# The conduct of monetary policy

Address by Governor Svein Gjedrem at Norges Bank's conference on monetary policy, 26 March 2004

*The text below may differ slightly from the actual presentation. The address is based on Norges Bank's Annual Report and Accounts for 2003 and previous speeches.*

The most important contribution monetary policy can make to sound economic developments in the long term is to ensure low and stable inflation. In the shorter and medium term, monetary policy can also contribute to smoothing fluctuations in output and demand.

We can choose our own target for inflation over time. Inflation in Norway can be low and stable even if external inflation is high or very low. The operational target of monetary policy as defined by the Government is inflation of close to 2½ per cent over time. Norges Bank has based its monetary policy a symmetrical target - it is just as important to avoid an inflation rate that is too low as it is to avoid an inflation rate that is too high.

The inflation target provides an anchor for economic agents' expectations concerning future inflation. It provides an important basis for choices concerning saving, investment, budgets and wages. The inflation target provides an anchor for long-term inflation expectations.

Norges Bank operates a flexible inflation targeting regime. Variability in output and employment and in inflation are given emphasis in interest-rate setting. Flexible inflation targeting builds a bridge between the long-term objective of monetary policy, which is to keep inflation at bay, and the objective of stability. The inflation target is a vehicle for, not an obstacle to, monetary policy's contribution to smoothing fluctuations in output.

Normally, Norges Bank sets the interest rate with a view to achieving an inflation rate of 2½ per cent two years ahead. There are two reasons for this.

- A reasonable balance is normally achieved between stabilising inflation on the one hand and smoothing fluctuations in output and employment on the other.
- Changes in the interest rate affect inflation with a lag.

It would in general have been possible to achieve the inflation target at a horizon shorter than two years by changing the interest rate more rapidly and more markedly. This might, however, have a greater impact on output and employment. A horizon of more than two years may result in persistent deviations from the inflation target.

The path of inflation and the real economy in the period ahead will be taken into account when setting interest rates. In situations where the central bank's projections indicate that inflation two years ahead will be equal to the target while there is substantial slack in the economy, it may be appropriate to orient monetary policy in such a way that inflation projections may temporarily overshoot the target somewhat in order to remedy the imbalances in the real economy.

We have also indicated that in the event of runaway overall credit growth and a sharp rise in equity prices as well as property and house prices, it may be necessary to reassess the time horizon.

A rapid and pronounced change in the interest rate may be appropriate in cases where there is a risk that inflation may deviate considerably from the target over a longer period, or where heightening turbulence in financial markets or a cost-push shock resulting from wage negotiations indicates that confidence in monetary policy is in jeopardy. Financial market confidence in the inflation target provides Norges Bank with greater scope for promoting stability in output and employment through monetary policy. This scope will also increase as the inflation target is incorporated as an anchor for wage formation.

### Assessment of monetary policy

In the course of 2003, the interest rate was reduced by 4.25 percentage points. The sight deposit rate stood at 2.25 per cent in December. The interest rate reductions since December 2002 have contributed to weakening the krone. Measured by an index of 44 import countries (I-44), the krone depreciated through 2003 by almost 11 per cent since its strongest level in January of the same year.

An assessment of the conduct of monetary policy in Norway is presented in the *Annual Report* in the form of answers to the following questions:

- Was inflation in 2003 close to the target of 2½ per cent? What were the reasons for any deviations from the target?
- To what extent has the conduct of monetary policy in 2003 increased the prospects of bringing inflation close to target two years ahead?
- Has the conduct of monetary policy contributed to stability in output and employment?
- Has monetary policy in 2003 underpinned confidence that future inflation will be 2½ per cent?
- Was monetary policy in 2003 predictable for financial market participants?

### Assessment of developments in inflation and output

In the years 1998-2002, the Norwegian economy was characterised by labour shortages and a considerably higher rise in labour costs than among trading partners. 2002 was the fifth consecutive year of very high annual wage growth. Wage growth was substantially higher than the level that over time is consistent with the inflation target and with normal productivity growth. Pay increases varied widely across the different groups. In Norges Bank's view, there was therefore a substantial risk of new wage-wage spirals. Further rounds of such strong wage increases might have led to a considerable decline in output and employment.

Monetary policy was therefore tightened through an interest rate increase in 2002 while the krone remained strong. At the one-year horizon, the strong krone would push down inflation to below 2½ per cent, but the effects of strong wage growth would subsequently dominate. Monetary policy was expected to contribute towards curbing pressures in the domestic economy.

Inflation was thus expected and intended to be low in 2003. In the October 2002 *Inflation Report*, inflation was projected to fall to 1¾ per cent in summer 2003. However, price developments are uncertain even six months to a year ahead. There was thus a possibility that inflation could fall even lower than projected, and be more than one percentage point below target.

