



June 20, 2001

## Report to the Government on the Inflation Target

In a joint declaration on March 27, 2001, the Government and Central Bank of Iceland announced changes in the monetary framework in Iceland. The objective of maintaining the exchange rate within a fixed band was replaced by the setting of an inflation target for the Central Bank. The target is that inflation, measured in terms of the twelve-month rise in the Consumer Price Index (CPI), shall be as close as possible to 2½%. Tolerance limits were defined allowing a deviation of 1½% in either direction from the inflation target in 2003 and thereafter. Until the end of 2001 and during 2002, the tolerance limits will be wider, however. Inflation may run as high as 6% this year and 4½% next year. If inflation goes outside the tolerance limits, the Central Bank shall submit a report to the Government, as stipulated in their joint declaration, stating the reasons why this happened, the Bank's planned response and the length of time it considers it will take to bring inflation back to the targeted level. This report shall be made public. At the same time, the declaration contains a provision that the Bank shall strive to bring inflation back within the tolerance limits as soon as possible.

On Monday, June 13, Statistics Iceland published the CPI for June. It had risen by 1.5% from the previous month and by 6.8% over the preceding twelve months. Inflation was thus outside the tolerance limits.

The following report was produced in light of the above. It opens with a discussion of the background to the change in the monetary policy framework on March 27. Next it addresses recent price developments and the main reasons that inflation exceeded the higher tolerance limit. This is followed by a discussion of wage developments. Wage increases far in excess of productivity growth in recent years have played an important part in the escalating rate of inflation. Wage rises, overheating of the economy, an excessive current account deficit and external shocks are the main explanations for the depreciation of the króna over the past year. A special section of this report is devoted to exchange rate developments. Then the Bank outlines the inflation prospects in light of its latest inflation forecast and developments since its publication. A new inflation forecast will not be published until the beginning of August. However, the Bank makes in this report an assessment of when inflation is likely to return to within the tolerance limits. Finally, the report addresses monetary policy and other conceivable measures to respond to the situation that has now arisen.

The Central Bank of Iceland will next present a comprehensive assessment of the economic situation and outlook, and publish its inflation forecast, in the August edition of its quarterly Monetary Bulletin, and subsequently at quarterly intervals. In the Bank's view, a new report of this kind is not required unless inflation goes outside the tolerance limits again after having been within them.

The main findings of the report are as follows:

1. A precondition for achieving the inflation target of 2½% in 2003 is to prevent a price, wage and currency spiral. If no changes are made to current wage agreements, the outlook is still that inflation will be in the region of 2½% in mid-2003, even if the exchange rate does not strengthen from its present level. Since the real effective exchange rate is currently very low, there is a good chance that the exchange rate will appreciate when inflation expectations subside.
2. Monthly rises in the CPI have probably reached their peak, provided that no further depreciation of the króna takes place. The twelve-month rate will continue to increase, however, at least until the autumn. Assuming a stable exchange rate and no change in monetary policy, the outlook is that inflation will remain above the upper tolerance limit until the beginning of 2003.
3. Wages have in recent years risen far in excess of productivity and an acceptable rate of inflation. This is the most important factor behind growing inflation, but it is in turn rooted in the strong growth of domestic demand. Along with tax cuts and credit expansion, large wage increases contributed to the current account deficit.
4. The depreciation of the króna in recent months is the most immediate explanation for the fact that inflation is now above the upper tolerance limit. The depreciation is the result of the imbalances which have built up in the Icelandic economy and manifest themselves in, for example, an excessive current account deficit.
5. The change made to the monetary policy framework at the end of March does not serve to explain the depreciation and growing inflation in recent months. The change was motivated by the fact that in the long run a more flexible regime was better suited to the Icelandic environment, and that a unilateral fixed exchange rate policy is extremely difficult to implement in an environment of liberalised capital movements. The króna had been under persistent pressure for some time and it would have been virtually impossible for the Central Bank to keep the exchange rate within the band much longer by interventions in the foreign exchange market.
6. The Central Bank has decided to keep its policy interest rates unchanged for the time being, even though the inflation rate and inflation expectations give grounds for raising them. This decision is based on the expectation of a relatively swift easing of demand in the near future and a slowdown in inflation next year, as well as the fact that raising interest rates in the present circumstances could undermine the stability of financial institutions. The Bank will monitor developments closely and will raise interest rates if, for example, the development of a price, wage and currency spiral becomes more likely.
7. The Central Bank is of the view that a demand stimulus is untimely. Measures which strengthen the supply side of the economy, i.e. increase the supply of factors of production (labour and capital), boost productivity and encourage

