

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

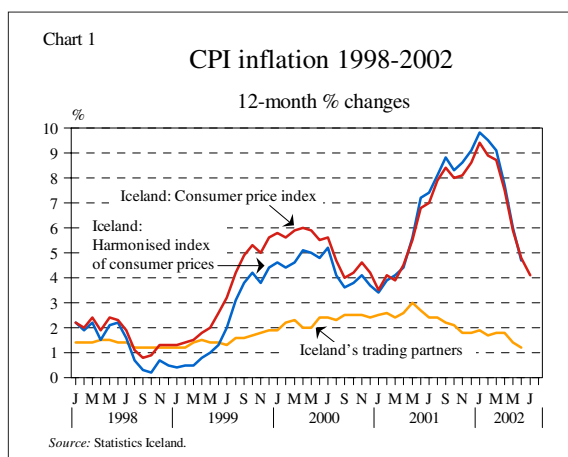
### Inflation target is within reach

*Inflation has been decelerating at a rapid rate recently and has now moved within the tolerance limits of the inflation target. Underlying inflation in recent months is probably consistent with the Central Bank's inflation target. Inflation now is primarily domestic in origin. The inflation outlook has continued to improve, mainly because of the strengthening of the króna. According to the current forecast the Central Bank's inflation target will be attained this year. There is much to suggest that the economic downswing has bottomed out, but it is very uncertain how strong the subsequent upswing will be. Unequivocal signs of a strong upswing still cannot be discerned and further slack is likely in the labour market. The economic outlook and favourable inflation forecast therefore fully justify an ongoing easing of the monetary stance. Construction work connected with power-intensive industry, however, could alter the position in the coming winter.*

*Inflation is rapidly decreasing and has moved within the tolerance limit*

So far this year the 12-month rise in the Consumer Price Index (CPI) has decreased significantly. Inflation in July measured 4.1 % by this criterion. It has thereby moved within the 4½% tolerance limit of the inflation target for this year and is very close to

the 4% limit which will take effect from the beginning of next year. Inflation has also slowed down in recent months among trading partner countries, which implies that the gap between inflation in Iceland and elsewhere has narrowed less than might be expected. Measured against the Harmonised Consumer Price Index, June inflation was 1.6% on average in European Economic Area countries, 1.8% in the euro area and only 1.2% among Iceland's main trading partner countries.

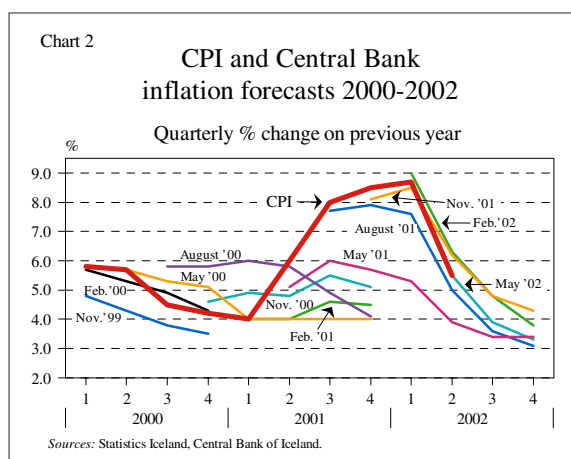


1. This article uses data available on July 26, 2002.

*CPI rise the same as in the Central Bank's April forecast*

In April the Central Bank forecast a 5½% rise in the CPI from Q2/2001 to the second quarter of this year, which turned out to be the case. As described in the May issue of *Monetary Bulletin*, unions and employers had agreed upon a benchmark for the CPI in May which was to determine whether the current wage settlement would have to be opened up. Unions had exercised substantial pressure upon businesses and the government to refrain from price increases in the period leading up to the CPI release in May. A substantial degree of uncertainty surrounded whether the

target would be attained, the impact of this temporary actions and to what extent it would be reversed after the May CPI release. Primarily the concern was that sellers of goods and services might have postponed raising prices, creating a backlog that would need to be cleared. It was also pointed out, however, that the strengthening of the króna could reduce the conceivable backlog of deferred price rises. So far these do not appear to be any greater than was assumed in the Bank's inflation forecast in May. The forecast made special allowance for a rise in petrol prices in the beginning of June. It was also assumed that the reduction in the excise tax on petrol was temporary and would be lifted, as happened at the end of last month. The bank did not expect any substantial further price rises for this reason.



#### *Inflation is now primarily domestic in origin*

Rising prices of private as well as public services account for around half of the rise in the CPI over the past three months. Some 40% of the increase is accounted for by private sector services. In July, private sector services were the index component which had risen most over the preceding 12 months, or 7.1%. Over the past three months, however, prices of private sector services had increased by much less on an annualised basis, or 3½%. The inflation of private sector services prices therefore appears to be slowing down. Around one-tenth of the index rise over the past 12 months derives from public services, which went up by 4.4%, although they have risen by less over the past three months on an annualised basis. Various government measures aimed at attaining the

price targets set by employers and labour unions caused prices of public services to rise by less this year than they would otherwise have done, for example a plan to increase the consumer share in health care costs was abandoned and a rise in television licence fees was postponed. The reduction in the excise tax on petrol, which affected its price, was later lifted, however.

The housing component of the CPI explains one-fifth of its increase over the past three months. Over the past year the housing component rose by 4.7%, or by half a percent in real terms. The annualised rise was 5.1% in the past half-year and 2.9% over the past quarter. Real estate trading has been brisk, as can clearly be seen from the growth in mortgage loans from the Housing Financing Fund. The number of applications received was considerably greater and the average amount of mortgage bonds was higher during the first half of this year than the Housing Financing Fund had assumed. The Fund lent 15.6 b.kr. over the period, or just over one b.kr. more than it had forecast.

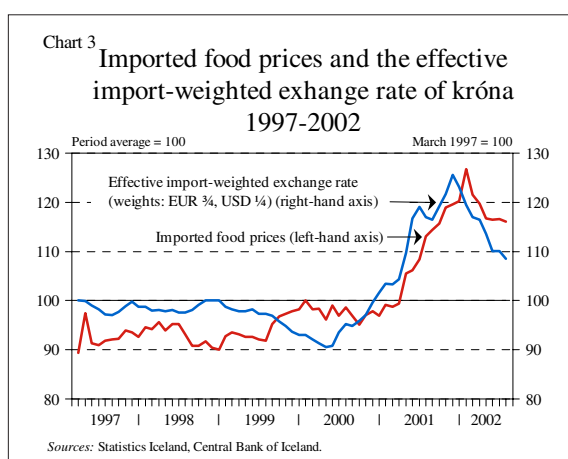
The price level of domestic goods excluding food and beverages has also risen somewhat in excess of average price changes in recent months. The increase over the past three months was 1½%, corresponding to almost 6% on an annualised basis. This rise explains just over one-tenth of the rise in the CPI over the period.

#### *Import prices have fallen but the strengthening of the króna has hardly been fully transmitted into the price level*

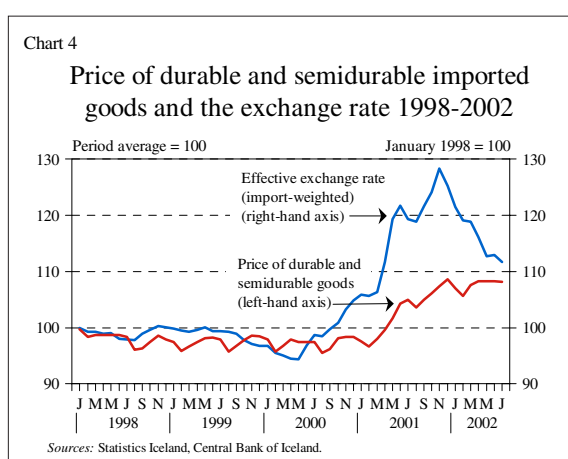
Changes in foreign prices and the exchange rate are transmitted very quickly to the domestic price of petrol. Over the past three months the petrol component of the CPI went up by 3.4%, corresponding to an annualised 14.4%. This increase can mostly be attributed to higher purchasing prices, but oil distributors had delayed responding to these changes in view of the employers and labour unions' CPI benchmark for May. Furthermore, the excise tax on petrol was raised to its former level. The appreciation of the króna has prevented petrol prices from rising by even more.

