Economic and monetary developments and prospects[1]

Output growth will pick up, creating a positive output gap by 2005

In spite of robust growth in domestic demand recently, the Central Bank has revised its output growth forecast for this year downwards from July, to 2%. The reasons are that exports have turned out weaker than foreseen then and investment in connection with the proposed Norðurál aluminium smelter expansion are not allowed for in the current forecast. Although this project looks fairly likely to materialise, it will still not affect output growth this year if it does. Excluding Norðurál, output growth is forecast at 3% next year and 4¼% in 2005. Output growth will therefore not exceed potential output growth until 2005, and the output gap will remain negative until then. If the Norðurál expansion goes ahead, annual output growth will be half a percentage point greater in both 2004 and 2005, and the output gap will close up next year. Inflation has been relatively stable recently, marginally below the Central Bank's target. The inflation forecast is based on the assumption that this trend will continue for the whole of next year. Two years ahead, however, inflation will inch above the target to around 3%, in the absence of the Norðurál expansion. Since this forecast assumes an unchanged monetary policy, interest rates will clearly need to rise in the coming months, unless unexpected shocks occur. The timing and scale will depend as usual on economic developments, but also on fiscal and housing policies. A committed decision to go ahead with the Norðurál expansion will push up interest rates sooner. If the budget proposal plans are realised, fiscal policy will support monetary policy next year, but the planned restraint on expenditure will be insufficient to offset proposed tax cuts, especially in 2006.

I Economic developments

Domestic demand growth has sped up sharply this year and in Q2 reached its highest rate since 2000. Indicators for Q3 such as turnover, imports and credit growth suggest that growth is continuing. However, the external conditions of the economy have worsened, exports have contracted and imports have increased in step with domestic demand. The result has been a fast widening of the current account deficit. The rather weaker króna in recent months compared with the spring and early summer may be one factor at work. Nonetheless, the króna must still be considered strong, supported by capital inflows connected to some extent with major investment projects that have either been launched or are pending. The inflow has been matched by a surge in lending, which is largely denominated in foreign currency. Inflation has remained low despite firm growth in domestic demand and is below the Central Bank's target, reflecting favourable exchange rate developments and labour market conditions. On the other hand, housing inflation has been running high and accounts for most of the rise in the Consumer Price Index (CPI). Residential housing prices in the Greater Reykjavík Area are at their highest point for decades in real terms and the increases show no sign

1. This article uses data available on October 31, 2003.

of abating, as demand is fuelled by low inflation, real wage growth and the lowest interest rates for a long period. Higher housing prices act as a demand stimulus in their own right, but in the long run they could fall again and curb the growth in private consumption.

Price developments and expectations

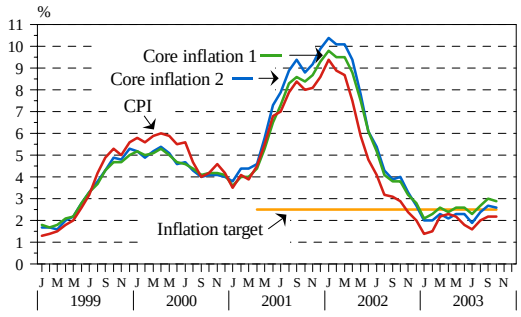
Inflation has been steady

Inflation has been in the region of 2% so far this year. Price stability has therefore been maintained as defined by the Central Bank's 2½% inflation target, although core indices show a rather higher rate. The effective inflation rate has been much lower for those who have not bought housing over the past year, because 1.7% of the 2.2% increase in the CPI over the twelve months to the end of October – more than three-quarters – stems from rises in the housing component. The remainder corresponds broadly to rises in public service prices; as explained in previous issues of *Monetary Bulletin*, the effect of a backlog which had built up is still tailing off. Goods prices have fallen on average over the past year, notably imports excluding alcohol and tobacco, and prices of private services have risen by 1½%. The rate of increase in private service prices has been slowing down steadily over the past year, but housing inflation has been on the rise at the same time. In the past few months, however, housing inflation has been fairly steady.

Chart 1

CPI and core inflation 1999-2003

12-month % changes



Source: Statistics Iceland.

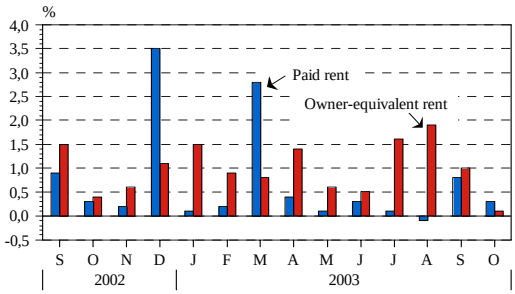
Lower annualised rise in the housing component of the CPI

The housing component of the CPI merits special attention since it accounts for the greater part of rises in the index over the past twelve months. In the beginning of October the housing component had risen by 10.3%, marginally down from the twelve-month increase until August. As explained in Box 1, the housing component is comprised of several items, the two most important being paid rent and owner-equivalent (imputed) rent, which reflects changes in the market value of housing. In particular it was a rise in market value that drove the housing component up in the summer. More recently, the month-on-month rise in market value has been slowing down. To some extent this is probably a seasonal downswing, but the annual rise in the component has also slowed down slightly. However, it is still too early to claim that prices have peaked. There was a jump in the rental component in both November 2002 and February 2003, but it has a relatively low weight in the index. No significant and lasting disconjunction has developed between rent and housing prices in recent years.

Chart 2

The housing component of the consumer price index

Change on previous month, September 2002 - October 2003



Source: Statistics Iceland.

Is the impact of the stronger króna waning?

Exchange rate developments have played a major part in disinflation since the beginning of 2002. Since summer 2002, prices of imported goods have been on a downward path. The króna continued to strengthen until the middle of this year, then after almost continuous appreciation since the end of November 2001 it weakened a little in the summer,

Box 1 The housing component of the CPI

Statistics Iceland's last consumer survey (for 2000-2002) revealed that just under 18% of the sample live in rented accommodation. The rent prices stated by these tenants form the rent expenditure base. Data on rental changes in comparable housing are used to estimate the rent cost. In March 2002, rent cost accounted for 2.1% of total expenses in the CPI base.

For the 82% of the sample who are owner-occupiers, the "user cost" needs to be calculated, i.e. the annual cost entailed by living in owner-occupied housing. Calculations take into account minor maintenance as well as charges for sewerage, refuse collection and water supplies. This cost amounted to 3.6% of total expenditure in the CPI base for March 2002. The largest item, accounting for 10.1% of total expenditure in March 2002, is "owner-equivalent rent", which aims to estimate depreciation and interest costs on the capital deployed in the housing.

The Land Registry valuation, which by law is supposed to reflect the market price of housing, is used as the base for calculating owner-equivalent rent. The base figure is projected using changes in the price of residential housing in recent sale agreements. All payments in housing sale agreements are valued at their present discounted value. T-bill interest rates are used to discount the amount lent by the seller to the buyer (generally the part of the down-payment paid by the buyer over the first 12-14 months after a sale agreement is signed). Other loans are discounted by the market yield on housing bonds plus a premium of 0.35%. Not all changes in housing bond yields are incorporated, but the index tries to follow the broad trend.

In order to estimate annual user cost of housing, assumptions need to be made regarding lifetime of the asset (and thereby annual depreciation) and interest expenses on account of capital deployed in it. Statistics Iceland assumes that housing has a lifetime of 67 years (with depreciation of 1.5% per year) and the value of the plot of land remains unchanged. For the sake of simplification, the combined value of the housing and plot of land are treated like an asset with a lifetime of 80 years (depreciated by 1.25% per year). Interest cost on owner-occupied housing is calculated in two ways: 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.[1] The latter interest rates do not change, but the former alter in line with the terms of the loans specified in the housing sale agreement. Recently, owners' equity has accounted for just over half the value of housing, and average real interest rates have been just over 5%.

Assuming a cash price of owner-occupied housing (S), its lifetime (n=80) and real interest (r), owner-equivalent rent is equal to the payment needed to pay off an annuity loan in the amount S, bearing r real interest, over n years. The following equation produces the annual payment (L) of such a loan:

$$L = \frac{r \cdot S}{1 - 1/(1+r)^n}$$

This formula can be simplified into $L=r \cdot S$ when n=80 and r is not a very low figure, e.g. r>2.5%. A rise in real interest rates on the loans taken for housing purchases thereby leads to a rise in owner-equivalent rent. A rise in real interest (r) from 4% to 4.5% (i.e. a rise in real interest on housing loans from 5% to 6% while interest on the owner's capital is fixed at 3%) will lead to a 14% rise in owner-equivalent rent.

An important consideration is that a large part of housing loans today bear fixed interest, or rates which are not determined directly in the market. This applies, for example, to loans from the Housing Financing Fund and some pension fund lending to homebuyers. Under such conditions, a general rise in real interest rates has relatively little impact on the real interest rates used to calculate owner-equivalent rent (r). On the other hand, a general increase in real interest rates which raises the yield on housing bonds, but does not alter the negotiated price of housing, lowers the cash price of the housing, by reducing the present discount value of loans bearing fixed real interest. In the current

1. Other countries which follow this method for estimating owner-occupancy cost use nominal interest rates instead of the real rates used by Statistics Iceland. These countries are Finland, Sweden, Ireland, the UK and Canada. Long-term lending is generally at nominal rates in these countries, but is indexed on loans in virtually all cases in Iceland.

situation the latter impact is much stronger than the former, so that a general rise in real interest rates reduces the owner-equivalent rent value.

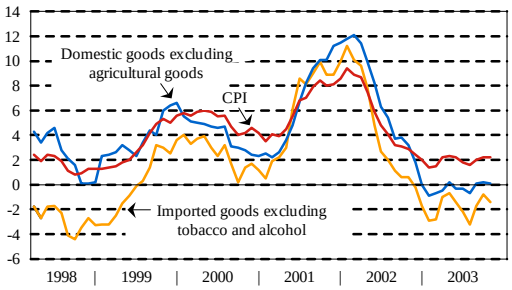
If this arrangement is changed to bring residential housing loan terms into line with ordinary market rates, the impact of a general rise in real interest rates on the owner-equivalent rent item will change as well. If real interest on all loans changes by the same amount, the cash price will remain the same, but the increase in average real interest rates on housing (r) would force up the owner-equivalent rent.

but has remained relatively stable in the autumn. At the end of October the króna was fractionally weaker than in the beginning of 2003, after slipping to its lowest value this year at the end of August. If the króna remains relatively stable, as it has been in recent months, the decline in imported goods prices will gradually come to an end. Yet goods prices were lower at the beginning of October than the same time a year before. Import prices had declined by ½% on average, and 1½% excluding alcohol and tobacco. Prices of domestic goods, which in many cases compete with imported substitutes, were also ½% lower in October than in the corresponding month in 2002. Petrol and food prices are particularly sensitive to changes in the exchange rate and have traced its movement closely, although foreign prices have also been quite volatile in both cases. Core indices exclude price changes in various volatile items.[2] In October the twelve-month rise in Core index 1 was 2.9% and Core index 2 measured 2.6%. Given that the greater rise in Core index 1 may be attributed to the catching-up of public service price rises, as mentioned above, Core index 2 may provide a better reflection of underlying inflation at present.

Chart 3

CPI and goods prices
March 1998 - October 2003

12-month % change



Source: Statistics Iceland.

2. Core index 1 is the CPI excluding changes in the price of domestic food prices, vegetables, fruit and petrol. Core index 2 excludes the price of public services as well.

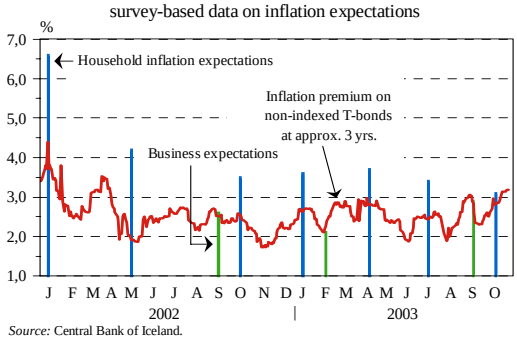
Household inflation expectations are inching down, but business expectations are rising

Household inflation expectations have inched down, according to a survey conducted in the first half of October. Respondents expected an average inflation rate of 3.1% over the next twelve months, compared with 3.4% in a similar survey in July. On the other hand, a September survey shows higher inflation expectations among executives of Iceland's largest corporations. On average they expect a 2.9% twelve-month rise in the CPI, as against 2.1% in a comparable survey in February.

Chart 4

Inflation expectations 2002-2003

Daily data on inflation premium and survey-based data on inflation expectations



Source: Central Bank of Iceland.

Changes in the inflation premium on non-indexed Treasury bonds reflect a shift in the financial markets' attitude towards the prospective impact of the proposed and pending aluminium-related investments, including uncertainty about whether the Norðurál smelter expansion will go ahead. The premium rose in August and into mid-September, but has fallen since, especially on bonds with a shorter

lifetime. Thus the two-year inflation premium rose from roughly 1.6% in the beginning of August to 2.5% in the middle of September, and has recently been hovering around 2.0%. The six-year premium has remained in the region of 3½% since the beginning of September, after rising before then. The financial analysts' evaluation of the inflation outlook for this year is unchanged since the last survey in July, and almost identical to the Central Bank forecast.

Minor errors in recent Central Bank forecasts

In Q3, the CPI measured 2.1% higher than a year before, which is approximately the same rate of inflation as forecast in July and slightly less than was forecast a year ago. The error in recent Central Bank inflation forecasts has been very small, as Table 1 shows.

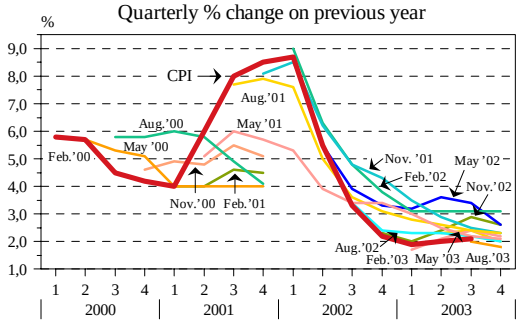
Table 1 Errors in Central Bank forecasts in 2003

(difference between actual and forecast inflation)

	Forecast made in:		
	Feb. '03	*May '03*	*July '03*
Q1	0.2	.	.
Q2	-0.1	-0.3	.
Q3	-0.3	-0.3	0.1

Chart 5 CPI and the Central Bank inflation forecast 2000-2003

Quarterly % change on previous year



Sources: Statistics Iceland, Central Bank of Iceland.

External conditions and output

The external conditions of the Icelandic economy have deteriorated this year. Export prices of marine products have fallen and fish catches have been lean. Offsetting this has been a rise in aluminium prices. Oil prices have risen somewhat during the year.

In the first eight months of the year prices of marine products, measured in foreign currency, were almost 4½% lower than in the same period the year before. To some extent, lower export product prices are attributable to subdued economic conditions among Iceland's main trading partner countries, especially sluggish private consumption in major European economies. According to Consensus Forecasts, output will grow by 0.8% in the EU this year and private consumption by 1.2%, compared with 2.7% and 3.0% respectively in the US. The outlook is improving, however, and growth is robust in various parts of Asia, especially China. Output growth next year is forecast at 4% in the US, almost 2% in the EU and 3% in major world economies on average. Although the US is fairly well on the road to recovery, it should be remembered that the strengthening of its economy is to some extent driven by temporary factors such as tax rebates, mortgage refinancing, inventory buildups and increased military expenditure. The rise in US bond yields since mid-summer could also have repercussions through unintended tightening of financial conditions.

As the economic recovery among trading partner countries gains momentum, the outlook for the terms of trade ought to improve, other things being equal. Markets are in fact very sensitive to increases on the supply side, and increasing supply to several fairly specialised markets for demersal fish has put just as much downward pressure on prices as weak demand. However, the poor state of fish stocks in the North Sea and elsewhere does not bode an increase in supply in the near future.

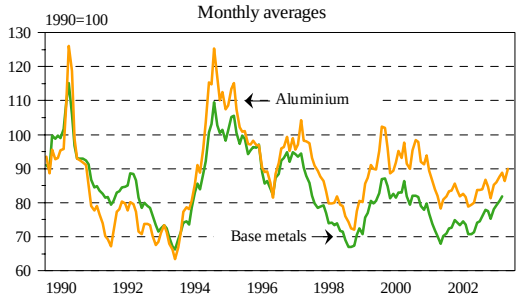
Fish catches in Icelandic waters during the first two quarters were down from a year before, but in the third quarter when the first effects were felt of higher demersal quotas for the new fishing year which began on September 1, the catch was broadly unchanged from a year before. Most of the impact of higher quotas, however, is expected to be felt next

year. A countervailing factor has been a fairly weak pelagic fishery in the autumn.

Aluminium prices have outstripped forecasts recently and futures prices point towards increases, with demand holding firm. This is consistent with prices of base metals, which have been rising rapidly over the past year after a dive which bottomed out in autumn 2001. If the recovery of major advanced economies gains momentum, prices can be expected to rise still further, over and above the recent increases fuelled by brisk growth in demand from China.

Chart 6

World metals prices 1990-2003



Sources: EcoWin, International Monetary Fund, London Metal Exchange.

Until this year growth in exports of manufactured industrial goods other than aluminium and ferrosilicon, which to a large extent comprise technology and investment goods, expanded at a healthy rate, despite the global downturn in investment. Some of the growth may, however, reflect the weak króna and an exceptionally favourable short-term competitive position. These exports have contracted substantially this year, not only as a result of poor external conditions, but also because output expanded mainly at foreign affiliates and subsidiaries.

A record number of visitors to Iceland are expected in 2003 after two weak years. Tourist numbers are forecast 7% higher than in 2000, which is a good result in light of general retrenchment in the global travel industry and the sharp appreciation of the króna.[3] The tourist season has also been extending.