savings would simultaneously create conditions for sustained growth and support the Bank's inflation target. Furthermore, improved investment opportunities, among other things through privatisation, would encourage capital inflows and a strengthening of the exchange rate. Measures which increase competition would also support the Bank's inflation target and reduce the need for high interest rates in order to achieve it.

### **Background to the change in monetary policy**

Iceland had implemented a flexible fixed exchange rate policy for a long time before the change in the monetary policy framework on March 27. This policy obliged the Central Bank to maintain the exchange rate within a specified band which served as a kind of anchor for monetary and price stability. Liberalisation of capital movements worldwide has put this type of exchange rate regime under pressure, and massive capital movements have sometimes overwhelmed government policies. Moreover, fixed exchange rate policies seem to have occasionally either contributed to excessive capital inflows or fuelled speculative attacks against vulnerable currencies. Governments in many parts of the world have responded to this problem either by dispelling all doubt about the exchange rate, e.g. by joining a monetary union, or by increasing flexibility of the exchange rate regime to prevent the currency from becoming an easy prey for speculators. In Iceland's case, the latter course was chosen.

Large imbalances in the Icelandic economy over the past three years compounded the need to adopt a more flexible exchange rate policy. In recent years, lack of exchange rate flexibility can be said to have hindered sufficient tightening of the monetary stance at the right time. Last year the preconditions for a stable exchange rate were weakened by the credit inflow required to meet an exceptionally wide current account deficit and net outflows of portfolio capital and foreign direct investment. In spite of the fact that the Central Bank substantially reduced its net foreign position to defend the króna, these actions proved inadequate and pressure on the króna increased. Just before the framework change on March 27, the exchange rate was very close to the upper limit of exchange rate band and the Central Bank's net foreign position amounted to less than 7½ b.kr. at the end of March, which would only have sufficed for one or two months' intervention to defend the króna, had interventions continued in similar magnitude as when the pressure on the exchange rate ran highest. The Central Bank has fully committed access to short-term credit facilities amounting to tens of b.kr. However, it would have been interpreted as a sign of weakness, at home and internationally, to allow the net foreign position to go into the red. Thus the prospects for defending the exchange rate band looked increasingly dim, except at enormous cost. The fishermen's strike (in April and May) and fishing quota cuts that became facts later would have virtually made it impossible. An unsuccessful attempt to defend the exchange rate target could have caused an extreme reaction in the foreign exchange market, as experienced by several countries in recent years. In that case, in the absence of a new framework for monetary policy to replace the one abandoned, the króna would probably have depreciated even more than turned out to be the case.

It is clear from the above that the change in the monetary policy framework is not to blame for the subsequent depreciation of the króna. The ensuing slide was primarily the result of imbalances that had built up in the economy over the past few years. The

Central Bank was aware of the risk that accumulated imbalances in the economy would be released following the change in the framework, and its inability to have a decisive effect on such a development in the short run. For this reason, a fairly high upper tolerance limit for inflation was set this year, albeit not so as to invite the interpretation of a relaxed monetary stance in the short term.

### Recent price developments

Inflation has been gaining rapid momentum over the past three months, which can largely be attributed to the depreciation of the króna. Changes in oil and petrol prices in world markets and higher general service prices have also had some effect, although in the case of services, both the depreciation and sizeable wage increases are probably at work. The housing component has contributed less to the rise in the CPI in recent months and in June a turning point was reached when housing prices actually fell.

