Strategy Document 1/03

Monetary policy in the period 5 March to 25 June 2003

Discussed by the Executive Board at its meeting of 5 February 2003. Approved by the Executive Board at its meeting of 5 March 2003

Background

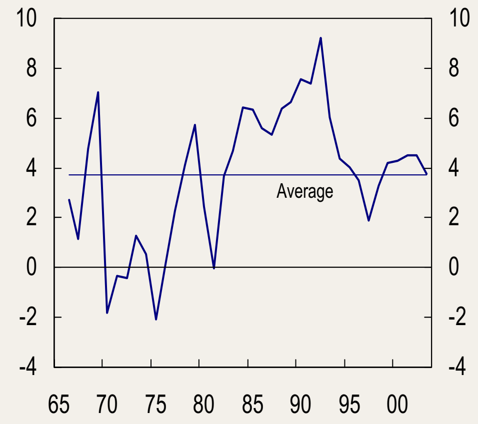
Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent. Monetary policy influences the economy with long and variable lags, and the Bank must be forward-looking in interest rate setting. The key interest rate (the sight deposit rate) is set on the basis of an overall assessment of the inflation outlook, normally two years ahead. A medium-term horizon also contributes to dampening fluctuations in the real economy. The key rate will normally be changed gradually so that we can assess the effects of an interest rate change and other new information about economic developments.

In the discussion of monetary policy strategy on 8 October, the Executive Board considered that a sight deposit rate in the interval 6½-7½ per cent was appropriate at the end of February 2003. The interval was contingent on developments in the krone exchange rate and the projections for economic developments. The sight deposit rate was lowered by ½ percentage point at the monetary policy meetings of 11 December 2002 and 22 January 2003. In the press release following the monetary policy meeting on 22 January, the Bank stated: "According to Norges Bank's assessment, with an interest rate of 6.0 per cent, the probability that inflation two years ahead will be lower than 2½ per cent is greater than the probability that it will be higher." The krone has remained strong since the previous Strategy Document, but depreciated somewhat at the end of February.

Economic developments, uncertainty and the inflation outlook

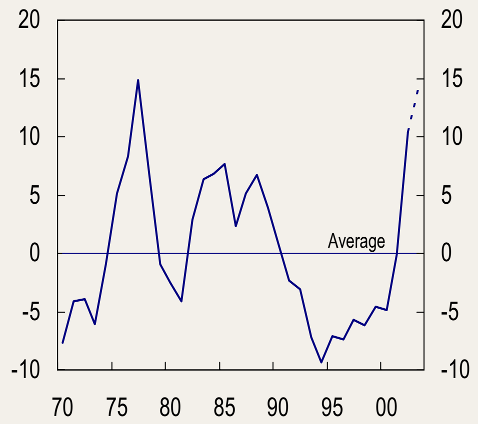
In recent years, following a long period of expansion, the Norwegian economy has been marked by a shortage of real economic resources and high domestic cost inflation. House prices have risen sharply, and household borrowing has been high. It has been appropriate to pursue a relatively tight monetary policy. The level of real interest rates has been ½ - 1 percentage point higher than the historical average (see chart). At the same time, the krone has appreciated, particularly in the past year. The impact of monetary policy has gradually intensified as interest rates abroad have fallen and demand for Norwegian krone has increased.

Chart 1 Real interest rate. 1966-2002



Source: Norges Bank

Chart 2 Real exchange rate. 1970-2002.



Source: Norges Bank

Global growth has been weak and unsteady over the last few years. The global downturn has generated negative impulses to the Norwegian economy through the appreciation of the krone and the decline in share prices. Oil prices have remained high. The interaction between high domestic wage growth, a strong krone and weak growth in export markets has squeezed profitability in most industries. Many enterprise must cut costs substantially. Unemployment in Norway edged up through last year, but unemployment is lower than the average for the 1990s. In recent months, house price inflation and credit growth have slowed, but growth in credit to households is still very high. Economic growth in the mainland economy is lower than potential growth, and the output gap as measured here is closing.

Important developments since the previous strategy discussion are:

- Global growth has been somewhat weaker than projected, particularly in Germany and Sweden. Key rates have been reduced in the US, the euro area, Denmark, Sweden, Iceland and the UK. The US dollar has depreciated. Oil prices have increased measured in US dollars.
- Domestic demand has broadly been in line with projections.
- The central government budget compromise for 2004 was in keeping with the fiscal rule.
- The social partners agreed to show moderation in this year's interim wage settlements.
- Households are less optimistic about the outlook for the Norwegian economy and their own financial situation.
- Industrial leaders in Statistics Norway's business tendency survey expect negative developments between the third and fourth quarter of 2003.
- The underlying rise in prices has been broadly in line with projections.
- Electricity prices have risen sharply. This will result in high CPI inflation this year. CPI inflation may be very low next year.