Changes in import prices have not been as favourable as assumed in earlier Central Bank forecasts. So far this year, crude oil and petrol prices have been 15% higher on average than in 2002. Futures prices have also gone up, which indicates that pending increases will be smaller than had previously been assumed, at around 5%.

Private consumption and investment took off in Q2 ...

The Q2 national accounts confirm that domestic demand made the fairly strong recovery that had been expected. However, output growth was dampened by sluggish exports and was marginally lower than in Q1, notwithstanding accelerated national expenditure growth. Private consumption growth was particularly robust, up 7½% from the previous year. Public consumption and gross fixed capital formation also showed strong growth.

First-half output growth was broadly in line with the July forecast for the year as a whole. For individual components of GDP, however, there are sizeable discrepancies between the Bank's forecast and Statistics Iceland's preliminary estimates for first-half growth. National expenditure in the first half was well above the Central Bank's July forecast for the year as a whole, but exports were much weaker. The forecast for private consumption therefore appears to have erred on the side of caution.

Table 2 National accounts in first half of 2003

Change on previous year (%)	*Q1*	*Q2*	*First half*
Gross national product	3.1	2.7	2.9
National expenditure	1.6	9.6	5.6
Private consumption	5.2	7.4	6.4
Public consumption	4.4	5.1	4.7
Gross fixed capital formation	-10.0	17.2	3.0
Export	4.3	-6.6	-1.4
Import	0.3	10.4	5.6
% of GDP			
Goods and services balance	1.7	-6.2	-2.3
Current account balance	-0.5	-7.7	-4.1

Source: Statistics Iceland.

3. It should be borne in mind, however, that exchange rate changes may be transmitted with a considerable lag and domestic service providers may have absorbed exchange rate losses on a fairly large scale.

Gross fixed capital formation trends are more difficult to read due to volatility caused by the import of an aircraft in Q1/2002.

...but exports contracted and the outlook for Q3 is poor

An even more marked turnaround between the first and second quarters took place in external trade. The contribution of external trade to growth in Q2 was sharply negative, while in Q1 it accounted for roughly half of output growth.

In the first half of the year, exports contracted – particularly merchandise exports, which decreased by 1% overall, led by a 5% drop in exports of marine products. Service exports were also slightly lower in real terms, with a sharp contraction in Q2, especially in income from transportation, travel and other services.

Merchandise exports contracted further in Q3. Excluding volatile items, the volume of merchandise goods exports over the first nine months of 2003 was 1% down from the corresponding period the year before. Marine product exports dropped by 1½%, but were offset by a 5% increase in exports of products from aluminium and ferrosilicon. Aluminium exports this year will probably grow at a slower pace than these figures suggest, because the sector's production capacity is unchanged from the previous year. To achieve the level of growth that was forecast in July, merchandise exports would have to increase by 9% year-on-year in the final quarter, which seems unlikely. Thus the Central Bank's forecast 1½% export growth for 2003 would appear to have been overoptimistic. By way of qualification, the Central Bank did forecast a climb in exports in the second half, partly driven by higher fishing quotas, but the capelin and herring harvests at the start of the new fishing year have proved disappointing.

Domestic demand

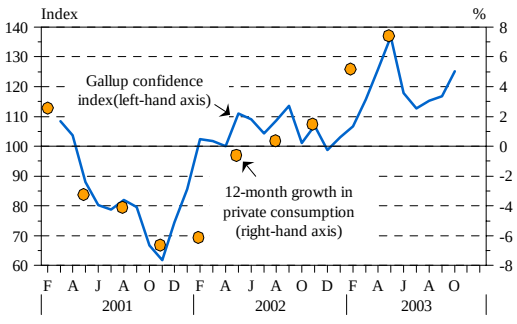
The national accounts for the first half of 2003 indicate considerably faster growth in domestic demand so far this year than was assumed in most forecasts. National expenditure during the first half rose by 5½% from the same period a year before, which is rather more than the Central Bank's forecast for the whole year. The crucial factor was that private consumption surged by 6½%, but in the July forecast was expected to rise by only 2%. Gross fixed capital formation expanded at a slower pace in the first half than forecast for the year as a whole. However, since investment depends very much on the impact of several large and volatile items, such as investment in vessels, aircraft (which explains the contraction in Q1) and power stations, it is difficult to assess exactly how closely the forecast is in line with the national accounts for the first half of the year. Public consumption growth, especially in Q2, was also substantially above the forecast.

Even though it was considerably above the first-half forecasts, strong growth in private consumption should not come as a surprise. Buoyant real disposable income growth, low and stable inflation, falling interest rates and rising asset prices are some of the forces that drive demand. Real wages have recently been around 3½% higher than a year before, and households are already beginning to respond to lower interest rates by stepping up their use of credit, although this is mainly for housing purchases.

Private consumption growth in Q2 ran higher than most indicators seemed to suggest. This buoyancy was probably connected to some extent to the general election in the middle of the quarter. Optimism surrounding the election and the job-creation schemes announced in the runup to it may also explain the rise in the Gallup consumer confidence index. Confidence peaked in May, then slid back, but the last three measurements have been on an upward trend.

Chart 7

Private consumption and consumer confidence February 2001 - October 2003

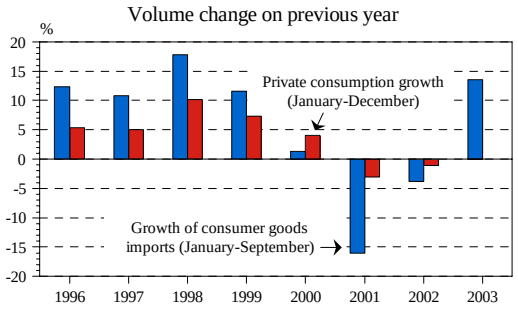


Sources: IMG Gallup in Iceland and Statistics Iceland.

If the above explanation is correct, growth can be expected to slow down for the rest of the year. However, other demand indicators suggest that it was still brisk in Q3. In the first nine months of the year, consumer goods imports expanded at a faster rate, year-on-year, than at any time during the last upswing apart from 1998, when private consumption soared by 10%. The impact of private consumption growth on consumer goods imports is likely to be exceptionally strong in 2003 due to a sharp contraction in imports of durables during the preceding years, but even after taking this base effect into account there are strong signs of buoyant private consumption in Q3.

Chart 8

Growth of consumer goods imports and private consumption[1] 1996-2003



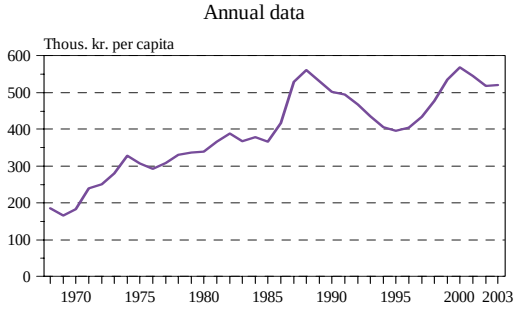
1. Final data not available for private consumption in 2003. *Source:* Statistics Iceland.

Credit card and groceries turnover paints the same picture. In Q3, groceries turnover was about 4% higher in real terms than in the same period the previous year, and credit card turnover 6½%. Although VAT turnover figures for Q3 are not available, real growth of turnover in the retail, wholesale and service sector clearly picked up speed until at least the middle of the year. The outlook for the final quarter is difficult to ascertain. Growth is likely to slow down due to the base effect, because private consumption surged in the closing months of 2002.

As mentioned, the underlying conditions should support continued robust growth of private consumption. Despite some increase in seasonally adjusted unemployment, the outlook for the labour market is considered fairly good. Expectations are a crucial factor in demand for durables. Households adjust their consumption of durables to higher expected future income, temporarily fuelling growth of private consumption. In Iceland, where most durables are imported, this fuels imports as well. National accounts treat durables as if they are consumed in the year of purchase. Actually their consumption is spread over a long period. Hence the rate of growth accelerates when households adjust their stock of durables to higher expected future income, and subsequently slows down. In the first half of the 1990s, households drew on their stock of durables – i.e. purchases of cars, electrical appliances, etc. were insufficient to offset depreciation of the stock and meet population growth. By 1995, the motor vehicle stock had diminished by 24 b.kr., for example. In order to restore the per capita level of 1988, car ownership would have needed to increase in 1995 by 32 b.kr., or the equivalent of 7% of that year's GDP. Understandably, households made a hefty adjustment to their stock of durables when optimism was restored in the mid-1990s, which may explain a sizeable part of the growth in private consumption and the current account deficit during those years.

Chart 9

Value of motor vehicle stock 1968-2003[1]



1. At constant 2003 prices. Based on population aged 17-90 yrs.
Sources: Motor Dealers' and Services Federation, Statistics Iceland, Central Bank of Iceland.

Despite some depletion of Iceland's stock of cars over the past two years, the adjustment that this may induce is unlikely to be as large as during the 1990s. However, heavy investment in cars over the period 1998-2000 has created some need for renewal which may underlie some of this year's import growth.

Businesses

The only reliable available data on business profitability in the current year is for companies that are listed on Iceland Stock Exchange. Gallup's surveys of business sentiment among the largest companies in Iceland also give some indication of their current position and future plans. Figures released by listed companies reveal fairly good profitability in the first half of 2003. EBITDA was similar to last year at 11%. Profit after tax was in fact down by half from 2002, at 4½%, but this is mainly explained by the impact of exchange rate changes on corporate foreign debt. EBITDA of fisheries companies deteriorated between the years to 22% of turnover, which is still an acceptable level of profitability in light of exchange rate movements, lower prices and smaller fish catches. The downturn in EBITDA was most pronounced in the fish meal and fish oil sector, which normally shows good profitability. In manufacturing, pharmaceuticals and software design, however, EBITDA increased year-on-year.

Financial companies' research units have published profit forecasts for the remainder of the year which are broadly in line with the first-half results. They assume some increase in turnover, and similar EBITDA and net earnings ratios to the six-month figures.

According to a Gallup survey of business sentiment (see Box 2) conducted in September, it is not only listed companies that enjoy a fairly good position. A sizeable majority of respondents described economic conditions as good and only 4% called them unfavourable. This is a notably more positive outlook than in the two preceding surveys, in September 2002 and February 2003. Prospects also appear fairly positive for the coming months, but poorer next year. It is not unlikely that concerns about negative side-effects of the aluminium-related investment programme are a factor at work there.

These concerns about the future scenario are probably reflected in the general trend for businesses to hold back on investments in the near term. According to the survey, businesses plan some reduction in investment next year, in particular in transportation and tourism, etc. However, a greater number of companies expect to hire staff over the coming twelve months, mainly in finance, services and consulting.

Table 3 Profitability of listed companies 1999-2003[1]

As a percentage of turnover					*First half*		*Forecast*[2]
All listed companies	*1999*	*2000*	*2001*	*2002*	*2002*	*2003*	*2003*
EBITDA	7.1	9.2	10.1	10.2	11.7	10.9	11.1
Profit after tax	2.3	-0.6	0.8	8.6	9.2	4.5	4.7
EBITDA							
Fisheries	13.7	17.0	27.1	23.3	26.6	21.9	20.8
Manufacturing and pharmaceuticals	7.0	13.2	12.9	13.3	12.9	14.2	20.3
IT	6.5	23.0	17.3	18.2	18.9	21.2	9.7
Retail and services, construction	6.4	6.7	10.1	10.2	8.0	14.3	.
Net earnings							
Fisheries	-0.1	-8.6	4.1	18.6	27.8	13.1	7.2
Manufacturing and pharmaceuticals	3.3	2.7	5.2	7.8	8.4	10.5	12.8
IT	4.3	1.7	-3.4	2.1	5.2	3.0	-2.1
Retail and services, construction	3.0	2.6	2.7	15.3	6.8	7.8	.

1. Paired comparisons between 1999 and 2000, 2001 and 2002 and the first half of 2002 and 2003. 2. Based on forecasts by the largest financial companies. *Source:* Central Bank of Iceland.

Box 2 Survey of Icelandic business sentiment

In September, the Central Bank and the Ministry of Finance commissioned Gallup to conduct its third survey of the expectations and intentions of the 400 largest companies in Iceland. Responses were received from 302. As before, executives were questioned about their views on the current economic situation and outlook, and the development of prices, the exchange rate and interest rates, together with various details of their own business operations such as sales turnover, inventories and number of employees. The questions were therefore both qualitative and quantitative. Responses to the qualitative questions are calculated as indices.

Businesses appear to be reasonably content with the economic situation. The state of the economy index measured 187 of a possible 200, a record reading. Six months ahead the result is similar: 189, also the highest figure for that horizon. On a twelve-month scenario, optimism begins to wane slightly, with the index slipping to 179, marginally lower than in previous surveys.

Turnover and recruitment plans confirm the picture given by the economy indices and indicate that an upswing is beginning again. As far as the number of employees is concerned, a clear difference emerges compared to earlier surveys. In September 2003 the index for the number of employees six months ahead is much higher, and statistical data also show a clear watershed. Turnover is on the increase as well, although the difference from the February survey is not as marked. Nonetheless, responses suggest that investment will contract this year and in 2004; it is not unlikely that the aluminium industry programme has some effect on these plans.

In February, fisheries sector companies were significantly more pessimistic and dissatisfied about the state of the economy than other employers. This gap has virtually disappeared, but the fisheries sector still takes a more pessimistic longer-term view and foresees smaller turnover growth in 2004 than other sectors – apart from public sector enterprises. Accordingly, fisheries companies seem reluctant to hire staff.

Business in the Greater Reykjavík Area and regional Iceland show no difference in attitudes towards general economic conditions at present and six months ahead, but regional companies are more pessimistic about the outlook one year ahead.

As before, executives expect the prices of their own products to increase by less than inputs, and inflation expectations have inched up since the February survey. The general view is that the króna will remain steady and that the Central Bank will raise its policy interest rate over the next twelve months.

Gallup surveys of business sentiment[1]

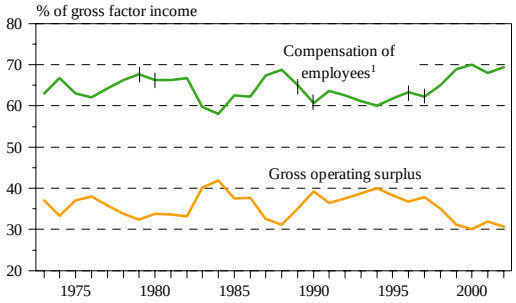
% unless otherwise indicated	*September 2002*	*February 2003*	*September 2003*
State of the economy index	157	131	187
Increase/decrease or no change in the number of employees in next 6 months (index)	88	97	132
Change in the number of employees	-2.4[2]	-0.3[2]	5.4[3]
Change in turnover (in real terms)	-1.6[4]	3.8[4]	4.4[5]
Change in product prices in next 12 months	1.6	1.3	1.1
Change in input prices in next 12 months	3.4	1.8	2.0
The Central Bank policy interest rate 12 months hence	6.8	5.4	5.6
Inflation over next 12 months	2.6	2.1	2.9
Change in the exchange rate of the króna in next 12 months	-1.5	-2.8	-0.5

1. The table indicates percentage changes except for interest rates (percentage points) and the change in number of employees, which is indicated by an index number. The index values are in the range 0 - 200. An index value close to 100 indicates an equal number of positive and negative responses.
2. From beginning to end of respective year. 3. From end-2003 to mid-2004. 4. Between respective and preceding year. 5. Between 2003 and 2004.

In light of the good profitability of most listed companies and the quite positive assessment of the current position revealed in the Gallup business sentiment survey, the high share of wages, and correspondingly low share of gross profit in gross factor income, is rather puzzling. The high ratio of wages to gross factor income could be a sign that other companies are being seriously squeezed, because the gross profit ratio over the past four years has been the lowest since at least 1973, and if the current macroeconomic forecast holds it will be lower still this year. The surveys do not indicate that the position has tightened, but comparative data for previous periods is lacking. The rise in the share of wages is probably explained by civil servants' wage increases and expansion in the public sector and service sector, in which the share of wages is greater. Nonetheless, the steepest rises in the share of wages and in civil servants' pay do not coincide. Small service companies which are outside the scope of the survey may be facing significantly tighter conditions. Only time will provide an answer to this enigma, but it should be noted that the underlying data is subject to considerable revisions.

Chart 10

Compensation of employees and operating surplus 1973-2002



1. Break in series in 1980, 1990 and 1997. *Source:* Statistics Iceland.

The competitive position of export and import-competing industries tightened further in the first part of the year and in May the real exchange rate (in terms of relative consumer prices) had appreciated by 6.2% since December 2002, 8.5% over the preceding twelve months and considerably more since it hit a historical low in December 2002. Accordingly, at least listed companies appear to thrive reasonably well at the current real exchange rate.[4]

Labour market

Unemployment has risen still further

Labour market conditions have still not reached a clear turning point. At 2.7%, registered unemployment was down from the preceding months in September, in line with the normal seasonal variation. The seasonally adjusted figure was 3.6%, unchanged from the previous month, but it is premature to conclude that unemployment has peaked. Seasonally adjusted unemployment has risen steadily since autumn 2001, apart from November and December last year when it stood still. However, the rate of increase over the past year is slower than during the preceding twelve-month period.

According to Statistics Iceland's labour market survey, unemployment was considerably lower in Q3 than in Q2, down to 2.6% from 4.1%, which reflects the seasonal drop in registrations. The drop in unemployment was concentrated in the youngest age group, while unemployment among older age groups remained unchanged. Registered unemployment in Q3 measured somewhat higher, at 2.9%. How this discrepancy should be interpreted is ambiguous.