Table 1 shows a fundamental change in the composition of CPI inflation over the past year. Firstly, increases in the price of imported goods (excluding petrol) accounted for more than one-third of the increase in the CPI over the 12 months to June, and an even larger share of the increase since the beginning of this year. Over the corresponding period last year, the contribution of import prices was negative. Secondly, the contribution of rising residential housing costs to CPI inflation over the 12 months to June was 13%, which is much smaller than last year when they explained almost half the rise in the CPI.

Table 1. Proportional contribution (%) of major components to the rise in CPI

|                                    | 12-month increase |                  | Increase since the beginning of the year |                  |
|------------------------------------|-------------------|------------------|--|------------------|
|                                    | <i>June 2001</i>  | <i>June 2000</i> | <i>June 2001</i>                         | <i>June 2000</i> |
| Domestic goods                     | 17.4              | 14.7             | 17.8                                     | 12.0             |
| Imported goods<br>excluding petrol | 34.9              | -0.6             | 41.2                                     | -11.0            |
| Petrol                             | 8.7               | 16.9             | 15.3                                     | 19.8             |
| Housing                            | 12.8              | 37.8             | 9.8                                      | 49.1             |
| Public sector services             | 3.2               | 12.5             | 0.0                                      | 1.9              |
| Other services                     | 23.0              | 18.7             | 15.9                                     | 28.2             |
| Total                              | 100.0             | 100.0            | 100.0                                    | 100.0            |
| CPI rise                           | 6.8               | 5.5              | 5.0                                      | 1.8              |

Thus the exchange rate depreciation clearly has been the main source of the accelerating rate of inflation in recent months. Prices of imported goods have risen by 8.5% over the past twelve months and by 8% since the beginning of this year and explain 3% and 2.8% of the rise in the CPI, respectively, or just under one half of the twelve-month increase, and almost two-thirds of the increase this year. In the imported goods category, the prices of food and beverages, new motor vehicles and

spare parts, and petrol have risen most. The price of these items has risen by 8-15% since the beginning of the year and 11-12% over the past twelve months. Prices of food, beverages, motor vehicles and spare parts have largely risen as a result of the depreciation of the króna. Of these three categories, petrol has risen the most, as a result of the currency slide as well as increases in world market fuel prices during the first half of the year. World market petrol prices in forward contracts suggest that they will fall in the second half towards their level at the beginning of the year. This ought to bring down petrol prices in Iceland by 6-7 króna per litre, if the exchange rate of the króna against the US dollar remains stable.

Non-public service prices have risen fairly rapidly over the past year. In June the twelve-month increase was 7.8%, which accounts for 1.5 percentage points of the increase in the CPI over the period. Prices of services are likely to continue to drift upwards for the time being, since the impact of last year's wage agreements and the exchange rate depreciation have probably not yet been transmitted in full.

In June, the twelve-month rise in the housing component of the CPI slowed down even further. It rose by 6.1%, which is less than the CPI as a whole. Thus housing prices have dropped slightly in real terms. The Central Bank's May forecast assumed that nominal housing prices would remain more or less stagnant for the next twelve months and therefore drop in real terms. In May the price per square metre of multi-residential housing in the Greater Reykjavík Area fell by 3-4% between the months, according to preliminary figures. Since the housing component of the CPI is the average price of contracts for the preceding three months, the figure in the June index is the average for March, April and May. Price per square metre of multi-residential housing in the Greater Reykjavík Area weighs more than half in imputed rent, which is one part of the CPI housing component. The initial impact of the decrease in May appeared in the CPI for June and will also be felt in July and August, which implies that the housing component of the index is likely to give a negative impulse to the inflation rate over the coming months.

Regarding other components, it is interesting to note the considerable rise in domestic food and beverage prices. These increased by 1.9% from May to June, which is only slightly less than the rise in imported foods prices (2.1%). Over the past twelve months the domestic food component has risen by 7.1%, or by more than the index as a whole. Other domestic goods apart from food went up by 2.4% between May and June and by 6.3% over the previous twelve months. Although prices of domestic goods are not directly affected by a weaker exchange rate, it may have relieved domestic firms from direct or indirect competition from abroad, making it easier to adjust output prices to the higher wage costs and prices of imported inputs.