Imported food and beverage prices have fallen by 8.4% from the beginning of the year to the beginning of July, and by 0.6% over the past 3 months. From

the beginning of the year to July 26, the euro depreciated by 6½% against the króna and the dollar by 17.4%. Roughly one-quarter of food imports was denominated in US dollars and three-quarters in European currencies. The recent strengthening of the euro has therefore somewhat dampened the impact of the stronger króna on food prices. Although the rise of the euro has reduced the impact it is unlikely that the króna's strength has been fully transmitted into lower prices of imported food.



Nor have prices of imported durables and semidurables fallen to the extent the price of foreign currency has declined against the króna. Since the turnover of these goods is slower than that of petrol and food, the pass-through to domestic prices occurs more slowly. The extent to which the appreciation of



the króna has been transmitted to domestic prices will be difficult to assess before this autumn, when summer sales come to an end and new goods are stocked in the shops. Over the past three months the price of imported motor vehicles has gone down by 1½%, while prices of other imported durable and semidurable goods have gone up by just under half a percent at the same time.

#### *Underlying inflation in the past 6 months consistent with the inflation target*

The last *Monetary Bulletin* included an assessment of underlying inflation, i.e. adjusted for the direct short-term impact of the employers and labour unions' campaign to restrain price increases. Underlying annualised and seasonally adjusted three-month inflation measured 4% in April. Using the same method, underlying three-month inflation until the beginning of June was about 1%, while the unadjusted index rose about 2% on an annualised basis. Over half a year the underlying rate of inflation in July was 2½%, in line with the Central Bank's inflation target. The measured annualised rise in the index was 1.4% at the same time.

#### *Inflation expectations in line with the Central Bank's inflation target*

Since the publication of the last *Monetary Bulletin* the inflation outlook has improved, as will be discussed later. When the last inflation forecast was made at the end of April, the inflation premium on treasury bonds with a lifetime of 1½ years or 5 years was 2½%. Since then the inflation premium on bonds with a 1½-year lifetime has remained virtually unchanged, apart from the latter half of May when it fell to 2% after it became clear that the CPI benchmark in May had been attained. The inflation premium on bonds with a lifetime of about 5 years, however, has been slightly higher for most of the period and averaged 2.7% in the first half of July. Similar indications are produced by a survey of financial market analysts' assessments of the inflation outlook for the next two years, see Box 1 on pp. 6-7.

The Central Bank conducts surveys of the public's inflation expectations and notions of past inflation three times a year, most recently in May 2002. According to this survey, the public expect an inflation rate of 4.2% over the next 12 months on average,

### Box 1 Survey of financial market analysts' assessment of the economic outlook

The Central Bank is now publishing the findings of its second survey of financial market analysts' assessment of the economic outlook for the next two years. The survey was sent to analysts at six institutions: Búnadarbanki, Economic Consulting and Forecasting, Íslandsbanki, Kaupthing Bank, Landsbanki and SPRON (Reykjavík and Environs Savings Bank). Results of the survey are given in the table. It should be pointed out that the analysts' assessment was based on the assumption that no power-intensive industrial projects will take place, which is in line with the Central Bank's forecast assumptions.

Firstly, the table shows the analysts' evaluation of inflation prospects for this year and next year. Their forecasts for inflation over the year and between annual averages closely resemble the new Central Bank forecast. All the analysts consider that the Bank's 2½% inflation target will be attained before the end of the year. Likewise, they expect the Bank to succeed in keeping inflation around the target until the end of next year. Those who predict the highest value expect inflation to begin rising again next year and exceed the target at the end of 2003, while remaining within the 4% upper tolerance limit.

Analysts were also asked their views about other key aggregates for economic developments. Their responses show an assessment of growth prospects for this year and next that very closely matches the new national economic forecast. Equal numbers apparently expect the króna to strengthen over the next year and to weaken. However, more believe that the króna will weaken somewhat from its current position over the next two years. Most seem to be rather more optimistic about the exchange rate of the króna over the next two years than they were when the last survey was made in April.

Furthermore, analysts expect that the Central Bank will continue cutting interest rates and that its policy interest rate will have declined to about 7% after one year. As in the last survey, on average they do not expect interest rate cuts to continue two years hence. Opinions vary somewhat on this point, however. Half the respondents expect the policy rate to be down to about 6½% by the middle of next year, which is probably close to a neutral monetary stance (cf. the discussion in the last *Monetary Bulletin*). Others do not expect a neutral stance to be reached until after two years. Interestingly, some analysts foresee a reversal of

#### Overview of forecasts by financial market analysts

|  | <i>Average</i>          | <i>Highest</i> | <i>Lowest</i> | <i>Average</i>           | <i>Highest</i> | <i>Lowest</i> |
|--|-------------------------|----------------|---------------|--------------------------|----------------|---------------|
|  | 2002                    |                |               | 2003                     |                |               |
| Inflation (within year) .....  | 2.4                     | 2.5            | 2.2           | 2.5                      | 3.5            | 2.1           |
| Inflation (year on year) .....   | 4.8                     | 5.3            | 4.0           | 2.8                      | 3.5            | 2.4           |
| Economic growth .....  | -0.6                    | 0.0            | -1.0          | 2.2                      | 2.5            | 1.8           |
|  | <i>One year forward</i> |                |               | <i>Two years forward</i> |                |               |
| The effective exchange rate index of foreign currencies vis-à-vis króna (Dec. 31, 1991=100)... | 128.2                   | 132.0          | 124.0         | 129.2                    | 135.0          | 120.0         |
| Central Bank policy interest rate .....  | 7.0                     | 7.5            | 6.5           | 7.1                      | 8.5            | 6.5           |
| Nominal long-term interest rate .....  | 7.1                     | 7.7            | 6.5           | 7.2                      | 8.5            | 6.4           |
| Real long-term interest rate .....   | 4.7                     | 5.0            | 4.2           | 4.7                      | 5.0            | 4.0           |
| ICEX-15 share price index (12-month change) ...  | 7.4                     | 19.8           | -10.0         | 14.2                     | 25.0           | 3.0           |
| Housing prices (12-month change) .....   | 2.9                     | 5.0            | 0.0           | 1.6                      | 4.0            | -2.0          |

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 Búnadarbanki, Economic Consulting and Forecasting, Íslandsbanki, Kaupthing, Landsbanki and SPRON (Reykjavík and Environs Savings Bank). *Source:* Central Bank of Iceland.

the declining trend in interest rates within two years, with rates beginning to rise again in the second half of the period, even though no power-intensive development projects are assumed in their forecasts. This probably reflects their assessment of a growing risk of inflation more than two years ahead. Nonetheless, the Central Bank ought to have the opportunity to respond to such an inflation risk before it becomes a reality. This evaluation is also reflected in the expectation that the inflation premium on long-term nominal rates will go up slightly. However, in all cases the inflation premium is very close to the Bank's inflation target.

