

## Overheating continues to be a risk to price stability

*Hopes that demand would begin to contract before price stability came under threat have been waning in recent months. In November, the 12 month rise in the CPI was 5%, which is much higher than in neighbouring countries. The outlook now is also for a similar current account deficit this year to that in 1998. A variety of other signs of overheating can be seen. Only part of the rise in the inflation rate can be explained by extraordinary factors. Overheating has therefore contributed to higher inflation. The current account deficit is a problem, even though its roots lie in the private sector, and has become more malignant as the upswing continues. Credit expansion has slowed down somewhat but is still far above any limit compatible with stability. It is probably still possible to avoid a hard landing. However, this demands a greater treasury surplus than is planned in the budget, and ongoing monetary restraint. A satisfactory outcome from next year's wage agreements is also essential.*

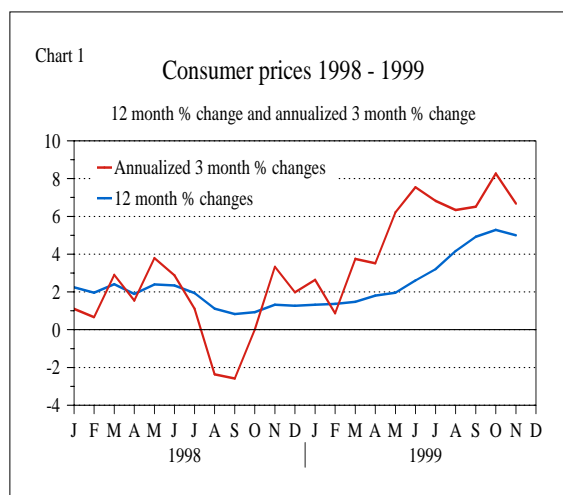
*Special external conditions only explain part of the higher inflation rate*

The 12 month increase in the CPI amounted to 5% in November. The annualized inflation rate thus increased by almost 4 percentage points since January. Even though increased inflation was not in itself surprising in the fourth year of economic growth in excess of 5%, the sudden and sharp increase came largely as a surprise. Expectations have been very quick to adapt to higher inflation. One form this took was a widening differential between yields on indexed and unindexed bonds, which was 2½% at the end of last year and reached 4.6% in September, but has narrowed somewhat since. A survey conducted by PriceWaterhouse Cooper for the Central Bank showed that the public expected an average inflation rate of 5% over the following 12 months.

The Central Bank issued repeated warnings in 1998 and 1999 that excessive demand growth could disrupt price stability in the long term, in particular given that the large and persistent current account

deficit could undermine exchange rate stability. However, such a sudden turnabout was not expected without being preceded by a depreciation of the króna. It therefore seems natural to ask whether this sudden upswing in inflation could not be partly, or even largely, traced to unexpected changes in external factors.

Admittedly, external factors do play a consider-



1. This article uses data available on November 10, 1999.

Table I Analysis of CPI inflation by origin to November 1999 (%)

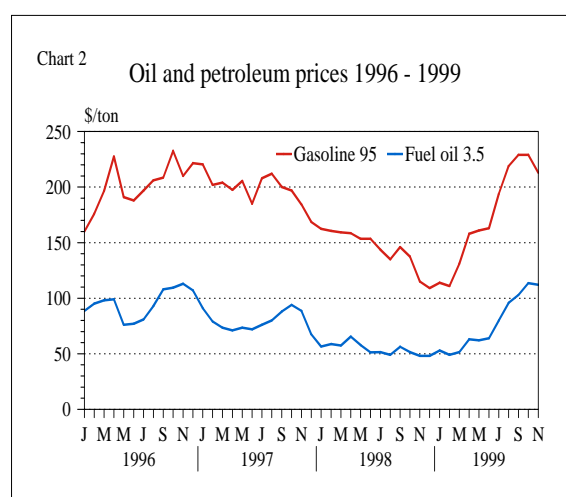
	Change in index			Contribution to CPI growth		
	Previous 3 mo. <sup>1</sup>	Jan.-Nov. <sup>1</sup>	12 mo.	Previous 3 mo. <sup>1</sup>	Jan.-Nov. <sup>1</sup>	12 mo.
(1) Agricultural products less vegetables.....	-1.6	1.5	3.0	-1.6	1.7	4.0
(2) Vegetables.....	-27.3	11.7	3.7	-4.5	2.0	0.7
(3) Other domestic food and beverages .....	5.7	6.0	9.7	5.1	6.6	11.8
(4) Other domestic goods.....	3.8	2.6	2.3	2.7	2.3	2.3
(5) Imported food and beverages .....	11.3	6.5	8.2	4.9	3.5	5.0
(6) Cars and spare parts.....	1.1	1.7	1.7	1.3	2.4	2.8
(7) Petrol.....	15.5	26.4	14.7	8.9	18.6	11.9
(8) Other imported goods.....	18.8	1.2	-1.1	40.0	3.2	-3.2
(9) Alcohol and tobacco.....	0.6	1.4	1.5	0.3	0.8	1.0
(10) Housing.....	18.4	15.2	13.4	31.0	32.4	32.1
(11) Public services .....	1.8	2.1	3.8	2.9	4.2	8.4
(12) Other services .....	2.7	5.4	5.2	9.0	22.1	23.4
Total .....	6.6	5.5	5.0	100.0	100.0	100.0
Domestic goods (1-4).....	0.5	3.8	5.1	1.7	12.7	18.7
Agricultural products and vegetables (1-2).....	-5.6	2.7	3.1	-6.1	3.8	4.7
Domestic goods less agric. products and vegetables (3-4)	4.9	4.6	6.4	7.8	8.9	14.0
Imported goods, total (5-9).....	10.7	4.4	2.4	55.3	28.6	17.4

1. Annualized change.

able part. Petrol prices have been highlighted in particular and housing prices to a certain extent. These two items account for just under half of the rise in the CPI since the beginning of the year. Had they risen at the same rate as other prices, twelve month inflation would have measured 3% in November instead of 5%. This only takes account of the direct impact of petrol prices on the CPI, not its indirect effect on prices of other goods and services.

Of the 4.6% rise in the CPI from January to November, just under one-fifth can be attributed to rising petrol prices. If petrol price rises had not outstripped others since the beginning of the year, 12 month inflation would have turned out to be just under 1% lower. The increase is by and large the result of price rises in overseas markets, although petrol tax has also risen (and in fact fallen once more in October) and there are signs of some rises in the mark-up. Petrol prices in the world market were exceptionally low in the second half of 1998, in some cases below production cost. Such conditions made it much easier for OPEC to agree on production curbs in March. The consequence was a very sharp price increase, which the Asian economic recovery and

Balkans conflict contributed to even further. By the end of September, oil and petrol prices were at their highest levels since 1996. The international rises entailed an adjustment to prices that had clearly been unsustainably low in the long run. In October, the increases in international markets were cancelled out to some extent, although petrol went up somewhat early in November. Even though petrol could still



rise even further, it seems unlikely that major increases will take place now unless new events disrupt equilibrium in the oil market.

*Demand pushes up market prices of housing and food*

Just under one-third of the rise in the CPI from January to November was caused by a 15% increase in the housing component of the index. There is little doubt that the rise in market prices of housing is rooted in sharp demand growth, while urban drift, credit supply and falling real interest rates may also play a part. In real terms, real estate prices in the Greater Reykjavík Area are now similar to those during the economic boom of just over a decade ago. Once prices reach such levels, increases can be expected to tail off. To some extent the housing price rises can be said to represent an adjustment from the low prices that prevailed during the stagnation period in much of the 1990s. This adjustment process should have been completed by now and the greatest wave of increases has probably passed, although some additional rise in housing prices in real terms could take place next year.

In a way, the increase in the housing component of the CPI gives an exaggerated picture of the rise in consumer prices. Firstly, the index only takes into account rises in real estate prices in the Greater Reykjavík Area. Real estate prices soared there last year, while the situation in most regional areas was completely different. Urban drift to the Greater Reykjavík Area has magnified tension in the housing market there but kept prices down elsewhere. Secondly, it should be borne in mind that the rise in imputed housing cost, which is based on market prices of housing and represents the most important reason for the increase in the housing component, does not directly reflect the direct additional cost of higher housing prices to consumers, but rather their opportunity cost of living in their own accommodation. Thus relatively limited real estate trading can lead to revaluation of this opportunity cost for all consumers. Assessing housing cost is in fact a very difficult task and approaches vary widely from one country to the other.

If rising petrol and housing costs were the only explanations for increased inflation, it could be hoped to slow down again automatically to a large

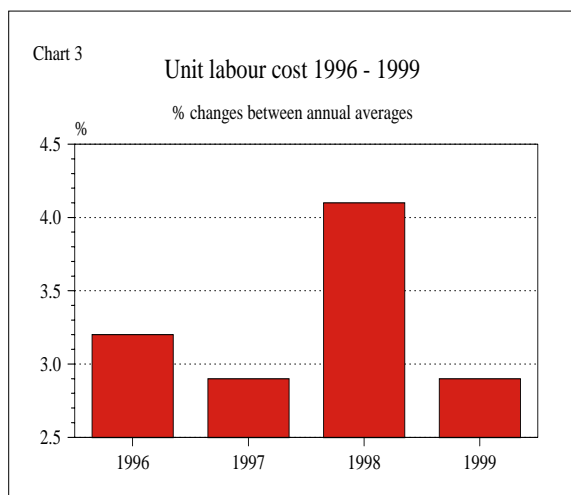
extent. Unfortunately this is not the case. Prices of domestic food and beverages, apart from agricultural products and vegetables, were 9.7% higher in November than at the same time the year before, and imported foodstuffs had risen only slightly less. It is difficult to ascertain the underlying causes. In part a shift in the seasonal cycle may be involved, or temporary disruptions in supply, but it has also been suggested that increasing consolidation of food distribution and retail companies plays a part. This hypothesis is supported by the fact that similar rises have been seen in prices of both domestic and imported foods. No general rise can be seen in the import prices of foods, which could suggest a higher markup. However, it is too early to state very much categorically about the impact of company mergers and bloc formation in the food trade.