### **Wage developments**

Since the general wage settlement in the spring of 1997, wages have risen substantially and far in excess of productivity growth. During the first quarter of this year, wages of all wage earners were 39% higher than on average in 1996. The CPI rose by 15% at the same time, which implies that real wages rose by more than 20%. In the private sector excluding financial institutions, wages rose by more than 26% between 1996 and 2000, or 6% per year on average. At the same time labour

productivity, i.e. GDP per employed person, went up by just over 7%, or an average of 1.7% per year.

In the long run, a productivity growth of that magnitude would sustain annual wage rises of 4.2% if inflation is to remain around 2.5%. Over a short period a larger wage increase could be sustained without causing higher inflation, provided that businesses have a margin of profit sufficiently large to absorb a larger increase in real wages than allowed by the rate of productivity growth. This mainly applies when real wages are rising from a depressed level that has caused the share of wages in national income to fall. This was probably the case in 1996 and 1997, but less so as the upswing progressed and wage increases continued to exceed productivity growth and the acceptable rate of inflation. The share of wages in national income has risen sharply in recent years and firms have become less able to absorb wage increases.

After the króna began to weaken last year, the price restraint imposed by foreign competition began to slacken. At the same time, the capacity of firms to absorb excess wage rises probably vanished. Hence, these cost increases were passed on to prices to a larger extent than during the first half of the upswing. Inflation increased as a result. These developments were compounded by the effect of the depreciation, causing the rise in real wages to level off quite sharply. This year the growth in real income could come to a halt or even be reversed. Last year real income increased by only 1½% and real wages in the private sector rose by less than productivity. Based on this year's inflation outlook, real income in the private sector is likely to increase slightly on average from the year before, but deteriorate somewhat in the course of the year. This is the inevitable consequence of excessive wage increases, considering that productivity growth has fallen short of expectations and the rate required to sustain these wage increases.

The rapid growth of disposable income in recent years, caused by wage increases and tax cuts, played a considerable part in the demand growth which is the main cause of the current account deficit. In the Bank's view, this rise in disposable income is a contributing factor to the current inflation problem, both directly as wage increases exceeding productivity growth have been passed on to prices as the upswing progressed, and indirectly as it contributed to the widening of the current account deficit which eventually undermined the stability of the exchange rate. Wage rises in turn were fuelled by increasing demand for labour which eventually caused the labour market to become overheated. Although there are certain signs that the excess demand for labour is beginning to ease, considerable tension still remains, in the Central Bank's view. Seasonally adjusted unemployment, for example, is still below 2%, suggesting the presence of excess demand after adjustment for vacancies and influx of foreign labour.

Table 2. Wage developments 1996-2001

| <i>Changes between annual averages (%)</i>            | 1996 | 1997 | 1998 | 1999 | 2000 | 2001              | 96-00 |
|---|------|------|------|------|------|-------------------|-------|
| Wage index  | 6.4  | 5.4  | 9.4  | 6.8  | 6.6  | 8.9 <sup>2)</sup> | 31.4  |
| Private sector wages excluding bank employees         | 5.2  | 5.8  | 7.1  | 5.5  | 5.7  | 7.2 <sup>3)</sup> | 26.3  |
| Real wages based on wage index                        | 4.1  | 3.6  | 7.6  | 3.3  | 1.5  | 4.7 <sup>2)</sup> | 16.8  |
| Real wages in private sector excluding bank employees | 2.9  | 3.9  | 5.3  | 2.0  | 0.6  | 0.6 <sup>3)</sup> | 12.3  |
| Productivity  | 2.8  | 2.9  | 1.1  | 1.4  | 1.5  | 0.6 <sup>3)</sup> | 7.1   |
| Unit labour cost <sup>1)</sup>                        | 2.4  | 2.8  | 5.9  | 4.0  | 4.1  | 6.6 <sup>3)</sup> | 17.9  |
| Real unit labour cost <sup>1)</sup>                   | 0.1  | 1.0  | 4.2  | 0.6  | -0.9 | 0.0 <sup>3)</sup> | 4.8   |
| Real disposable income                                | 4.9  | 5.0  | 8.5  | 4.2  | 1.9  | 0.0 <sup>3)</sup> | 21.0  |
| <i>Trading partners</i>                               |      |      |      |      |      |                   |       |
| Wages   | 3.5  | 3.3  | 3.4  | 3.3  | 3.2  | 3.7               | 13.9  |
| Productivity  | 1.5  | 1.5  | 1.2  | 1.2  | 1.8  | 1.8               | 5.8   |
| Unit labour cost                                      | 2.0  | 1.7  | 2.1  | 2.2  | 1.4  | 1.8               | 7.6   |