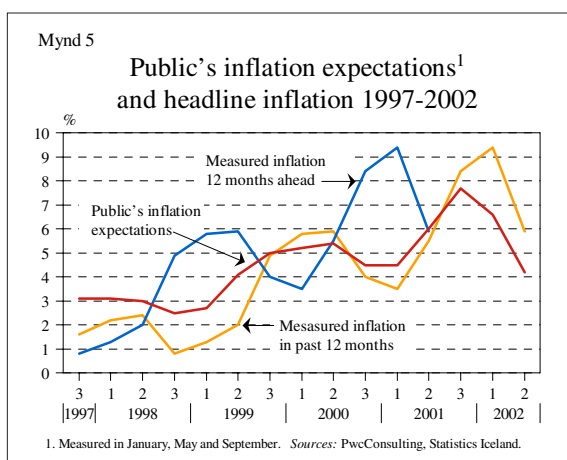
The survey reveals different views about equity price developments over the next two years. Most analysts expect equity prices to rise over the next twelve months, by 7-20%. Some are more pessimistic and the lowest expectation is for a decline of 10% over the next twelve months. Over the medium term, they are unanimous that equity prices will rally, although there is considerable variation. Their assessment of real estate price developments is fairly unanimous with most assuming some increase. However, some expect a slight fall in real estate prices two years hence.

while the median was lower at 4.0%. A lower median than average indicates that inflation expectations are equally distributed above and below 4%, but quite a few of the respondents who expect inflation to exceed 4% assumed a much higher figure, which raises the average. Results of these surveys in recent years show that inflation expectations for the coming 12 months match inflation over the preceding 12 months fairly closely, as shown in Chart 5.

In addition, the exchange rate of the króna has strengthened by almost 4½% since the Bank's last forecast and the strength of the króna appears to be on a more solid footing than before due to a smaller current account deficit and lower inflation. Hence the medium-term price outlook has improved since April.

The outlook is for a somewhat faster decline in inflation than forecast in May. Inflation is forecast at 2.1% in the course of 2002, instead of 2.8% in the Bank's last forecast, and 1.9% in the course of 2003, which is 0.4 percentage points lower inflation than forecast in May. One year ahead, the Central Bank is forecasting an inflation rate of 2.3%, which also is considerably lower inflation than forecast a year ahead in May. Partly this is explained by the lower inflation rate between May and June 2003. Two years ahead, the Bank forecasts an inflation of 2.2%.

The 12-month inflation rate has now moved inside the 4½% upper tolerance limit of the inflation target for this year, and is bordering the 4% upper tolerance limit which will take effect from the beginning of next year. Based on quarterly figures, inflation will already have moved within the 4% limit in the next quarter, and the Bank's 2½% inflation target will be achieved immediately in the fourth quarter of this year, which is roughly one year earlier than expected in its May forecast. On a two-year projection, inflation seems likely to fall below the target, assuming an unchanged exchange rate and monetary stance. However, the forecast remains well above the 1% lower tolerance limit that the inflation target stipulates.



### *Inflation target could be attained as early as this year*

The May 2002 CPI benchmark of employers and unions was achieved, as seemed likely when the Central Bank's last inflation forecast was prepared in April. Furthermore, conditions in the labour market seem to have eased considerably. The likelihood of inflationary pressure stemming from the labour market in the near term has therefore greatly diminished.

Table 1 Inflation forecast of the Central Bank

| <i>Quarterly changes</i> |  |  |  |
|--------------------------|--|--|--|
|                          | <i>Percentage change from previous quarter (%)</i> | <i>Annualised quarterly change (%)</i> | <i>Change on same quarter of previous year (%)</i> |
| 2001:1                   | 0.9  | 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                   | 0.3  | 1.1                                    | 3.4  |
| 2002:4                   | 0.7  | 2.8                                    | 2.4  |
| 2003:1                   | 1.0  | 3.9                                    | 2.3  |
| 2003:2                   | 0.4  | 1.5                                    | 2.3  |
| 2003:3                   | 0.2  | 0.7                                    | 2.2  |
| 2003:4                   | 0.5  | 2.1                                    | 2.0  |
| 2004:1                   | 0.9  | 3.5                                    | 1.9  |
| 2004:2                   | 0.7  | 2.7                                    | 2.2  |
| 2004:3                   | 0.1  | 0.3                                    | 2.1  |

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

| <i>Annual changes (%)</i> |                     |                    |
|---------------------------|---------------------|--------------------|
| <i>Year</i>               | <i>Year on year</i> | <i>Within year</i> |
| 1999                      | 3.4                 | 5.8                |
| 2000                      | 5.0                 | 3.5                |
| 2001                      | 6.7                 | 9.4                |
| 2002                      | 4.9                 | 2.1                |
| 2003                      | 2.2                 | 1.9                |

Shaded area indicates forecast.

#### *Assumptions in the inflation forecast*

Notwithstanding minor revisions of the macroeconomic outlook and some turbulence in the global economy, there appears to be little need to change most of the assumptions behind the inflation forecast published in May. Factors affecting domestic prices have changed little. A detailed discussion of these assumptions was presented in *Monetary Bulletin 2002/2*.

The only substantial change from the May forecast is the assumption for the exchange rate of the króna. As has been the general practice it is assumed that the exchange rate will remain unchanged from

the day of forecast. It is based on the exchange rate index for July 23, which stood at 127.3 points. The Bank's last forecast was based on the assumption that the exchange rate index would be 133 points for the duration of the forecast period. The current forecast is based on an exchange rate which is almost 4½% higher than assumed in the May forecast.

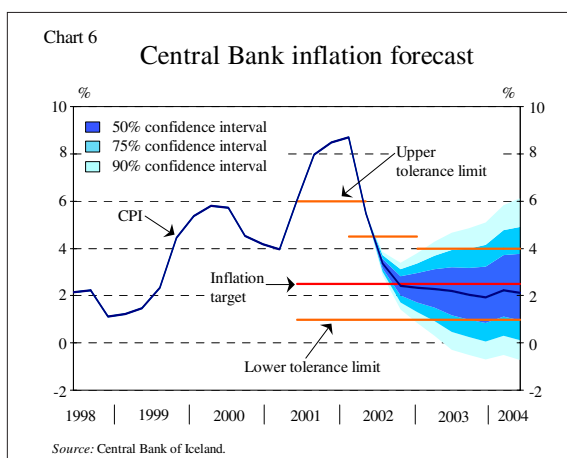
Table 2 Main assumptions of the inflation forecast

| <i>Percent changes between annual averages</i>   | <i>2002</i> | <i>2003</i> | <i>2004</i> |
|--|-------------|-------------|-------------|
| Contractual wages .....  | 4.0         | 3.6         | 2.9         |
| Wage drift .....   | 1.6         | 0.2         | 0.6         |
| Domestic productivity .....  | 0.3         | 1.0         | 1.6         |
| Exchange rate of króna, based on an import-weighted basket of foreign currencies ..... | -4.3        | -2.6        | 0.0         |
| Import prices in foreign currency terms  | -1.1        | 1.9         | 1.5         |
| <i>Percent changes within year</i>   |             |             |             |
| Contractual wages .....  | 4.2         | 3.3         | 2.9         |
| Wage drift .....   | 0.5         | 0.0         | 1.0         |
| Domestic productivity .....  | 0.5         | 1.5         | 1.5         |
| Exchange rate of króna, based on an import-weighted basket of foreign currencies ..... | -10.3       | 0.0         | 0.0         |
| Import prices in foreign currency terms  | 0.1         | 2.3         | 1.4         |

#### *Uncertainties and risk factors*

To underline the inherent uncertainties in all forecasts, the inflation forecast is presented together with an estimated confidence interval in Chart 6. The entire coloured area shows the 90% confidence area; the two darker ranges show the corresponding 75% confidence interval, and the darkest range indicates 50% probability that inflation will stay within the range. The uncertainty increases the longer the horizon of the forecast, as reflected in the widening of the confidence interval.<sup>2</sup>

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



In principle, the Central Bank's assessment of uncertainties in the inflation forecast remains unchanged from April. It is still assumed that the forecasting uncertainty is somewhat less than historical forecasting errors would indicate, and that the probability of the rate of inflation one year ahead being higher than forecast is about the same as the chance of lower than forecast inflation.