In some cases, external factors have caused price rises, but market conditions have probably meant that prices have risen more than these warranted. Prices of services in the open market have risen by just over 5% compared with the previous year. This includes a rise in motor vehicle insurance premiums following legislation which makes more stringent demands for coverage. However, only just under one-third of this increase was reflected in the rise in the CPI, namely the part which Statistics Iceland considered was not the result of the mandatory extra coverage. Although assessments of the extra cost borne by insurance companies as a result of the new legislation may be disputed, it must be considered likely that market conditions played a part in enabling the insurance companies to raise premiums more than would otherwise have been the case. Be that as it may, the impact of the insurance premium rise on the CPI was only 0.2% in the end.

Apart from imported petrol and food, price trends for other goods, such as cars and electrical equipment, have served to restrain rises in the CPI. Their prices have either virtually remained constant or fallen, and Statistics Iceland calculations incorporate changes in the quality of these goods, which produces a lower measured price.

*Currency trends only had a temporary impact on prices this year and higher productivity cushioned the impact of wage rises*

The exchange rate of the króna weakened somewhat



during the first part of the year and in the first half of May it was around 1% lower than at the beginning of the year, and just over 2½% down on the peak from summer 1998. Since May, however, the króna has appreciated substantially and early in November it had reached a higher level than at any time since the devaluation of June 1993. Although the depreciation of the króna played some part in the rise in inflation in the first half of the year, this impact should by and large have faded out and in the near term the higher exchange rate, if it persists, will lead to lower import prices in króna terms.

During the third quarter of 1999, wages in the general market were 5.3% higher than a year previously, according to the wage index published by Statistics Iceland. Wages of public sector and bank employees had risen by almost 3% more than those in the general labour market. According to the National Economic Institute's forecast for economic growth and labour demand in 1999, productivity will increase by around 2½% this year. Thus the rise in unit labour cost would be around 2%. All things being equal, such an increase should not have much inflationary impact.

#### *Shortfall in the Central Bank's second- and third-quarter inflation forecasts*

In January, the Central Bank forecast 2.2% inflation from the beginning to the end of the year. Other forecasts at that time were in the range 2.2-2.7% for the year. The Bank's year-on-year forecast was 1.9% and other forecasts were along similar lines, in the range

1.7-2.5%. The Central Bank's forecast was revised upwards in April, July and, most recently, October, when the bank predicted an inflation rate of 4.6% for the year. This is a sharp turnabout from previous years, when there was a tendency to over-predict inflation.

Forecast errors can originate from two sources: either the forecast model is incorrect, or the forecast assumptions are wrong. A year ago the Central Bank made a study of its inflation forecasts.<sup>2</sup> This was prompted by an apparent inherent tendency to over-predict inflation. The study found that no fundamental change had occurred in the long-term relationship between wage costs, import prices and consumer prices. The tendency to over-predict inflation was primarily caused by too pessimistic assumptions regarding external factors such as import prices and productivity, besides which the policy of monetary restraint had served to bring down inflation by producing a higher exchange rate than the Bank had assumed in its forecasts. It seems, however, that the pass-through of wages to consumer prices has lengthened in recent years.

In the second and third quarters of this year, the Central Bank forecast a considerably lower rate of inflation than turned out to be the case. Almost half of the shortfall in the second-quarter forecast can apparently be attributed to incorrect assumptions. The main factor at work there was that petrol prices in international markets began to rise very sharply in March and April, contrary to predictions by international agencies. By the beginning of the summer petrol prices had risen by around 50% since February and in recent weeks they had roughly doubled since the beginning of the year. Housing costs also rose by more than had been expected. In the third quarter, the greater part of the discrepancy is apparently explained by forces that the Bank's forecast model cannot explain even when fed with the most recent and reliable data. Petrol prices continued to rise in the third quarter, as it happens, but the main reason for the remaining shortfall in the forecast, after allowance for the increase in import prices, was the rise in the housing component of the index.

2. Central Bank of Iceland Autumn Statement 1998.

Table II Several assumptions in the Central Bank's January forecast, and actual developments

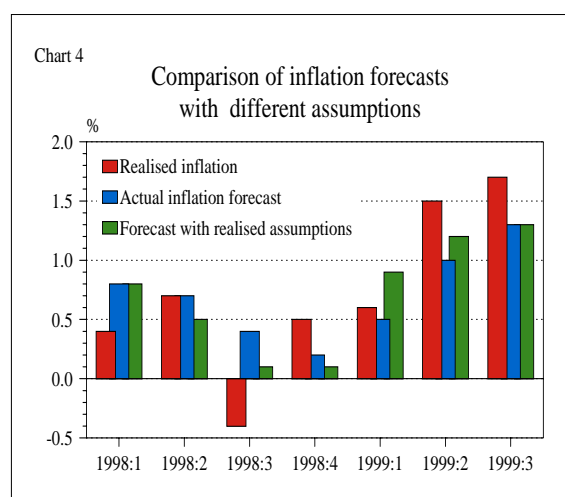
<i>Premiss</i>	<i>January forecast</i>	<i>Status in November</i>
Wage drift	2% wage drift assumed for 1999.	Assessment unchanged.
Productivity	2.5% increase in productivity assumed for 1999.	Assessment unchanged.
Exchange rate	Exchange rate was assumed to remain unchanged from January 15.	The króna appreciated by 2.8% from the beginning of the year to November 10.
Import prices	1% reduction forecast for first part of the year and 1% rise during the last nine months.	3.5% rise expected in 1999.
Housing prices	Rising market prices of housing were expected to lead to a greater rise in the CPI than would otherwise be the case.	Market prices of housing in the Greater Reykjavík Area rose by 17% from the beginning of the year until September and the housing component of the CPI by 12.5% from the beginning of the year until November.
Petrol prices	Petrol price developments were not taken into particular account. The IMF report published in May predicted a 9% reduction in oil prices in SDR between 1998 and 1999.	Retail petrol prices rose by 26% from January to October and by 21.6% to November. World market prices have more than doubled since March. The IMF report published in October predicted a 27% rise in oil prices in SDR between 1998 and 1999.

*The Central Bank forecasts 4% inflation between 1999 and 2000*

In its quarterly forecast in October, the Central Bank forecast a 3.3% rise in the annual average CPI between 1998 and 1999, and 4.1% between 1999 and 2000. Virtually no inflation was expected for the rest of the year on account of seasonal factors and the impact of petrol tax cuts. This forecast appears to be holding good, since the CPI in November was unchanged from the previous month. According to the forecast the increase in the CPI from the beginning to the end of this year will be 4.6%, while the forecast for the year 2000 is 3.7%. This forecast was based on the following assumptions:

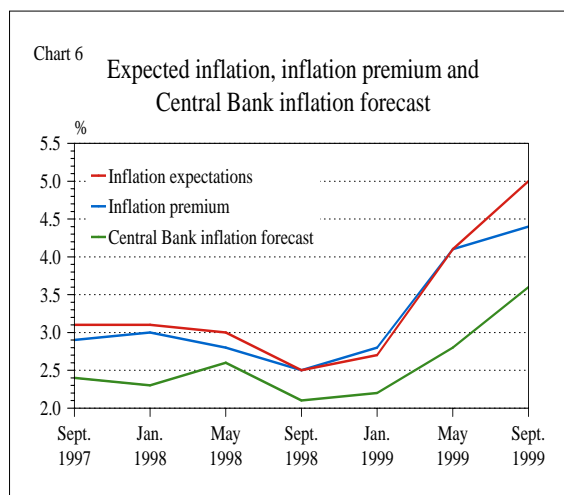
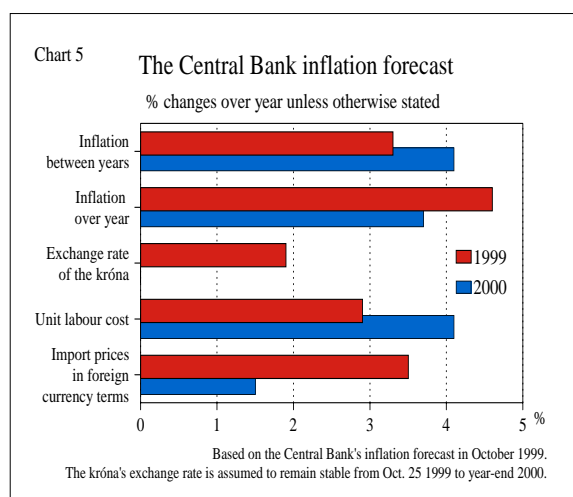
- An unchanged exchange rate of the króna from October 25, when it was 3.6% above the central reference rate.
- Average wages will increase between 1999 and 2000 by 6½%. This increase includes the impact of pending wage agreements plus contractual rises in the general market and wage drift (2% in 1999 and 1½% in 2000).
- Productivity increases of 2½% in 1999 and 2% in 2000
- A rise in import prices in foreign currency terms of 3½% in 1999 and 1½% in 2000.