<sup>1)</sup> Private sector excluding bank workers. <sup>2)</sup> Change between Q1/2000 and Q1/2001. <sup>3)</sup> Provisional.

### Exchange rate developments

As stated earlier, the depreciation of the króna is the main reason that inflation has exceeded the upper tolerance limit set in March. In mid-June, the exchange rate had depreciated by more than 13% since the monetary policy framework was changed on March 27, and was almost 8½% lower than assumed in the inflation forecast which the Bank published in May. The depreciation followed an 11% slide in the exchange rate from the beginning of 2000 until March 27 this year.

Exchange rates of currencies are determined by a complex interaction of many factors and it is often hard to identify which ones play a decisive role, even in retrospect. One reason is that the exchange rate is to some extent an asset price, determined by market participants' expectations concerning the development of the economic fundamentals which determine exchange rates in the long run. A variety of factors may have affected the exchange rate of the króna in recent months, including the following:

1. The real exchange rate may have reached a higher level than was compatible with long-term macroeconomic balance, leading to an adjustment in the form of a nominal depreciation of the króna.
2. Macroeconomic imbalance, as manifested in an exceptionally large current account deficit, undermined the stability of the exchange rate as funding the deficit gradually became more difficult.
3. Events such as the fishermen's strike may have caused a temporary disruption to the inflow of foreign currency revenues and fuelled pessimism about economic prospects, thereby lowering expectations about the equilibrium exchange rate.

4. Finally, the market may simply have overreacted, as is common in foreign exchange markets. In such cases, market participants' react on the basis of expectations concerning the future developments of the exchange rate which may overestimate the need for adjustment, and be self-fulfilling to the extent that they include the expectations that other market participants will react in such a way.

Evaluation of the first factor depends to some extent on the concept of long-term equilibrium of the exchange rate applied. The Central Bank remains convinced that the exchange rate was not substantially misaligned. Even though the real exchange rate appreciated considerably in recent years, it deviated much less from the historical average rate than has usually been the case during economic upswings, even at its peak in the first half of last year. In the beginning of June this year, the real exchange rate relative to prices hit its lowest level since June 1983. In the light of historical experience, such a low real exchange rate is unlikely to be sustained in the long term, and can be expected to rise again over the medium term, through either an appreciation of the exchange rate or higher inflation, or both.

Although there are strong grounds for supposing that the real exchange rate has recently dropped below its long-term trend, it cannot be taken for granted that a market driven appreciation is immediately on the horizon. The imbalances last year had become so pronounced that a credit inflow equivalent to one-fifth of GDP and repeated Central Bank market intervention did not suffice to prevent the króna from sliding. A need for foreign borrowing on the scale witnessed last year, to finance both the current account deficit and the net outflow on direct and portfolio investments, invites the risk of exchange rate instability. If financing of the current account deficit becomes more sluggish, this may undermine the exchange rate before domestic demand has adjusted sufficiently to relieve the pressure on it. Thus downwards pressure on currencies often runs highest when a current account deficit is beginning to narrow, as seems to be the case in Iceland at present. Very marked macroeconomic imbalance may cause the exchange rate to fall below the level compatible with long-term equilibrium.

Undoubtedly the fishermen's strike temporarily contributed a lower exchange. Insofar as it directly affected foreign exchange revenues, some lingering effect may still be at work. In other respects, the impact should have receded by now, since the strike does not change the medium term economic outlook in a significant way. Bleaker prospects for the fisheries sector following the recent Marine Research Institute report, however, will probably have a more longer-lasting effect.