In May it was expected that inflation projected two years ahead was more likely to exceed the forecast than fall short of it, i.e. the probability distribution of the forecast was asymmetrical with a positive bias. According to the current forecast, on the other hand, inflation will decelerate somewhat faster than the Bank had expected, and residual systemic inflationary pressure seems to have been overestimated to some degree. Furthermore, the assumption of a stable exchange rate now appears to be on a firmer footing, due to the improved current account balance, the diminished positive output gap, rapid disinflation and the greater probability of power-intensive industrial development. Finally, the cooling down of the labour market makes substantial wage drift much less likely for the time being. This is corroborated by estimated wage drift in the second quarter, when the rise in the wage index for the non-financial private sector from the preceding quarter exceeded the estimated rise in contractual wages by only 0.3%.

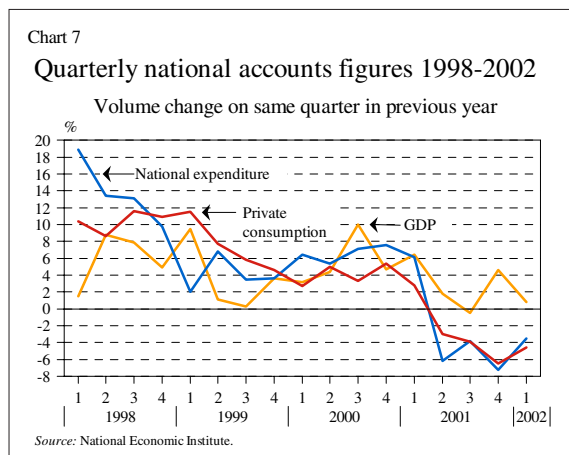
The above factors ought to help reduce the asymmetry in the probability distribution of the inflation forecast. Offsetting this is the greater likelihood that construction of an aluminium smelter and associated hydropower development will enter full swing as

early as next year. Such projects would inevitably fuel domestic demand and spur inflationary pressure, as described in the last *Monetary Bulletin*.<sup>3</sup> Surveys of consumer expectations also suggest greater public optimism, which could spur domestic demand. However, the indebtedness and heavy debt service burden of the household sector may constrain consumption growth over the medium term. On balance, asymmetrical probability distribution in the inflation forecast seems to be warranted, for the time being. Hence, as in May, the conclusion is that inflation two years ahead is more likely to exceed the forecast than fall below it. Since inflation is currently forecast below the target, this implies that the probability of inflation two years hence exceeding the target is roughly the same as it being less.

#### *Sharp drop in activity around the New Year could have bottomed out*

National expenditure in the first quarter of 2002 contracted 3½% from the same quarter last year, according to initial estimates by the National Economic Institute (NEI). This was the fourth successive four-quarter decline in national income. However, the year-on-year contraction was somewhat smaller than estimated in the second and final quarters of 2001. Despite the contraction in domestic demand and a 3% decrease in exports of goods and services, GDP grew slightly from a year ago, which is explained by a sharp decline in imports. Figures for economic activity in the first quarter are to a large extent based on estimates rather than actual records and have not been adjusted for the variable number of working days associated with the move of Easter between Q1 and Q2. Hence, these estimates must be taken with great reservations. The seasonal contraction in GDP which always takes place in the first quarter of the year appears to have been rather modest this year. This is difficult to reconcile with data for turnover

3. It should be reiterated that the forecast does not assume that new power-intensive projects development will take place. Thus the Bank's assessment of the deviation of key aggregates from given assumptions is reflected in its assessments of the forecasting uncertainty. This applies, for example, to the discussion of the probability of substantial deviation of actual exchange rate developments from the constant path assumed throughout the forecasting period. Furthermore, the forecast is based on the assumption of no change in policy interest rate throughout the forecast period.



and external trade, which show a large contraction from the year before.

Recent data on turnover and treasury receipts seem to indicate that activity in markets for goods and services may be picking up again. Domestic payment card turnover in Q2 was marginally above the rate recorded during the same quarter last year, although this could be caused by irregularities due to variable timing of Easter holidays. In the first 6 months of this year, domestic payment card turnover has shrunk by almost 4% in real terms from the same time the year before. Whether considering the past twelve months or the past three, growth in domestic lending by deposit money banks has been moderate recently, or in the range of 4-5% if adjusted for indexation and exchange rate changes. Considerable growth has taken place in broad money (M3), apparently explained by increasing savings which have initially been channelled into deposits within the banking system. In fact, this growth seems to have slowed down considerably, since 12-month growth in M3 until the end of June was almost 14%, while the annualised seasonally adjusted figure was only 5½% over the past three months. This is probably rather lower than can be expected in the long run if growth in the economy is consistent with long-term growth in potential output and if inflation is in line with the Central Bank's target.

On the whole it is still too early to claim that a significant recovery is underway, but there are fairly good reasons to believe that the recession has bottomed out. To some extent, however, this may be a repercussion of last year's shocks which may fade

out in the course of time. Nonetheless, the outlook for economic stability has improved and plans for hydropower and power-intensive industrial development seem more likely to be realised now than for a long time in the past. Coupled with decreasing inflation and a more stable exchange rate, both these factors could stimulate consumption and investment, as discussed later in the section on the macroeconomic outlook.

#### *Vigorous growth in merchandise exports in the first 5 months of the year ...*

Export growth still remains strong. Merchandise exports during the first three months of the year grew only 3% from the same period in 2001, measured at constant prices. However, exports in April and May were extremely robust and figures for the first 5 months were 14% up on the same period last year, measured at constant prices. Some two-thirds of the growth was explained by a higher exported volume of marine products and manufactured goods. External trade in March and April reflected the different number of working days between the years due to the shift of Easter between these months. A sharp drop appeared in March, which was recovered in April but left merchandise exports for the first quarter looking weak. The transfer between March and April presumably to some extent explains the large increase in merchandise exports in April, by one-third at constant prices excluding vessels and aircraft. Correspondingly, merchandise imports were one-fifth above their year-ago level. This distortion should have largely vanished from the total figures for the first five months of this year. The fishermen's strike in the spring of 2001 may still distort comparisons between the years, however.