Mismatch between labour demand and supply

The unemployment trend suggests that the upturn in economic activity has still not sufficed to generate job creation. This is normal, since a recession tends to result in excess production capacity that businesses utilise before starting recruitment (cf. the output gap trend in Chart 23). Even though the aluminium-related investments are starting to have an impact within specific sectors, the full effect will be transmitted to the whole economy only with a considerable lag. Labour may be in short supply in some sectors at the same time as there is

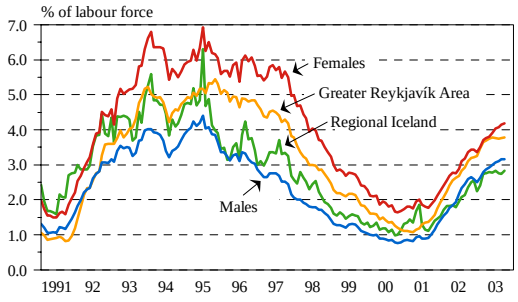
4. It should be borne in mind that the real exchange rate, as calculated on the basis of the 16 main trading partner countries, does not extend to changes in certain Asian currencies which are becoming increasingly important for the Icelandic economy. Recently, for example, growing competition has been felt from China in Western markets for frozen seafood products. The RMB, like most currencies in that part of the world, has followed the depreciation of the dollar, enabling Chinese companies to compete in new fields.

unemployment in others. The composition of unemployment according to sex, region and age, and the disparity between vacancies and the number of issued work permits, could be an indication of a mismatch.

In September, seasonally adjusted registered unemployment was 3.8% in the Greater Reykjavík Area and 2.8% in the rest of Iceland. Unemployment has continued to rise in and around the capital in 2003, but been at a virtual standstill in regional Iceland since February. Regional unemployment has dropped among males but increased among females so far this year. In the Greater Reykjavík Area, on the other hand, female unemployment has remained virtually unchanged since the beginning of the year, despite fluctuations, while male unemployment has continued to rise. No substantial shift has taken place in the age composition of unemployment. There has been no change since last year, for example, in the share of the youngest age group, where unemployment always fluctuates sharply in pace with the economic cycle.

Chart 11

Unemployment by gender and region
1991-2003



Sources: Directorate of Labour, Central Bank of Iceland.

As unemployment has risen, so has the number of long-term unemployed, i.e. those who have been out of work for six months or longer. This group accounted for 30% of total unemployed in September 2003, but 24% in the same month the year before. Long-term unemployment is much more marked in the Greater Reykjavík Area than in regional Iceland, and is proportionally lowest in the youngest age group (16-24) at 17%, and most common among the older sections of the population. In September, 45% of unemployed people aged 55 and above had been out of work for six months or longer. Historical experience shows that the long-term unemployment rate can continue to rise for some time after total unemployment has begun to drop.

The distribution of unemployment by occupation has not changed much over the past year. People with lower educational qualifications make up the bulk of the unemployed but there has been a slight drop in their share, while the proportion of the more qualified section of the labour force has increased. The proportion of unemployed with only compulsory schooling was 63% in September, which is 3½ percentage points less than a year before, but the group with a secondary level qualification or higher grew by 4 percentage points to 19%. The proportion of unemployed skilled labourers has also increased.

The number of vacancies registered at employment agencies has soared and so far this year has been double the figure for the corresponding period in 2002. Only once have there been more vacancies than in the past three months, in autumn 2000. The greatest proportional increase in vacancies has been in regional Iceland, where unemployment is lowest.

Growing unemployment has been accompanied by a reduction in the number of work permits issued, especially new ones. The number of issued work permits plunged last year. This pattern continued into Q1/2003, but in the past two quarters the number of work permits issued has been broadly the same as a year before.

Indications that labour demand will grow in the next few months

A business survey conducted for the Central Bank and Ministry of Finance in September indicated increasing demand for labour and fewer planned redundancies over the coming few months. This represents a turning point, after surveys conducted in September 2002 and February 2003 indicated hardly any change.

Far more executives expressed intentions to hire staff over the following six months than in previous surveys, or more than 27% compared with 19% in February. Those who foresaw lay-offs decreased from 20% to 14%. Manufacturing was the only sector in which fewer companies wanted to recruit than in the February survey. A marked turnaround

was reported in regional Iceland and the fisheries sector. Only 15% of regional executives foresaw a reduction in their workforce, compared with 25% in February. The number of companies expecting to make redundancies dropped from 35% to 10%.

Real wages have increased from the year before

Over the past year, basic wages have remained consistently higher in real terms than a year before. According to Statistics Iceland's index, wages in Q3 were 5½% higher than a year before, as they had been for the four preceding quarters. The same increase was recorded in private sector wages and wages of civil servants and bank employees in the third quarter. Since inflation has been in the region of 2% over the past year, annual growth of real wages has remained steady at around 3½%.

Most private sector wage agreements come up for renegotiation in the new year. Although scheduled negotiations have begun with the unions whose wage agreements expire at the end of this year, settlements are unlikely to be reached until the first months of 2004. No demands have yet been put forward. Union spokesmen have declared their aim to secure stability, low inflation and continued growth of real wages. The results of the September business survey indicate that employers expect wages to rise by 3½% in 2004, broadly the same wage increase as this year.

Households

The financial position of households has strengthened ...

Household finances have clearly strengthened recently. Real wages have increased and unemployment is widely expected to fall in the near term. Interest rates have gone down and households have been eager to invest in housing after inflation slowed down and stabilised, as discussed in more detail below. Purchases of durables have rallied as well – especially cars, imports of which were 50% higher during the first eight months of 2003 than over the corresponding period the year before. Improving household finances are also reflected in the Gallup confidence index. Their assessment of the current situation improved sharply in the spring to its most positive level since the first half of 2001. Expectations six months ahead were boosted around the time of the general election, but waned afterwards when the debate on the side-effects of aluminium-related investments and the need for countervailing measures came to the fore. However, households still take a fairly weak view of the employment situation, and seasonally adjusted unemployment has not yet decreased. Consumer confidence may dwindle again if it is not supported by an improvement in the job situation, but given the pending investment programmes that lie ahead, a rise in employment seems certain.

... but their accumulation of debt gathers momentum again

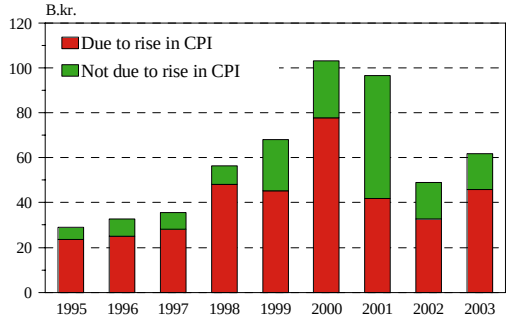
The era of debt accumulation by Icelandic households, which has continued incessantly for two decades, is apparently far from over (see the discussion of debt in Iceland and other countries in the Appendix on p. 41). Debt accumulation slowed down sharply last year, as shown in Chart 12, but a hefty increase seems to be on the cards this year, although not on the scale experienced towards the end of the last episode of overheating. Deflation has greatly reduced the non-discretionary rise in the debt stock which results from the fact that the bulk of household debt is indexed to the CPI. This year, nominal household debt in króna terms grew by roughly twice as much as private consumption, which is a similar proportion to the period 1994-1999. In 2000 and 2002, household debt rose by between two and five times the nominal increase in private consumption. A major cause of debt growth in 2001 was the rise in indexed liabilities. New household borrowing shrank sharply that year and fell even further in 2002 when the rise in disposable income more or less came to a halt in 2002 and residential housing prices fell temporarily in real terms. This trend and a rise in the debt service ratio were major contributors to the contraction in private consumption during those years. Similarly, stepped-up borrowing this year bolsters private consumption, and even more strongly investment in residential housing.

Burgeoning demand for residential housing has sent prices soaring, which fuels private consumption even further, both through a wealth effect and because of higher mortgage value of housing property. All in all, the position of households

appears to be robust at the moment. While high indebtedness may leave them more exposed to economic shocks than ever, the probable upswing ahead means that the balance sheets of most households are unlikely to deteriorate in the next few years. As it happens, household asset growth outstripped debt accumulation last year. In particular, this is due to growth in financial assets (excluding pension funds), reflecting higher share prices, among other things, and increased car ownership. Household balance sheets have therefore strengthened despite the rise in debt. Defaults are also on the decline, as discussed in more detail in the chapter on Financial stability.

Chart 12

Annual increase in household debt 1995-2003



Source: Central Bank of Iceland.

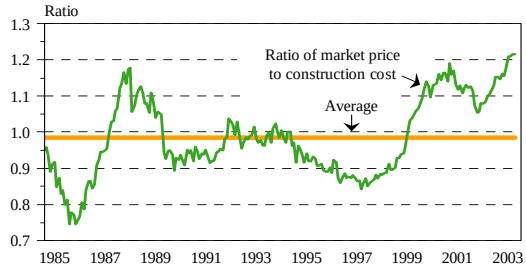
Real estate market

New peak in residential housing prices

Residential housing prices in the Greater Reykjavík Area have been rising steadily since the middle of last year, after a period of retrenchment which began in spring 2001. In recent months the annual increase has been 12-13% in excess of the CPI. In September 2003 the estimated three-month average price of housing was in real terms almost 7% above its previous peak in spring 2001, and 45% higher than in the beginning of 1996. Given the unambiguous impact that real estate prices have on private consumption and the fact that their increase accounted for around three-quarters of the rise in the CPI last year, it is worth considering how long this trend can continue. The rate of increase has in fact slowed down in recent months, as pointed out above, which prompts the question whether a new peak has been reached. To evaluate this, it is useful to examine the interaction between the long-term determinants of real estate prices and factors which affect demand for housing over the short or medium term.

Chart 13

Market price and construction cost of apartments 1985-2003



Index for market prices of apartments in the Great Reykjavík Area, as a ratio of the construction cost index. Both indices normalised to the average for 1985-2003.
Sources: The Land Registry of Iceland, Central Bank of Iceland.

From a historical perspective, the current high level of housing prices in real terms (cf. Chart 13) indicates that prices may be unsustainable. To what extent, however, is not obvious. The trend of housing prices relative to construction costs firmly suggests a considerable gap between current prices and long-term equilibrium prices. Housing prices reflect not only construction costs, but also the price of the land on which where the property is located. A rise in the equilibrium price cannot be ruled out, for example due to an increasing shortage of cheap, well located building plots, the expansion of the Greater Reykjavík Area (which according to a familiar metropolitan pattern drives up the price of land in city centres), or tighter management of supply of land. Yet it seems highly unlikely that the supply of land has altered so radically over such a short time that it can explain more than a fraction of the growing gap between housing prices and construction costs.

On the other hand, for obvious reasons the price of land is fairly inelastic in the short term, compared with the fluctuations that can occur in demand for it. This is the main reason for the volatile prices of land and the property built on it. An analysis of these demand factors can give an indication of how

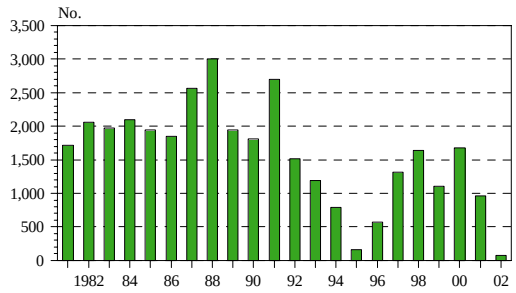
transient current prices are. Recent conditions have delivered a very strong stimulus to housing demand, as described above, and are therefore probably the main explanation for higher housing prices. Per capita disposable income has been growing steadily, interest rates have gone down sharply in the past 1½ years and access to credit has become easier. Changes in the housing loan system, as frequently discussed in previous editions of *Monetary Bulletin*, have also put upward pressure on housing prices.

Demographic factors apparently do not explain the recent rise in housing prices

In the long run, demographic trends also exert a significant impact. The rates of national population growth and urban drift from both rural areas and abroad vary. Population growth is quite closely linked to economic growth. The rate of population growth peaked in 2000 with an increase of around 4,000; in 2002, a year of recession, the increase was half as large. Fluctuations in population growth are even more marked in the age group from 25-50, i.e. those who are likely to be most active in the housing market, as shown in Chart 14. The Greater Reykjavík Area has accounted for all the growth in population, and in some years more than that.

Chart 14

Annual population growth in the age group 25-50 years[1], 1981-2002



1. In the Greater Reykjavík Area. *Source:* Statistics Iceland.

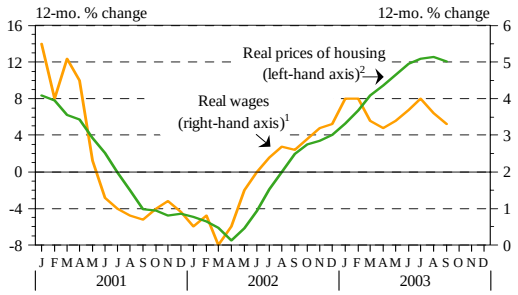
Population swings have an obvious effect on demand for housing and housing prices, especially in the Greater Reykjavík Area. The drop in real estate prices in real terms from spring 2001 to spring 2002 coincided with a sharp slowdown in population growth, and in fact also in real wage growth at roughly the same time. Although data for 2003 are not yet available, projections suggest that population growth will be small this year and moderate over the next few years. Reports on population movements also suggest that urban drift to the Greater Reykjavík Area is not as intense at present as often before. Thus the cause of higher housing prices apparently lies elsewhere.

Close correlation between real wages and housing prices in recent years

Real wage developments and expectations affect housing prices. If households regard a rise in real wages as permanent, or even expect such a trend to be sustained, demand for housing will increase, softening the restrictive impact of factors such as mortgage payment evaluations, which have served to limit credit supply. For most of this year, real wages have been in the region 3-4% higher than a year before. Prolonged talks on wage settlements could of course lead to a temporary decline in real wages, but on the basis of the inflation and growth forecast, the outlook is bright for the coming years.

Chart 15

Real wages and real prices of housing in the Greater Reykjavík Area 2001-2003



1. Based on the wage index and CPI. 2. Deflated with the CPI.
Sources: The Land Registry of Iceland, Statistics Iceland, Central Bank of Iceland.

Demand for housing fuelled by lower interest rates

Lower interest rates stimulate demand for housing, which can fuel price rises. Conceivably, the distinctive features of Iceland's housing bond market are partly responsible for the faster transmission of lower interest rates than would otherwise be the case. A drop in the yield on housing bonds causes the

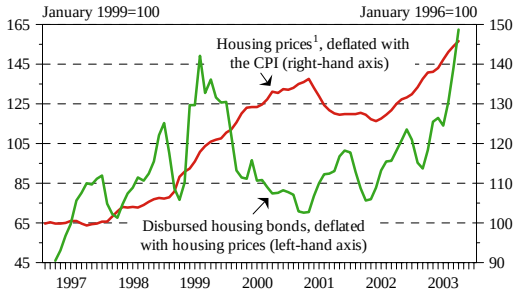
effective price of housing bonds to rise. When a housing sale is made, the seller thereby receives more valuable housing bonds in return for the mortgage bond issued in his name. It has been claimed that the rise in the cash price of housing generated in this way is not a real increase. This, however, is a misconception. In effect, housing demand and prices respond in broadly the same way as if housing transactions were financed with bank loans, apart from the fact that the price rise initially takes the form of more valuable housing bonds which the owner receives for his property.[5]

Soaring real estate prices are not confined to Iceland. This phenomenon has been witnessed in many countries in recent years, although perhaps not entirely for the same reasons. Part of the explanation for booming housing prices worldwide is thought to be exceptionally low interest rates. Prices of residential housing in Reykjavík began to climb after housing bond yields bottomed out early in 1999. However, they continued to rise for quite a while after yields began to go up again. Last year's rise in housing prices has also coincided with falling yields. Another common explanation for recent buoyant housing prices in many countries is that when the equity markets slumped and share prices plummeted in 2000-2002, there was a flight of capital into real estate. Conceivably this has been the case in Iceland, holding up housing prices at a time when the Icelandic economy went through a difficult adjustment, although this explanation seems rather far-fetched. For the past two years, domestic equity prices have soared in tandem with housing prices, and hardly appear to have had any decisive impact on them. International historical data show that, on average, housing prices have peaked approximately 2½ years after the equity markets reach a high. Various factors can speed up or slow down this process, so it cannot be ruled out that, in the final analysis, housing prices in Iceland will behave broadly in line with the global historical tendency. For example, the turbulence in 2001 which severely undermined household confidence may have caused a temporary halt in housing price rises and thus delayed the market from reaching its peak.

The upswing in the housing market is clearly shown in the number of housing loans granted, their nominal value and, in particular, their market value, all of which have reached record levels in recent months. The market value of disbursed housing loans, deflated with the housing price index, has not been higher since a very brief peak early in summer 1999. The upswing in housing bond issues then marked the beginning of a period of soaring residential housing prices, which peaked just under two years later. Given how high housing prices have climbed at present, however, it is not certain that a corresponding impact on prices will be observed this time.

Chart 16

Market value of disbursed housing bonds and housing prices 1997-2003



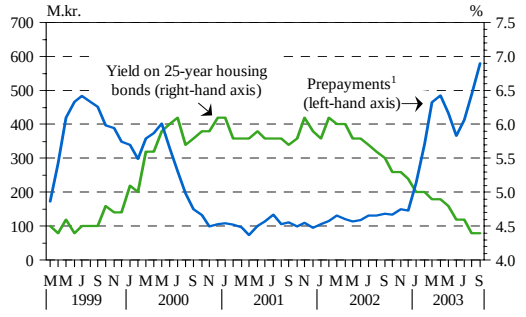
1. In the Greater Reykjavík Area.
Sources: Housing Financing Fund, The Land Registry of Iceland, Central Bank of Iceland.