The upswing abroad has still not materialised. Very low interest rates and tax cuts in the US and other countries are stimulating activity. The forecasts for economic growth this year have been revised downwards, but we expect growth to pick up next year. Inflation is expected to remain low among Norway's trading partners, and the projections remain unchanged in relation to the previous *Inflation Report*.

The international situation is marked by political uncertainty, reflecting fears of war in Iraq and the situation in North Korea. Fears of war, low oil production in Iraq and the oil production disruptions in Venezuela have pushed up oil prices to more than USD 30 per barrel. Crude oil stocks in the US and other OECD countries are low. Oil capacity utilisation in Saudi Arabia is high. In the short term, this will keep oil prices at a high level, but developments may also lead to a subsequent fall and wide oil price swings. We assume that oil prices will gradually fall to USD 20 in the course of 2004-2005. Continued high oil prices may have a dampening impact on global growth and fuel inflation.

There are other risks to the growth outlook. The effects of the sharp fall in equity prices and earlier overinvestment in several sectors have not yet been exhausted. House prices have risen sharply in the UK. There has also been a considerable increase in the US in recent years. A correction in house prices could have a substantial effect on the household saving ratio and restrain consumption growth. The US has been running a substantial trade deficit for several years. Sustained, sharp growth in debt increases the risk of a pronounced depreciation of the US dollar. If the US dollar continues to depreciate, growth may be negatively affected in Europe and Japan through lower exports. On the other hand, the Iraq conflict may be resolved peacefully or swiftly, which will reduce the uncertainty in the global economy, partly via lower oil prices.

Continued moderate and unsteady growth in the international economy will contribute to a further cooling of the Norwegian economy. Household confidence in the Norwegian economy and their own financial situation weakened considerable last autumn. This was followed by a marked increase in electricity prices. The rise in electricity prices may lead to lower growth in household real disposable income and weaker growth in private consumption in 2003 than projected in the previous *Inflation Report*. On the other hand, the interest rate cuts in December last year and January this year will contribute to holding up growth in private consumption. Higher electricity expenses in the private sector will to a large extent be offset by higher public sector revenues, probably limiting the effect on domestic demand over the next two to three years.

According to preliminary figures from the Technical Reporting Committee on income settlements, wage growth was 5.6 per cent in 2002. The figures for large collective bargaining groups are based on preliminary statistics. The final figures will probably show somewhat higher annual wage growth. We have therefore left our projection of 5¾ per cent in the previous *Inflation Report* unchanged. Due to a considerable carry-over, wage growth will reach 5 per cent this year even with low pay increases. Unemployment rose last year, particularly in service industries. Employment growth in internationally exposed industries is expected to be weak in the period ahead. The increase in allocations to public entities is being consumed by the high level of wage growth, which will probably result in low employment growth. The prospect of an easing of labour market implies that wage growth may be lower this year than projected in the previous *Inflation Report*. The projections for wage growth in 2004 are contingent on a number of factors such as labour market tightness and thus our assumptions concerning the interest rate and exchange rate.

Unstable relationship between the interest rate differential and the krone exchange rate

The krone continued to appreciate after the previous strategy discussion. One reason why the krone has appreciated is that interest rates in Norway are higher than interest rates in most other countries. This is in turn due to the relatively high level of wage and cost inflation in Norway, which reflects the divergence between cyclical developments in Norway and abroad. The possibility of war in Iraq and high oil prices may have increased the flow of short-term capital into Norway and contributed to the appreciation of the krone. The uncertain political situation will also have a bearing on developments in the coming months. As a result, there may be wide variations in the risk premium and an unstable relationship between the interest rate differential and the krone exchange rate. At the end of February, the krone had depreciated by more than 5 per cent from its strongest level in early January. The depreciation can be seen in the light of expectations of weaker developments in the Norwegian economy, as reflected in the interest rate reduction this winter and expectations of further interest rate cuts. In order to shed light on the significance of the unstable relationship between the interest rate differential and the krone, various scenarios for the Norwegian economy in the period to 2005, using different exchange rate and interest rate assumptions, are discussed below.