The pending wage negotiations involving the bulk of labour unions make the forecast's assumptions on wage developments highly uncertain. If the interaction of wage and exchange rate developments differs from the forecast, the outcome could be better or worse. For example, a 1½% appreciation of the króna over the next few months, on the assumptions made in the forecast, combined with wage increases 1% below the forecast level, would leave the rise in the CPI just over 1% lower next year than the forecast figure. In both cases the development of real wages would be virtually identical.



A less favourable interaction of exchange rate and wage developments is also conceivable, resulting in considerably more inflation than forecast by the Central Bank. In order for this not to happen, the economy must slow down next year. A great deal also depends on price developments for the special factors that have driven up inflation during the present year. The Central Bank forecast assumes that the increase in housing prices will decelerate until the end of the year, then pick up again somewhat in the first months of 2000. Considering that residential accommodation prices in the Greater Reykjavík Area are already as high in real terms as during previous peaks, price rises are likely to slow down at the least. The housing component of the CPI remained unchanged in November.

It is important to regain control over inflation before higher inflationary expectations establish themselves. General expectations have been for rather higher inflation than the Central Bank has forecast. The spread between expected and measured inflation has been even greater, since the Central Bank has had a tendency in recent years to over-predict inflation, until last year. This gap apparently narrowed last year, however, and was 0.4% in May and September 1998. Now it has widened once again and respondents in a survey made in September said they expected 5% inflation, compared with the Central Bank forecast of 3.6%, i.e. a 1.4% higher figure. At the same time, respondents estimated inflation over the preceding 12 months at 4.8%. In fact the CPI rose by 4.9%, so there was a close correspondence



between inflation assessments over the past twelve months and actual developments. In general, however, participants in previous surveys have had a tendency to overestimate the inflation rate.

The inflationary premium on bonds, measured by the differential between the yield on unindexed and indexed bonds of the same maturity, gives some idea of inflationary expectations among investors. A qualification must be added that this differential would actually need to be broken down into expected inflation and an inflation risk premium, which is difficult. Be that as it may, the inflationary premium of investors has been very close to inflationary expectations of individuals as measured in surveys. Recently, however, a growing discrepancy has emerged. In September the investors' inflation premium was 4½% by this criterion, i.e. ½% lower than individuals' expectations for inflation but 0.9% higher than the Central Bank forecast. Since then the inflationary premium has dropped somewhat, so that the differential can be expected to have increased still further. A conceivable explanation is that investors take a different view from the general public as regards the impact of the strengthening króna in recent months, the special temporary factors in the price upswing and foreseeable restraint measures.

#### What causes economic overheating?

In its forecast presented with the national budget in October, the National Economic Institute estimates that GDP will grow by 5.8% in 1999 but slow down sharply next year to 2.7%. If this forecast holds good,

Table III GDP and its components

Percentage change unless stated otherwise	1997	1998 <sup>1</sup>	1999 <sup>2</sup>	2000 <sup>2</sup>
Private consumption .....	6.0	11.0	6.0	2.5
Public consumption .....	3.1	3.7	3.4	2.5
Gross fixed capital formation .....	10.5	23.4	-0.1	2.1
National expenditure.....	6.2	12.1	4.0	2.4
Gross domestic product .....	5.3	5.1	5.8	2.7
Current account balance, % of GDP	-1.4	-5.7	-4.6	-4.2

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

economic growth this year will be the highest since 1987. Even more remarkable is that 1999 is the fourth consecutive year that annual growth has exceeded 5%. Over these four years, GDP has grown by 24%, roughly the same figure as during the boom in 1983-1987.

High growth this year is primarily the result of continued rapid growth in private consumption and considerably greater export growth than in 1998, at the same time as import growth has been slowing down. Investment is expected to remain virtually unchanged, thereby reducing the growth in national expenditure.

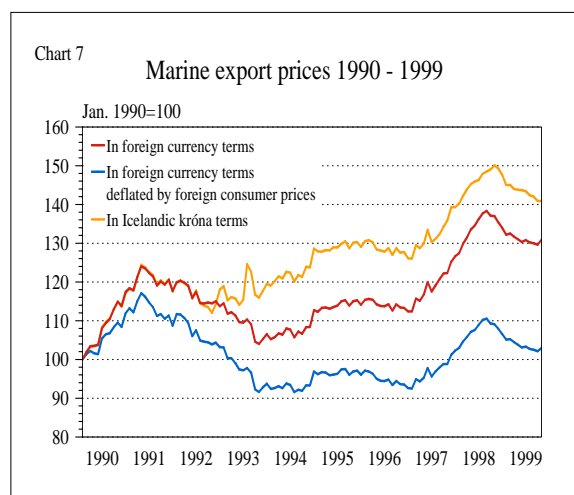
Given the major role played by demand expansion in fuelling inflation this year, the cure must lie in dampening the growth of domestic demand. To determine whether or how extensive action is needed, the cause of such heavy demand must be assessed.

In brief, the pattern has been as follows:

- When prospects for external conditions picked up because of the improved state of fish stocks, rises in prices for marine products in export markets and stepped-up investment in power-intensive industries, optimism increased among businesses and households, which reviewed their investment and consumption plans.
- Falling unemployment and a brighter economic scenario boosted the bargaining power of labour unions and companies' ability to meet higher wage costs. The result was a large increase in real disposable earnings, which made households even bolder in their consumption and investment plans, and the same was true of companies serving the domestic market.

- At the same time as general optimism about economic prospects created greater demand for credit, the supply of credit increased. Among other things, greater credit supply can be traced to new stock offerings in the state-majority commercial banks during the buildup to privatisation, and the establishment of the Investment Bank (FBA) with a strong equity position. Fiercer competition for market shares took place among financial institutions as a result. Generally speaking, public access to credit has also grown in recent years and the rules on access to government-backed mortgage loans have been relaxed. Trading in fish quotas has probably boosted both demand for and supply of credit. Despite increasingly tight monetary restraint, the real interest rates offered to corporate borrowers and on mortgages generally dropped.

External conditions are undeniably favourable, but not on the same scale as during the greatest fisheries upswings. Catches have increased in recent years, but relatively steadily. Marine product prices are running fairly high in foreign currency terms, but relative to general price rises they are still lower than at the 1991 peak. Króna prices are very high, however, since the exchange rate is lower now than when prices of marine products peaked in foreign currency terms in 1991. It can thus be said that the fisheries boom is to some extent the product of domestic exchange rate policy no less than that of external conditions. This year, the price rises for marine prod-



### Comparison between the upswings in 1986-1987 and 1998-1999

The present upswing resembles that at the end of the 1980s in many ways but differs in others. The following is a comparison of the main features of these two economic growth periods:

- The current account deficit is greater now, or 5.7% of GDP in 1998 compared with 3½% in 1987.
- Public sector debt now, although decreasing, is much greater than in the 1980s. The same applies to household debt, corporate debt and the national debt.
- Real interest rates on borrowing are higher now than during the expansionary period of the 1980s.
- Capital movements are unrestricted now, increasing the risk of a currency and financial crisis if market players lose confidence in the economic policy.
- The competitive position of industry is much better now, the real exchange rate closer to equilibrium and corporate profits higher. Furthermore, real interest

rates are lower, which reduces the debt burden. Inflation is also lower, giving more scope for tackling overheating before a currency adjustment becomes unavoidable.

- Unemployment in 1987 was even lower than now, and there was more tension in the labour market which was not as open externally then as today.
- Public sector operations are in much better shape with a sizeable surplus now but a considerable deficit in 1985-1987.
- Investment plays a larger part in the upswing in recent years than in the 1980s. However, the proportion of investment is not high in historical terms.
- The Central Bank is now better equipped to counteract expansionary forces. The Bank has been granted greater independence in applying interest rates and exchange rate policy is somewhat more flexible.

ucts, which occurred in 1997 and 1998, have been cancelled out to some extent, after peaking in autumn

Table IV Comparison between two upswings

<i>Annual percentage change unless otherwise stated</i>	<i>1986-</i>		<i>1998-</i>	
	<i>1987<sup>1</sup></i>	<i>1987</i>	<i>1999<sup>1,2</sup></i>	<i>1999<sup>2</sup></i>
GDP growth .....	7.4	8.6	5.4	5.8
CPI inflation .....	20.0	18.8	2.5	3.3
Current acc. balance, % of GDP...	-1.5	-3.4	-5.2	-4.6
Real effective exchange rate				
- average (relative wages) .....	97.7	109.0	87.3	87.4
Real exchange rate (relat. wages) .	29.0	26.2	4.3	0.2
Treasury fin. balance, % of GDP..	-2.5	-0.9	1.3	1.6
Gen. government debt, % of GDP	28.2	26.6	44.7	42.0
General government net debt, % of GDP .....	8.9	8.5	28.4	26.4
Real annual growth of broad money (M3) <sup>3</sup> .....	12.6	13.8	12.2	11.1
Real growth of DMB lending <sup>3</sup> .....	8.4	19.6	28.5	27.4
Real growth of credit system's total lending <sup>3</sup> .....	4.7	10.6	11.9	11.3
Unemployment, % of labour force	0.6	0.4	2.3	2.0
Real disposable income, 1990=100	96.1	120.8	113.2	118.7
Real disposable income, annual percentage change .....	17.3	25.8	6.6	4.8
National expenditure .....	10.0	15.7	8.0	4.0
Gross fixed capital formation .....	23.7	21.3	11.0	-0.1
Private consumption.....	11.5	16.2	8.5	6.0

1. Period averages. 2. Central Bank's and NEI estimates and projections.  
3. For 1999, 12 month % change to end of September is shown.