Of course, the market value of disbursed housing bonds is not the same as net household borrowing for residential housing purchases. So far this year there has been a high level of prepayments of earlier loans, which reduce the net value. However, these rarely involve pure debt conversions, because the reason for real estate transactions is normally that one or both parties intend to buy larger housing. Prepayments surged during the upswing in 1999 as well; buyers normally opt to retire older loans with a relatively short residual lifetime rather than take them over. The changes made in May 2002, allowing owners of "social housing" to sell it a market price, have probably exacerbated prepayments, since one condition for such transactions is to prepay the social (low-interest) loan that the seller had previously received with a pledge in the property.

5. In some cases, of course, it is conceivable that a homebuyer is not fully informed about the value of the housing bonds that the seller receives in return for the mortgage bond.

Chart 17

Housing bond prepayments and yields
March 1999 - September 2003

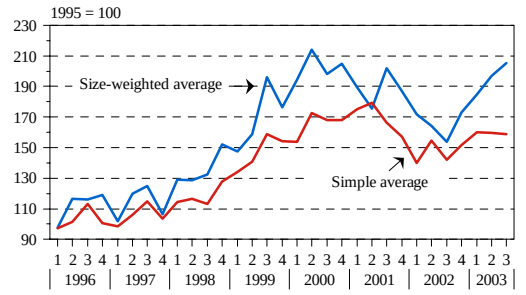


1. 3-month moving averages. *Sources:* Housing Financing Fund, Central Bank of Iceland.

Prices of business premises are still 60%-90% higher in real terms than before the upswing started in 1998. Contractors have tended to hold back on construction of business premises recently unless firm lease agreements have been made, so supply has decreased somewhat. A considerable amount of older business premises are unoccupied, although reliable figures about the vacancy ratio are not available. These conditions should force down rents and thereby contribute to lower prices. Estate agents confirm a substantial drop since 2000 in prices of older, traditional business premises which have not been rented out under firm agreements. Rents still appear to be high enough relative to construction cost to make it economical for those who need business premises for their own use, or have secure long-term tenants, to build for themselves. Real estate management companies are increasing their activities again, on the assumption that rents will rise, at least for modern, quality premises. Foreign investors have also shown an interest in buying specific large and expensive properties which are considered easy to rent out.

Chart 18

Commercial property prices in Greater Reykjavík Area (in real terms)[1] 1996-2003



1. Weighted average of industrial, retail and office premises.
Sources: The Land Registry of Iceland, Central Bank of Iceland.

Price bubble in the real estate market?

Does the recent surge in real estate prices represent a bubble? A distinction needs to be made between two different sources of real estate price fluctuations. Firstly, fluctuations in economic fundamentals, e.g. income, interest rates, volume of construction, etc., and secondly, price changes resulting from self-fulfilling speculation with the aim of profiting on short-term price movements. Under a strict definition, only the latter qualifies as a bubble, although the term could also be used when expectations in general become disconnected from fundamentals. Of course, these three factors are generally linked and therefore difficult to separate. There do not seem to be any clear signs of speculative activity. However, while recent price volatility may hardly warrant the term "bubble" in the strictest sense, this is not to say that the economic consequences could not be considerable or even serious.

Higher real estate prices can be both the cause and effect of rising demand. Research has shown that property prices have a substantial effect on private consumption.[6] This can be explained in general terms with the wealth effect, i.e. the greater the value of households' assets, the more prepared they are to increase their consumption and the less reluctant to raise their indebtedness. Higher prices for property also boost its mortgage value, making it easier for owners to acquire credit, not least because financial companies are more willing to lend due to perceived lower credit risk. Robust private consumption in much of the world in recent years, despite contractions in other aggregates, has largely been attributed to the higher mortgage value of assets used to finance it. The same is likely to apply in Iceland.

6. See, for example, IMF *World Economic Outlook*, May 2000.

The timing of a real estate market turnaround is difficult to pinpoint, but it could dampen private consumption growth

The fact that housing prices in the Greater Reykjavík Area are currently around 45% higher in real terms than in the beginning of 1996 indicates that they could head downwards in the long run. This does not imply that prices might not rise even further for a while. Prices can fall relatively swiftly – with adjustment in some cases induced by external shocks – or over a long period. Whichever happens, such an adjustment would dampen private consumption growth. The timing of this effect is impossible to pinpoint, but it should be pointed out that a failure to maintain low inflation during the aluminium-related investment programme, accompanied by volatile real interest rates and real wages, could conceivably prove decisive for the housing market.

The greater the gap between property prices and underlying construction costs, the higher the risk of a rough adjustment. Thus it is important to do nothing during the upswing that could widen the gap further. Demand has probably been quite strongly driven by higher maximum mortgage amounts, easier mortgageability and changes to the social housing system in the past few years. Plans for additional moves in this direction could fuel price rises even further and exacerbate the risk of a hard landing later. Governments have been known to take measures which have the opposite effect during periods of overheating, in order to contain excessive growth of mortgage debts.[7]

Public sector finances

The budget for 2003 was in broad balance as passed, excluding asset sales and assuming average depreciation and pension charges. The outlook is for a 7% increase in regular Treasury revenues from 2002. This increase is proportionally greater than was entailed by the budget and supplementary budget. Due to initial overestimates the amounts themselves remain broadly on target. Expenditures appear to be on or slightly above target, rising by almost 10% from the previous year in nominal terms, and from 32.3% to 33.6% of GDP. This hefty increase is largely explained by substantially higher welfare expenditure and investment.

Treasury result falls short of budget target

A number of changes to the revenue and expenditure sides were planned when the budget for 2003 was passed. Net worth taxes and corporate income taxes were cut, and a 0.5% hike in social security taxes and non-discretionary growth in other taxes were expected to suffice to keep revenues in line with GDP. Accordingly, revenues excluding asset sales were expected to increase by a nominal 3.5%, and 1.6% in real terms, compared with the supplemented budget for 2002.

Table 4 Treasury finances on an accruals basis 2002-2004

	Supplemented budget	*Treasury accounts*	*Budget*	*As supplemented in May*	*Outlook*	*Draft budget*
B.kr. unless otherwise stated	*2002*	*2002*	*2003*	*2004*	*2003*	*2004*
Regular revenues[1]	253	247	262	262	265	279
% of GDP	32.5	31.8	32.0	32.0	32.5	32.4
Expenditures[2]	253	251	263	267	274	276
% of GDP	32.5	32.3	32.1	32.7	33.6	32.0
Regular balance	-0.5	-4	-1	-5	-9	3
% of GDP	-0.1	-0.5	-0.1	-0.7	-1.1	0.3

1. Excluding proceeds from asset sales. 2. Excluding unusual pension expenditure and tax claim write-off. *Sources:* Budget proposal, Treasury accounts and Central Bank forecasts.

7. Rules on the loan-to-value ratio were tightened, for example, in Hong Kong several years ago and in South Korea recently. In some countries rules refer to average price over a longer period, which also reduces the risk of over-mortgaging during episodes of rising prices.

When the first supplementary budget for the year was passed by parliament in March it was clear that privatisation proceeds would be 2½ b.kr. in excess of the budget. A further supplementary budget proposal recently presented to parliament entails increases of 1 b.kr. in tax revenues and 2 b.kr. in interest revenues and dividends, leaving estimated Treasury revenues excluding privatisation proceeds at 265 b.kr. Because the forecast for the GDP deflator has been revised upwards since the budget was passed, the overall year-on-year rise in tax revenues is still 1½%.

According to the budget for 2003, Treasury expenditure would increase by 3.6% from the supplemented budget for 2002 (or 1.7% in real terms), excluding extraordinary items.[8] Broadly speaking the extra outlays consisted of 4½ b.kr. in operating expenditures, maintenance and health insurance expenditure[9] and a similar amount in increased social security transfers, among other things due to agreements reached with organisations of elderly and disabled persons. Other transfers were down by 3.3 b.kr., the estimated decrease in debt service was 1½ b.kr. and no significant increase in investment was planned from the already high level of 2002. In March 2003, however, it was decided to add 4 b.kr. on the investment side and 0.7 b.kr. in expenditures: 3 b.kr. on operations and a similar amount on transfers, with roughly 2 b.kr. of previously approved investment expenditures deferred until next year. This would leave the deficit excluding extraordinary items at just over 1% of GDP and budgeted expenditures 15 b.kr. (6%) higher in real terms than the result in 2002.[10]

Under the budget for 2003 and the supplementary budget proposal, Treasury revenues excluding transitory items will grow by 4.5% between the years. Collection figures suggest that revenues will increase by somewhat more, or 6-7%, which deflated by GDP is around 3.5%. Nonetheless, revenues in króna terms could end up on or just below target, since revenues for 2002 turned out to be lower than had been projected when the budget for 2003 was passed.

The main source of fiscal data within the year is the State Accountant's monthly surveys. In many respects these surveys differ from final data and the Treasury Accounts. The discrepancy between preliminary figures for December and expenditures according to the State Accounts has mainly involved debt service, pension charges and write-offs of Treasury revenues. Expenditures have tended to be underestimated in the data within the year.

Table 5 Treasury expenditure 1998-2002[1]

In b.kr.	*1998*	*1999*	*2000*	*2001*	*2002*
Accruals basis	148.1	167.7	177.5	202.6	224.9
Cash basis (December)	146.5	164.4	176.3	200.1	224.6
Difference	1.1%	2.0%	0.7%	1.3%	0.1%

1. Excluding interest, write-offs and pension payments. *Sources:* Treasury accounts and State Accounting Office.

regional transfers. As a result, funds earmarked for investment during the year were one-quarter higher than appropriations for 2002 and 36% in excess of expenditures on this item according to the 2002 Treasury accounts as published in August. The outlook was for a fiscal deficit of 0.7% of GDP excluding extraordinary items. The supplementary budget proposal for 2003 involves an 8 b.kr. increase

A simple projection of expenditures excluding debt service, write-offs and pension charges so far this year indicates an increase of close to 10% from the result in the State Accounts for 2002. This is close to budget targets. Some policy areas and institutions seem set to overshoot on expenditure and others are heading towards a surplus. If public sector administration have a tendency to use their

8. Write-offs of tax claims and extraordinary pension commitments.

9. Which constitute the bulk of public consumption by central government and the national insurance system.

10. It should be borne in mind that expenditures in 2002 were lower than estimated when the budget for 2003 which was passed by parliament.

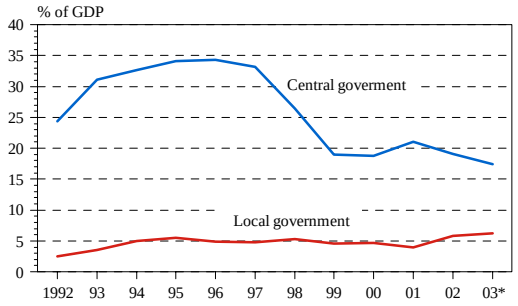
expenditure authorisations to the full, this implies a risk that the actual result will be poorer than the current outlook. This implies that an expenditure-side risk is still present despite the massive injection needed to raise budgeted expenditures by 1½% of GDP.

Decrease in Treasury's net debt

Fiscal surpluses and privatisation proceeds, coupled with output growth, have led to a substantial reduction in central government debt as a proportion of GDP in recent years. Net Treasury debt will continue to decline in 2003. The Treasury has also been scaling down its own lending at the same time as government enterprises have been sold and government agencies have been granted greater independence in borrowing. Gross debt has therefore dropped by more than the net figure, although the difference is slight.

Chart 19

General government net debt 1992-2003



* Estimate for 2003. *Sources:* Ministry of Finance, Statistics Iceland, The Central Bank forecast.

Local government expenditure growth slows down this year

Local government revenues grew by 4% in real terms in 2002, and their expenditures by broadly the same amount. On the basis of budgets for 2003 and preliminary figures for 2002, revenues look set to increase by 7% this year but expenditure by only 2½%, which would represent a contraction of ½%-1% in real terms. While the rise in revenues is fairly closely in line with the probable increase in the municipal and real estate tax bases, a contraction in expenditure would be bigger news, since local government spending has grown annually by 4% in real terms since 1995. Admittedly, virtually the entire contraction is accounted for by lower investment. There is a precedent for this scenario from 1995, when investment plunged by 32% in a single year, much more than budgeted for now.

One assumption behind forecasts for slow growth in public sector expenditure is subdued local government activity. A counteracting factor is the risk of growth in outlays on wages, which have tended to rise by more in the public sector than elsewhere.[11] Local governments have been allocated sizeable additional revenues to enable them to take over primary school operations and investment in this area should have come to an end by now. No major new projects comparable to the new school building programmes or harmonised full-day schooling lie ahead, but many schools are still under construction and no end is in sight to the growth in expenditure on kindergartens. The Ministry of Finance assumes no change in local government revenues as a proportion of GDP over the next few years and a lower expenditure ratio. In light of mounting expenditure on kindergartens and an apparent increase in the number of primary school pupils, this seems to be rather optimistic. Changes in the presentation of local government accounts also invite certain risks, since investments are generally no longer posted on the expense side. However, significant synergies may be tapped in closer cooperation between local authorities.

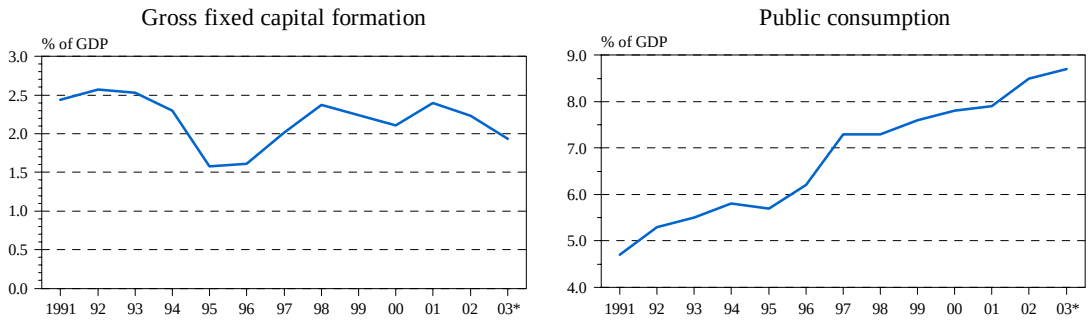
Local government debt has grown by less than might be expected

Remarkably little increase has been seen in local government debt following deficits which totalled 7% of GDP over the past decade. To some extent the explanation is an accounting phenomenon, i.e. institutions have been made financially independent and refinanced, and have paid out part of their accumulated equity to their municipal owners. There has also been some genuine privatisation, e.g. sales of fishing companies, which reduces the local authorities' debt commitments in real terms.

11. Since wages are at a historical high relative to GDP, municipal tax revenues are unlikely to grow by significantly more than GDP.

Chart 20

Local government finances 1991-2003



* Estimate. *Sources:* Ministry of Finance and Statistics Iceland.

Financial markets

Adequate liquidity position for most of the year

The Central Bank's policy interest rate has remained unchanged since February. Nonetheless, financial conditions have been relatively favourable over the ensuing period. Icelandic financial markets have experienced adequate liquidity for most of the year, reflected in short-term interest rates which are generally lower than the policy rate. Substantial inflows of foreign credit and the Central Bank's currency purchases have also reduced financial institutions' need to procure credit through Central Bank repos.

Since the spring, the yield on four-year Treasury notes has trended downwards, although it is difficult to determine whether this reduction is permanent, since long-term bond yields are quite volatile. This development probably reflects market participants' expectations that the upswing will start more gently than had previously been thought, among other things because of uncertainty about the Norðurál smelter expansion, poorer external conditions, waning optimism and growing discussion of the need for counter-expansionary measures after the general election. Yields on most debt instruments went down in August, although this has largely been reversed except for indexed Treasury bonds with a two-year lifetime, on which yields are more than half a percentage point lower than in mid-summer. Bank lending rates have kept pace with the Central Bank policy rate for most of the past year and have therefore changed little since February, apart from a minor reduction in September. The spread between bank interest rates and Treasury-guaranteed bond yields has thus been widening and was probably at one of its highest levels ever in the beginning of September.

Long-term yields on foreign treasury bonds have decreased since mid-year

Domestic credit institutions and business have recently enjoyed very favourable foreign terms, which have partly been obtained through short-term financing. In most parts of the world, short-term interest rates are at their lowest level for decades. Although they have begun to rise in some places, they have remained steady in the countries which are most important to Iceland as credit providers. Trade-weighted foreign short-term interest rates have remained virtually unchanged since mid-summer, but reductions in Iceland have narrowed the interest-rate differential with abroad by around half a percentage point, and it has recently been in the region of 2½%.

Foreign government bond yields, on the other hand, have climbed sharply from the low they reached in the middle of the year. The downturn in yields that took place in the first half of 2003 has been reversed and in some instances they are higher than when it began. This reflects expectations of economic recovery among the main advanced economies and possibly also incorporate the effect of the widening US fiscal deficit and a readjustment that market participants made after overestimating the risk of disinflation for some time. The rise in yields on US government bonds has been particularly

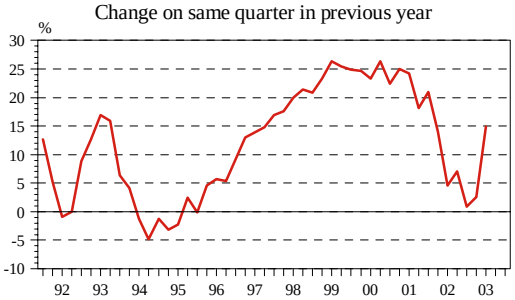
pronounced. In the first half of October they were 0.9% higher on average than in June, and for a while had been even higher. If Asian central banks, especially in China and Japan, had not made massive purchases of US treasury instruments in order to dampen or prevent the appreciation of their domestic currencies against the US dollar, yields on US government bonds could even have climbed further. The impact of higher yields on the terms of foreign credit available to Icelandic businesses and credit institutions is not yet clear, but they could deteriorate if the upward trend continues.