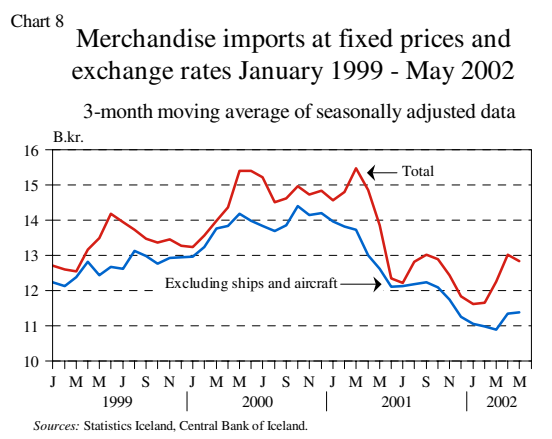
Over the first five months of this year, merchandise exports exceeded their year-ago level by 18 b.kr. Of this figure, some 5-6 b.kr. may be explained by higher average prices of foreign currencies, 4-6 b.kr. by price increases in terms of foreign currencies and 7-8 b.kr. by growth in export volume. The crucial factor was a 13 b.kr. increase in exports of marine products, which were largely sustained by robust exports of frozen fillets and fishmeal. Last year's fishermen's strike, however, may distort the comparison. Proportionally, the largest increase was in exports of manufactured industrial goods other than



aluminium and ferrosilicon, which went up by 65% measured at constant exchange rates, or by 4.2 b.kr. As pointed out in *Monetary Bulletin* in May, there are various conceivable explanations for this export growth. Firstly, it may be partly attributable to the slide in the króna. The impact of exchange rate movements can be divided into a fairly permanent impact which could last for as long as the exchange rate of the króna remains favourable, and a temporary impact whereby export companies benefit from selling from their inventories while the exchange rate remains low, if it is expected to strengthen later. If this is an important factor at work here, the export upswing can be expected to slow down soon, as appears to be an underlying assumption in the NEI's recent macroeconomic forecast. However, it seems doubtful that such inventory movements explain the upswing except to a limited extent, and a preliminary survey by the Central Bank does not suggest that this is the case. As far as the fisheries sector is concerned, the impact of exchange rate fluctuations could also appear in the form of temporary rescheduling of activities within the fishing year. In that scenario too, the upswing could tail off towards the end of the fishing year. Output can be expected to drop in July and August due to a shortage of quotas for demersal fish species, which will be offset to some extent by good results in other fields. Secondly, strong growth could derive from good marine conditions. Catches of pelagics during the first half of this year exceeded the catch during the first half of 2001 by 235 thousand tonnes, and the demersal catch rose by 32 thousand tonnes. Last year's fishermen's strike, however, explains this difference to a considerable extent. Thirdly, there are indications that value added in fish-processing has been increasing rapidly. Although it appears unlikely that long-term changes of that kind fully explain the upswing in recent months, export growth which consistently exceeds the growth in fish catches for a number of years gives support to this hypothesis. A case in point is that the processed value of pelagic species has increased markedly because, on a growing scale, they are being frozen for human consumption.

*... but the contraction in merchandise imports appears to have stopped*

During Q1, imports had contracted by 16% from the previous year, measured at constant prices, and merchandise imports by 20%. For the same reasons as outlined above, these figures probably give a distorted picture of the underlying downswing. After inclusion of data for merchandise imports in April and May, the contraction measures only half as much. Seasonally adjusted merchandise imports measured at constant prices, excluding vessels and aircraft, were somewhat higher from March to May than during the preceding three months. Exchange rate swings may cause temporary rescheduling of imports just as they do for exports, which is not easy to predict or distinguish from a permanent impact. It should be borne in mind that the contraction over the past two years is already a very large one (see Chart 8). In volume terms, general imports of consumer goods over the first 5 months of this year were 7% down from the same period in 2000. This is a considerably smaller decrease than was measured during the first 3 months of this year. Thus it is to be expected that imports are at least close to a trough, if they have not already reached it. Also, imports can be expected to respond positively to the strengthening of the króna and better outlook for economic stability. The exchange rate dive that hit bottom in November last year represented a great setback for import-related activities. The scale of the slide conceivably led market players to regard it as temporary, prompting them to delay imports which would even-



tually appear in a fairly robust temporary upswing, once the exchange rate stabilised. Higher imports in April and May can be seen as the consequence of such a shift, as well as a more permanent effect of relative price changes.

*Favourable external conditions plus a drop in demand produced a swift narrowing of the current account balance*

During the first five months of the year there was a 10.7 b.kr. surplus on the merchandise account, and 18.6 b.kr. excluding vessels and aircraft. By comparison, in June the NEI forecast a surplus of 10.4 b.kr. for the year as a whole. In Q1/2002 there was a 1.5 b.kr. deficit on the external account, compared with an 18.5 b.kr. deficit the same time a year before. A 5.5 b.kr. deficit on the balance on income broadly offset a surplus on the merchandise account, and the services account was negative to the tune of 1.3 b.kr. Interestingly, interest and dividend payments to abroad were 2 b.kr. less during the first three months of this year than last year, despite a 14% appreciation of foreign currencies against the króna and a larger foreign debt stock. This can be attributed to lower foreign interest rates and the fact that domestic parties shortened the lifetime of their foreign debts in order to take advantage of the currently lower interest rates on short-term liabilities. Iceland's economy experienced what could be called a multiple boom at the beginning of this year, i.e. high prices for marine products, good fish catches, low oil and commodity prices and low foreign interest rates, which together

with a contraction in domestic demand led to a rapid narrowing of the current account balance.

*NEI forecast: GDP will contract more in 2002 but the current account deficit will be smaller..*

The NEI forecast for GDP growth this and next year, published on June 21, does not entail a radical change from its forecast published in March. GDP and national expenditure are forecast to contract more this year than the NEI foresaw in March, and the current account deficit is forecast to be smaller, at only 1% of GDP this year, instead of 2%. Judging from available data, however, this seems to assume a rather swift recovery in national expenditure growth, which partly explains why a surplus of only 10 b.kr. is forecast on the merchandise account, implying that it will remain in balance for the rest of the year. In view of last year's contraction in private consumption, considerable growth will be required during the present year if the NEI forecast is to hold good, which would be reflected in rising imports. This may be somewhat optimistic in light of household indebtedness and the probability that real wages will decline in the course of the year. However, a recovery of private consumption and investment is to be expected as a result of an improved outlook for exchange rate stability and for the economy in general. Another reason that the NEI expects a merchandise account surplus of only 10 b.kr. is that it attributes the recent upturn in exports to a decline in

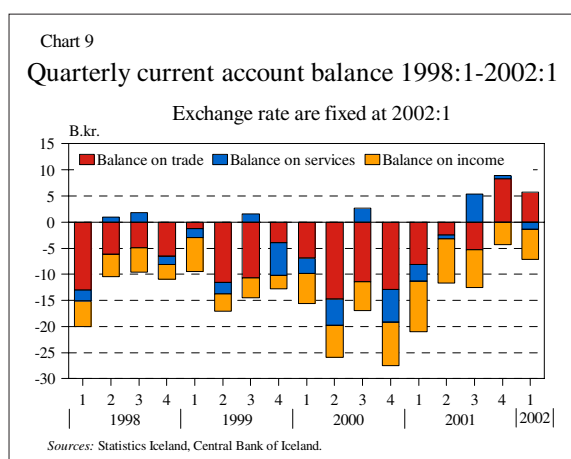


Table 3 Economic prospects 2000-2003

| Volume changes<br>between years %           | 2000  | Prelim.<br>2001 | Estim.<br>2002 | Forecast<br>2003 |
|---|-------|-----------------|----------------|------------------|
| Private consumption.....                    | 4.2   | -2.8            | -1.3           | 1.0              |
| Public consumption.....                     | 3.7   | 3.0             | 2.8            | 3.0              |
| Gross fixed investment.....                 | 14.8  | -6.0            | -14.5          | 9.9              |
| National expenditure.....                   | 6.7   | -3.0            | -3.2           | 3.2              |
| Exports of goods<br>and services.....       | 6.3   | 7.6             | 3.0            | 2.9              |
| Imports of goods<br>and services.....       | 8.8   | -7.8            | -3.1           | 4.8              |
| Gross domestic product....                  | 5.6   | 3.0             | -0.8           | 2.4              |
| Current account balance<br>as % of GDP..... | -10.2 | -4.3            | -1.0           | -1.4             |

Source: National Economic Institute.

inventories, which will be reversed in the course of the year.