Alternative 1: The krone remains strong

The real exchange rate is considerably stronger than the historical average for the last 30 years. With a continued, strong krone and higher wage growth than among our trading partners, cost competitive-

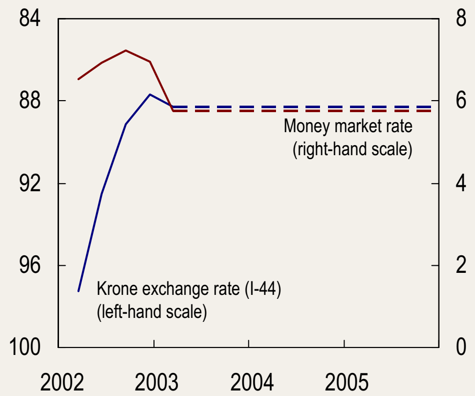
Table 1 Projections for main macroeconomic aggregates with sight deposit rate of 5.5 per cent and krone exchange rate equal to avereage for February 2003. Percentage change from previous year. Change from previous Inflation Report in parenthesis.

	2003	2004	2005
Mainland demand	1¼ (-1)	2½ (0)	2½
Private consumption	2¾ (-¾)	3¼ (0)	3
Public consumption	¾ (0)	2 (0)	2
Fixed investment	-4 (-3¾)	½ (0)	2
Mainland GDP	1¼ (-½)	2 (-¼)	2¼
Employment	-½ (-½)	0 (-½)	½
LFS-unemployment[1)]	4½ (¼)	4¾ (½)	4¾
Annual wages	5 (-½)	4½ (-¾)	4½
CPI	3¼ (1¼)	1 (-1¼)	2¼
CPI-ATE	1¾ (-¼)	2 (-¼)	2¼

[1)] Percentage of labour force

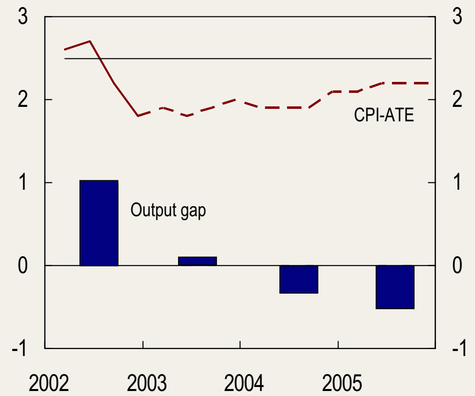
Source: Norges Bank

Chart 3a Alternative 1: The krone exchange rate remains strong.



Source: Norges Bank

Chart 3b Alternative 1: The krone exchange rate remains strong.



Source: Norges Bank

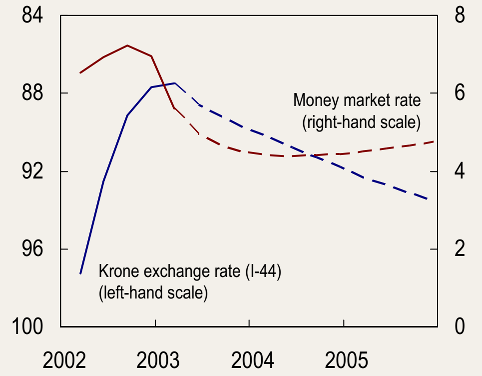
ness will have weakened by 15-20 per cent in relation to this average by the end of 2005. The scaling back of internationally exposed industries may intensify and expose more industries to international competition. Many enterprises will probably have to close or maintain operations through sharp cost cuts. This will also lead to lower activity in the sheltered sector. The strong krone has increased the price of Norwegian goods and service in relation to foreign prices, which is having a negative effect on demand for goods, services and labour.

With a constant interest rate of 5½ per cent, mainland economic growth in Norway may be lower than potential growth in the period to 2005. Pressures in the Norwegian economy will ease. The output gap, as measured here, will turn negative. Unemployment will edge up, and wage growth will be lower than projected (see Table 1). A strong krone will contribute to lower imported price inflation. Consumer price inflation may be below target over the next two years. In this scenario, inflation will also be below target three years ahead. This shows that with an interest rate of 5½ per cent and a constant exchange rate monetary policy is too tight.