Credit growth has been steadily gaining speed during the year, especially in corporate credit

Data on credit are available up to June for the credit system as a whole and until the end of September for the banking system. Figures confirm the clear upswing in lending which began in the spring. Twelve-month growth of lending by the credit system amounted to 10½% at the end of June, or just under 10% adjusted for exchange rate movements. The sharpest upturn has been in corporate lending, which soared by 15% over twelve months, while lending to households was up by just under 7%. Growth in loans to households primarily stemmed from the Housing Financing Fund and pension funds, whose lending increased by roughly 12%.

Chart 21

Growth of credit system lending to businesses 1991/Q1 -2003/Q2



Source: Central Bank of Iceland.

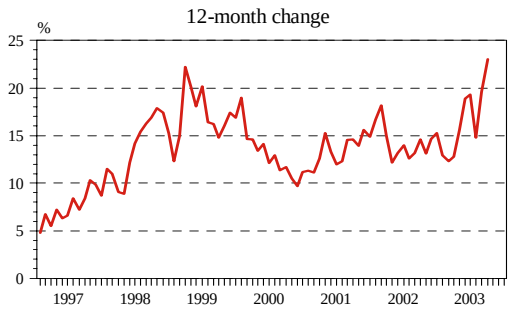
At the end of September, domestic lending by deposit money banks (DMBs) had increased by almost 14% over the year, and price indexation and exchange rate adjustments had little aggregate effect on its growth.[12] In August and September the growth rate was at its highest since March 2001. A breakdown of DMB lending and market bond portfolios shows a 22% increase to businesses and 8% to households. Around three-quarters of this growth is attributable to increased lending or portfolio holdings of market securities issued by companies in the services sector. Lending to the transportation and electricity sectors has also grown firmly.

Foreign-denominated items are financed from abroad

DMBs continued to increase their lending to non-residents, by 25 b.kr. over the twelve months until the end of September, to a total of 72 b.kr. Lending to foreign borrowers, foreign-denominated loans to residents (mainly in the corporate sector) and other foreign-denominated items have been financed by borrowing abroad. Over the twelve months until the end of September, foreign borrowing and foreign-denominated securities issues amounted to 164 b.kr. At the same, foreign assets, foreign-denominated loans, lending abroad and market securities portfolios grew by 153 b.kr. Financing of other lending has been met with a hefty increase in deposits, which amounted to 88 b.kr. Of the 148 b.kr. increase in net lending and securities portfolios, roughly 60% was financed with increased deposits and 40% with foreign borrowing net of foreign asset growth.

Chart 22

Increase in broad money (M3) in real terms 1997-2003



Source: Central Bank of Iceland.

12. Approximately one-quarter of DMB lending growth was accounted for by loans to non-residents.

Highest growth of M3 in real terms since 1999

Broad money (M3) has increased rapidly so far in 2003; growth also remained fairly brisk last year at the same time as lending growth came to a halt. In September, M3 growth in real terms was marginally greater than the previous peak, which was in March 1999.

Depreciation of the króna eases competitive position of trading companies

Companies in the tradable goods sectors were squeezed by the appreciation of the króna in the first half of the year, which was reversed during the summer. The exchange rate has been stable in recent months, with the currency index moving within a relatively narrow range. These exchange rate fluctuations do not represent a significant change in financial conditions.

Rising equity prices facilitate business expansion

Equity prices have risen rapidly so far this year and some indices have set three-year records. Higher equity prices spell an improvement in the financial climate and facilitate the funding of further growth with new share offerings. It should be pointed out, however, that most of the price rises are attributable to relatively few companies, which have extensive activities outside Iceland and have performed very well recently. Hence rising share prices are not necessarily related to growing domestic activity. Another possible factor which may have pushed up equity prices is that the number of listed companies has declined following recent mergers and delisting, leaving correspondingly fewer investment opportunities, at the same time as ample liquidity has been available for investment. Relative to corporate profits, P/E ratios are within moderate limits. They have climbed from an average of 12.6 in 2001 to 15.6 this year, which is much lower than at their peak in 1999 and 2000.

II Macroeconomic and inflation forecast

As usual the macroeconomic and inflation forecast is based on the assumption of a constant exchange rate and unchanged monetary policy stance over the forecast horizon. A number of significant changes in assumptions have been made since the Bank's last forecast at the end of July. For instance, it is no longer assumed that the Norðurál expansion will go ahead during the forecast period. Although the likelihood of the investment may probably have increased, this is in essence a new project whose nature and timetable have only been clarifying in the past few weeks. External conditions and the terms of trade this year have deteriorated from the previous forecast. For the first time, the forecast covers the whole of 2005. Assumptions about the fiscal stance are broadly in line with the budget proposal for 2004 and the Government's medium-term scenario for 2005-2007.

The GDP forecast for 2003 and 2004 has been revised downwards. Fairly robust output growth is expected in 2005, outstripping growth in potential output. The output gap will turn from negative to positive in that year. Inflation will therefore rise over the forecast horizon, but is expected to remain below the Bank's target for the early part of the forecast horizon. Two years ahead, however, it will marginally exceed the target. The risk spectrum has been revised upwards. One year ahead the risk is considered symmetric, but in the July forecast it was on the downside. Two years ahead it is on the upside, but was previously considered symmetric.

Demand and output

Weaker external conditions and terms of trade this year than in the July forecast

As usual, the Central Bank's macroeconomic and monetary forecast assumes that both the policy interest rate and exchange rate will remain unchanged throughout the forecast period. The policy rate is currently 5.3% and an exchange rate index of 126 is assumed, which implies a 1½% depreciation of the króna from the index value assumed in the July forecast. For the first time, the forecast extends until the end of 2005.

Since the publication of the July forecast, the outlook for external economic conditions during 2003 has worsened. In July it was assumed that marine export production this year would grow by 3%. In the current forecast a 2% contraction is assumed. On the other hand the outlook for 2004 has improved with marine production growing by 6½%

instead of 5% as assumed in July. Over a longer horizon, marine export production is expected to grow in pace with general global demand.

Prices of marine products are expected to fall by 3% in 2003 and remain flat next year. In 2005 they are expected to develop in line with overall global inflation. Offsetting the lower marine product prices, aluminium prices are assumed to rise in both 2003 and 2004, but remain stable in 2005. This assessment is based on futures prices. In foreign currency terms, prices of exports of goods and services will decline this year, although by less than was assumed in the July forecast. The forecast rise in export prices in 2004 has been revised upwards to 2¼%, with a rather smaller increase in 2005.

The most significant change in assumptions concerns the prospects for fuel prices. The outlook is for a much steeper rise in fuel prices this year than was assumed in the July forecast. Futures prices indicate a smaller drop in 2004 than previously expected, followed by a negligible decrease in 2005. Assumptions about prices of merchandise imports have also been changed significantly. An increase of more than 2% is foreseen this year, instead of a slight decrease. This trend will be reversed next year and subsequently prices are assumed to converge towards the long-term equilibrium growth path in 2005. Overall, the terms of trade are expected to deteriorate this and next year, and then improve in 2005.

Aluminium investment plans have been revised as well

In the July forecast it was assumed that the Norðurál expansion would go ahead. Plans for the project have since been revised. The timetable for the Fjarðaál smelter construction project and the Kárahnjúkar hydropower station to supply electricity for the plant has also changed. Current plans for the construction of a smelter in East Iceland, expansion of the Norðurál plant and the accompanying power facilities are described in Box 3. No final decision has been made on the Norðurál expansion, but the probability that it will go ahead is about as high as in the spring. However, various details of the project have changed from what was assumed in the spring. The timetable has changed and according to the current plan electricity will be supplied by geothermal facilities operated by Reykjavík Energy and Suðurnes Regional Heating (Hitaveita Suðurnesja) instead of Landsvirkjun's hydropower stations. Since these plans did not emerge until only shortly before the forecast was to be published, and since no final decisions have been taken, it was decided not to include the project in the base forecast. However, the potential impact of the smelter expansion, in line with current plans, is discussed below.

According to revised estimates from Fjarðaál, the bulk of construction work on its aluminium smelter will take place slightly later, resulting in less investment in 2005 compared with earlier plans. Landsvirkjun's work on the Kárahnjúkar power station has also got off to a slower start than originally planned, although it does not involve a major reshuffle. These factors affect the scale of investment during the forecast period and thereby the results of the macroeconomic forecast.

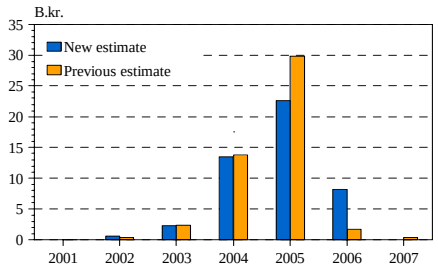
Box 3 Investment in the aluminium industry

An in-depth study of the macroeconomic impact of proposed aluminium-related investments and possible economic policy responses to them was included in *Monetary Bulletin* in February this year. That analysis did not take into account the planned expansion of the Norðurál smelter, but was confined to construction of the Alcoa (Fjarðaál) smelter in east Iceland and Landsvirkjun's hydropower station at Kárahnjúkar which will supply it with electricity. The macroeconomic forecast in the May *Monetary Bulletin* incorporated the Norðurál expansion and accompanying investment in power facilities. So did the macroeconomic forecast published in *Monetary Bulletin* in August. The current macroeconomic forecast, however, once again only takes into account the Fjarðaál and Kárahnjúkar projects.

There have been considerable changes since the analysis in the February *Monetary Bulletin*, although most of the fundamentals are the same. Most significantly, in the summer Landsvirkjun abandoned its

Chart 1

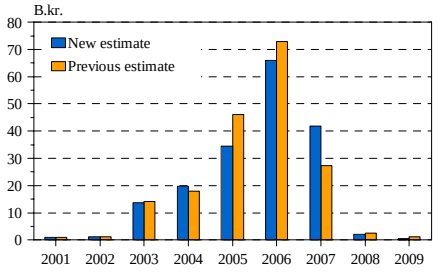
Construction cost for Norðurál expansion and power facilities 2001-2007[1]



1. At constant prices (January 2003). *Source:* Central Bank of Iceland.

Chart 2

Construction cost for Fjarðaál smelter and power facilities 2001-2009[1]



1. At constant prices (January 2003). *Source:* Central Bank of Iceland.

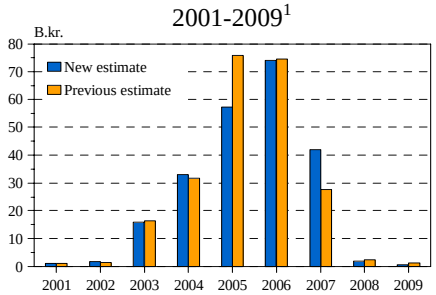
plans to make a power agreement with Norðurál. Instead, Reykjavík Energy and Suðurnes Regional Heating (Hitaveita Suðurnesja) will supply the required electricity for expanding production capacity at the smelter at Grundartangi by 90 thousand tonnes per year. Preparations are making good progress, both for the expansion itself and towards a final agreement with the prospective power supplier. A number of issues remain to be finalised, however, and a final decision on whether the expansion will go ahead will be made in the beginning of 2004. Total cost of the expansion project is estimated at almost 24 b.kr., largely spread over 2004 and 2005. Foreign procurement is expected to account for 62% of the total investment and domestic procurement 38%. The expanded smelter is planned to go on stream in spring 2006, bringing Norðurál's total production capacity up to 180 thousand t.p.y. The construction cost of power generating facilities will be roughly the same as the cost of the smelter expansion, or 23 b.kr., spread over 2004-2006. The main change from the earlier cost schedule is that construction activity will peak at a lower level in 2005 and be spread in part to 2006. The estimated labour requirement for the power station project is 700 man-years, 85% of which will be met domestically. Foreign procurement is expected to amount to 57% of the total.

Construction of the Kárahnjúkar power station is in full swing and the investment this year is estimated at 13.5 b.kr. Construction activity will peak in 2005 and 2006, with investments of 23 and 25 b.kr. respectively. The project will largely be concluded in 2007. Estimated breakdown of the total investment is 45% procured domestically and 55% from abroad.

Total manpower requirement for the Kárahnjúkar power station is estimated at roughly 3,500 man-years, of which 53% is expected to be foreign labour and 47% domestic.[1] This autumn, 850 people are employed on the project, of whom 550 (65%) are foreigners. Estimated distribution of cost over the construction period remains broadly unchanged. Some 2/3 of total costs will be incurred over the period 2004-2006, and more than half in 2005 and 2006.

Chart 3

Construction cost for Norðurál expansion, Fjarðaál smelter and power facilities 2001-2009[1]



1. At constant prices (January 2003). *Source:* Central Bank of Iceland.

1. The macroeconomic forecast assumes a 40% foreign contingent in the labour force on the Kárahnjúkar project. The data in this box are more recent than those used in the macroeconomic forecast and were not available at the time it was made. Only a minor change in assumptions is involved, however, with an insignificant impact on the macroeconomic forecast result.

Total construction cost for the Fjarðaál smelter is estimated at 87 b.kr. and will mostly be spread over the period 2005-2007. Activity will be most intense in 2006 and 2007 when 85% of construction cost will be incurred. Domestic procurement is expected to amount to 40% of the total investment and foreign procurement 60%. The total labour requirement is estimated at 2,200 man-years, with a 70% domestic component. According to current schedules, Fjarðaál will reach full production capacity in autumn 2007.

Rescheduling of project phases and the lower peak in construction activity implies that the aluminium-related investments in east Iceland will represent a smaller proportion of GDP than was previously estimated. At the peak in 2006, the cost will be equivalent to just over 6% of estimated GDP that year, and just under one-quarter of gross fixed capital formation. The labour requirement will be 1.3% of the total labour force that year. If both the east Iceland programme and the Norðurál expansion go ahead over the next few years, the total investment will amount to 220 b.kr. Activity will peak then in 2005 and 2006 when the cost will be equivalent to 7%-8% of GDP for each year.

As Chart 3 shows, the main divergence from earlier plans for the Norðurál and Fjarðaál projects is that the peak shifts from 2005 to 2006 and some investment is delayed until 2007.

Assumptions on fiscal policy broadly in line with the budget proposal and Ministry of Finance's medium-term scenario

Public consumption is forecast to grow by 3½% this year, which is roughly 1 percentage point higher than in the July forecast. In line with the budget proposal, it is only expected to grow by 1% in 2004, a very low figure in historical terms. Slightly higher public consumption growth of 2% is expected in 2005. As a proportion of GDP, however, it will remain virtually flat throughout the forecasting period, at around 26%.

The July forecast assumed sizeable growth in public sector investment, especially due to job creation projects which featured prominently in the economic debate in the spring. Even though some projects have been deferred until 2004, central government investment will still increase substantially this year. A contraction at local government level leaves estimated investment by the public sector as a whole at 3½% this year.

Table 6 Assumptions of the Central Bank macroeconomic forecast

	Current forecast[1]			*Change from previous forecast*[1]	
Policy rate and exchange rate[2]	*2003*	*2004*	*2005*	*2003*	*2004*
Central Bank policy interest rate	5.3	5.3	5.3	-	-
Foreign exchange index	123¾	126	126	¾	2
External conditions (% change from a year before, except for interest rates)					
Marine production for export	-2	6½	2	-5	1½
Prices of marine products	-3	0	2	1	-
Aluminium prices	5	4	0	1	1½
General import prices	2¼	-½	1¾	2¾	-1
Fuel prices	15¼	-5	-1	6¼	9
Prices of exported goods and services	-4¾	2¼	1¾	3	1½
Terms of trade for goods and services	-1½	-¼	¾	-¼	-½
Foreign short-term interest rates (%)	2	2½	3½	-1	-1

1. '-' indicates no change. 2. Annual averages. Assuming unchanged interest rates and exchange rate from the day of forecast (daily data).

Forecast for private consumption and national expenditure growth revised upwards ...

As described above, there are strong indications of robust output growth so far this year. In light of these and other indicators, the Bank has upped its forecast for private consumption in 2003 from 2% to 5½%.

Robust private consumption growth is reflected in a hefty rise in imports, forecast to expand by 8½% this year, which is 4 percentage points more than the Central Bank had forecast in July. The surge in imports has been concentrated on investment goods and construction equipment on the one hand, and consumer goods on the other. Exports, however, are expected to grow at a slower pace than in the forecast in July. Thus private consumption is not supported by export revenue, which is lower than expected.

Moreover, public consumption surged despite a weakening of the labour market. Unemployment in 2003 is expected to measure 3½%, one-quarter of a percentage point higher than forecast three months earlier. Although increased private consumption is largely explained by higher real wages, it also seems to be driven by expectations of improving household finances in the near future. Expectation-driven growth of this kind exacerbates imbalances in the economy and it will not transpire until after a few years whether the optimism was entirely warranted.

Due to higher private consumption, national expenditure will grow by rather more in 2003 than was forecast in July, despite a lower growth rate of gross fixed capital formation. The forecast for investment has been revised downwards to reflect the

Table 7 The Central Bank of Iceland macroeconomic forecast

	Billion krónur at current prices[1]			*Volume change on previous year (%)*[2]			*Change since previous forecast*[2]	
	2003	*2004*	*2005*	*2003*	*2004*	*2005*	*2003*	*2004*
Private consumption	449.6	479.3	517.1	5½	4¼	5	3½	1¼
Public consumption	214.9	226.6	239.6	3½	1	2	1	-1½
Gross fixed capital formation	162.0	176.7	197.6	6¾	8	8½	-4	-3¼
Industries	89.8	104.0	123.4	12¼	15	14½	-1¾	-5½
Excl. power-intensive projects, ships and aircraft	65.6	67.5	71.7	-1¾	2¼	2½	½	-7¼
Residential housing	40.4	42.9	45.8	3	3½	3½	-	-
Public investment	31.8	29.8	28.3	3½	-8½	-8	-7¾	-1¼
National expenditure	826.5	882.6	954.3	5¼	4¼	5	1½	-¼
Exports of goods and services	294.0	312.5	333.3	0	4	4¾	-2	-
Imports of goods and services	307.8	340.0	369.7	8½	7½	7	4	½
Gross domestic product	812.7	855.1	917.8	2	3	4¼	-¾	-½
Current account balance, % of GDP	-3½	-5¼	-6	.	.	.	-2¾	-3¼
Gross national saving, % of GDP	16½	15½	15½	.	.	.	-1¾	-2½
Net external debt, % of GDP[3]	95¼	100¼	107¼	.	.	.	1	6¼
International investment position, % of GDP[3]	-73¾	-78	-84½	.	.	.	-¾	-5
Private sector wages, % change between annual averages	.	.	.	5	4¼	5½	-	-
Labour productivity, % change between annual averages	.	.	.	2	1½	1¾	-	-
Real household disposable income per capita, % change between annual averages	.	.	.	2¼	2¼	2	-	-1
Unemployment, % of labour force	3½	2¾	2¼	.	.	.	¼	¼
Output gap, % of GDP	-½	-¼	1¼	.	.	.	-	-½

1. Unless otherwise indicated. 2. '-' indicates no change. 3. International investment position and GDP are calculated using the same SDR exchange rate.

