

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

### Higher inflation and current account deficit call for restrictive economic policies

*Inflation accelerated during the final months of last year and finished higher than the Central Bank had forecast. In order to maintain a tight monetary stance in such a climate, the Central Bank raised interest rates in January. The króna appreciated somewhat during the last two months of the year. If the exchange rate remains relatively high, inflation should decelerate somewhat in the course of the year, while the fall in the CPI in February is broadly in accordance with the Central Bank forecast for the year as a whole. It is crucial that the pending wage agreements do not undermine exchange rate and price stability. Under the prevailing conditions, monetary restraint causes a rise in the real exchange rate and a temporarily tighter competitive position for industries, but this cannot be avoided if inflation is to be contained. A more restrictive fiscal policy would reduce these side-effects. Signs are now emerging that credit growth is beginning to slow down, although it is still much faster than is consistent with a low rate of inflation. Thus monetary policy should be at least as tight as it is at present.*

#### *Continuing high inflation*

Inflation continued to increase towards the end of 1999, measured in terms of the 12-month rise in the CPI. From January 1999 to January 2000 the CPI rose by 5.8%, producing the highest rate of inflation in Iceland since 1991. The CPI increase in 1999 was 1.2% more than the Central Bank had forecast in October, largely because public levies rose in January by more than had been assumed, as did the housing component of the index

Admittedly, the CPI remained unchanged in November, but this may be attributed to a seasonal drop in the price of vegetables and a temporary fall in petrol prices which was largely reversed in December and January. The inflation trend in December and January, however, resembled that earlier in the year, with the exception that the increase in public levies made a substantial contribution to the

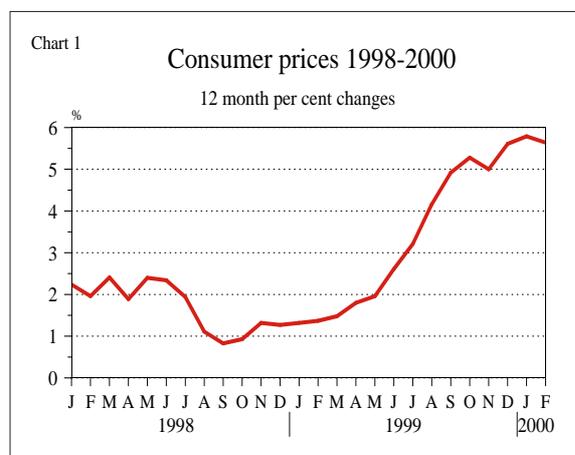
CPI rise in January. In other respects the rise in petrol and housing prices continued to account for a large part of the increase and non-administrated food prices kept rising. The combined rise in petrol and housing prices explains almost half of last year's inflation

As far as the rise in petrol prices is concerned, this is obviously an external impact which gives no grounds for a policy response. Of last year's rise in the CPI, just under 1% can be attributed to rises in petrol prices in foreign markets. The price of petrol rose again in December and January after a drop in November caused by a reduction in petrol tax and temporary fall in world prices in October. Afterwards, world petrol prices rose once more and reached a new peak in January, but are presently at a similar level to the previous peak in September.

Rising petrol prices do not explain why inflation has increased in Iceland far more than among main trading countries, which have also experienced a similar increase and higher residential heating costs

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1. This article uses data available on February 11, 2000.



as well. In part the difference between domestic and foreign inflation can be attributed to an increase in the price of housing.<sup>2</sup> Nearly one-third of the rise in the CPI during 1999 was the result of an increase of almost 15% in the housing component. The rise in market prices of housing still does not seem to be slowing down to any extent, since in December and January the housing component of the index rose by 2%, which is more than at the same time the year before. This must be regarded as an indication of continuing strong demand for housing in the Greater Reykjavík Area, since seasonal fluctuations do not give grounds for such a large rise in prices.