Alternative 2. The krone depreciates

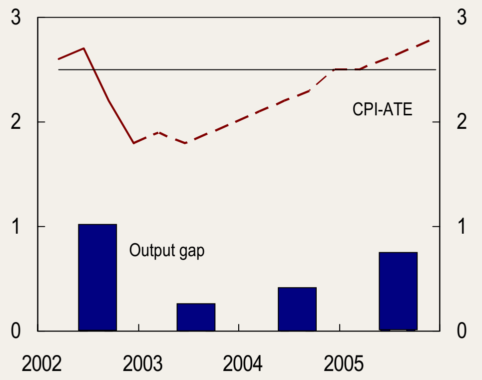
A gradual weakening of the krone has been priced into the forward foreign exchange market. The krone is expected to be 6-7 per cent weaker than the average for the last month towards the end of 2005. The money market has priced in an interest rate reduction of about 1 percentage point in the period to summer (see chart below). Lower interest rates may fuel household optimism and lead to an increase in purchasing power. Consumption growth could continue to provide a substantial growth impetus to the Norwegian economy. Combined with a weaker krone, this may limit downscaling in the manufacturing sector. Overall, this may entail a somewhat smaller increase in unemployment than in Alternative 1. In this alternative wage growth may remain somewhat higher than 5 per cent (see Table 2). The weakening of the krone may result in a somewhat higher rise in prices for imported consumer goods. At the two-year horizon, CPI-ATE inflation is projected at 2¾ per cent. Inflation continues to rise in 2005. The output gap will be positive at about last year's level in 2005. The inflation outlook and general economic developments imply that the interest rate should not be set as low as the level priced into the market if the krone depreciates in pace with the forward rate.

Chart 4a Alternative 2: The krone exchange rate weakens. Forward interest rate and forward exchange rate



Source: Norges Bank

Chart 4b Alternative 2: The krone exchange rate weakens. Forward interest rate and forward exchange rate



Source: Norges Bank

Table 2 Projections for main macroeconomic aggregates with forward interest rate and forward exchange rate. Percentage change from previous year. Change from baseline scenario in table 1 in parenthesis.

	2003	2004	2005
Mainland demand	1½ (¼)	3½ (1)	3½ (1)
Private consumption	3 (¼)	4¼ (1)	3¾ (¾)
Public consumption	¾ (0)	2 (0)	2 (0)
Fixed investment	-3½ (½)	2½ (2¼)	4½ (2½)
Mainland GDP	1½ (¼)	2½ (½)	2¾ (½)
Employment	-¼ (¼)	¼ (¼)	1 (½)
LFS-unemployment[1)]	4½ (0)	4½ (-¼)	4 (-¾)
Annual wages	5 (0)	5¼ (¾)	5¼ (¾)
CPI	3¼ (0)	1¼ (¼)	2¾ (½)
CPI-ATE	1¾ (0)	2¼ (¼)	2¾ (½)

[1)] Percentage of labour force

Source: Norges Bank

Monetary policy ahead

The past year has been marked by sharp wage growth, a global downturn and a pronounced appreciation of the krone. Over a somewhat longer horizon, it is fairly probable that the appreciation of the krone will be fully or partly reversed. As global growth prospects improve and the interest rate level normalises, other currencies will become more attractive as investment currencies. A resolution of the Iraq conflict may reduce the interest in Norwegian kroner. Domestic developments will also affect exchange rate developments ahead. Easing pressures in the Norwegian economy and clear signs that the inflation target is being incorporated as an anchor for wage formation may pave the way for lower interest rates and a weaker krone exchange rate. Experience shows that the real exchange rate tends to return to its long-term average fairly rapidly after periods of depreciation or appreciation. However, the economic policy regime has been changed. The new guidelines providing for a gradual and sustainable increase in the use of petroleum revenues in the Norwegian economy means that fiscal policy has a medium-term anchor. Fiscal policy is no longer used in the same way to stabilise domestic demand. The interaction between the various components of economic policy has changed. At the same time, it is possible that wage developments in the internationally exposed sector do not have the same impact on settlements in other sectors as was the case earlier. This may amplify exchange rate fluctuations, and it may take somewhat longer for the real exchange rate to return to a more normal level.

The appreciation of the krone and high wage growth over recent years has eroded cost competitiveness in the internationally exposed sector in Norway. The real exchange rate is also strong from a historical perspective. There is uncertainty associated with the effects of a strong krone on output and employment. At the same time, the appreciation of the krone has resulted in a subdued rate of increase in prices for imported consumer goods and low CPI inflation. On balance, our analyses indicate that monetary policy is too tight.