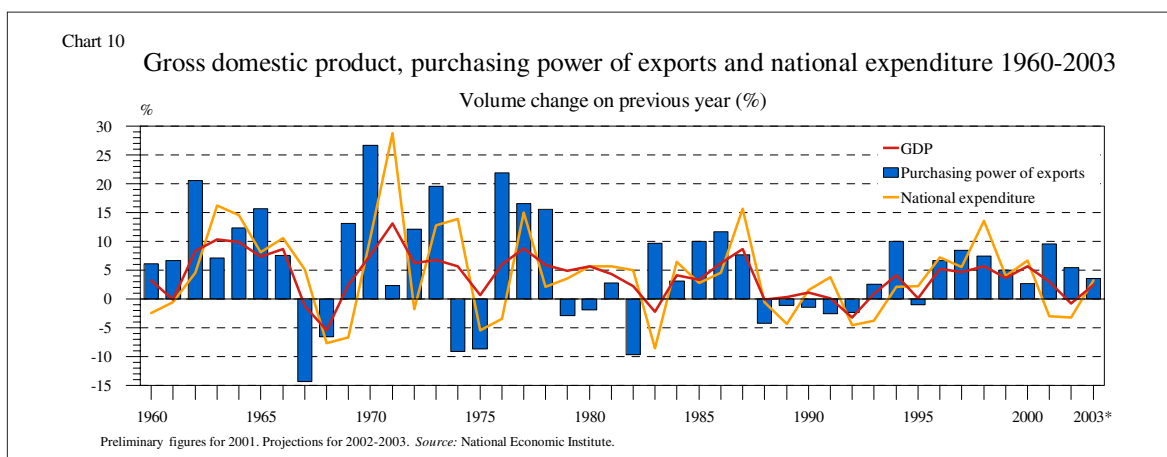
*.... and an economic recovery next year*

Next year the NEI forecasts 2.4% growth of GDP and somewhat higher growth for national expenditure. Export growth is expected to be sluggish, since quota allocations for the fishing year that ends in August 2003 do not allow for any increase in output. This assumption may be on the pessimistic side in light of developments in recent years. No hydropower development or power-intensive industrial projects are assumed in the forecast. Obviously the possibility of such projects is a major uncertainty. Even without such large-scale construction work, the NEI does not foresee increased unemployment in 2003. Given that seasonally adjusted unemployment has been growing so far this year, this seems a rather optimistic assumption, since unemployment would then need to start falling again. According to the forecast, growth in private consumption will remain low, because households will cut back their expenditure in response to rising debt service burden. Capital formation is forecast to grow by almost 10%, in particular due to greater business investment, assuming that lower interest rates and corporate income tax will stimulate a recovery in business investment. This is highly uncertain considering that Icelandic businesses still have a relatively high level of indebtedness and various companies in the domestic market are facing difficulties. If investment turns out lower, economic growth will also be lower than the

NEI has forecast. Offsetting this, the forecast for export growth may be rather pessimistic, although this depends on the assumption that the global economy will pick up.

*GDP falls despite no deterioration in purchasing power of exports*

The purchasing power of exports, defined as exports of goods and services divided by import prices of goods and services, is the single best criterion of the external conditions of the economy, since it covers changes in the terms of trade as well as supply shocks to the export sector. There has been a very close correlation between changes in the purchasing power of exports and national income growth in Iceland, and recent research indicates that this relationship has remained robust in the past few years. A contraction in national income has generally gone hand in hand with a fall in the purchasing power of exports, and the same applies to economic growth. However, it is interesting to note that if the NEI forecast holds good, the contraction in GDP this year will be accompanied by a considerable increase in the purchasing power of exports this year and last year, cf. Chart 10. This has not happened since 1961 when GDP remained virtually unchanged despite an increase in the purchasing power of exports. For the past 6 years the purchasing power of exports has grown steadily and fairly vigorously, by a total of 46%, of which almost 10% occurred last year. By comparison, purchasing power of exports decreased by 11½% over the period 1987-1992 during a period



## Box 2 Bourses in troubles

Strong tremors have been shaking major stock exchanges on both sides of the Atlantic in the past few weeks. The EURO STOXX 50 index went down by 16% in three days in July, which is the sharpest decline since it was first compiled in 1998. The slide began on the US Stock Exchange after mid-May and was exceptionally sharp, especially in July. The main US equity indices have gone down by 18-21% over the past 60 days (before July 26), with more than half of the decline concentrated in the past 30 days. By comparison, the drop since the beginning of this year is in the range 17-25%. The decline in US equity prices since their historical peak in 2000 is unusually large. Nasdaq has plummeted the most, by almost three-quarters, while other indices have gone down by 30-45%.

This development must be seen in the context that equities had previously risen way beyond what was justified by economic fundamentals, especially in the USA. When prices peaked in 2000 they were almost twice as high as the average over the period 1995-1998 and three to four times higher than over 1990-1994. In part, this huge rise in equity prices was driven by unrealistic expectations, optimism and blind faith in the future of the high-tech industries and IT companies. This can be seen from the very sharp rise in the price to earnings ratio (P/E), which is in fact still high in historical terms. Despite a slump over the past two years, share prices are now similar to or higher than the average during the period 1995-1998. This fact and various other indicators could suggest that equities are still rather highly priced.

Accordingly, it can be argued that the reduction in equity prices was an inevitable adjustment to long-term normality. Sizeable over- or undershooting of equity prices is a familiar phenomenon. Compounding the decline due to weak fundamentals and inevitable correction of overinflated equity prices was a breach of confidence between investors and shareholders in the USA on the one hand and board members of listed corporations on the other hand, in the wake of scandals and exposure of dubious accounting practices. This breach of confidence may not be the main cause of the price slump in recent weeks, but rather the catalyst of price adjustment which could have been expected anyway.

Prices of European equities have dropped in sync with the US market. Links between national equity markets appear to have grown in recent years, partly because of the highly global nature of technology sectors. The EURO STOXX 50 index has gone down by 25% over the past 60 days and since the New Year it has fallen by just over 27%. Similar setbacks have taken place in the Nordic exchanges. The Swedish equity index has dropped by 30% in the past 60 days and by more than 18% over the past 30 days. However, the problems in the USA are not the sole culprit. The recovery of the continental economy seems to be anaemic and the performance of some major corporations has been disappointing. The recent rise of the euro may also be slowing down the euro zone export sector.

So has the recent slump in equity prices bottomed out and will the losses be recouped? Repeated attempts by the US authorities to calm the market and boost public confidence in corporations has not yet produced convincing results. Major factors in equity market mechanisms are trust, confidence and expectations, and these appear to be lacking. Until confidence has been restored a sustained recovery is unlikely. It is virtually impossible to predict when such subjective changes will occur. Equities do not appear to have become particularly inexpensive, judging on the basis of the P/E ratio from a historical perspective. For example, the calculated P/E ratio on the Dow Jones is 22.1, while the estimated value based on profit forecasts for this year is 15.5. The same goes for the P/E ratio of other equity indices. This suggests that pricing is still on the high side.