#### *Food prices rose faster than in main trading countries*

In addition to housing costs, it is particularly the trend in prices of food, both domestic and imported, which distinguishes Iceland from its main trading partner countries. Domestic food prices increased by 6.8% during 1999, and 7.4% excluding publicly administered prices. Imported food and beverages prices increased even more over the same period, by 7.8%. Over the past two months these items (excluding agricultural products and vegetables) rose by 2.3% and 2.2%. The turnaround in the food price

2. The difference may partly be the result of the index overestimating the rise in domestic housing costs, because in Iceland this has solely been based on housing prices in the Greater Reykjavík Area. Housing prices have also risen sharply in the UK, which nonetheless has a similar rate of inflation to other European countries. Other methods are used to measure housing costs there which may explain why the rise in market prices of housing is not shown so clearly in the British Retail Price Index. Furthermore, sterling has appreciated much more than the króna in recent years, which has kept inflation down.

Table I Analysis of CPI inflation by origin in 1999

%	Change in index in previous		Contribution to CPI growth in previous	
	3 mo.	12 mo.	3 mo.	12 mo.
(1) Domestic agricultural products less vegetables ...	5.3	2.8	7.7	3.2
(2) Vegetables.....	-47.6	2.4	-12.2	0.4
(3) Other domestic food and beverages.....	10.7	7.4	14.8	8.2
(4) Other domestic goods.....	3.8	3.0	4.1	2.5
(5) Imported food and bev. ....	11.5	7.8	7.6	4.1
(6) Cars and spare parts .....	1.3	1.5	2.2	2.1
(7) Petrol .....	-4.3	24.7	-3.7	16.2
(8) Other imported goods.....	-1.3	-0.5	-4.2	-1.2
(9) Alcohol and tobacco.....	1.9	1.6	1.4	0.9
(10) Housing .....	8.4	14.8	21.9	31.1
(11) Public services.....	14.8	5.3	35.4	10.4
(12) Other services .....	5.0	5.5	25.1	21.9
Total .....	4.4	5.8	100.0	100.0
Domestic goods (1-4).....	2.9	4.4	14.4	14.3
Agricultural products and vegetables (1-2) .....	-3.9	2.7	-4.5	3.6
Domestic goods less agricultural products & vegetables (3-4)....	7.7	5.5	18.9	10.7
Imported goods, total (5-9) .....	0.4	3.7	3.3	22.2

trend was fairly sudden, since in July the 12-month increase in food and beverage prices measured only 2.1%. This is a striking increase not only because of its scale, but also because there appears to be a peculiar correspondence between the price trends for domestic and imported foods, despite the fact that food prices in other countries have remained stable and notwithstanding an appreciation of the króna that should have contributed to falling prices of imported food at the wholesale level, as import statistics confirms.

According to figures from the National Economic Institute (NEI), average prices of imported food and beverages, other than alcohol, to distributors fell by 2% over the period January to November 1999, compared with the same period the previous year. At the same time, the average price of imported food and beverages in the CPI rose by 1%.

From December 1998 to December 1999, food and beverage prices in Iceland rose by 6.8%, but remained constant in the Euro area, after food prices

Table II Food and beverages

%	<i>12-mo. % changes in second half of 1999</i>			
	<i>July</i>	<i>Sept.</i>	<i>Nov.</i>	<i>Dec.</i>
Iceland, food and beverages .....	2.1	5.3	6.5	6.8
Iceland, imported food.....	-1.3	6.6	8.2	9.2
Iceland, domestic food less agric. goods and vegetables.....	3.8	5.6	9.7	9.2
Denmark.....	-0.5	0.2	0.7	1.8
Norway.....	2.2	1.5	1.4	1.5
Sweden.....	-0.2	1.1	1.1	0.9
Finland.....	-0.6	-1.4	-0.5	-0.2
UK.....	-0.1	-1.3	-1.0	-1.7
Germany.....	-1.7	-1.9	-1.9	-1.8
France.....	-0.8	-0.9	0.6	0.9
Euro area.....	-0.6	-0.6	-0.1	0.0
USA.....	2.1	2.2	2.0	2.0

Data for European food price trends are based on the Harmonized Index of Consumer Prices (HICP). Sources: *Data Stream and Statistics Iceland*.

fell for a period in the summer. A somewhat larger but still modest increase took place in the USA and in Scandinavia, while food prices in Britain and Germany fell by more than 1½%.