Box 4 Financial market analysts' assessments of the economic outlook

The accompanying table shows the forecasts made in October by a number of financial market analysts. Analysts were given a free choice as to whether to include investments on the Norðurál smelter in their forecasts, and three of the five opted to do so.

The forecast for inflation over 2003 is unchanged from July and almost identical to the Central Bank's forecast of 2.2%, after having been revised upwards since the summer in light of global inflation developments and changes in the oil markets. Forecasts for 2004 show a greater divergence, with the Bank forecasting 2.1% inflation over the year and market participants 2.8%, which is above the Bank's target. The Bank also forecasts lower average year-on-year inflation, but the difference is slight.

As usual, analysts were also asked about the outlook for other key economic aggregates. Their growth forecasts have been revised upwards since July and for both 2003 and 2004 their current forecasts are somewhat higher than that of the Bank, which has in fact been revised downwards after excluding the Norðurál smelter expansion. The Bank forecasts output growth of 2% this year, but financial analysts 2.9%. The corresponding figures for 2004 are 3% and 3.9% respectively.

The difference of opinion among financial companies about growth prospects has widened since the summer, but this is explained by the fact that some of them take the Norðurál expansion into account while others do not. The forecast range has widened because of both a rise in the highest value – especially for 2003 – and a drop in the lowest value.

On average, the respondents expect little change in the exchange rate of the króna for the next 1-2 years, forecasting an index value in the range 120-125 and inching upwards as the period progresses. There is a closer consensus on exchange rate developments than in the past.

As in the past three surveys, the respondents expect the Central Bank to raise its policy rate soon. They forecast a policy rate of 6.4% in October next year and 7.4% a year thereafter.

Analysts expect equity prices to follow a trend broadly in line with the surveys in April in July. Expectations vary widely, however, as indicated by the wide range between the highest and lowest values. Views on the outlook for housing prices also differ, but all forecast continuing price increases, both one and two years ahead.

Overview of forecasts by financial market analysts[1]

	2003			*2004*		
	Average	*Highest*	*Lowest*	*Average*	*Highest*	*Lowest*
Inflation (within year)	2.3	2.3	2.2	2.8	3.1	2.5
Inflation (year-on-year)	2.1	2.2	2.0	2.5	2.8	2.3
GDP growth	2.9	4.2	2.5	3.9	4.3	3.5
	One year ahead			*Two years ahead*		
The effective exchange rate index of foreign currencies vis-à-vis króna (Dec. 31, 1991=100)	123.0	125.0	120.0	125.0	125.0	120.0
Central Bank policy interest rate	6.4	6.8	6.2	7.4	7.6	6.8
Nominal long-term interest rate[2]	7.2	7.5	6.8	7.7	8.3	7.3
Real long-term interest rate[3]	4.2	4.7	3.9	4.4	5.0	3.7
ICEX-15 share price index (12-month change)	6.0	15.0	0.0	12.4	25.0	5.0
Housing prices (12-month change)	5.5	10.0	3.0	8.0	10.0	5.0

1. The table shows percentage changes, except for interest rates (percentages) and the exchange rate index for foreign currencies (index points). Participants in the survey were the research departments of Economic Consulting and Forecasting, Íslandsbanki, Kaupþing Búnaðarbanki, Landsbanki and SPRON (Reykjavík and Environs Savings Bank). 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 bonds (IBH 41 0315). *Source*: Central Bank of Iceland.

changes in job creation projects and the timetable for construction of the Kárahnjúkar power station.

...but output is nevertheless forecast to grow at a slower pace this year

Despite higher national expenditure growth this year, the GDP forecast has been revised downwards. In the current year output is forecast to expand by 2%, instead of the 2¾% forecast in July. This is a marginally higher rate of growth than the Ministry of Finance had forecast in the beginning of October, but somewhat below the rate forecast by financial market analysts (see Box 4).

Since a downward revision of the GDP forecast reflects lower export growth and higher import growth, the current account deficit will also widen, to 3½% of GDP, compared to the 1¼% envisaged in July.

Outlook for a surge in national expenditure over the next two years

The new forecast assumes that annual private consumption growth will be in the range 4¼%-5% and gross fixed capital formation 8%-8½% for the next two years. These figures reflect the major investments ahead and the boost to economic activity that will accompany them. Business investment is expected to grow by more than 14% annually over the next two years, and will still grow even if investments in the aluminium industry and in ships and aircraft are excluded – albeit at a much slower rate than forecast in July. Investment in residential accommodation will also go up, but a dampening factor is the marked reduction in public sector investment, as the government scales down this category in response to the surge in aluminium-related investments.

Accordingly, national expenditure will increase by 4¼% next year, slightly less than was expected in July. This is mainly the result of lower business investment growth, because the Norðurál expansion has been omitted from the new forecast and a recent survey indicates that domestic businesses in general intend to hold back on investments (see Box 2). In 2005, national expenditure is expected to grow by 5%.

The aluminium projects call for substantial imports of investment goods. Imports are forecast to grow over the next two years by 7%-7½% annually. Despite sturdy export growth this will widen the current account deficit to an estimated 6% of GDP in 2005. Part of this deficit can clearly be attributed to imports of investment goods for the aluminium project and hydropower station. Fjarðaál's investment plan indicates that just under one-quarter of this year's 3½% current account deficit is directly attributable to imports in connection with those investments. This share will grow in the course of the forecast period and in 2005 increasing imports in connection with the project can be expected to account directly for more than one-third of that year's 6% deficit. Including the indirect, second-round effects on domestic demand, the aluminium-related investments will account for a significantly larger share of the current account deficit.

Output gap will turn from negative to positive in 2005

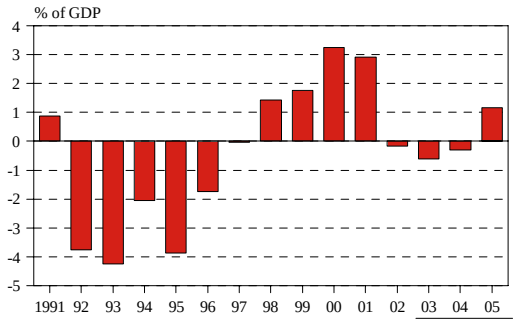
With domestic demand and exports rising over the next two years, output growth will accelerate. Output growth next year is expected to be around 3%, which is broadly in line with the increase in potential output. This is a lower rate of growth than in forecast in July, due to the fact that the Norðurál expansion is no longer assumed next year. In 2005, the rate of output growth will speed up to 4¼%, which is some way above the growth in potential output. The Ministry of Finance has recently forecast somewhat higher growth, at 3½% in 2004 and 5½% in 2005. Financial market analysts have on average forecast an even higher rate of growth for 2004, at almost 4% (see Box 4). However, some of them include the Norðurál expansion in their forecasts.

As output growth rises, the output gap will be affected. It is expected to be negative this year and also, albeit only slightly, in 2004. This contrasts with the July forecast which saw the output gap already turn marginally positive next year. The change is the result of lower forecast output growth this year and in 2004. The output gap is expected to turn positive in 2005, when output growth will outstrip potential output.

While the slack in the economy withers away, the labour market will tighten, but with some lag. Unemployment is expected to decline over the next two years and will probably drop below a level which is considered compatible with a stable rate of inflation in 2005.

Chart 23

The output gap 1991-2005



Source: Central Bank of Iceland.

Increased use of foreign labour could ease pressures in the second half of the forecast period

Earlier estimates assumed that one-quarter of the labour force employed on aluminium industry and hydropower investments in the next few years would be brought in from abroad. There are strong indications that the share of foreign labour has been underestimated. It is now expected that 40% of the workforce on the Kárahnjúkar hydropower project will be foreign, but the share of imported labour engaged in construction of the Fjarðaál smelter will probably be lower. The higher the proportion of foreign labour employed on these projects, the smaller will be the effect on domestic demand. The assumed share of foreign labour affects unemployment as well as the economic outlook in general.

Under an alternative scenario in which the majority (70%) of the combined workforce constructing the smelter and hydropower station is assumed to be from abroad, unemployment increases by 0.1 percentage point per year over the period 2003-2005, and the output gap will be 0.1 percentage point narrower than otherwise in 2005. At the peak of construction activity in 2006 and 2007, other things being equal, this will dampen inflation by as much as one percentage point for each year.

The Norðurál expansion will fuel output growth and increase the output gap

One of the main uncertainties for the years ahead is the planned expansion of the Norðurál smelter. If this project is realised in line with current estimates, a considerable impact on the economy will be felt as early as next year. Unemployment in 2004 and 2005 could end up half a percentage point below the current forecast. Likewise, output growth could be half a percentage point higher for each year. The negative output gap would therefore vanish next year and a larger output gap than otherwise would emerge in 2005. Inflation would already be higher next year, but the thrust of the impact would be felt in 2006 and 2007, beyond the current forecast horizon. Uncertainties in the macroeconomic and inflation forecast are discussed in more detail in the next section.

The inflation outlook

Global inflation contributes to higher inflation in the short term, but increased domestic demand has similar effects over the longer horizon

The assumptions underlying the inflation forecast have been outlined in the preceding section on the macroeconomic forecast. The main changes in assumptions affecting the inflation outlook over the next two years are global inflation and domestic demand.

Assumptions for import prices in foreign currency terms have been revised in light of recent data and revised international forecasts. Notably, this included recent changes in spot and futures fuel prices. Import prices denominated in foreign currency are assumed to increase by 2¼% this year, compared to a ½% reduction in the July forecast. The króna is also assumed to be 1½% weaker than in the July forecast. Accordingly, import prices, measured in terms of domestic currency, will be more than 4¼% higher than was forecast in July, raising the inflation rate for most of the period.

On the other hand, import prices are expected to decrease by roughly ½% next year, but had been forecast to rise by ½%. Domestic demand is forecast to be weaker than before, largely because the Norðurál expansion is no longer included in projections. This is reflected in slightly higher unemployment and a more negative output gap than in the July forecast.

For the first time, the forecast covers the whole of 2005. The outlook is for subdued inflationary pressure from abroad that year. Inflation will be mainly driven by domestic demand, as reflected in a

widening output gap and falling unemployment, and will contribute to a rise in unit labour costs, which are estimated to increase by 3½% in 2005, somewhat above the Bank's inflation target.

Inflation more flat than previously forecast

In the last *Monetary Bulletin* it was argued that a delay in construction work for Norðurál could be expected to amplify inflationary pressure in the short term, through a weakening of the króna, but reduce it in the long term through the impact of higher domestic demand. This pattern is reflected in the current forecast.

Higher inflation than previously forecast is now expected until the second half of 2005, and the decline in inflation until the middle of next year is no longer present. Inflation is therefore expected to be just under or on target for most of the forecast period. One year ahead it is expected to be 2.4%.

As in the July forecast, inflation is expected to gain momentum in the course of 2004 and exceed the target in mid-2005. Two years ahead it is forecast at just below 3%, which is broadly in line with the July projection. Beyond the forecast horizon, inflation is expected to continue rising, on the basis of the forecast assumptions, which include an unchanged monetary stance.

Table 8 The Central Bank inflation forecast

Quarterly changes (%)

	Percentage change on previous quarter	*Annualised quarterly change*	*Change on same quarter of previous year*
2001:1	0.8	3.4	4.0
2001:2	3.5	14.5	6.0
2001:3	2.3	9.7	8.0
2001:4	1.6	6.6	8.5
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	0.7	3.0	2.2
2004:1	0.5	2.1	2.0
2004:2	0.6	2.3	2.1
2004:3	0.6	2.3	2.4
2004:4	0.4	1.7	2.1
2005:1	0.6	2.5	2.2
2005:2	0.9	3.8	2.6
2005:3	0.9	3.6	2.9
2005:4	0.6	2.4	3.1

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

Annual changes (%)

Year	*Year-on-year*	*Within year*
2000	5.0	3.5
2001	6.7	9.4
2002	4.8	1.4
2003	2.0	2.2
2004	2.2	2.1
2005	2.7	3.1

Shaded area indicates forecast.

Changes in the risk spectrum reflect the absence of the Norðurál project

Omitting the Norðurál smelter expansion from the inflation forecast has changed the risk spectrum considerably. Should the project go forward during the forecast period, it could strengthen the króna and boost already rising domestic demand. The inflationary impact is ambiguous. An appreciation of the króna could dampen inflationary pressures in the short term, while higher domestic demand could fuel them in the latter part of the period. Uncertainties concerning global inflation and the exchange rate appear more symmetric than in July, and uncertainty concerning activities at the US military base within the forecast horizon has also diminished.[13]

Risk of an insufficiently tight fiscal stance and announced changes in public housing finance could contribute to higher inflation

On the fiscal front, uncertainty is probably biased towards a laxer stance, which could result in stronger

13. The level of activity at the US military base in Keflavík has recently been under review. US authorities had announced their intentions this spring to withdraw their fighter jets and airborne rescue teams presently deployed at the Keflavík naval air base, which could have led to a sharp reduction in activity there. Under pressure from the Icelandic authorities, the decision was deferred for consideration in a more comprehensive review of the American military presence in Europe.

demand and higher inflation. As noted before, there has been a persistent tendency towards budget overruns when supplementary budgets are passed. This poses some risk that next year's fiscal stance will turn out to be too loose, despite promises to the contrary. Concerning the Treasury's longer-term plans, the risk is that public sector investment will not be reduced sufficiently to offset planned tax cuts.

Besides the general risk of an insufficiently tight fiscal stance, the Government plans to change the lending rules of the Housing Financing Fund (the public housing finance system). The Central Bank has already pointed out that the planned changes are equivalent to an easing of the fiscal stance, giving a corresponding impulse to domestic demand and inflation. Furthermore, they are likely to give an extra boost to already buoyant demand for housing and amplify housing price inflation over a period of some years, although in the long run this will be determined by construction costs.

On the other hand, considerable uncertainties surround housing price developments over the next few years, irrespective of the planned changes to financing arrangements. As noted earlier, it cannot be ruled out that housing prices will soon peak and enter a decline, which could constrain domestic demand by reducing household wealth. A decline in mortgage value would reduce households' scope for borrowing to finance consumption, and by raising the credit risk it could make financial institutions more reluctant to lend.

Uncertainty ahead in the labour market

Recently the labour market has turned out weaker than the Central Bank and other analysts had expected. Unemployment has continued to rise and it cannot be ruled out that the labour market will continue to be weaker than forecast. Wage agreements come up for review next year. No demands have yet been put forward, but labour union leaders have announced their priorities as economic stability and low inflation, while raising real wages at the same time. The high share of wages in national income and hefty rises in real wages in recent years are likely to encourage employers to resist immoderate wage increases.

Another uncertainty is the share of foreign labour in construction work for aluminium-related investments. Hitherto this has exceeded estimates by a considerable margin, which could reduce the risk of excessive domestic labour market pressure, as discussed in the previous section.

The risk spectrum is symmetric in the short term but to the upside over a longer horizon

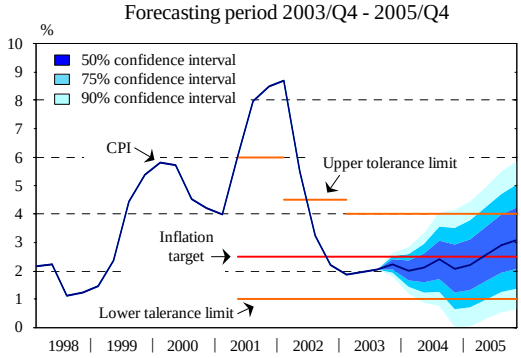
On balance, the risk spectrum has moved to the upside throughout the whole forecast period, compared with the July forecast. In the short term, the risk spectrum is assumed to be symmetric, while in July the risk was assessed to be on the downside one year ahead. Two years ahead, the risk is now considered to be on the upside, but was seen as symmetric in July.

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. Recently the Bank's forecasting errors have been smaller than in the build-up to the inflationary surge in 2001. The degree of uncertainty is therefore still thought to be less than the errors estimated on the basis of data from this period.

Chart 24

Central Bank inflation forecast

Forecasting period 2003/Q4 - 2005/Q4



Source: Central Bank of Iceland.

Chart 24 presents the Bank's forecast for the next two years and the estimated confidence intervals. Thus the entire 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.[14] The asymmetry of the risk spectrum is reflected in a greater part of the confidence interval above the values forecast for the second half of the period.

The probability ranges for the forecast are shown in Table 9. The probability of inflation in 2004 falling below the target has diminished substantially to just over 50% compared with 80% in the July forecast, reflecting the upward revision to the forecast one year ahead and the reassessment of the risk spectrum. Two years ahead the probability of inflation being below target is virtually the same as in the July forecast. Inflation is also considered more likely to remain within the tolerance limits of the target next year. Furthermore, the probability of disinflation during the forecast has dropped to virtually nil.