Since the króna was floated it has depreciated very sharply on several occasions, then temporarily rallied. In some cases, overshooting would seem to be involved, more the product of uncertain expectations among market participants and of very short-lived market conditions than of economic fundamentals. There is a significant risk of self-fulfilling expectations when an exchange rate is determined in a very thin market by a handful of players. The Central Bank and inter-bank market makers are now examining whether foreign exchange market arrangements can be improved in order to reduce the risk of such incidents.

Although in many cases it is difficult to ascertain the underlying causes of individual depreciation episodes during the past twelve months, the depreciation of the króna

should not have come as surprise, given the economic conditions. Macroeconomic imbalances must be seen as the main impetus behind exchange rate developments over the past twelve months, regardless of specific events and shorter episodes. The macroeconomic imbalances of the past few years inevitably had to lead to one or both of two types of adjustment. Firstly, domestic demand growth would conceivably adjust to leave a sufficient surplus on the trade and service account to meet at least a part of the net foreign debt service payments. Secondly, an adjustment could take place through the depreciation of the króna. From the Central Bank's perspective, the latter course is less desirable, since it leads to more inflation than the former.

Nonetheless, the Bank's ability to influence exchange rate developments is limited, and early this year it became clear that the cost of maintaining a stable exchange rate could become unsustainably high. This does not rule out intervention by the Bank in the inter-bank foreign exchange market, however, if it is likely to produce the intended results and is deemed necessary from the point of view of price or financial stability.

The Central Bank has repeatedly warned that the heavy macroeconomic imbalances reflected in the wide current account deficit could eventually undermine the exchange rate with adverse consequences for both price and financial stability. Monetary Bulletin 2000/1, published in February last year, stated that a "large current account deficit and relatively sensitive foreign short-term position are signs of weakness...The main risk is that in the long run a large current account deficit could undermine credibility of economic policy and the stability of the exchange rate." Monetary Bulletin 2000/4, published last November, concluded from the experience of other countries which have been through similar periods of economic overheating and current account deficits that "a relatively painful adjustment is necessary, even if a serious crisis can be avoided." In the introduction to Monetary Bulletin 2001/1 it was pointed out that "even though its main cause is not an overvalued real exchange rate, the consequences of the current account deficit could still be an untimely depreciation and undesirably high rate of inflation."

Last year's current account deficit amounted to 68.2 b.kr. In addition, the net outflow due to direct foreign investment and portfolio investment amounted to 64.5 b.kr. Thus a total currency inflow through borrowing abroad of 133.4 b.kr., or 11.1 b.kr. per month, was needed to keep the exchange rate stable. As soon as this inflow became less forthcoming, in part due to less optimism and greater awareness of exchange rate risk, pressure on the króna developed and could not be countered by Central Bank intervention alone. This, in the Bank's opinion, is the main reason for the depreciation of the króna in the recent past.

### **Inflation prospects**

The Central Bank publishes an inflation forecast at quarterly intervals in its Monetary Bulletin. Its most recent official inflation forecast was published in Monetary Bulletin at the beginning of May. This was based on data available on April 26. As is customary, the forecast assumed an unchanged exchange rate from that day until the end of the forecast period. According to the forecast, inflation in the second half of this year would have been very close to the upper tolerance limit and then temporarily exceeded it early next year, after the limit is lowered to 4½%. However, it would have

been on a downward path, moving back within the limits during the first half of next year. Bearing in mind the inherent uncertainties, it was conceivable that inflation would exceed the upper tolerance limit as early as this year. Since the forecast was made, the exchange rate has slid by almost 8½%, as stated earlier, and in May and June the CPI rose considerably more than forecast. Inflation has therefore already risen beyond the upper tolerance limit.