The difference in the rise in food and beverage prices in Iceland and its main trading partners cannot be explained by exchange rate developments either, since the króna has strengthened against the weighted basket of their currencies and most of all against European ones. Thus it is natural to seek an explanation in heavy domestic demand and in changes which have taken place in the domestic food market, for example mergers which may have reduced price competition and led to a higher mark-up.

Although prices of services have risen marginally less than the CPI as a whole, the rise in the services component makes a substantial contribution to the higher rate of inflation measured in Iceland than in neighbouring countries. Service items account for more than one-third of the CPI in total and explain almost one-third of the increase in the index over the past 12 months. Last year, public services rose by considerably less than market services, but this gap narrowed in January when public services rose by 3½%. Over the past 12 months the prices of public and private services have risen by a similar amount, or 5.3% and 5.5% respectively.

### *Prospect of decelerating inflation later in the year if modest wage agreements are made*

The Central Bank published its inflation forecast for 2000 in January. This assumed that prices would increase by 5% between the years and 3.8% in the course of the year. According to the forecast the rate of inflation will slow down in the course of the year when the impact of price rises from last year and expected wage rises during the first half of this year begin to fade out. The main change from the October scenario is that the forecast average rise in prices is upped by 0.9% as a result of the increase in the CPI at the end of last year. The inflation forecast for 2000, however, has hardly changed since October, due to the impact of the strengthening króna. The January forecast assumed that residential housing prices would continue to increase somewhat in excess of general prices. Moreover it was assumed that wages would increase by 6½% over the year, comprising contractual wage rises which have already taken effect, wage rises which might be agreed upon in the pending wage negotiations, and forecast wage drift.

It is interesting to compare the Central Bank inflationary forecast with the inflation expectations of market players. The inflation premium on government bonds with a lifetime until October this year is 5.6%, and 4.8% on those with a 3-year lifetime. The progressively decreasing inflation according to the lifetime of bonds indicates that investors expect inflation to come down in the long term. Forecasts made by others do not deviate substantially from the Central Bank forecast. Íslandsbanki and the Gjaldeyrismál newsletter forecast somewhat lower inflation in the course of the year than the Central Bank, at just over 3%, but FBA rather more, at just over 4%.

### *More moderate wage rises could deliver lower inflation but similar purchasing power*

The outcome of wage negotiations will have a decisive impact on inflation in the year 2000, both through the direct impact of rising wages on prices and because a greater rise in wages than has been expected could create downward pressure on the exchange rate of the króna. There is also a risk that high inflationary expectations could become entrenched. An alternative wage development to that assumed in the Central Bank forecast will obviously

produce different inflation results. For example, should wage costs rise by 9% during the year, it would yield a year-on-year inflation of approximately 6%, and just over 5% in the course of the year. For example, excessive wages increases which would lead to a depreciation of the króna by 4% would yield an inflation rate of just over 6½%. On the other hand, a more moderate wage increase that would contribute to an appreciation of the króna would result in lower inflation than forecast. For example, if wages increase by 5% and the króna strengthens early in the year, it should result in year-on-year inflation of 4% and 2½% in the course of the year. In the first year, such an outcome would produce a marginally lower increase in real wages than the base forecast, but would strengthen the foundation of long-term growth and improving living standards.

#### Outlook unchanged by fall in the CPI in February

The CPI fell by 0.3% in February. The premises on which the Central Bank based its January forecast for inflation during the year assumed some reduction in February on account of seasonal factors, especially winter sales. Admittedly, the decrease was somewhat larger than expected, as a result of the greater impact of winter sales (a 0.5% reduction in the CPI). This effect can be expected to be cancelled out in the next months and the prospects for the year as a whole will not alter to any significant extent. However, the CPI measurement in February is gratifying insofar as it did not involve any further unexpected inflation.

#### National Economic Institute forecasts larger current account deficit

In the first Monetary Bulletin published in November, it was argued that the current account deficit for 1999 would be greater than the National Economic Institute had forecast in October. The development of merchandise exports and imports since then has been consistent with this assessment, even though exports were in fact exceptionally favourable in November. This deterioration is reflected in the revised NEI forecast in December. There, the current account deficit for 1999 was estimated at 38 billion kr., instead of 29 billion kr. as forecast in October.