Table 9 Probability ranges for inflation over the next two years

	Inflation				
	under 1%	*in the range 1%-2½%*	*under 2½%*	*in the range 2½%-4%*	*above 4%*
Quarter					
2003:4	< 1	86	86	14	< 1
2004:3	8	46	54	41	5
2005:3	9	28	37	37	26

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

III Monetary policy

On the whole, the financial conditions of businesses and households have changed little since the last *Monetary Bulletin* was published in August. The monetary stance, measured in terms of the policy interest rate in real terms, has eased slightly in tandem with higher inflation expectations. However, this needs to be seen in the context of what was probably an abnormally low inflation premium on Treasury bonds from the spring until the autumn, in part connected with fears of deflation in the main industrial countries which to some extent were shared in Iceland. The short-term interest-rate differential with abroad, on the other hand, has narrowed again since the summer, when factors such as lower foreign interest rates – also partly linked to the perceived risk of deflation – had caused it to widen. The króna has weakened slightly too. Bond interest rates have not changed much and equity prices have been climbing.

The inflation forecast suggests the fundamentals are in place for raising interest rates in the coming months

The macroeconomic and inflation forecasts presented above imply a stronger case for raising interest rates in the coming months than the July forecasts. Then, inflation was forecast below target until the first quarter of 2005, and well below it in the first half of 2004. Given the stronger downside risk one year ahead in that forecast, there was some likelihood of outright disinflation in the first half of 2004. While inflation was projected above target two years ahead, this was only a marginal overshot, and the uncertainty was estimated to be symmetric. Accordingly, the Bank suggested that although the next interest rate change would most probably be upwards, a decrease could not be ruled out if domestic demand or imported inflation declined further. Scenarios under which this might happen included cancellation or serious delay of the Norðurál project, significantly lower-than-expected domestic demand from other sources than aluminium industry investments, and continued buildup of deflationary pressures in the global economy. Although the Norðurál investments are not included in the current macroeconomic forecast, there is still a strong possibility that this project will go ahead. Domestic demand has also turned out to be much more robust that than had been assumed, and disinflationary fears among Iceland's main trading partner countries have diminished significantly. A cut in interest rates is therefore highly unlikely except in a case of major unexpected shocks.[15]

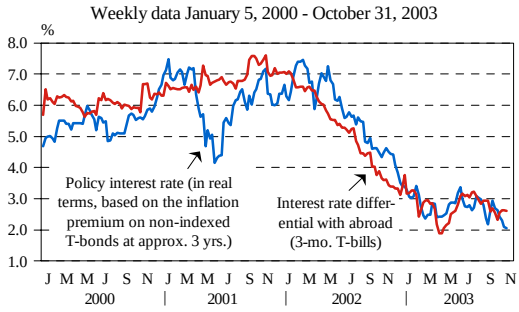
14. The range for which the Bank has not previously forecast is based on a simple extrapolation. Just as forecasts for individual values are subject to uncertainty, so is the method of estimating the uncertainty of forecasts. The estimated forecast uncertainty should therefore be interpreted with caution. 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.

15. This was apparent towards the end of August and was announced by the Chairman of the Board of Governors in a speech published elsewhere in this *Monetary Bulletin.*

The Central Bank now foresees somewhat lower output growth this year and in 2004 compared with its August forecast, largely because it does not allow for the Norðurál investments, but also due to weaker exports this year. Thus the output gap will remain negative until well into next year and unemployment will be greater than previously forecast. Nonetheless, the inflation forecast for next year has been revised upwards to reflect rising foreign prices and a weaker króna. The peak of aluminium-related investment activities is now closer and inflation two years ahead is forecast slightly above target. Output growth of 4¼% is forecast in 2005, i.e. well above potential output growth. The output gap will turn positive and pressures could build up in the labour market.

Chart 25

The policy interest rate and interest rate differential with abroad



Source: Central Bank of Iceland.

In general, a lag of one year may be expected before the impact of interest rate changes on the price level is felt with significant force and a further year before it is transmitted in full.[16] Thus the outlook presented above obviously calls for a rise in the policy interest rate in the coming months. However, room for manoeuvre remains to observe how closely developments in the near term confirm this outlook, since inflation is still below the target and there is some output slack in the economy. It is therefore still premature to raise interest rates, but probably will be appropriate soon. Medium-term interest rate developments will depend on economic developments as always, but also on fiscal policy and conceivable changes to housing loan arrangements. Also, if a final decision is made to launch the Norðurál smelter expansion in 2004, interest rates will need to go up sooner and by more than otherwise, since this will cause the output gap to close within that year.

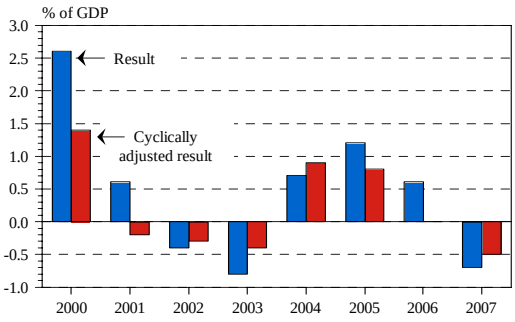
16. See Thórarinn G. Pétursson, "The transmission mechanism of monetary policy", *Monetary Bulletin*, 2001/4, 62-77.

Tighter fiscal stance planned in 2004 and 2005 ...

The budget proposal which has been presented to parliament involves a sizeable and very necessary tightening of the fiscal stance compared with the current year. The Treasury's revenue balance excluding proceeds from the sale of assets and discretionary outlays will be turned around from an estimated deficit of 9 b.kr. this year to a surplus of 3 b.kr. in 2004. Amounting to 12 b.kr., this improvement is equivalent to almost 1½% of GDP. Cyclical adjustment of the Treasury balance produces the same result. Under the budget proposal, the cyclically adjusted surplus will be equivalent to 0.7% of GDP in 2004, an improvement of 1½ percentage points from the previous year (see Chart 26). The fiscal tightening reflected in this figure nonetheless needs to be seen in the context that the stance has been eased for the three preceding years.

Chart 26

Treasury fiscal balance 2000-2007



Source: Treasury budget proposal for 2004 and long-term fiscal programme.

In particular, the improvement in the Treasury outcome will be achieved by cutting investments, which are exceptionally high during the current year, and curbing public consumption growth. Ministry of Finance and Central Bank macroeconomic forecasts both assume that growth in public consumption, i.e. central and local government spending, will amount to only 1%, which is well below the annual average

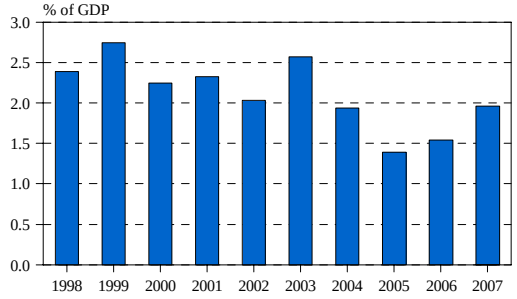
of 3% over the period 1990-2002. Instances of such low public consumption growth, or lower, are known from recent years, e.g. a contraction of 0.8% in 1992 and an increase of 1.2% in 1996. Interestingly, in both cases this was the first whole year after a general election.

If the budget proposal for 2004 is realised as planned, fiscal policy will support monetary policy during that year. The problem is that on the basis of recent experience, the outcome has tended to shrink from the draft budget. Hence the stance tends to be less tight than originally aimed for. Some of the budget targets should be reasonably solid once they have been decided, such as the reduction in investment and abolition of the rebate on national insurance tax for employers' supplementary pension contributions. Experience shows that other factors are more uncertain, such as lower sickness benefit expenditure and the estimated reduction in benefit payments as a result of a drop in unemployment. It is vital to take action to ensure that the tighter fiscal stance aimed for next year remains intact. If not, monetary policy will come under more strain and interest rates will rise sooner and by more than would otherwise be the case, with a corresponding effect on traded goods industries.

Alongside its budget proposal, the government presented a medium-term fiscal scenario for 2005 to 2007. Such a programme is more important now than often before because of the need for countervailing measures against the impact of aluminium-related investments. The scenario takes into account the government's plan to reduce taxes by 20 b.kr. over the years 2005-2007, equivalent to more than 2% of GDP. A further 3 b.kr. will be allocated to priority projects such as higher child allowance. To counter the fiscal easing caused by these measures, it is planned to keep public consumption growth below its historical average for all three years, at around 2%. In real terms, transfers will be reduced by 2½% per year. It is also planned to cut back infrastructure investments by 3 b.kr. from the original projections for 2005. These will then be stepped up again in 2006 (see Chart 27), although being 2 b.kr. less than earlier projections. Central government investment expenditure will then increase further in 2007.

Chart 27

Central government investment expenditure 1998-2007



Sources: Treasury Accounts, Treasury budget proposal for 2004 and long-term fiscal programme, the Central Bank forecast.

... but a very inopportune easing in 2006

According to the medium-term scenario, the cyclically adjusted Treasury surplus will be broadly unchanged in 2005 (see Chart 26), in spite of the first phase of tax reductions, because these will be offset by expenditure and investment cutbacks. However, things will take a turn for the worse in 2006 when the cyclically adjusted result will deteriorate considerably with the implementation of the second phase of tax cuts at the same time as central government infrastructure investment is stepped up again. If this combination of measures goes ahead it will be very inopportune. As pointed out in Box 3, aluminium-related investment activity will peak in 2006 and the level of activity will be higher than in 2005 even if the Norðurál expansion project is realised. Historically, the final year of an upswing has posed the greatest risk to economic and financial stability, which implies that it is not an appropriate time to ease fiscal policy. The risk is that monetary policy will come under intense strain in 2005 and 2006. It is vital to take full account of this factor in the review of fiscal plans for coming years.

Housing finance reforms could affect the conduct of monetary policy

In its *Monetary Bulletin* in August the Central Bank pointed out the conceivable expansionary effect of plans to raise mortgage levels for ordinary housing

17. See further the discussion in the Financial Stability chapter of this *Monetary Bulletin.*

purchases to as much as 90%, and to raise the ceiling on Housing Financing Fund loans.[17] In the prevailing climate, changes of this kind could have a similar effect on the exchange rate and monetary policy to that of easing the fiscal stance. The Central Bank produced studies of this issue in October (published in full in Icelandic on its website) at the request of the Ministry of Social Affairs' housing loan project director and Social Democratic Alliance members of parliament. The studies conclude that such changes will have less impact in the long term than the short term, because in the long run real estate prices will move in pace with construction costs, and because income and interest rates are ultimately more important than access to credit for household spending decisions. However, the short-term impact could prove fairly strong and last for several years. It will take the form of higher housing prices, a more buoyant real estate market and higher private consumption. In turn, this will drive up domestic demand and inflation, unless monetary policy responds by raising interest rates or other official countervailing measures are applied (see Box 5). According to the analysis, raising the loan ceiling will probably also prove more decisive in this respect than raising the loan-to-value ratio.

This analysis suggests that the negative impact of such changes will depend crucially on their timing. A cautious approach is vital while the economy is under strain due to the large investment projects. Further elaboration of this issue is not fruitful at present, however, since it is not clear at this point what concrete proposals are going to be made.

Box 5 The housing component of the CPI and monetary policy

Modern monetary policy is based on the desirability of maintaining relatively stable prices for the goods and services consumed by the public. Since housing is a major household expense item, the index by which the success of monetary policy is measured should preferably take due account of changes in the price of it. When monetary policy is based on a formal inflation target, the consumer price index is more often than not used as the target index. In several countries such as the UK and South Africa, the reference is the CPI excluding certain items. In all inflation-targeting countries, the monetary authorities monitor other indices and take them into account when formulating monetary policy. Statistics Iceland has also recently begun calculating core indices which are supposed to serve as a reference for monetary policy although inflation as measured by the CPI remains the official target.

It has recently been claimed that it would be natural to exclude housing cost from the target index for monetary policy. Several arguments can be put forward to support this view. Firstly, housing prices are difficult to measure. Housing is by no means a homogeneous good. Size, appearance, age and even location all play a part. It can likewise be pointed out that expectations and speculation often affect the prices of long-life assets such as housing, and are therefore more volatile than those of the goods and services that form the backbone of household consumption.

Secondly, as Thórarinn G. Pétursson points out in an article in *Monetary Bulletin* 2002/4 (p. 56), it is undesirable if the price of an important component of the CPI is directly determined by interest rates. In particular this applies if interest rates have a short-term direct effect on the index which is opposite to their general impact on prices. For this reason, the target index in the UK is the retail price index excluding mortgage payments. Statistics Iceland's methodology causes a general rise in interest rates to produce either an increase or a decrease in the "owner-equivalent rent" component. A rise in interest rates which forces up the yield on housing bonds will diminish the present discounted value of the down-payment on a housing purchase and of loans bearing real interest rates that are fixed or change sluggishly. This reduces the cash price of the housing. However, a rise in long-term interest rates also drives up real interest rates on long-term housing credit other than loans from the Housing Financing Fund. Such a rise affects the real interest

value in the formula for effective rent given in Box 1. The aggregate impact of changes in interest rates on effective rent will depend on the weight of these different loans in housing sale agreements, the degree to which their real interest rates change, and the repayment period of the loans used to finance housing purchases compared to an estimated 80-year lifetime of the property.[1] Given the large proportion of housing loans bearing fixed or rigid interest today, a general rise in interest rates, with a corresponding impact on housing bond yields, is likely to produce a lower effective rent value.[2]

1. Here and elsewhere in this article, fixed prices are assumed in housing sale agreements. The impact of higher interest rates on prices in housing sale agreements operates in opposing directions. General demand will fall, yielding a lower price, while the production cost of capital-intensive goods also rises, forcing up the relative price of housing.
2. It should be noted that interest rates on different types of securities often change in different ways. Recently, the yield on housing bonds has often changed differently from other interest rates.

Thórarinn G. Pétursson (*Monetary Bulletin* 2002/4) has demonstrated the close correlation between twelve-month changes in the housing component of the CPI and future changes in the CPI. Two years on, the correlation is 67%. While this close correlation is not easy to explain, it is conceivable that housing prices rally quickly at the start of a cyclical upswing and soon fall back during a downswing. This does not appear to have happened in the recent recession, however. If this close correlation reflects normal economic behaviour, changes in the housing component of the CPI should provide an important instrument for forecasting changes in headline inflation. Thus in formulating monetary policy it is important to monitor the factors that determine the development of the housing component. A decision on whether to include the housing component in the target index in the first place, however, should take into account the other factors discussed above.

Appendix 1 Iceland's national debt

Iceland is one of the most indebted nations in the world, in terms not only of private sector (corporate and household) debt but also of gross and net national debt. Public sector debt, on the other hand, is not particularly large. The following is an attempt to evaluate how much Iceland deviates from the norm and identify possible reasons for its high level of private sector debt. The conceivable impact of debt accumulation on economic growth over the years to come is also discussed.

Although Iceland has a high level of private sector debt, it is not unique among the advanced economies. International comparisons are complicated by the lack of comparable data. According to the IMF's International Financial Statistics, four advanced economies (Denmark, Germany, the Netherlands and the UK) exceed Iceland in terms of domestic credit to the private sector debt as a proportion of GDP. This comparison is flawed, however, because non-deposit institutions differ in importance within the respective credit systems. In Iceland, for example, the Housing Financing Fund performs a very large function. Foreign credit institutions can also be assumed to play a relatively large role in Iceland, because a small, open economy with high interest rates has more incentive to procure credit in foreign markets. Private sector debt to the credit system as a whole is more than double that with deposit money banks. This is much higher figure than in the USA and Sweden, the only countries besides Iceland that publish data for a broad measure of credit; no figures are available for the countries whose levels of domestic credit to the private sector exceed Iceland's.

Households in Iceland rank with the most indebted in the world. However, according to Eurostat, Danish and Dutch households have higher ratios of indebtedness to disposable income. On a cautionary note, however, statistics on household debt may be of rather poor quality, both in Iceland and internationally. The OECD points out that net assets of Icelandic households (excluding pension funds) are also on the low side, although not far below the few countries included in its comparison.

Icelandic corporate debt is similarly high compared with other countries for which data are available. At the end of 2002, debts of non-financial corporations were equivalent to almost 1½ GDP, the highest figure for nations with broadly comparable data.[1] Corporate debt is marginally lower in the Netherlands, but debt ratios in other countries are substantially lower.

The debt-to-equity ratio of listed companies (excluding the financial and insurance sector) has fluctuated widely in recent years. The debt ratio was 1.97 in 1997, jumped to 2.32 in 2000, fell back to 1.72 at the end of last year and had climbed back to 2.09 in the middle of 2003. The debt-to-equity ratio for Icelandic businesses as a whole seems to follow roughly the same pattern according to data from Statistics Iceland, which extend only to 2001. By international standards Icelandic corporate debt appears to be on the high side and more volatile than in most other countries.