The Central Bank will not publish a full forecast in this report, but rather discuss the inflation scenario in broad terms with respect to the inflation target's tolerance limits, on the assumption that both the exchange rate and monetary policy stance remain unchanged. A reassessment of inflation prospects based on the exchange rate as of June 15 and in light of recent development of the CPI suggests that monthly increases in the index will slow down provided that the exchange rate remains stable. Twelve-month inflation will continue to rise, however, at least until the autumn. It is nonetheless assumed that housing prices will fall in real terms and that petrol prices have peaked and will decline for the remainder of this year, in line with forward prices in international markets. Thus there is very scant probability of inflation dropping below the upper tolerance limit this year if the exchange rate does not strengthen significantly during the coming weeks and months. According to the joint Government and Central Bank declaration in March, the upper tolerance limit will be lowered to 4½% at the beginning of next year. There appears to be a considerable likelihood that inflation will remain above the limit for virtually all of next year if the króna remains at its present weak level, even without assuming any changes in wages over and above current agreements and estimated wage drift. Assuming a stable exchange rate, unchanged monetary policy and the macroeconomic assumptions on which the Bank's most recent inflation forecast was based, it could take as long as until the first months of 2003 before inflation goes back inside the upper tolerance limit, which will then be 4%.

The precondition for this happening is that a temporary rise in inflation does not become ingrained in inflation expectations. If it does, there is a risk that inflation will become more persistent than assumed above. For example, if wage agreements are reviewed in the first part of next year and larger increases are negotiated than allowed for in the current agreements, inflation could easily run higher. If a new hydropower development project is launched as well, there is a risk that the positive output gap will widen again and fuel inflation in 2003. Offsetting this is the capital inflow generated by foreign financing of such a project, which puts upward pressure on the exchange rate. On the other hand, the extent to which the economy has cooled may conceivably be underestimated. Economic growth could then end up considerably lower this year and next year than is assumed in the latest National Economic Institute forecast. This would lead to a narrower positive output gap or even a slack, and higher unemployment. In such a scenario the Bank's inflation target is more likely to be achieved in 2003, especially if wage rises in the near term remain within the framework of current agreements.

If no changes are made to current wage agreements, the outlook is still for inflation in the region of 2½% by mid-2003, even if the króna does not strengthen from its present level. The inflationary impact of the recent depreciation will then have worn off and the excess demand and output pressure which have prevailed in the economy in the recent term will have eased completely.

In light of the weak position that the króna has reached, a depreciation from the present level is unlikely in the long term, unless inflation and expectations about it take root. A conceivable review of wage agreements next year and a wages, prices and currency spiral therefore pose the greatest threat to the inflation target. One of the main tasks of monetary policy and other economic policies is to ward off such a threat.

Various factors could contribute to lower inflation in the medium term than has been assumed here. The first is an appreciation of the króna. Faster narrowing of the positive output gap and easing of pressure in the labour market would also push in the same direction. Housing prices could also drop by more than has been assumed. Higher productivity growth than assumed here would have a positive effect too. These factors are also likely to reduce the probability that current wage agreements will be revoked. Economic policies therefore need to reinforce these factors.

### **Monetary policy and other economic policy measures**

The Central Bank announced a reduction in its policy rate, by half a percentage point to 10.9%, on March 27. This reduction was decided in light of unequivocal signs of a significant slowdown in growth of domestic demand, the prospect that the positive output gap would close in the relatively near future and the fact that the monetary stance, as reflected in Central Bank real interest rates, was tighter than necessary to achieve the Bank's inflation target. Since interest rates were lowered, the signs of a cooling in the economy have become even clearer, especially in figures for turnover, tax receipts and imports. Some overheating is still present, however, and domestic demand is greater than is compatible with macroeconomic balance, with a sizeable deficit still on the current account and pressure in the labour market. Some conditions underlying the interest rate reduction have changed significantly, however, headed by a depreciation of the exchange rate of more than 13% and a sharp increase in inflation and inflation expectations. This is shown in Table 3, which compares conditions on March 27 and mid-June.