The merchandise trade deficit for the first 11 months of 1999 amounted to 21.3 billion kr. A deficit of 1.8 billion kr. was shown on the service account

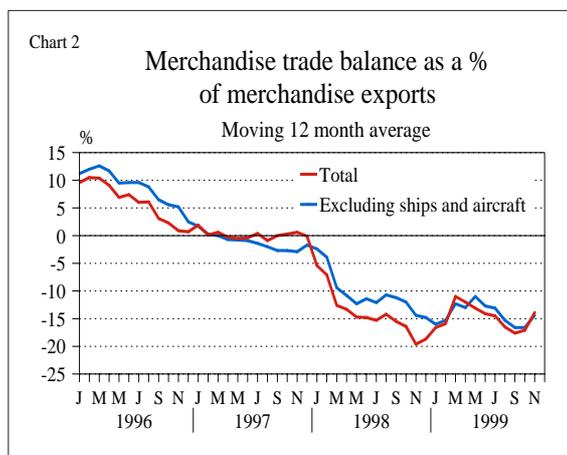
Table III GDP and its Components

Percentage change unless otherwise stated	1997	1998 <sup>1</sup>	1999 <sup>2</sup>	2000 <sup>2</sup>
Private consumption .....	6.0	11.0	7.0	3.0
Public consumption .....	3.1	3.6	4.5	2.5
Gross fixed capital formation .....	10.5	25.9	-1.1	2.7
National expenditure .....	6.2	12.2	4.7	2.8
Gross domestic product .....	5.3	5.4	5.0	2.9
Current acc. balance, % of GDP	-1.4	-5.7	-6.0	-5.6

1. Preliminary. 2. Forecast. Source: National Economic Institute.

and net factor outlays amounted to 10.3 billion kr. over the period January to September. The main uncertainty about the final outcome for the year involves factor income during the last quarter. Because of the method used for assessing income from the foreign securities stock, the outcome can be susceptible to foreign securities price fluctuations. In 1998 a rise in foreign security prices towards the end of the year generated a surplus on the factor income account of 5 billion króna in the last quarter. This pattern will presumably have repeated itself last year, but on a smaller scale. Thus it is not inconceivable that the final current account figures will show a more favourable outcome than in the NEI December forecast, although this is little consolation, given how easily foreign security prices could fall again.

In its December forecast, the National Economic Institute assumed a 2½% higher growth in imports between 1998 and 1999 than it had forecast in October, and 1½% less export growth. In line with



higher imports of consumer goods than previously assumed, the National Economic Institute forecast in December that private consumption would increase by 7% instead of 6% and public consumption by 4½% instead of 3½%. On the other hand, a somewhat greater contraction in investment was assumed in the December forecast than in the October one, although less than in the first NEI forecasts for 1999. The wider current account deficit more than outweighs the more rapid growth in private and public consumption, leaving estimated economic growth in 1999 somewhat lower than had been forecast in October, at 5% instead of 5.8%. This revision has little effect on the Central Bank's earlier assessment. If anything, it serves to reinforce the bank's view that there is serious overheating in the Icelandic economy.

#### *Little narrowing of current account deficit in 2000*

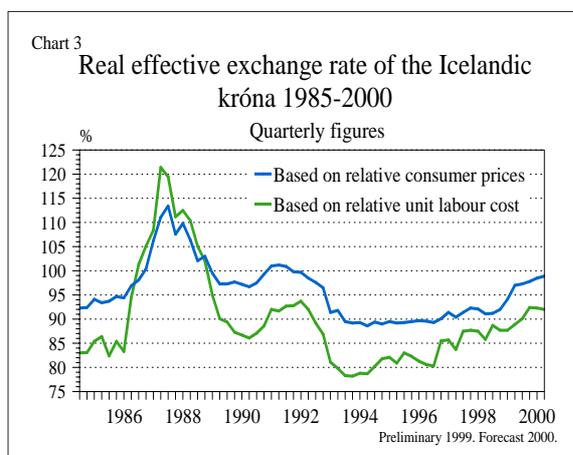
As far as the prospect for the present year is concerned, the National Economic Institute also assumes faster growth in private consumption and investment than in its earlier forecast, with a 3% increase in private consumption and 2.7% growth in fixed capital formation. Export growth is also expected to decelerate sharply, on a larger scale than was expected in the October forecast, as a result of less growth in marine production than last year. The combined effect of these revisions is that the National Economic Institute is now forecasting a current account deficit of 38½ billion kr. in 2000, almost 10 billion kr. higher than the October forecast. This is roughly the same deficit as in 1999 and equivalent to 5.6% of estimated GDP for the year. These changes have little impact on economic growth, since a larger current account deficit offsets the increase in national expenditure.