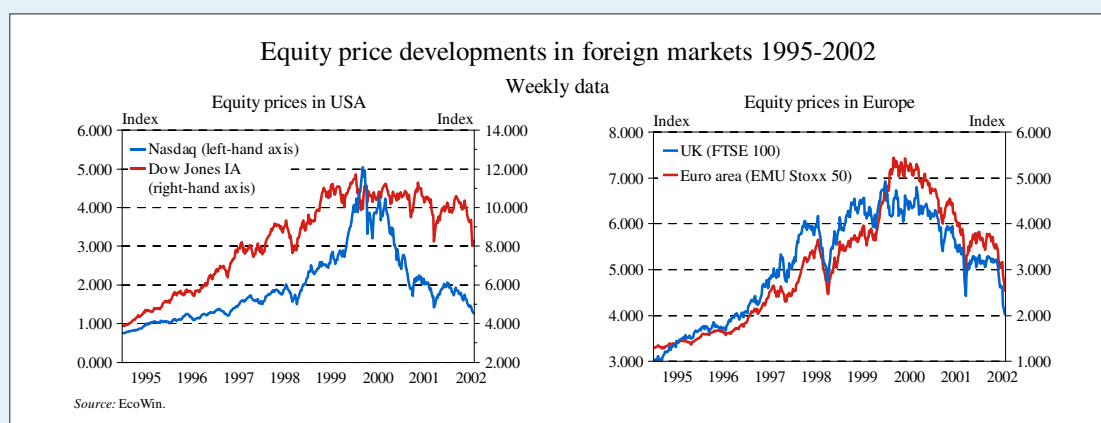
It is a cause of some concern that the slump in equity markets may have a negative effect on economic developments in the next few months, just when the US economy is recovering. The fall in share prices in the USA since 2000 is estimated to have amounted to as much as 6,500-7,000 billion dollars. This erosion of asset value can be expected to reduce private consumption and investment. On the other hand, housing prices, which are considered to have a stronger impact on private consumption than changes in equity prices, have remained strong.

## Overview of equity price developments and P/E ratios in foreign markets

| Region                                   | Sweden  | UK      | Germany | Euro area           | USA     |                      |                   | Japan         |
|--|---------|---------|---------|---------------------|---------|----------------------|-------------------|---------------|
| Equity price index                       | OMX     | FTSE100 | DAX100  | DJ EURO<br>STOXX 50 | S&P500  | DJ Indus.<br>Average | Wilequity<br>5000 | Nikkei<br>225 |
| <i>Price change to July 26, 2002 (%)</i> |         |         |         |                     |         |                      |                   |               |
| From highest value since 1995            | -68.5   | -42.0   | -53.3   | -53.6               | -44.2   | -29.5                | -45.1             | -54.0         |
| From December 31, 2001                   | -42.8   | -23.0   | -29.6   | -33.3               | -25.7   | -17.5                | -25.2             | -9.0          |
| Past 30 days                             | -17.6   | -11.4   | -12.6   | -14.0               | -12.4   | -9.4                 | -12.3             | -4.8          |
| Past 60 days                             | -29.9   | -22.3   | -26.6   | -27.0               | -21.3   | -18.2                | -22.0             | -19.9         |
| Region                                   | Iceland | Denmark | Sweden  | UK                  | Germany | USA                  |                   |               |
| Equity price index                       | ICEX-15 | KFX     | OMX     | FTSE100             | DAX     | Dow Jones            | S&P500            | Nasdaq        |
| P/E <sup>1</sup>                         | 13.2    | 32.1    | 25.8    | 56.8                | 22.5    | 23.1                 | 31.5              | (negative)    |
| Estimated P/E <sup>2</sup>               | ...     | 14.6    | 18.2    | 19.8                | 18.8    | 16.5                 | 16.7              | 41.9          |

1. Based on profits in past 12 months and prices on July 25, 2002. 2. Based on profit forecasts for 2002.

Sources: EcoWin and Kaupthing Bank.



of prolonged slump in external conditions. Favourable external conditions during a period of sharp adjustment in domestic demand made the adjustment process smoother than it would otherwise have been. This demonstrates that the nature of the current contraction is somewhat different from the typical one that involves adjustment to negative external shocks. While the global downturn in the ITC sectors has contributed to the slowdown, its main cause lies in the adjustment of domestic demand to a more sustainable level after years of overheating.

### *Turmoil in global financial markets affects the Icelandic economy in various ways*

Turmoil has characterized the global financial markets in recent weeks. Equity prices have dropped significantly in most industrialised countries, cf. Box 2. The US dollar has also fallen relative to other currencies. The slide in the dollar against the euro amounts to 6½% since the beginning of the year and its trade-weighted rate of exchange has gone down by 8.4% over the same period. To a large extent this involves a long-awaited correction of equity prices and the dollar exchange rate. In real terms the US dollar has been way above its historical average for many years and the US current account deficit has

been widening. Before the recent decline, equities were still relatively expensive in the USA.

These upheavals will only have a sizeable impact on the world economy if they thwart the nascent recovery in the world economy. It is far from sure that this will happen. A downturn has sometimes followed a sharp drop in equity prices, but by no means always. Clearly, many industrialised economies have not experienced as rapid a recovery as some people apparently expected. In particular, corporate profits have taken longer to pick up than was hoped, but doubts about the reliability of reported corporate profit figures seem to have seriously undermined confidence over the past few weeks.

If the turmoil in global financial markets sends the US economy back into recession, this will of course have negative effects in Iceland. Apart from this, the effect on the Icelandic economy is mainly twofold. Firstly, the depreciation of the US dollar benefits the terms of trade and national income in the short run. The reason is that imports of goods and services from the US weigh more heavily in Icelandic foreign trade than exports to the US. As it happens the impact may be underestimated, since oil, petrol and many commodities are denominated in dollars even though they are imported from other countries. However, this impact is probably not large and ought to tail off over the longer term as prices adjust to the underlying supply and demand conditions. Secondly, lower equity prices in industrialised countries weaken the net asset position of the economy. The reason is that Icelanders, in particular the pension funds, own considerable amounts of equities overseas, while loans and bonds weigh heaviest on the liabilities side of the economy.

#### *Greater probability of power-intensive industrial projects*

Following the signature of a memorandum of intent between Alcoa and the Icelandic government concerning the construction of an aluminium smelter in Reydarfjörður, the probability of power-intensive industrial development being realised in east Iceland has increased significantly. It is aimed to complete by the beginning of 2003 all decisions needed for launching construction of hydropower facilities as soon as that year. Some preparatory work is actually already being done this year, but only on a small

scale. Valued at around 600 m.kr., it will have little impact on economic activity. Activity associated with the construction of the aluminium smelter, hydropower station and related investments would peak in 2004 and 2005.

The proposed construction of Alcoa's aluminium smelter in Reydarfjörður and investment in hydropower facilities would be a smaller-scale project than was under examination in cooperation with Norsk Hydro until this spring (the Noral project). Production capacity of the smelter is estimated at 295 thousand tonnes, while the Noral project assumed a capacity in the range 360-420 thousand tonnes after its final phase. The macroeconomic impact will be similar in character, only correspondingly less. A Central Bank study found that the Noral project could be incorporated into the economy without seriously disturbing stability. However, higher interest rates than otherwise would be required in the build-up to the construction projects. Other countermeasures, e.g. in the fiscal area, could somewhat reduce the need for monetary response. A similar principle obviously applies to the Alcoa project, although on a somewhat smaller scale. The Central Bank intends to outline its evaluation of the proposed project in the November issue of *Monetary Bulletin*.

It is still too early for monetary policy to respond to these proposals. There are three main reasons. In the first place the projects are uncertain, although the likelihood of this project must be considered much greater than for the Noral project in its day. Secondly, the peak of construction activity is more than a year away. Thirdly, the hypothetical impact of this project is at present overshadowed by other economic developments, such as rapidly decelerating inflation, the economic downswing and the fact that short-term interest rates remain high in real terms.

#### *Treasury result so far this year poorer than last year, but receipts have improved in recent months*

The treasury result so far this year has been poorer than last year. Cash from operations, i.e. collected revenues excluding asset sales less expenses paid, was negative by almost 8 b.kr. up to the end of May, but was just under 2 b.kr. in the red at the same time last year.<sup>4</sup> The result over the past two years is much poorer than in the fiscally most successful years of 1999-2000, when the mid-year surplus was 8-10 b.kr.