1998. A major factor there is that fishmeal prices plummeted after being exceptionally high. Prices of other marine products are still running high, although they have been slipping slightly.

At later stages in the business cycle, the external stimuli that originally launched it have diminished, especially during the current year. Although cod quotas are continuing to increase, there have been cut-backs in other species. Shrimp catches have been poor and deepwater fisheries have dropped. Investment in power-intensive industries has fallen once again. Nonetheless the upswing is continuing, driven this time by domestic demand, which is generously fed with foreign borrowing. This will be discussed in more detail later on.

Combined economic growth over the past four years is now similar to that during the growth period from 1983 to 1987, but a comparison of the periods when GDP can be expected to have outstripped long-term production capacity, namely 1986 to 1987 and 1998 to 1999 respectively, gives the former period of overheating the lead in terms of economic growth and growth in national expenditure, especially private consumption. Following the growth period came a long adjustment period when economic growth was either very low or negative and real disposable incomes fell for years on end. We must surely ask whether such a hard landing is inevitable now too, or whether growth can slowly be tailored to a



level compatible with long-run price stability, without having to cut real incomes. This question is not easy to answer but the comparison of the two growth periods given in the accompanying box and chart is useful to bear in mind.

*National expenditure has been reduced, but not enough to ensure external balance*

The National Economic Institute (NEI) forecasts some slowing down in the growth of national expenditure this year, and higher export growth than in 1998. In this respect the components of growth are more favourable this year than they were last year. National expenditure is now forecast to grow by 4% this year compared with 12% in 1998. The NEI forecast for more than 8% export growth this year is quite an improvement on last year's sluggish growth, if this prediction holds good. A considerable reduction in import growth is also forecast, at 3.4% compared with 22% in 1998.

It is too early to get off guard, however, despite the predicted lower growth in national expenditure. Firstly, it should be borne in mind that growth in private consumption is still very high according to the NEI forecast, at 6%. Although the investment wave has peaked, slower growth in national expenditure will not serve to cause a sufficient reduction in the current account deficit that was formed in 1998. The NEI forecasts a continuing current account deficit this year, equivalent to 4.6% of GDP. Even worse is the prospect that no significant reduction will take

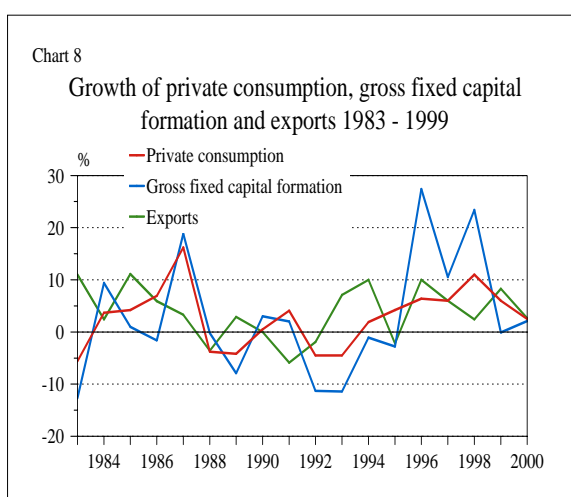
place in this deficit in 2000 either, despite the moderate growth forecast for that year.

*Risk of a higher current account deficit than forecast in the recent national budget*

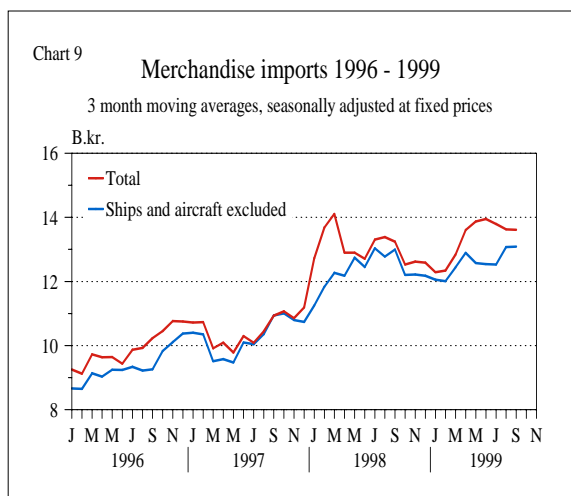
Secondly, the NEI estimates for private consumption and investment growth seem on the conservative side. Models for consumption and investment patterns that have been evaluated at the Central Bank show considerably greater growth in private consumption and investment during the current year and in investment in the year 2000 than were foreseen in the NEI forecast. If this turns out to be the case, a larger current account deficit can be expected than forecast by the NEI.<sup>3</sup>

Thirdly, foreign trade statistics so far this year reinforce the conclusion that the deficit will exceed the NEI forecast. The NEI forecast assumes a deficit on the trade account of 17.9 billion kr. for the year as a whole. During the first nine months of the year it had reached 20 billion kr., which is approximately the same as for the whole of 1998. Admittedly, various factors in the final months of the year will contribute to a lower deficit. A new fishing season commenced in September and greater exports of marine products may be expected until the end of the year compared with recent months. Higher aluminium prices will also boost export value. Offsetting this is the rise in imported fuel and raw material prices, which will widen the deficit.

Another cause for concern is that imports and exports of aircraft and vessels, which fluctuate and do not necessarily reflect underlying economic developments, create a rather more favourable picture for this year's current account balance, while in 1998 the opposite occurred. Excluding buying and selling of ships and aircraft, the nine month trade account deficit grew from 13.5 billion kr. in 1998 to 16 billion kr. over the same period this year. Growth in exports so far this year is almost entirely accounted for by manufactured goods. Exports rose by one quarter over the first three months of the year in volume terms, but only 15% in value on account of low aluminium prices, although these are rallying briskly now. The growth in exports of manufactured goods is



3. It should be pointed out that OECD forecast a higher current account deficit than the National Economic Institute for 2000, or 5.3% of GDP.



largely caused by higher aluminium exports, but also extends to many other product categories. Investment goods linked to fisheries and food production head the list. Exports of marine products have been sluggish in recent months and showed some contraction during the first nine months of the year compared with the same period in 1998. Low exports of marine products in late summer, i.e. towards the end of the fishing year, can be traced to the good catches early in the season. Excluding vessel and aircraft transactions, export value during the first three quarters of 1999 rose by only 1%, while total merchandise imports rose by 5½% in value and almost 7% in volume.

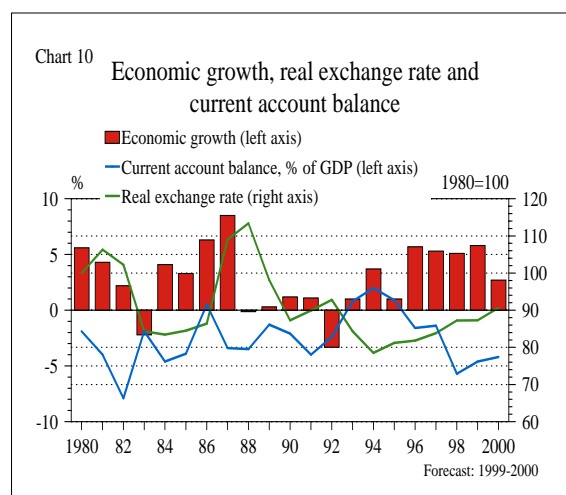
During the first nine months of the year, merchandise import growth slowed down substantially compared with the previous year. The most recent figures indicate that consumption goods are still growing rapidly. Imports of consumer durables are growing most, but the import of non-durable goods is also increasing. Imports even appear to have gained momentum in the summer and autumn, after figures for the first months of the year had shown a considerable contraction. Imports of investment goods were greater than assumed in previous NEI forecasts and increased in the final months of the period.

Data for trade in services are only available for the first half of this year. Based on current exchange rates, exports of services contracted then by 1% compared with the first six months of 1998, while imports of services increased by almost 6%. As a result, the deficit on the service account widened by

just under 2½ billion kr. compared with last year. This occurred mainly in the second quarter and is largely attributable to a rise in expenditures on overseas travel, but a sharp decline also took place in exports of various services, including those connected with Iceland Defence Force activities. Overseas travel can be expected to continue growing, and likewise spending per trip, a development that the strengthening of the króna in recent months will encourage to begin with. On the whole, this year's current account deficit looks certain to be considerably greater than the NEI forecast earlier in the autumn, and may even exceed last year's deficit.

*The current account deficit is greater now than in 1987, but is it a benign one?*

Compared with 1987, when the expansionary period of the 1980s reached its peak, the present deficit on the current account is both greater and more persistent. In 1987 the deficit was equivalent to 3½% of GDP after a minor surplus the previous year, compared with a deficit of 5.7% in 1998 and at least 4.6% this year. It is not enough to judge the deficit merely by its size; the underlying causes also need to be examined. If a current account deficit is largely created because of profitable investments, which yield increased export revenues in the course of time, there is less cause for concern than when it is primarily the result of growth in private consumption. The upswing in 1986 to 1987 certainly showed larger growth in private consumption, amounting to 23% in



those two years but just under 18% in 1998 to 1999. If the periods 1983-1987 and 1995-1999 (forecast for 1999) are examined as a whole, it transpires that private consumption grew by a similar amount over both, or around one-third. Growth in capital formation is heading just past 73% now but was just under 30% during the former period. However, it must be remembered that the growth in investment during the present period followed a large contraction and that investment as a proportion of GDP is not high in a historical context. Neither the proportion of investment nor private consumption is abnormal in a historical context. It is primarily public consumption which has shown some increase at the expense of both. The proportion of capital formation to GDP grew from 14½% in 1995 to 21½% in 1998, which is a similar ratio to the mid-1980s but lower than the average for the preceding decade. This year the proportion of capital formation will drop once more, to just under 20%, according to the NEI forecast, and even more next year.