According to this forecast, the year 2000 will be the third in a row in which the current account deficit exceeds 5%. No consecutive three-year period with such a high average current account deficit has been recorded since 1974-1976. What is unique about the present situation, however, is that the deficit has been so large and persistent in the absence of any serious fall in export revenues. It is almost entirely the result of buoyant domestic demand. In this respect, the situation is more sensitive now than often before.

#### *Is the real exchange rate higher than is sustainable in the long-term?*

In recent years domestic prices and wage costs have increased by considerably more in Iceland than among its main trading countries. At the same time a tight monetary policy has caused a nominal effective appreciation of the króna. Ceteris paribus, both these factors entail a rise in the real exchange rate of the króna. A rising real exchange rate leads to a deteriorating competitive position for domestic businesses vis-à-vis foreign ones, squeezing the profits of domestic companies in sectors competing with imports and in foreign markets. In the long term this can lead to a declining domestic market share and stagnating or contracting export growth, widening the trade deficit. Monetary authorities face a certain dilemma when domestic demand requires a significant tightening of monetary policy but the current account deficit is unsustainably large. In the short run tight monetary policy will result in an appreciation of the exchange rate which widens the current account deficit even further before delivering lower domestic demand. This is precisely the problem monetary policy in Iceland faces today. One of the questions arising under such circumstances is whether the ensuing appreciation and domestic cost increases have caused the competitive position of industries to deteriorate to such a degree that any further rise in the real exchange rate would lead to an unsustainable external balance and, ultimately, seriously disrupt internal balance in the view of market participants. If in the view of the market continued monetary restraint will call for greater sacrifices than the government is probably prepared to make, the credibility of monetary policy may vanish, leading to an outflow of capital.

Various criteria can be applied to assess how domestic industries stand vis-à-vis foreign competitors. The development of the real exchange rate index over a specific period is the most common yardstick. The problem with such indices is that they do not provide direct information about profitability, but only a rough indication of how it has changed relative to a base period. The result of such an assessment is clearly dependent on the choice of base period. Alternatively one could assess the so-called equilibrium real exchange rate, defined as the real rate of exchange which is compatible with external and internal balance over the medium term. No such



assessment has been made for Iceland.

Notwithstanding theoretical and empirical uncertainties, the question of whether the current exchange rate or even a higher one is sustainable in the long term is an important one in view of the considerable appreciation that took place last year. From the last quarter of 1998 to the same period in 1999, the real exchange rate rose by 6.5% measured in terms of relative prices and by 3.6% in terms of relative unit wage cost. From its historical low in 1994, the real exchange rate has appreciated by 10% and 14% in terms of these respective criteria. Despite this appreciation, the real exchange rate during the last quarter of 1999 was nonetheless only close to the average for the past 20 years. This year it will conceivably somewhat exceed the average for the past 20 years.

Assuming that the average exchange rate for the past 20 years reflects some kind of equilibrium, it may be concluded that the current rate does not imply an unsustainable competitive position, in particular in light of the fact that it is natural for the exchange rate to strengthen during an economic upswing. Furthermore, exports of manufactured goods, from both power-intensive industries and other sectors, showed a substantial increase last year, which suggests that the real exchange rate has not seriously constricted export industries. Company profitability figures for the first half of last year also appear to support this conclusion, since pre-tax profits on regular operations by companies listed on Iceland Stock Exchange increased from 4.5 billion kr. during the first half of 1998 to 6.5 billion kr. over the same period last year. However, several qualifications must be made to this favourable outcome. Firstly, profit