Developments in the krone are uncertain and are also influenced by other factors than Norwegian interest rates. Even if we lower the interest rate somewhat, the interest rate differential will be wide. The krone may remain strong for a period. Some analysts have argued that the krone will remain strong as long as there are hardly any other currencies that yield a return as high as the Norwegian krone. New Zealand with 5¾ per cent, Australia with 4¾ per cent and some central European countries have comparable interest rates. Unless the strong krone is due to new expansionary impulses to the Norwegian economy, substantial interest rate cuts will be needed to reach the inflation target two years ahead. Interest rate cuts will stimulate domestic demand, which may reach a historically high level. Consequently, there is a risk of a renewed acceleration in house a credit growth. The resulting tensions may trigger a marked depreciation in the krone if the special factors that led to a strengthening of the krone gradually cease to apply. In conjunction with high wage growth, the result may be substantial inflationary impulses.

The uncertainty ahead is also linked to economic developments abroad and in Norway. Employment in Norway is projected to fall in 2003. The deterioration in competitiveness may prove to have a greater impact than we have assumed. Forecasts for global economic growth have been revised downwards this winter. It cannot be ruled out that the world economy is facing a fairly long period of stagnation. This will have an impact on the Norwegian economy. Sooner or later the oil market will also feel the downturn, with downward pressure on oil prices.

Market participants expect interest rates to be reduced by about one percentage point in the period to summer, which may lead to a depreciation of the krone. If the krone depreciates in line with today's forward rate, inflation may be somewhat higher than the inflation target two years ahead, unless the krone depreciates even further as result of a more pronounced downturn in the Norwegian economy than we have assumed. At the same time, output growth may return to a level that is higher than trend growth.

A more moderate reduction in the interest rate may gradually lead to a weakening of the krone, but the krone may show a more limited depreciation than implied by the forward rate. This could push up the rise in prices for imported consumer goods. In 2004 and 2005, the output gap may become less positive than in the alternative where the interest rate and the exchange rate follow the forward interest rate and the forward exchange rate, but it is unlikely that it will close.

On balance, our projections imply that the sight deposit rate should be in the interval 4¾-5½ per cent at the end of June 2003. If the krone remains strong or appreciates further, it may be appropriate to reduce the interest rate to the lower range of the interval or below the interval. Likewise, it may be appropriate to consider an interest rate in the upper range of the interval or higher than the interval if the krone should depreciate sharply. Any interest rate reactions must be based on an analysis of the background for the exchange rate movements and an assessment of the duration of a change in the exchange rate.

The Taylor rate, which is not forward-looking, is now about 5¼ per cent, a decline of about 1 percentage point in relation to the previous strategy discussion. The reason behind the decline is that actual inflation, as measured by the CPI-ATE, has fallen and the output gap has narrowed.

Several factors warrant a gradual approach to the conduct of monetary policy:

- The relationships in the foreign exchange market are unstable. The effect of a change in interest rates on the exchange rate may vary.
- There is a risk of continued wage-wage spirals as a result of wage settlements and it takes time to address the problems associated with wage formation. It is still uncertain how quickly the social partners will incorporate the inflation target as an anchor in wage negotiations.
- The effects of changes in the exchange rate on inflation and economic developments are uncertain. The impact on output and employment may be greater than we have assumed. This would be reflected in the labour market and thereby have implications for interest rate setting.
- The long period of expansion in the Norwegian economy has resulted in high house prices and a high debt ratio in large parts of the private sector. The rise in house prices now appears to be levelling off. Developments in the housing market and lower household optimism may reduce credit growth in the period ahead. Further interest rate cuts may, on the other hand, lead to a renewed acceleration in house prices and credit growth. Developments in the housing market and credit market through the spring are therefore important when assessing further monetary policy action.

Strategy

- Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent.
- The key rate is set on the basis of an overall assessment of the inflation outlook, normally two years ahead. The key rate will normally be changed gradually so that we can assess the effects of interest rate changes and other new information on economic developments.
- With financial market confidence in the inflation target, Norges Bank has greater scope for promoting stability in the real economy. This scope will increase further as the inflation target is incorporated as an anchor for wage formation.
- Economic developments broadly in line with projections and the current balance of risks imply a sight deposit in the interval 4¾-5½ per cent at the end of June 2003.
- Developments in the krone exchange rate and the effects of the appreciation of the krone on inflation and output are uncertain. If the krone remains strong or appreciates further, it may be appropriate to reduce the interest rate to the lower range of the interval or below the interval. If the krone depreciates sharply it may be appropriate with an interest rate in the upper range of the interval or higher than the interval. Any interest rate reaction must be based on an analysis of exchange rate movements and an assessment of the duration of the change in the exchange rate.

Recommendation

The Executive Board endorses the conclusions above.