*Is a current account deficit less cause for concern if the private sector is behind it?*

Although a larger degree of fiscal restraint is currently maintained than during the upswing of the 1980s, the current account deficit is nonetheless considerably greater. It has sometimes been claimed that the current account deficit now is not a cause for concern since it is largely the result of heavy investment by the private sector and not of a deficit on public sector operations. There are grounds for treating such an interpretation with caution. In this respect it is worth pointing to the recent experience of many Asian countries. The above argument was often advocated there before the currency and financial crisis hit a large part of Asia in 1997. Firstly, it is not certain that private investment is always profitable. Experience shows that this may be based on overoptimistic macroeconomic assumptions over which companies have no control. They make their decisions independently without any overview of investment in the national economy, and may therefore overinvest in certain sectors. Furthermore, not all investments generate future foreign exchange revenues for the national economy, at least not sufficiently quickly, even though they might be profitable in the long run. Secondly, the consequences of over-

investment by corporations may become even more serious for the financial system than when the public sector overheats the economy with excessive expenditure or tax cuts during a boom. The State has the power to increase its revenues through taxation if needed. Companies which run into difficulties, on the other hand, need to take painful streamlining action and if they fail to do so there is a risk that loan losses in the financial system will result.

The argument that profitable investments should dispel fears about the current account deficit was highly relevant in 1997, less so in 1998 and even less so in 1999. At the beginning of the upswing, investment was particularly marked in power-intensive industry and harnessing projects, and in 1998 also in fishing and fish-processing. Investment in power-intensive industry is now on the decline. Investment in energy production is considered to have peaked and will diminish next year. During the current year, however, investment in commercial and office premises, office equipment and residential accommodation, together with public sector investments, is expected to sustain the total level of investment while a contraction occurs in most other areas. The types of investment which are now growing will therefore not generate such clear foreign currency revenues for the national economy as the former investments. Overall investment is expected to remain constant in 1999. It is therefore continuing growth in private consumption which above all has stopped the current account deficit from diminishing to any extent. In its Annual Report for 1998, the Central Bank found that up to 40% of the current account deficit that year could be explained by arbitrary or temporary factors, such as trade with aircraft and vessels, inventory accumulation by power-intensive industries, and investments in power-intensive industries and energy production. Even though energy production investment is still running high, other temporary factors have dropped sharply. The deficit in 1999 must therefore largely be explained in terms of the economic cycle and underlying deficit, which needs special action to rectify. Indeed, projections which assume a relatively quick adjustment of output to its long-term capacity levels show that the deficit will remain in the range 3-3½% over the period 2001-2003. This suggests an underlying deficit amounting to 20 billion kr. per year. Thus the con-

clusion is that the longer the economic growth period has lasted, the riskier the underlying causes of the current account deficit become, so there is every reason to take it seriously.

*Industrial competitiveness is much stronger now than in 1987*

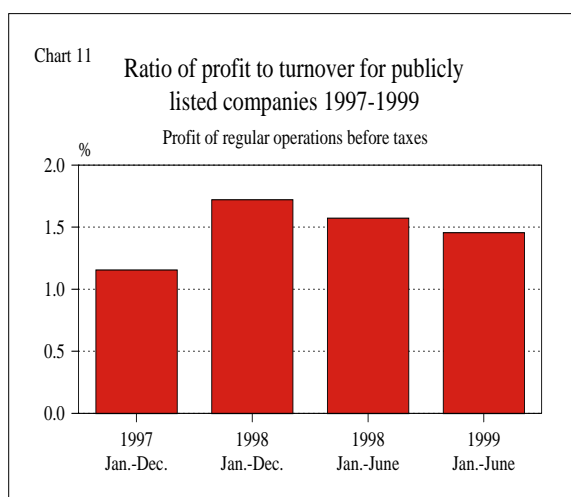
The real exchange rate of the króna has appreciated considerably in recent years. Nonetheless, it cannot be considered high in historical terms, since it is lower than or similar to 1990, when a devaluation had taken place the previous year. Admittedly the devaluations in 1992 and 1993 brought the real exchange rate down even lower, but these were a response to different external circumstances from today. Despite the recent rise, inflation is much lower than in the 1980s. One consequence is that domestic demand does not undermine the competitive position of the export goods sector as quickly as before, provided that the exchange rate remains constant. Thus there is more scope for responding to imbalances before an exchange rate adjustment becomes unavoidable. Because it was attempted to maintain a steady exchange rate while inflation was still running high, the real exchange rate rose very rapidly during the former growth period and in 1987 was clearly much higher than was consistent with external balance in the economy in the long run. Thus a depreciation of the currency was inevitable to attain economic balance.

From a long-term perspective, there does not appear to be as much reason to adjust the exchange

rate now, difficult as it may be to ascertain where the real exchange rate is actually in equilibrium. The precondition for maintaining a stable currency over the long term is the successful restriction of demand growth in the near term. The profitability of companies during the first half of this year does not suggest that their position is tight. The profit on regular operations of companies listed on Iceland Stock Exchange has fallen somewhat compared with 1998, but it must be borne in mind that 1998 was a very good year. On average, equity ratios have risen slightly. As far as the fisheries sector is concerned, profitability of demersal fishing and processing is very good, although it was even better in 1998, but a downturn has taken place among companies which largely depend upon pelagic catches and processing of them for fishmeal and oil. Although company profits are now much greater than they were during the previous period of economic overheating, it should be remembered that the introduction of an equity market has also ushered in increased demands regarding profitability.

*Public sector finances are strong but do not exert sufficient restraint*

Public sector finances have improved greatly in recent years. The public sector showed a surplus equivalent to 0.9% of GDP last year, and an even larger surplus is foreseeable during the current year, or equivalent to 1.2% according to the National Economic Institute. This success is entirely the result of the strong position of the treasury, while municipal authorities have been in the red in recent years despite the economic boom. The strong treasury position this year is above all growth-led, because tax revenues have increased by considerably more than was assumed in the budget for 1999. The supplementary budget for the current year assumes that treasury revenue will exceed the budget targets by 10 billion kr. and outlays by 5.5 kr. billion. Both income tax and turnover tax revenues are considerably in excess of estimates. Consequently, the treasury balance will improve from a 9 billion kr. deficit in 1998 to a 7.5 billion kr. surplus in 1999. However, the improvement largely stems from sales of assets, and from special pension fund allocations in 1998 that are not included in international public sector accounting standards. As measured by the National



Economic Institute, the central government balance shows a smaller improvement, from a surplus of 9 billion kr. in 1998 to 10½ billion kr. This is less than an economic growth rate of almost 6% should have produced. The draft budget for the year 2000 assumes a 15 billion kr. treasury surplus, which is 7.5 billion kr. better than during the current year. If this holds good, the cyclically adjusted balance will improve considerably once more and the degree of fiscal restraint will increase. This will, however, do no more than make up for the slack which occurred in 1999.

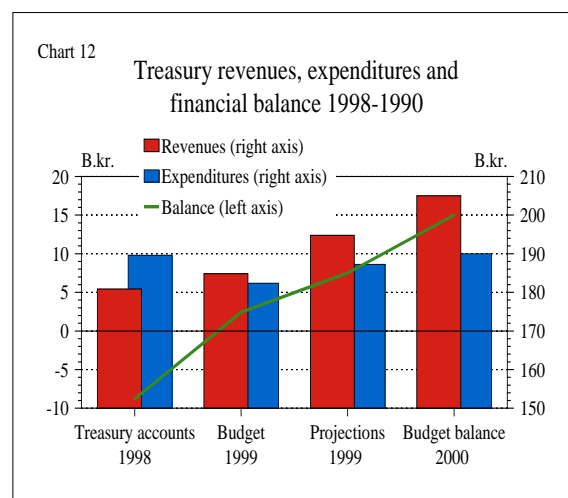
The central government balance during the current year could in fact turn out to be better than the draft supplementary budget envisages, since the strengths on the revenue side appear to be greater than the weaknesses on the expenditure side. The outcome could be a surplus in the range 10-15 billion kr. according to the central government accounts, or 1½% of GDP. Accordingly, a 15 billion kr. surplus next year would by no means imply any additional restraint. However, if the improvement in the balance this year and the probable extra revenues next year were added to the budget plans, the treasury's operating surplus would be more than 20 billion kr. and around 3% of GDP. This would imply a considerable extra degree of restraint.