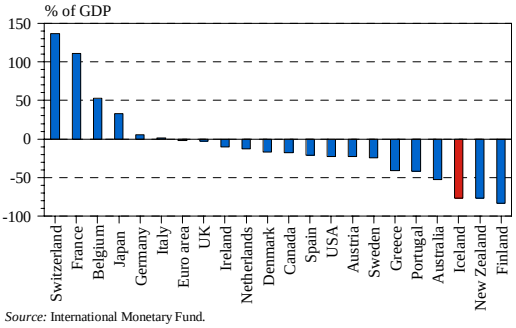
There is a direct correlation between Iceland's heavy corporate debt and its national debt, because over one-third of the former is denominated in foreign currencies, either as direct loans or intermediated through the credit system. Buoyant household demand for credit has presumably also contributed to high domestic interest rates, making foreign credit markets more attractive for businesses which are able to tap them (especially export revenue earners) and the public sector. The distinctive character of the Icelandic energy sector should be underlined here. Hydropower and geothermal facilities are capital-intensive to construct, their operating costs are low and they have a very long service life. The bulk of power generation is for industrial manufacturers, sold at rates denominated in foreign currencies and at least partially linked to export market prices. Naturally, the energy sector has a strong requirement for long-term credit which is largely denominated in foreign currency. As a supplier to the aluminium and ferrosilicon industries,

1. Based on data from National Economic Institute reports until 1997, projected to 2002. According to the Central Bank's own data, debts with the credit system are somewhat lower.

the energy sector plays a prominent role in the Icelandic economy, and the overwhelming importance of hydropower makes the sector highly capital-intensive. Debt of the energy sector amounts to 92.1 b.kr. – the equivalent of 9.1% of gross national debt –and is almost entirely foreign-denominated. Iceland's net debt position at the end of 2002 was equivalent to 100.0% of GDP and the net international investment position (i.e. including net venture capital) was -77.1%. Since then, debt has been alleviated somewhat by the appreciation of the króna. As Chart 1 shows, only two advanced economies equal or exceed Iceland's negative international investment position.

Chart 1

International investment position of selected industrialised countries 2002



Source: International Monetary Fund.

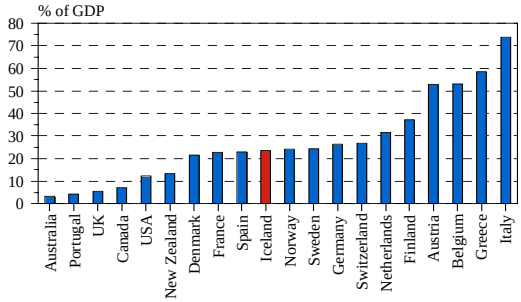
International rating agencies have noted Iceland's negative debt position, with a corresponding effect on its sovereign and financial institutions' ratings. Iceland tends to be compared with countries in a similar risk category. In the Standard & Poor's report from June 2003, for example, it is noted that Iceland's ratio of net debt to current account receipts is the highest among all the countries in that risk category. Only New Zealand is in a similar position. The rating report points out, however, that New Zealand is better placed insofar as its foreign debts are denominated in domestic currency. The same is true of Finland, which uses the euro.

Why does Iceland owe so much? The answer to this question might be important when assessing the probability of a reversal in the near future, either by a gradual process or a quick adjustment if the debt level becomes clearly unsustainable.

One explanation for the negative debt position of some countries can be ruled out from the start in Iceland's case. Its public sector debt is not very large by international standards, nor is the share of foreign debt in it. As a ratio of GDP, Iceland's general government gross foreign debt is similar to that of most European countries. But while other European countries have a higher share of foreign debt in their public sector debt than Iceland, much of this is denominated in the euro, which has become their "domestic" currency. A fairly large portion of other nations' foreign debt is probably denominated in domestic currency. Since no exchange rate risk is involved in such cases, the term "foreign debt" has limited economic significance.[2]

Chart 2

General government gross foreign debt in selected industrialised countries 2002



Sources: Various sources.

In some respects, the high level of debt may be easier to explain for households than for corporations. Various demographic and economic characteristics of Iceland are unquestionably conducive to debt accumulation. One feature is the age structure of Iceland's comparatively young population, which in its own right was estimated by the IMF this summer[3] to account for up to 60% of

2. It should not be taken for granted that the domicile of the creditor is irrelevant for domestic-denominated debt, however. In such cases the foreign exchange risk is transferred to the creditor, who may have only minor liabilities in the respective country or currency area. Creditors' sharp reactions to uncertainties can cause turbulence in foreign exchange markets, as has often been seen.

3. *Iceland – Staff Report for the 2003 Article IV Consultation*, July 31, 2003.

Iceland's higher external liabilities relative to other advanced countries.[4]

Another possible factor is the large proportion of private housing in Iceland, with its strong housing credit system which provides substantial support for homebuyers. The rental housing market is correspondingly thin and, from the viewpoint of tenants, insecure. According to available data, Iceland ranks second-lowest in terms of the size of the rental accommodation market, at roughly one-fifth. Only Spain has a greater share of owner-occupied housing, while it is similar in Greece and Ireland.[5] In Germany, on the other hand, some 60% of residential housing is rented.

The high ratio of owner-occupied housing in Iceland implies that housing accounts for a larger share of interest costs than in countries with a more extensive rental market. Housing accounts for an estimated 60% of total household debt; conversely, housing debt is equivalent to roughly 65% of total residential housing assets.[6] If half the current home owners rented their housing instead, household debt would be reduced by 250 b.kr. and its ratio to disposable income would decrease from 183% at the end of 2002 to 133%. However, a lower debt level would not necessarily entail an easier payment burden, because households would need to pay rent instead. This example highlights the importance of the scale of owner-occupancy when examining household debt.

A third factor is that student financing is mostly in the form of long-term loans bearing little or no interest, which represented around 7% of household debt at the end of 2002. While Iceland is not alone in having such a student finance arrangement, the proportion is exceptionally high.[7]

Fourthly, it has been argued that Iceland's system of accumulated, protected pension rights encourages debt accumulation. Countries with a similar level of household debt to Iceland, or higher, also have strong pension systems. Pension savings are compulsory savings. If households are forced to save more of their annual income and spend less than they would otherwise do on their own initiative, they are likely to respond by accumulating debt in order to realise consumption sooner.[8] A strong pension system may also provide a sense of security about future income for meeting obligations, which can fuel both supply of credit and demand for it.

A fifth factor that may be crucial is Iceland's extensive price indexation. This enables borrowers to procure much longer-term credit and results in lower rates of interest than if loans were non-indexed; furthermore, rebates on mortgage interest significantly reduce interest costs for a large group of borrowers.[9]

Table 1 Debt of households and non-financial corporations

	Companies, % of GDP	*Households, % of disposable income*	*Figures for year:*
Denmark	71.9	201.9	2000
Finland	72.8	69.7	2001
France	82.1	73.2	2000
Germany	88.3	112.7	2001
Iceland	147.1	169.3	2001
Netherlands	140.8	191.4	2001
New Zealand	.	120[1]	2000
Norway	91.7	141.8	2001
UK	105.9	120.4	2001
USA	93.7	92.9	2001

1. Household debt in New Zealand has been growing rapidly in recent years, according to Dr. Alan Bollard, Governor of the New Zealand Reserve Bank, in a speech on October 14, 2003. The ratio had risen to 130% by 2002.

Sources: Eurostat for continental Europe, National Statistics for UK, Federal Reserve Flow of Funds Releases for USA. Figures for Iceland are based on data from the National Economic Institute until 1998, with Central Bank projections until 2001.

4. The methodology used in the Staff Report is based on Lane, Philip R. and Gian Maria Milesi-Ferreti, 2001, "Long-term Capital Movements", *IMF Working Paper* 01/107.
5. *Structural Factors in the EU Housing Markets*, ECB, March 2003.
6. Based on Land Registry valuations. The market value of properties is considerably higher.
7. Student finance in the other Nordic countries resembles the Icelandic arrangement in many ways, except that in addition to loans they also provide direct grants. Much more extensive grants are provided in a number of instances. In other respects, support is means-tested, i.e. based on household circumstances, parents' income, marital status, number of children supported by the student, etc. Loans may be converted into grants under certain circumstances. Although grants are much more widespread in the other Nordic countries than in Iceland, they do not replace loans entirely.
8. A counterargument is that widespread participation in supplementary pension schemes in Iceland shows that pension saving is not particularly burdensome. However, considerable tax concessions are involved which complicate the picture.
9. Most other countries which grant discounts on interest costs through the tax system seem to be in the process of abandoning this practice, see Appendix 2 on Public sector support for homebuyers.

The annuity format of housing loans creates a more back-loaded payment burden which is likely to leave households with relatively high indebtedness for longer than would otherwise be the case.

All the above points attempt to explain why Iceland has such a high level of debt by international comparison. A related question is why debt has risen so fast. Although the young population can explain high indebtedness relative to other countries, it hardly provides a convincing explanation for steady growth of debt over two decades, because the average age of population has not been decreasing over this period – on the contrary. A more natural explanation for this trend would seem to be the effects of deregulated borrowing, more open access to foreign credit, the introduction of indexation and changes in the housing loan system. When real interest rates were negative, credit was rationed and the real value of loans was quickly wiped out by inflation. Financial market deregulation reversed this trend. Financial institutions increased their credit supply, indexation enabled borrowers to take much longer loans than before without overstretching their ability to repay, and the annuity format of housing loans led to very slow amortisation of mortgage debt, as pointed out above. When indexation was introduced, a generation of homebuyers had acquired housing which was funded with negative real interest rates. Debts had thereby become abnormally low relative to assets. These homeowners had a high mortgage value at their disposal, which presumably encouraged debt accumulation. In some cases this perhaps did not happen until later generations took over the properties. Such an adjustment may therefore take a long time, even decades.

A similar explanation can probably be given for rising corporate debt. The argument about the low average age of population is less relevant as an explanation of current high levels of indebtedness, however. There may be many reasons for the apparently high and volatile level of corporate debt in Iceland compared with other countries. Fisheries companies, which play a prominent role in the Icelandic economy, are conceivably more capital-intensive than most other countries' industries, which may lead to a relatively high level of debt in this sector. However, research on this point is lacking. Many fisheries companies have also invested in fishing quotas in recent years, generally financing these investments with credit, as pointed out earlier.

A major part of corporate long-term debt is denominated in foreign currencies. Exchange rate fluctuations therefore exert a strong impact on the nominal króna value of debt, and play a large part in the volatility of the ratio of debt to assets, which are valued in króna.

It is also likely that, for Icelandic businesses, the accounting value of assets is significantly lower than their real market value. This applies in particular to fisheries companies, due to their hidden assets in the form of fishing quotas. The resulting distortion of the real relationship between assets and liabilities serves to reduce the book value of equity.

Finally, the organised equity market in Iceland is relatively young and largely comprised of fairly small companies. Only a small part of corporate finance has been raised through public share offerings. Businesses have relied heavily on the banking system for their finance, which may have led to higher indebtedness than is the norm in advanced economies. Restrictions on external investment in the Icelandic fisheries sector contributes even further to financing through the credit system.

Appendix 2 Public support for homebuyers in Iceland and elsewhere

Broadly speaking, the government can influence the housing market in two ways: through the tax and welfare systems, or by intervention in housing finance arrangements. The following is an attempt to chart public sector intervention in the housing finance market in Iceland and present a comparison with Scandinavia and several other European countries.

The Housing Financing Fund dominates the Icelandic housing credit market ...

The Housing Financing Fund is a public sector institution and by far the largest supplier of credit in the Icelandic mortgage market. It lends both for social and private housing, for construction and older properties alike. Loans are secured with a mortgage that may be equivalent to up to 90% of market value in the case of social housing, 70% for first-time private buyers and 65% in other cases of purchases in the secondary market, with a loan ceiling of 7 to 8 m.kr. At the end of 2002, the Housing Financing Fund's outstanding loan stock amounted to just over 388 b.kr. Other outstanding loans backed by housing collateral comprised 84 b.kr. from pension funds and 27 b.kr. from commercial banks. The Housing Financing Fund's market share is therefore more than 75%.

...and its scope is greater than in most other countries

The scope of the Housing Financing Fund's activities is greater than that of corresponding bodies in neighbouring countries, as shown in Table 1. In the countries included there, apart from France and Norway, public sector lending to homebuyers only takes place through the social housing programme. In Norway, the public sector agency *Husbanken* provides loans for the purchase of newbuildings and has a total share of 12% in that market. Husbanken lends up to 60%-70% of mortgage value of approved types of housing and is the only provider of loans with a state guarantee. In France, public sector support for homebuyers is more complex and there are many loan categories, for example mortgages for civil servants at lower rates of interest than in the ordinary market and interest-free loans as welfare assistance. Sweden and Finland provide loans with state guarantees at a premium, but under stringent terms including the type of housing, loan-to-property value and maximum loan amount. A recent report by SBV (the Bankers' and Securities Dealers' Association of Iceland)[1] found that as a result of state guarantees on loans from the Housing Financing Fund and the lower equity requirements made towards it than to other credit institutions, its interest rates are 0.9%-1.3% lower than would otherwise be the case. Based on the Fund's outstanding loan stock at the end of 2002 this spread is equivalent to 0.5%-0.7% of GDP. Although no statistics are available on the corresponding support that other countries provide through their mortgage systems, it almost certainly seems to be much lower than in Iceland.

Table 1 Public sector intervention in the housing finance market

	Public sector loans available for purchase of:			
	Social housing	*New housing*	*Older housing*	*State guarantee*
Denmark	No	No	No	No
Finland	Yes	No	No	Yes
France	Yes	Yes	Yes	Yes
Germany	No	No	No	Yes[1]
Iceland	Yes	Yes	Yes	Yes
Netherlands	No	No	No	No
Norway	No	Yes	No	Yes
Sweden	No	No	No	Yes
UK	No	No	No	Yes[2]

1. Some form of social assistance, including payment of mortgages depending on family size and household income (German *Wohngeld*).
2. Some form of social assistance aimed at easing the interest rate burden in cases of, for example, sickness or unemployment, which is not granted until after 39 weeks for people of working age.
Sources: Wyman, M. O., *Financial Integration of European Mortgage Markets*; Kemp, P. A. and G. Pryce, Evaluating the mortgage safety net; German Ministry of Health and Social Security; Norwegian Housing Bank (Husbanken) and Icelandic Housing Financing Fund.

1. *Markaðsvæðing húsnæðisfjármögnunar á Íslandi* (Liberalisation of housing finance in Iceland), the Bankers' and Securities Dealers' Association of Iceland, February 2003.

Table 2 Public sector support/taxation as % of GDP

	ECB		OECD		Nord 2001:27 Housing support[1]		Housing taxes[2]		Net support	
	1990	2000	1990	1998	1995	1999	1995	1999	1995	1999
Denmark	1.3	1.4	0.66	0.72	3.26	2.67	1.33	1.35	1.93	1.32
Finland	1.6	1.2	0.18	0.38	1.93	1.32	0.13	0.13	1.8	1.19
France	1.1	1.1[3]	0.74	0.92	-	-	-	-	-	-
Germany	0.6	0.9	0.13	0.18	-	-	-	-	-	-
Iceland	-	-	.	0.12	1.06	0.87	0.6	0.5	0.46	0.37
Netherlands	0.9	0.7[3]	0.33	0.44	-	-	-	-	-	-
Norway	-	-	0.15	0.2	1.44	0.8[4]	0.82	0.72[4]	1.44	0.8[4]
Sweden	1.5	1.4	0.66	0.81	3.91	1.74	0.93	0.93	2.98	0.81
UK	.	0.6	1.28	1.61	-	-	-	-	-	-

1. 1990. 2. 1998. 3. Housing benefits are stated for 1999. 4. 1998.

Sources: ECB (March 2003), OECD (Social benefits) and Nordic Council of Ministers (Nord 2001:27).

Public sector intervention in the housing market through the tax and welfare systems

Likewise, support for homebuyers through the tax and welfare systems varies from one country to another. Differences in their systems and data compilation methods make comparisons difficult, however. Table 2 presents recent data published by the European Central Bank (ECB), OECD and the Nordic Council of Ministers (in its report Nord 2001:27) on direct public sector intervention in the housing market, which is defined as taxation, tax relief and subsidies directly linked to residential housing ownership. There is some inconsistency in findings between sources, probably caused by the different definitions applied.

Data from these three sources reveal that Iceland has one of the lowest levels of public sector intervention in the housing market through the tax and welfare systems, and the second lowest among the Nordic countries. General support in connection with mortgage interest is normally only in the form of tax relief rather than the system of reimbursements in effect in Iceland; reimbursements are generally paid in cases of social assistance. Many countries have reduced both tax relief and mortgage interest reimbursements. Within the EU, for example, Ireland, the Netherlands, Austria, Portugal and the UK have all lowered or reduced mortgage reimbursements/tax relief over the past decade, and only Luxembourg has raised them.

Most countries' public sectors have been withdrawing from the housing finance market

In most countries, housing policies aim to ensure that all citizens have the opportunity to live in satisfactory housing. Emphases vary between countries, however, with different degrees of support aimed to increase general owner-occupancy, encourage construction of housing, help first-time buyers or assist lower-income groups with social housing schemes. Housing policy priorities can be analysed by examining the mix of taxation and subsidies or tax relief. Tax relief or mortgage interest subsidies benefit recent homebuyers in particular, while property tax is paid by long-time owners who have repaid a large part of the loans they originally took. All in all, a system of mortgage interest subsidies and property tax represents a transfer of housing costs to the later part of taxpayers' lives.

Some countries have stepped up their public sector intervention in housing financing while others have reduced it. Overall, however, in the countries discussed here the public sector has tended to withdraw from the housing market, especially on the financing side. Commercial banks have been granted more freedom to offer mortgages, e.g. with deregulation of interest rates and more diverse loan formats. The countries appear to have kept broadly in step in reducing or abolishing mortgage interest reimbursements and tax relief on mortgage interest payments. For example, France, which had a wide-

reaching system of support for homebuyers, changed its legislation in this field in 1999. The aim was to simplify the system and reduce public sector intervention in housing finance.

Conclusion

Public sector intervention in the housing finance market through the tax and welfare systems is fairly limited in Iceland compared with other countries for which data has been studied. The trend in Iceland is also to reduce it further, as shown by the lowering of the net wealth tax this year and a conceivable reduction in mortgage interest reimbursements. The picture is different as regards the scope of state-guaranteed housing finance and the Housing Financing Fund's lower equity requirement compared with other credit institutions. This support will increase still further if ideas for raising the maximum loan amount to 90% of mortgage value go ahead. The other countries in the comparison generally only lend 70%-80% of the mortgage value. Raising the maximum loan would therefore represent a step towards greater intervention in the housing finance market, which would run counter to the trend in neighbouring countries.