growth among listed companies is primarily the result of good performance of financial institutions. Their high profits can to some extent be attributed to capital gains. Profits by manufacturing and fisheries companies, however, fell slightly. Secondly, it is likely that smaller unlisted companies which are more dependent on the domestic credit market are more vulnerable to a rise in domestic short-term interest rates than larger listed companies. Thirdly, it should be remembered that most of the real exchange rate appreciation occurred during the last two quarters of the year. The surge in share prices suggests that profitability in the latter half of the year was still considered strong in the markets, although market sentiment can change very suddenly.

Be this as it may, a temporary drop in profitability inevitably results from monetary restraint and is in fact one of the transmission mechanisms of monetary policy. Lower profits encourage companies to exercise moderation in their investments, hiring of workers and wage setting. Hence, an appreciation serves to check the surge in earnings which is the root of the current account deficit, although monetary tightening may cause the deficit to rise in the short term. On the other hand, monetary easing under the conditions now prevailing in the labour market and elsewhere would not lead to a lasting real exchange rate depreciation, since the resulting nominal depreciation would soon be offset by higher inflation and wage drift.<sup>3</sup>

An analysis of the present real exchange rate position does not invite the conclusion that it has risen considerably in excess of what is compatible with long-term stability. Industrial profitability is reasonably good and exports are growing. The current account deficit is primarily the result of excessive demand growth. Any measures to reduce the current account deficit must primarily aim to contain demand, since the alternative of easing monetary policy and allowing the króna to depreciate would

3. The disadvantage of letting the real exchange rate appreciate by means of price and wage inflation rather than nominal appreciation is the general lack of downward flexibility in wages. Thus it may prove difficult to achieve real depreciation by deflating wages and prices when the situation demands it, possibly making a devaluation inevitable. By allowing the exchange rate to rise during a cyclical upswing dampens wage and price inflation, enabling the exchange rate to revert to its former position when the economy cools and the risk of inflation has diminished. Domestic prices are therefore less likely to show a permanent rise relative to foreign ones.

undermine internal stability even further and kindle inflation, which is already too high. Until the full impact of increased monetary and fiscal restraint on domestic demand has been delivered, domestic industries will inevitably have to accept a loss of competitiveness and possibly an even higher real exchange rate than at present.<sup>4</sup>

*Budget for 2000 posits greater surplus after a relaxation last year*

The budget for 2000 was passed with a surplus of 16.7 billion kr., rather larger than seems to have been the result for 1999. The improvement is greater than it appears, however, since the surplus less profits on the sale of assets has grown from 3.2 billion kr. in 1999 to 12.5 billion kr. Estimated revenues are probably on the cautious side, but in turn healthcare outlays may also be underestimated.

Estimated treasury revenues in 2000 are 210 billion kr., an increase of 1% in nominal terms from the previous year, with revenues less profits from the sale of assets rising by 4.5%. Revenues from direct taxation of individuals are expected to increase by 3%. This estimate appears to be on the low side, given that total earnings are expected to rise by 7% while the tax burden should remain virtually unchanged. The estimated 2.3% rise in indirect taxation other than VAT may also be somewhat cautious but is consistent with import forecasts.

According to the budget, outlays will amount to 193 billion kr., an increase of 1% in nominal terms from 1999. Calculated pension fund contributions, debt service and investment drop by just over 6 billion kr. between the years; these items are distinguished by being either obligatory or particularly volatile in nature. Other outlays rise by 4.2% in nominal terms and 0.4% in real terms, i.e. relative to public consumption prices. Nominal GDP is expected to rise by almost 8% between 1999 and 2000, which implies that core outlays drop from 24% to 23.5% of