*The strong fiscal position makes it possible to cushion conceivable setbacks but public sector indebtedness is greater than at the end of the last period of overheating*

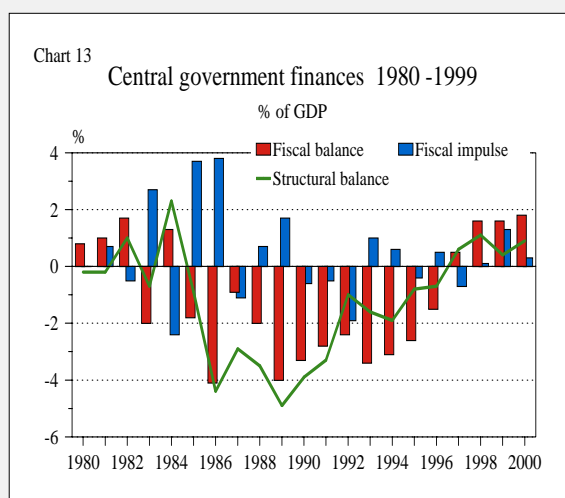
Over the years 1985-1987 the public sector operated at a considerable deficit in spite of the economic boom, especially in 1986. The present strong position of public sector finances can be seen from various angles. Because the public sector is now operating at a surplus during an economic boom and its indebtedness is being reduced, scope has been created for allowing public sector finances to soften the reversal which may lie ahead. This positive aspect of public sector finance needs two qualifications, however. Firstly, public sector indebtedness is now much greater than during the 1980s upswing, despite substantial reductions in recent years. Net indebtedness of the public sector was equivalent to 8.5% of GDP in 1987 but will probably amount to 26% of GDP at the end of this year. Households and the economy as

a whole also have higher levels of debt. Secondly, it is more difficult to take fiscal action against overheating if its origin is in the private sector and not in public sector operations. If treasury overspending were the main cause of the current account deficit, the government could directly target the root of the problem through increased restraint. However, the government can only have an impact on private sector activity by indirect and much slower means. Despite this, it is still important to apply firm fiscal action to counter expansionary trends in the private sector, though politically it might be difficult to raise taxation or cut back expenditure when the public sector is operating at a surplus.

Given the strong need to apply public sector operations against expansion in the private sector, the operating deficit shown by municipal authorities is troublesome. In 1998 there was a 4.5 billion kr. deficit on municipal operations, or equivalent to 10.4% of their tax revenues. Recent indicators suggest that the deficit will only be slightly smaller in 1999. Such a large deficit leads to a rapidly deteriorating debt position. Total indebtedness of municipal authorities at the end of 1998 amounted to 47 billion kr., or around 8% of GDP, having risen by 5 billion kr. during the year. At the beginning of this decade their debts were just over 4% of GDP. The municipal authorities' debt counteracts fiscal restraint and feeds expansionary tendencies in the economy. It is also inherently dangerous, because if the present situation continues, municipal authorities' debt will rise from 90% of tax revenues in 1998 to more than 150% in



The accompanying chart shows treasury performance according to the National Economic Institute's preparation of standardized national accounts. After the reforms in central government accounting in 1998, these figures provide the main basis for retrospective comparisons. Together with the operating result, two indicators are included showing the extent to which treasury performance is determined by the economic climate. One indicator, the fiscal impulse, assumes that fiscal performance is neutral if treasury revenues are a fixed proportion of GDP and real outlays per capita are constant. The other shows the fiscal balance, adjusted for the impact of the economic cycle. This first assesses whether GDP is greater or less than normal production capacity, and then what the treasury balance would have been, if the utilization of capacity had been normal rather than as realized.

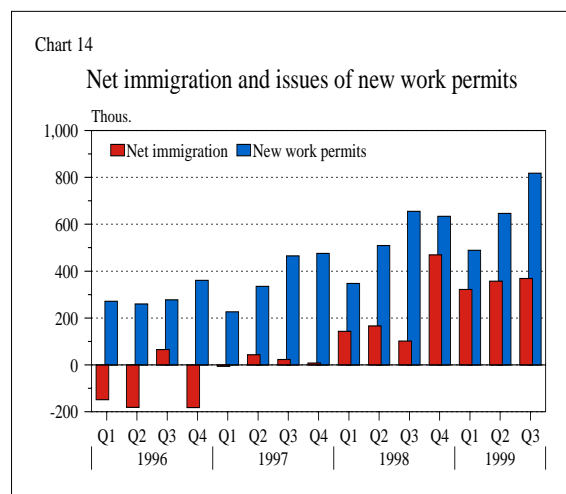


2010. Admittedly, investment in schools, kindergartens and drainage systems, which has been exceptionally high in recent years, is to some extent temporary and may be explained by new demands for whole-day schooling and environmental reforms. Thus outlays may be expected to decrease to some extent in the years to come. Nonetheless, debt accumulation in recent years means that municipal authorities' operations are now more sensitive to changes in external conditions over which they have little control, such as setbacks to economic growth or interest rate developments.

*The domestic labour market is stretched to its limits but foreign labour alleviated the strains so far*  
Unemployment has been steadily declining and was down to 1.4% in September. In some parts of the country unemployment has to all intents and purposes vanished. The number of work permits issued to foreign workers has been increasing steadily in recent years and foreign temporary workers play an important role in certain communities. More than 2,000 work permits were issued during the first nine months of the year, or almost as many as in the whole of last year, which was also a record. There has also been net immigration to Iceland. In the first nine months, 1,048 more people moved to Iceland than from it, comprising 249 Icelanders and 799 citizens

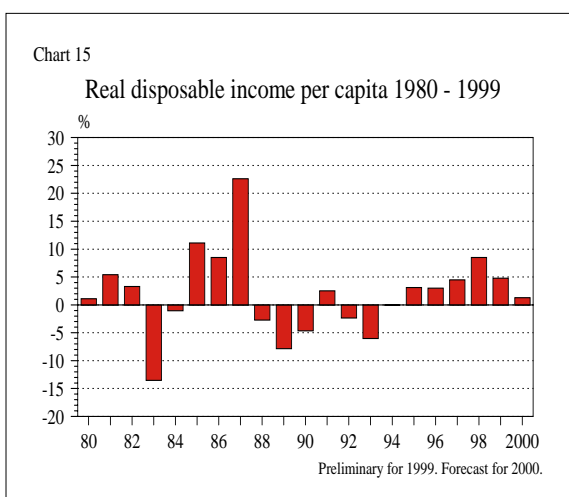
of other countries. At the same time in 1998, net migration was 411, although more Icelanders left the country than moved to it then.

Wage developments during the year have largely been in line with wage agreements. In the third quarter wages in the general labour market had risen by 5.3% from the same period in the previous year, while those of public sector and bank employees had risen by considerably more. Wage drift was still running at less than 2% and in fact dropped to 1½% during the third quarter. Rather more wage drift could have been expected in such a scenario. However, it



must be borne in mind that real disposable incomes and company payroll costs have grown sharply in recent years and therefore presumably give less occasion for wage drift. Importation of labour has also solved bottlenecks in the labour market. It is also conceivable that the strengthening of the equity market and profitability demands made there impose greater wage restraint on companies than during previous periods of economic growth.

Once again the overheating of the economy in 1987 makes an interesting comparison. Unemployment then was even lower, or around ½%. There was also less scope for importation of labour, since the European Economic Area had not been established and Eastern Europe was still behind the Iron Curtain. Labour market participation was also much higher than today, although the fact that 1987 was an income tax-free year with an unnaturally large labour supply must be taken into account. It is unrealistic to assume that labour market participation could reach such a level again. Compared with the years before and after 1987, labour market participation is still some way from reaching the former peak. Under the conditions prevailing in the labour market in 1987, real earnings increased excessively. The excessive and rapid growth of real disposable income in 1987 quickly undermined the competitive position of businesses and at the same time intensified excess demand and the current account deficit. During the present upswing real disposable income has also increased very rapidly but the gains now are much less than during the former phase.

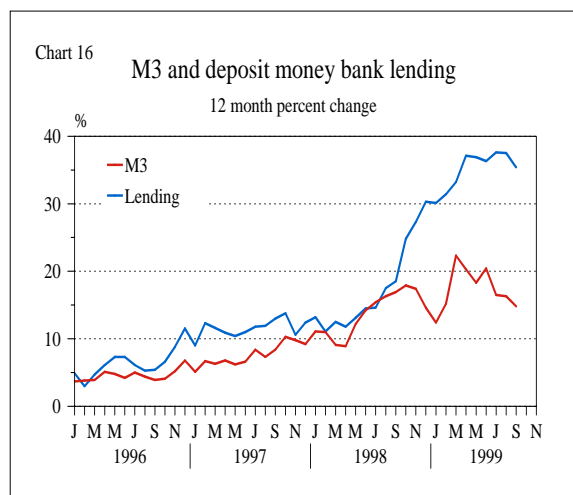


#### *Credit expansion still poses a risk to stability*

The Central Bank has been concerned about the lending boom and the rapid money supply growth during this year and last. Growth in lending by deposit money banks<sup>4</sup> amounted to 31% last year<sup>5</sup> but growth in lending by the credit system as a whole was less, or just over 15%, which is the same rate that M3 increased by. The growth in lending accelerated further this year and the 12 month increase in lending by deposit money banks until the end of September amounted to 36%, while M3 increased by just over 15% over the same period. Figures are not available for lending by the credit system as a whole after the end of June, when it had increased by 16½% from the middle of 1998.