Table 3. Monetary conditions on March 27 and June 15

|  | <i>March 27</i> | <i>June 15</i> |
|--|-----------------|----------------|
| Inflation  | 3.9             | 6.8            |
| Public inflation expectations                          | 4.5             | 6.0            |
| Inflation premium on T-bonds                           | 4.0             | 6.1            |
| Short-term interest rate differential with abroad      | 6.7             | 6.8            |
| Nominal Central Bank policy rate                       | 10.9            | 10.9           |
| Real Central Bank policy rate                          | 6.7             | 4.5            |
| Real short-term interest rate differential with abroad | 5.3             | 3.0            |
| Real interest on bank loans*                           | 13.6            | 10.5           |
| Exchange rate index                                    | 123.6           | 142.4          |

\* Average interest rate on non-indexed bonds

In pace with rising inflation expectations, the Central Bank's real interest rates have gone down by significantly more than was aimed for with the reduction announced on March 27. Immediately afterwards, they stood at 6.7%, but are now just under 4½%. Although some further reduction in real interest rates was justified in light of strong indications of easing demand pressure in the economy, this would have constituted an undesirable slackening of the stance, given that inflation has now passed the upper tolerance limit. Under such conditions, monetary policy must above all be aimed at the inflation target and has little scope for softening a conceivable recession. It should be borne in mind that a slowdown in demand contributes to a lower rate of inflation and reduces the likelihood of wage agreements being revoked next year.

In spite of various arguments in favour of raising interest rates, the Central Bank has decided to keep them unchanged for the time being. The decision is based on the Bank's confidence that demand will slow down relatively rapidly in the near future and the current account deficit will shrink, and that these developments will support the exchange rate. The decision to keep interest rates unchanged also acknowledges various indications that very high interest rates can undermine the position of financial institutions. However, the Bank will review this decision in the light of subsequent developments. For example, if a review of wage agreements increases the likelihood that a spiral of rising prices and wages and exchange rate depreciation will establish itself, a rise in interest rates may be inevitable. If this can be avoided, the inflationary impact of the recent depreciation will gradually taper off, and even more so if the exchange rate strengthens again. Current inflation expectations of 6% or more, however, show that there are grounds for remaining on the alert towards a scenario which could set an inflation spiral in motion. The Bank will therefore monitor developments closely.

In the long run, monetary policy is the most decisive factor determining the rate of inflation. Other economic policies, wage decisions, effectiveness of markets and degree of competition, may affect inflation temporarily and determine the cost, in terms of lost production and unemployment, of achieving a given inflation target. If fiscal policy, for example, is applied in order to stimulate demand and the level of employment at the same time as monetary policy seeks to bring demand down as a counter-inflationary measure, real interest rates and the real exchange rate will end up higher than would otherwise be the case, and the main impact of the adjustment will be borne by exporters and import competing industries. Negotiated wage increases in excess of productivity growth and the Central Bank's inflation target will force the Bank to raise interest rates more than otherwise, and the target will be reached at a higher level of unemployment than would have been necessary. Increased competition forces down prices. This could then have a positive effect on inflation expectations, calling for less restraint on domestic demand in order to achieve a specific inflation target.

The Central Bank warns against taking fiscal or other measures which will stimulate demand. Although demand pressures are easing, domestic demand still exceeds what is compatible with macroeconomic balance. Less demand in the economy and an easing of pressure in the labour market are preconditions for a permanent reduction in the rate of inflation. Measures that encourage demand now would therefore counteract the Bank's inflation target and force it to keep interest rates higher than otherwise. Thus it is the Bank's view that, under the present conditions, tax reforms must be

revenue neutral and should aim to encourage saving and strengthen the supply side of the economy. A reduction in corporate tax rates could be compatible with this view, if it is offset by increased taxation elsewhere.

Under the present circumstances the government should, in the Central Bank's view, focus on measures which strengthen the supply side of the economy, i.e. increase the supply of factors of production (labour and capital) and boost productivity, and promote a strengthening of the króna. Greater inflow of foreign capital through privatisation and new business investment, together with a narrowing of the current account deficit, would help to bring about an appreciation of the exchange rate. On the other hand, extensive power-intensive industrial projects serve to widen the output gap, as discussed in the section on the price outlook. The timing of such projects and measures to counteract their effects are therefore important for price developments. Measures that promote greater degree of competition and lower prices without weakening the treasury's position would also support the Central Bank's inflation target.