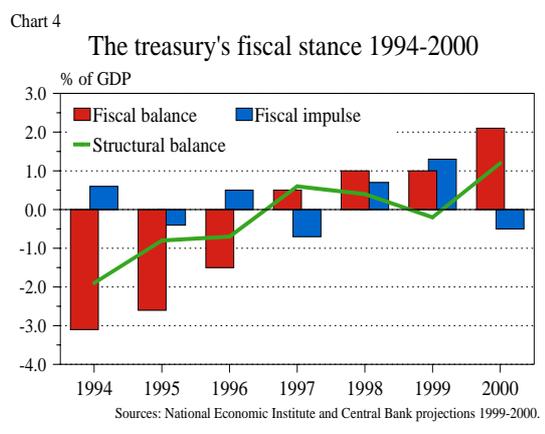
4. It should be pointed out that relative unit labour costs in Iceland have by no means risen more than in other countries which have experienced strong economic growth in recent years. OECD figures show that relative ULC rose by 43½% in the UK from 1995-1999 and by almost 20% in the USA. The difference between the development of the competitive position in Iceland and these two countries is that the increase there is to a large extent (in fact entirely in the case of the USA) caused by a rising nominal effective exchange rate. In Iceland, however, rapid wage increases are no less crucial.

Table IV Fiscal highlights

<i>In billion kr.</i>	1998	Estimate 1999	Budget 2000
Revenues.....	180.8	207.9	209.9
of which profit on sale of assets...	2.5	11.0	4.2
Revenues less sale of assets .....	178.4	196.9	205.7
Outlays.....	189.6	192.8	193.2
of which extraordinary pension fund obligations .....	16.7	2.2	1.3
Balance .....	-8.8	15.0	16.7
excl. sale of assets .....	-11.3	4.1	12.5
excl. sale of assets and extraordinary pension fund obligations .....	5.4	6.2	13.8
Net credit balance .....	22.9	28.9	21.0

GDP. The budget and its premises imply a contraction in healthcare spending of 3% in real terms. Clearly a considerable effort will be needed to achieve this aim. Other core expenditures are supposed to rise by just under 2% in real terms.

Since both imputed pension expenditures and sales of assets are expected to drop in 2000, the surplus on operations and lending is expected to decrease from 29 billion kr. in 1999 to 21 billion kr. in 2000. A larger budget surplus and privatisation have reduced treasury debt both as a proportion of GDP and in nominal terms. Treasury debt peaked in 1997 at 242 billion kr., the equivalent of 45% of GDP, but has been falling rapidly since and should fall below 210 billion kr., or 30% of GDP, by the end of this year. Net treasury debt reached 34% of GDP in 1996 but should drop to 16% at the end of the year.



Due to recent changes in the Treasury's accounts, one must turn to the national accounts for continuous time series on treasury activities. These exclude revenues from the sale of assets and exceptional pension expenditures, and use a somewhat different method for depreciating tax revenues compared with the budget format in Table IV. According to these accounts, the fiscal balance improved each year from 1994 to 1998, remained unchanged in the election year 1999 and will improve again this year. The fiscal impulse<sup>5</sup> is shown as negative in 1995, 1997 and 2000, and positive in 1996, 1998 and 1999, since the requirement of constant per capita expenditures in real terms is quite restrictive given the rapid economic growth of recent years. The cyclically adjusted balance swings from a deficit to a small surplus over the years 1995 to 1997, was negative in 1999, but improves substantially this year according to the budget targets, largely on account of better fiscal performance but partly because the economy is expected to be edging its way down from a cyclical peak.

The planned fiscal tightening this year follows a significant easing last year, and is thus not as large as it appears on first impression. The current GDP forecast, which takes into account the fiscal policy enshrined in the budget, assumes that the current account deficit will exceed 5% for the third consecutive year, and that symptoms of overheating in the economy will remain. Hence, a significant surplus on the cyclically adjusted fiscal balance would have been preferable in order to restrain demand growth. This would probably have dampened the risk discussed above of the real exchange rate rising and export and competitive industries becoming temporarily squeezed between an overheated economy and a tight monetary stance. From this perspective, a minimum requirement is that actual expenditures should not exceed budgeted expenditures and that any excess revenues should be used to improve the fiscal balance. Furthermore, it is vital that any government action in order to facilitate moderate wage agreements be neutral or better in terms of its budgetary impact.

5. The fiscal impulse becomes progressively more negative as the revenue to GDP ratio rises and real outlays grow at a slower rate than population. The cyclical adjustment subtracts the surplus attributed to GDP in excess of normally utilised production capacity. See the Monetary Bulletin, November 1999.