This development gives rise to two particular concerns. The first is that such high growth in monetary aggregates and lending is not compatible with low inflation in the long run. Studies confirm a long-term relationship between M3 and the nominal value of GDP changes which may be regarded as the sum of inflation and economic growth. If inflation is to be maintained in the range 2-2½% and the growth capacity of the Icelandic economy in the long run is in the range 3% to 4%,<sup>6</sup> the long-term growth of money should be in the range 4-9%. This assumes that the velocity of money can change within normal limits. In addition, studies indicate that rapid growth in lending can lead to greater future inflation by stimulating demand.<sup>7</sup> The other concern is that a large increase in lending during an upswing can lead to loan losses in the banking system when the economic situation tightens, which can then undermine confidence in the financial system and its stability.<sup>8</sup>

4. Commercial and savings banks and other institutions permitted to accept deposits from the public.
5. The balance sheet of the Commercial Loan Fund was incorporated into that of Íslandsbanki in October 1998, distorting the figure for 12-month lending growth among deposit money banks for a whole year afterwards. Rough allowance for this gives a figure for lending growth by deposit money banks of 27% in 1998 and 32% over the 12-month period up to the end of September. However, this change does not affect lending figures for the credit system as a whole.
6. The upper limit is probably too high, but does not make much difference in this context.
7. A more detail explanation of the predictive value of money and credit for price developments is found on pp. 14-15 in the Central Bank of Iceland Annual Report for 1998.
8. The next Monetary Bulletin will contain a discussion of the stability of the financial system as a whole.



What are the explanations for the large growth in lending, and how are these new loans financed? Firstly, it should be stated that there is nothing unusual about strong growth in money and credit in a situation of high growth and rapidly increasing income. Thus nominal GDP growth can be expected to have been around 10% in both 1998 and 1999 and the increase in total earnings from labour and capital a similar figure. A similar growth in money would therefore not cause much concern. Furthermore, it is natural for credit to grow somewhat in excess of nominal GDP growth during an upswing, since lending generally fluctuates more than output. The recent growth in money and lending has, however, been substantially larger than can be regarded as a natural accompaniment to an economic upswing.

One conceivable explanation for this monetary and credit expansion could be that the Central Bank had encouraged it with substantial money creation or lending to deposit money banks. Available data does not suggest that this is an important contributing cause, especially not in 1998 when credit expanded significantly. The best criterion of the Central Bank's contribution to money creation is the increase in the Bank's base money, which consists of notes and coins in circulation and the deposit money banks' reserves. Base money only increased by 4½% in 1998 at the same time as M3 increased by more than 15% (see Table V), and in 1997 base money increased by only 3.1%. If Central Bank money creation were the main explanation for monetary expansion, base money would have needed to increase by

Table V Money and credit in 1998 and 1999 - selected items

Percentage change (%) from beginning to end of period	1998	1999 to end of Sept.	12 m. to end of Sept. 99
Central Bank base money .....	4.5	13.1	12.1
Banking system's foreign liabilities for relending.....	54.1	30.5	70.3
Banking system's total lending.....	27.7	15.6	27.0
M3 .....	15.2	14.9	15.3
M4 .....	17.7	16.0	16.6
DMB lending .....	30.6	18.1	35.8

proportionally more than M3. So far this year base money has increased by 13% at the same time as M3 has risen by 15%.

The financial statements of deposit money banks show how they financed their lending last year and this year (see Table VI). In addition to conventional financing through deposits, foreign borrowing played the largest role. It provided finance for almost half of the increase in lending in 1998 and almost 40% so far this year.<sup>9</sup> The Central Bank's contribution to funding the increase in lending was only 17% in 1998 and has in fact been negative so far this year. Thus a more obvious explanation for the growth in M3 and credit over and above the nominal growth in GDP is a credit expansion which is financed by foreign borrowing. Such an increase in lending leads to additional growth in deposits, which increases M3 even further.

What is the explanation for the large growth in lending by deposit money banks? Firstly, credit demand has been running very high because of the economic upswing. It has been even greater because households appear to have made upward revisions of their expected future incomes and then based their expenditure decisions and borrowing on this optimistic assessment. Secondly, the supply of credit has grown because deposit money banks have been increasing their market share at the expense of other

9. The same picture is presented when the accounts of the banking system (i.e. deposit money banks and the Central Bank together) are examined: almost half the increase in lending last year can be attributed to financing from abroad.



Table VI Deposit money bank lending and financing 1998 and 1999 (to end of September)

<i>In b.kr. and as % of lending</i>	<i>1998</i>		<i>1999</i>	
	<i>b.kr.</i>	<i>%</i>	<i>b.kr.</i>	<i>%</i>
Lending .....	76.4		59.0	
Deposits.....	30.6	40.0	34.4	58.3
Net securities.....	-5.3	-6.9	7.5	12.7
Net foreign liabilities .....	36.8	48.2	22.4	38.0
Central Bank, net .....	12.8	16.8	-6.8	-11.5
Other, net.....	1.6	2.1	1.5	2.5

credit institutions. This is best seen in the growth in lending by deposit money banks, which is far beyond the growth in lending by the credit system as a whole. Thirdly, credit supply has increased whereby it is easier to borrow money than before, for a longer maturity and on relatively better terms. Credit supply was boosted still further last year when the lending capacity of state-owned commercial banks was raised with new equity offerings and a new investment bank was established with a strong equity position, which increased competition in the credit market. A stable currency and an increased interest rate differential vis-à-vis abroad has also increased demand for foreign-denominated loans.

Credit expansion fuels the upswing, which has already exceeded the limits compatible with stability and low inflation. It also jeopardizes financial stability, insofar as it is based on over-optimism by borrowers about the future scenario and an underestimation by credit institutions of credit risk. The risk of such an underestimation grows in pace with tougher competition among lending institutions. In this respect it is disturbing to note that the deposit money banks' equity ratios have been falling recently and the share of subordinated loans in their calculated equity has been increasing. The risk-adjusted equity ratio of commercial banks and savings banks at the end of June was estimated at 9%, i.e. only 1% over the mandatory minimum capital adequacy limit, and had decreased by 0.3% from the same time the previous year. The equity ratio excluding subordinated loans stood at 6.7%, which is 0.7% over the mandatory minimum, having decreased by 0.5% over the same period.

Experience in other countries shows that a high proportion of short-term foreign borrowing in the

funding of lending can pose great risks to exchange rate stability and the strength of the banking system. This source of financing can be ephemeral. If it dries up, either because of setbacks in international financial markets or because foreign creditors, rightly or wrongly, lose their confidence in the country, there is a risk of downward pressure on the currency. At the same time the deposit money banks' foreign exchange balance will become negative, as inflows from abroad drop but outstanding foreign-denominated liabilities remain. Under such circumstances credit institutions face an even greater problem if domestic borrowers encounter difficulties in repaying foreign-denominated liabilities, because the debt service burden on them increases as the domestic currency falls. Accordingly, it is a major cause of concern that the deposit money banks' foreign liquidity position has substantially deteriorated alongside the expansion in their lending activities.

One of the Central Bank's main objectives for almost two years now has been to work towards slowing down the growth in lending and create a more solid foundation for the financing of credit. The Bank has done so by issuing cautionary remarks to parties capable of influencing this development. In particular, the Central Bank has addressed its remarks to the management of banks, who are supposed to be guided by the interests of their operational security, and also to the government authorities as the main owners of some of these players. The Bank has also deployed the instruments at its disposal to exert an influence on lending by the banking system. The Central Bank has raised its policy rate and it also set liquidity requirement ratios for credit institutions in February. Liquidity requirement ratios and their impact are discussed in more detail in a separate article on Financial Markets and Central Bank Actions. As a result of the liquidity requirements, the commercial banks' and savings banks' liquidity position has improved significantly and the share of short-term foreign borrowing in their liabilities has been reduced. The growth in bank lending has also slowed down somewhat but it is uncertain whether this trend can be entirely attributed to the new liquidity rules, since the Central Bank's interest rate rises and warnings should also have had some impact. It is also conceivable that lending growth would have slowed down of its own accord anyway,

given the high level it had reached. Nonetheless, growth in lending in recent months is still far too great. Annualized seasonally adjusted growth in lending by the deposit money banks measured almost 23% from the end of April to the end of September. Thus it is vital to continue working towards containing this excessive growth in lending. An important point here is not to take any action which may increase the lending capacity of state-owned credit institutions by boosting their equity, either by means of new share offerings or subordinated loans. Admittedly, the deteriorating equity position is a major cause of concern, but does have the positive side-effect in the present circumstances of making it more difficult for banks to swell their balance sheets to the extent that has been seen until now. Eventually, the management of credit institutions will have to consider very carefully the risk that a large increase in lending entails.

*Growing indebtedness and asset price inflation make the economic situation more volatile*

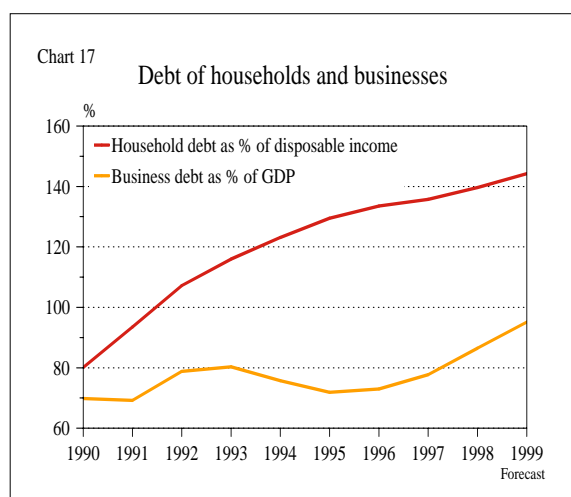
The expansion in lending has gone hand-in-hand with growing accumulation of debt by households and companies. Household indebtedness as a proportion of disposable income is estimated at 144% this year, as against 130% when the upswing began at the end of 1995. Industrial sectors' debts with the credit system have also been growing in recent years, from 73% of GDP in 1995 to a probable figure of 95% in 1999. Offsetting this is the reduction that has been taking place in public sector debt as a proportion of

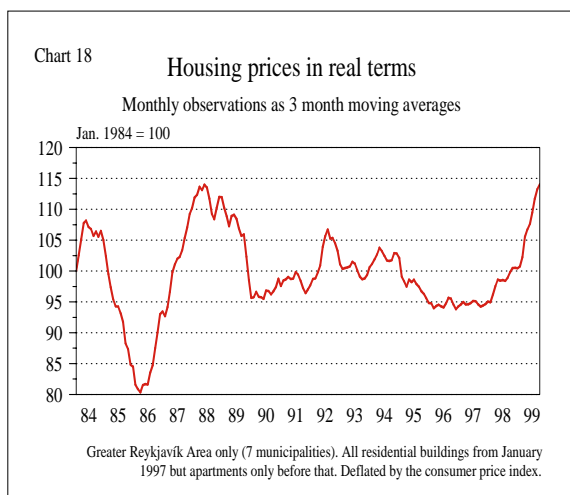
GDP from 1996 onwards. Private sector indebtedness has been growing at a greater rate, however, causing the net national external debt to rise as a proportion of GDP in both 1998 and 1999, and this pattern looks set to continue next year.