Table 4 Treasury finances  
January-June 2001 og 2002

| B.kr.                              | January-June |       | Change (%) |
|------------------------------------|--------------|-------|------------|
|                                    | 2001         | 2002  |            |
| Revenues excl. asset sales.....    | 107.9        | 113.2 | 4.9        |
| Thereof taxes .....                | 99.9         | 104.3 | 4.5        |
| Expenditures.....                  | 109.6        | 120.9 | 10.4       |
| Thereof operating expenses .....   | 43.9         | 50.1  | 14.2       |
| Cash from operations .....         | -1.7         | -7.7  | .          |
| Asset movements .....              | -2.0         | 3.4   | .          |
| Net borrowing requirement .....    | 3.7          | 4.3   | .          |
| Pension obligations payments ..... | -7.5         | -4.5  | .          |
| Net borrowing .....                | 9.4          | 5.4   | .          |
| Foreign .....                      | 6.1          | 7.8   | .          |
| Domestic .....                     | 3.3          | -2.4  | .          |
| Cash balance .....                 | -1.8         | -3.4  | .          |

Source: State Accounting Office.

Movements of net lending and equity have been fairly favourable so far this year with an inflow of 3 b.kr., as against a balance during the first half of last year. The treasury's net borrowing requirement during the first six months of this year was thus only marginally higher than during the same period in 2001, or just over 4 b.kr. In addition, payments to meet the treasury's earlier pension obligations have been cut back as its scope for making such allocations has diminished. As a result, the treasury has managed with a lower level of borrowing than in 2001, or 5½ b.kr. until the end of May compared with 9½ b.kr. last year. The bulk of the treasury's borrowing requirement has been financed with foreign loans in excess of repayments, or 8 b.kr., which is almost 2 b.kr. more than at the same time last year.

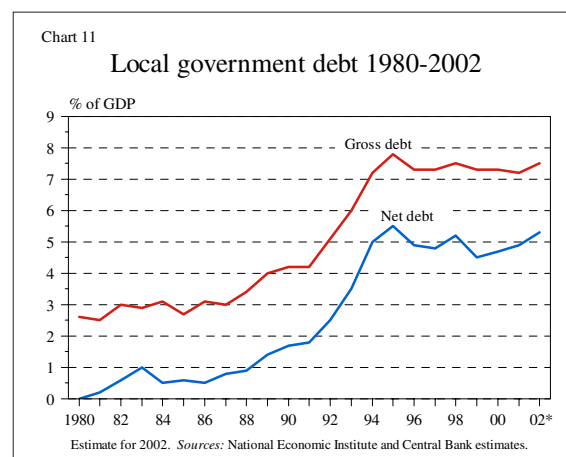
So far this year total tax receipts have been 4½% higher than over the same period in 2001, with receipts from personal income tax and payroll taxes increasing by 12½% and revenues from taxes on goods and services rising 4%.<sup>5</sup> Thus the development so far this year seems to be broadly speaking in line with revenue forecasts.

4. It should be remembered that the result during odd months is generally slacker than in even ones, since relatively little VAT is collected then. The same applies to the months when the state settles mortgage relief payments and PAYE rebates.
5. Changes in tax legislation were expected to cost the treasury 3 b.kr. in lost revenues in 2002.

Outlays paid excluding interest and pension supplements have been 10% higher so far this year than at the same time in 2001, while the budget assumed a 5% rise between the years. On the basis of this simple indicator, one might estimate that treasury outlays are heading roughly 10 b.kr. beyond the budget figure and that the treasury's result, excluding privatisation receipts, is heading for a deficit of 5-10 b.kr. instead of a small surplus. By way of qualification, intra-year treasury reports on cash disbursements sometimes give a misleading picture of the underlying accruals, and the timing of outlays can likewise shift within the year. However, various special disbursements paid out in the first half of 2001 should be making this year's outlays look better by comparison. Besides, it is known that hefty wage rises have recently occurred in the public sector and there has been a sizeable overshooting in health sector expenditures so far this year. Accordingly there seem to be grounds for paying special heed to the development of outlays in the quite near future.

#### Local government finances worsen in spite of higher municipal tax revenues

Indications of local government operating results in 2001 suggest that their finances have been worsening in spite of higher municipal tax revenues and increased treasury contributions through the Municipalities' Equalisation Fund. The deficit on operations of the 15 largest municipalities was more than 4 b.kr. last year, or 8% of revenues. Their budgets assumed a deficit of 500 m.kr. These authorities' tax revenues exceeded budgets by 8% and overruns

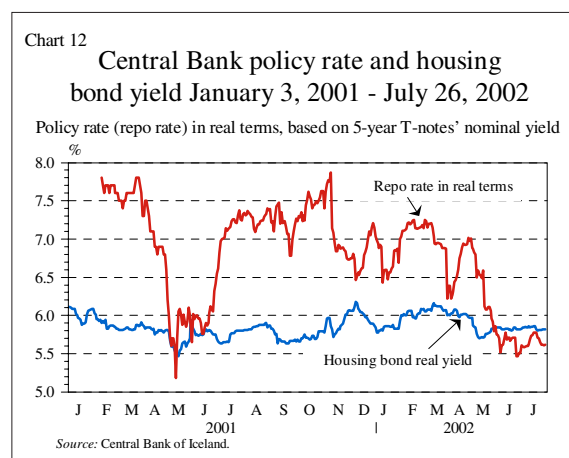


on outlays were even higher at 16%. Net investment outlays overshot budget figures by 30% during 2001, partly because of poorer collection of revenues from investments than had been estimated. Since some 80% of Iceland's population live in these 15 municipalities, their results give a fairly good picture of the overall local government operating result. Once again, it looks as if the build-up to the local elections cost municipal funds a fair sum.

Given this marked deviation from 2001 budgets, the budgets for 2002 might be viewed with considerable scepticism. Comparison is complicated by changes in accounting methods, but as far as can be seen, these 15 municipalities aim for a combined deficit of ½ b.kr. this year.

*The monetary stance remains tight in view of the economic conditions*

The Central Bank has cut its policy interest rate by a total of one percentage point since *Monetary Bulletin* was published in May. The Bank's policy interest rate in real terms has gone down by slightly less, because inflation expectations have decreased as the anticipated disinflation has been confirmed. In the beginning of May the Bank's policy rate in real terms was 6.9%, based on the inflation premium on five-year treasury instruments, but 5.6% towards the end of July. According to the inflation forecast presented above, the Bank's real interest rate was almost 6½% towards the end of July, based on the rate of inflation projected one year ahead. A tight monetary stance is therefore being maintained. Other financial conditions are also fairly tight. The exchange rate has appreciated by 2% since the beginning of May. Real interest rates on indexed bonds have declined little so



far and are in fact very high considering the downswing and uncertain outlook for the economy. Interest rates on indexed 25-year housing bonds, for example, were just under 6% towards the end of July, or similar to the rate in the beginning of May.

At 6% in real terms, the Central Bank's policy interest rate is well above long-term equilibrium, cf. the discussion in the last issue of *Monetary Bulletin*, and too high in light of the prevailing economic situation. The recent surge in inflation, however, required the Central Bank to take a cautious approach towards easing the monetary stance, since its long-term credibility would have suffered serious consequences without a victory in the battle against inflation. Now that the Central Bank's inflation target is within sight of being attained, there is good reason to reduce interest rates further. The scope and timing of cuts, however, will as ever be determined by the Bank's assessment of economic developments as they unfold.