*Although the growth in credit and money supply is slowing down, it is still excessive*

The growth rate of credit and money supply decelerated somewhat during the second half of 1999. Nonetheless, it was still much faster than is compatible with a low inflation rate. The 12-month growth rate in lending by deposit money banks to the end of 1999 was 23.2% and money supply (M3) grew by 17.1%. Seasonally adjusted growth in credit during the last quarter of 1999 was 13%, i.e. somewhat lower than the 12-month figure. The large growth in base money until the end of 1999 is striking but is clearly temporary, as will be discussed later.

The November issue of the Monetary Bulletin discussed in detail the growth in lending by deposit money banks (DMBs) and demonstrated that, in addition to customary funding through deposits, this was largely financed with foreign borrowing. Recent figures show that the part of credit growth funded in this way last year was even larger than could be inferred from the final September figures, or 52.5%. Just under half was funded with foreign borrowing in 1998. The net contribution of deposits and securities issues to funding of lending now appears to be lower than in the end-of-September figures. The Central Bank's contribution to credit growth is still negative to the tune of 5 billion kr.

The development of lending by DMBs and funding of it since September does not alter the Central Bank's earlier analysis of the reason for this growth as a three-way interaction of demand, the DMB's attempts to increase their market shares and increased supply of credit in general. The increasing supply of credit is partly the result of new equity

Table V Money and credit 1997-1999  
– selected items

<i>Percentage change from beginning to end of period</i>	<i>1997</i>	<i>1998</i>	<i>1999</i>
Central Bank base money.....	3.1	4.6	75.8
Bank system's foreign liabilities for relending .....	33.2	59.9	49.4
Bank system's total lending .....	16.4	15.0	34.4
M3.....	8.7	15.8	16.5
M4.....	11.4	17.8	17.0
DMB lending.....	12.8	30.3	23.1

Table VI Increase in DMB lending and source of funding, 1998 and 1999

	<i>Increase over year in b.kr.</i>		<i>Percentage breakdown</i>	
	<i>1998</i>	<i>1999</i>	<i>1998</i>	<i>1999</i>
Lending.....	75.9	75.4	100.0	100.0
Deposits.....	29.7	38.5	39.1	51.1
Net securities.....	-6.1	-1.1	-8.0	-1.5
Net foreign borrowing.....	37.1	39.6	48.9	52.5
Net Central Bank facilities	12.8	-4.9	16.9	-6.5
Net other sources.....	2.4	3.3	3.1	4.4

issues by state-owned commercial banks which boosted their lending capacity. The Central Bank's negative contribution to funding of DMB lending indicates the tightness of monetary policy, although it can be argued that they have so far escaped this restraint by borrowing abroad.

*Central Bank raised interest rates to maintain monetary restraint*

Since the beginning of the year the Central Bank raised interest rates twice and on February 14 the exchange rate band was widened in order to provide more flexibility to tighten monetary policy. Following the combined 1.1 percentage point increase in interest rates in January and February

monetary policy tightened according to most criteria, but earlier inflation in excess of expectations had caused some unintended monetary easing. Interest rates in Central Bank repurchase agreements adjusted for inflation over the past 12 months now run at 3.8%, a similar rate to that prevailing in the latter part of September, although considerably lower than during the first half of 1999. Taking the inflation premium on treasury bonds as an indication of inflation expectations, which imply that market participants expect some disinflation during the coming year, the degree of restraint is somewhat larger. Measured in this way, the Central Bank's real interest rate is 4.8%, the highest for almost a year. Short-term interest rates are also somewhat higher than those on longer non-indexed liabilities, as they generally have been since mid-1998. A downward sloping yield curve is generally an indication of a tight monetary stance, and of confidence in the market that monetary policy will succeed in containing inflation, allowing short-term interest rates to fall at a later stage. The Central Bank's interest rate rises in January and February have sufficed to keep the yield curve on a downward trend. In conclusion, available indicators point to a fairly tight monetary policy, despite occasional unintended easing. The tight monetary stance must, however, be seen in the context of substantial economic overheating.