Lending expansion and the accompanying rise in household and company debt have fuelled consumption and investment during the upswing, but at the same time leave households and companies more susceptible to income fluctuations. One consequence could be that a downturn in the economy will have a greater downward impact on consumption and investment than before, since the extra debt service burden constricts other expenditure correspondingly when income drops.

Recently, the credit boom has been driving up real estate prices. At the same time, rising real estate prices intensify the expansion of demand. This occurs in two ways. Firstly, higher real estate prices stimulate housing investment, which the NEI forecasts to increase by 8% this and 5% next year, in what is probably a conservative estimate. Secondly, higher real estate prices boost the market value of households' assets. This in turn encourages them to spend more, not only because they consider themselves to be better off than before but also because of their greater borrowing potential using their own housing as collateral. Accordingly, the impact of a downswing in the economy could conceivably be intensified if it coincides with a drop in real estate prices. Thus it is important to assess the probability not only of even further rises in real estate prices but also of a sharp fall.

Real estate prices have soared over the past two years. In September the index of nominal residential property prices in the Greater Reykjavík Area had risen by almost one-quarter over less than two years and in real terms residential property prices are at their highest for more than a decade. This suggests that prices may be approaching their peak now. While continuous data which would allow a precise evaluation of real estate price developments are lacking, available data show that property prices in real terms can fluctuate by up to 30% between their highest and lowest levels. Greater fluctuations occurred in prices in real terms in the 1980s, which can be explained by the high and variable rate of inflation at that time. Such large changes in the price level are



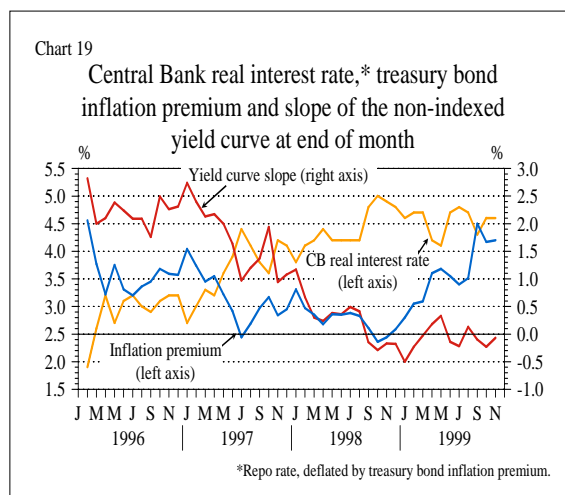


unlikely now, but the rise in housing prices in real terms over the past two years could be cancelled out over a relatively short period if conditions alter, i.e. real prices could drop by around 15%.

Share prices have risen sharply in the past two years. This should exert the same kind of stimulus on demand as rising property prices, since higher share prices make it less expensive for companies to finance their investments and also boost the assets of shareholders, which should encourage consumption. This effect is probably still comparatively slight in Iceland, where the equity market is young and relatively small relative to GDP. In their spending decisions, investors may also take into account that the rise in share prices may be a price bubble.

*Monetary policy has exerted restraint ....*

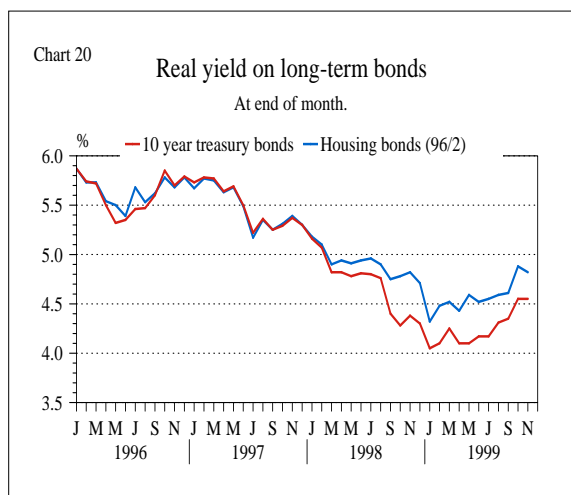
The large differential between short-term nominal interest rates in Iceland and its main trading partners reflects a significant level of monetary restraint. After the rise in the Central Bank's policy rate in mid-June, the difference between the yield on three month treasury bills in Iceland and the average of comparable rates among main trading partners (weighted by their share in Iceland's foreign trade) increased to around 5 percentage points, and then to almost 5½ percentage points following the Bank's interest rate rise in September. On November 10 the differential stood at 5.3 percentage points, while the rate rises of 0.5 percentage points by the ECB and 0.25 percentage points by the Bank of England on November 5 did not reduce it as much as could have



been imagined, since expectations of an interest rate adjustment were already partly built in to the money market rates in these markets. The fact that the yield curve is now downward sloping also indicates a significant degree of monetary restraint. Greater inflationary expectations, however, dampen the restraint imposed by monetary policy, since they entail lower real short-term interest than would otherwise be the case.

*.....but long-term interest rates have shown a tendency to fall*

The impact of the Central Bank's restraint measures was dampened by the fact that, despite the rise in short-term interest, indexed long-term interest rates fell in 1998. The main reason for this trend is probably the abolition of restrictions on external capital movements, which has gradually been forcing down interest rates in Iceland towards foreign levels, while liquidity in the secondary market has also contributed to lower yields. Long-term real interest rates have a greater impact on private consumption and investment than short-term ones. Interest rates on housing loans and bank loans are most important in this respect, and interest on indexed bank loans fell by much less last year than treasury bond rates. Since interest rates have a somewhat delayed effect on expenditure, last year's reduction in long-term interest rates can be expected to stimulate demand this year to some extent. In 1999 this trend has been reversed. At the end of October, interest rates on indexed long-term obligations were somewhat high-



er than at the beginning of the year, while unindexed rates had gone up even more in pace with deteriorating inflationary expectations and rises in the Central Bank policy rate. The Central Bank's restraint measures have played some part in this development. They have conceivably prevented a further drop in long-term interest rates, which would have fuelled domestic demand even more.

*Economic policy needs to try to avoid a hard landing*

One result of the growth in domestic demand in the past year or two has been to push capacity utilization beyond its long-term potential level. In recent months this has been causing the economy to overheat, which coupled with special circumstances has prompted a substantial rise in inflation. If the growth in domestic demand is not sharply reduced in the near future, and if monetary and lending expansion cannot be curbed, a harsh readjustment process cannot be avoided later. In a worst-case scenario – if the economy does not begin to slow down, and if excessive wage rises result from the forthcoming wage agreements – growing inflation and the widening current account deficit could force a depreciation of the króna at the same time as the government is compelled to increase monetary and fiscal restraint in order to keep inflation under control. A reduction in real disposable incomes would be unavoidable then. Domestic demand would be likely to drop sharply as a result, and unemployment would increase.

Fortunately, the likelihood of this happening is still a fairly distant prospect, but it must nonetheless remain the main economic policy task in the coming months to prevent such a sequence of events and aim instead for a “soft landing.”

The national budget and draft treasury budget which have now been presented for the year 2000 assume such a “soft landing” for the economy. However, there are many signs that demand growth in 1999 is underestimated in the national budget, and that this year's current account deficit is under-predicted. Economic growth would need to be even lower than the 2.7% now forecast by the National Economic Institute in order to defuse demand pressure, but the probability of this actually happening is correspondingly smaller. The Central Bank estimates that economic growth could be at 3½% next year. The reason is a greater level of investment than in the NEI forecast, even though the same assumptions are made in other respects. Furthermore, the Central Bank's forecast from October 25 assumes 4% inflation next year, based on an unchanged exchange rate from that date. This is completely unacceptable. There is thus a pressing need to apply all economic policy instruments with full force against excessive growth in domestic demand and monetary and lending expansion.

The Introduction to this publication discusses the immediate economic policy priorities. The most important point in this respect is continuing monetary restraint and a larger budget surplus than envisaged in the draft now before parliament. Another premise for achieving a “soft landing” is that next year's wage agreements must be compatible with a reduction in inflation from its present rate. If these focuses are followed through, there is a strong likelihood that it will prove possible to restore price stability and balanced economic growth without a hard landing. Among other things, this claim is backed up by the comparison made above between the present period of economic overheating and that at the end of the last decade. Although the situation now is to some extent more volatile due to greater indebtedness and unrestricted capital movements, the foundations of the economy are on the whole much stronger.