Nevertheless, the difference between the outcome and the projection was unusually wide. Consumer price inflation in Norway declined considerably through 2003. Core inflation (measured by the CPI-ATE) rose by 1.1 per cent from 2002 to 2003. As from May 2003, the year-on-year rise in the CPI-ATE has been more than one percentage point below target. Annual CPI-ATE inflation fell to -0.1 per cent in February 2004.

The difference between outcome and projection was substantial because the economy was exposed to considerable unexpected disturbances.

The krone appreciation through 2002 pushed down import price inflation. Global economic developments were an important factor behind the appreciation of the krone. In 2003, growth in the global economy moved on a different path and was substantially weaker than Norges Bank and other observers had expected. Weak developments in the global economy resulted in lower interest rates abroad and a wider interest rate differential between Norway and other countries. Negative events such as the accounting scandals in large US companies, fears of terror and war in Iraq and the spread of SARS contributed to weak growth and low inflation in other countries. Developments in international equity markets and the risk of higher oil prices also contributed to strengthening the krone.

A change in trade patterns and external economic conditions have resulted in an unexpectedly sharp fall in import prices, even when measured in terms of what Norwegian importers pay in foreign currency. The change in trade patterns has led to a particularly sharp decline in prices for clothing, footwear and audiovisual equipment. Rapid technological advances have also pushed down prices for audiovisual equipment.

In Norway, competition has probably increased in the retail industry, transport and other service sectors in recent years. In the first round, heightened competition affects companies' profit margins. But enterprises will respond by reducing their costs, to a certain extent within the individual business. Subcontractors will also be required to reduce their prices and enhance efficiency. Increased competition therefore usually triggers higher productivity growth in the economy. Low inflation may thus be matched by higher productivity.

Under a flexible inflation targeting regime, monetary policy shall contribute to stability in both inflation and output. The economy has experienced a soft landing after the long period of high cost inflation in Norway and sluggish external activity.

The *output gap* is a measure of the difference between the actual level of output in the economy and the output level that is consistent with stable inflation over time. The output gap is not directly observable, and must be estimated. A simple method of estimating the output gap is to measure the difference between actual and potential output. It is usually assumed that production capacity over time grows at trend because the labour force expands and because productivity rises. Trend growth may vary because there are variations in labour force growth. New technology and new forms of organisation can also affect productivity growth. Developments in the output gap provide a basis for assessing cyclical developments and can thus also shed light on domestic price and cost pressures in the economy.

The output gap, as calculated by Norges Bank, shows that capacity utilisation has decreased from a high level and is now on a par with the level in the years 1995-97, before cost inflation accelerated. The output gap was only marginally negative in 2003.

Wage growth is a direct indicator of the social partners' perception of employment and labour shortages. Real wage growth must match productivity growth over time. If real wage growth is higher than underlying productivity growth, profitability in the business sector will deteriorate.

The *wage gap* is defined as the difference between wage growth in Norway and wage growth that over time is consistent with stable economic developments. From 1990 to 1995, when unemployment was relatively high in Norway and actual output was below potential, wage growth in Norway was lower than that of its trading partners. From 1997, however, the wage gap was positive. In this period, resource utilisation increased markedly. Towards the end of the period, the wage gap narrowed as resource utilisation approached a more sustainable level. There seems to be a close relationship between this wage gap and capacity utilisation in the economy as Norges Bank measures it by the output gap.

*Unemployment* edged up in 2002 and 2003, but is nonetheless considerably lower than at the beginning of the 1990s and is now approximately on a par with the average for the 1990s measured by the number of registered unemployed and by the LFS. The number of registered unemployed and participants in labour market programmes is lower than the average for the 1990s. Wage growth in the 1990s averaged 4½ per cent, while consumer price inflation averaged 2½ per cent, a rate that is on a par with the current inflation target.

Equilibrium unemployment refers to the level of unemployment where wage growth is consistent with stable and sustainable economic growth. Consequently, equilibrium unemployment may change over time, and will depend partly on labour market flexibility and wage formation. We have no fixed perception of the level of equilibrium unemployment at a given point in time.

The *employment rate*, that is employment as a share of the working age population, has exhibited a rising trend since the early 1970s. This is primarily the result of an increase in the participation rate for women. The rate usually varies with the business cycle and is higher than normal in a boom period. The employment rate was above a linear trend from 1996 until 2003.

*Credit growth* is an indicator of private sector demand, which in equilibrium may be assumed to grow approximately in pace with nominal GDP. If we assume that mainland GDP grows at a trend rate of close to 2½ per cent in real terms and inflation is on target, credit growth may be around 5 per cent.

Underlying growth in private sector credit from domestic sources (C2) has fallen steadily from 9 per cent at the beginning of 2003 to 7.1 per cent at year-end. Year-on-year growth in total private sector gross debt excluding petroleum activities and shipping (C3 Mainland Norway) fell from 7.3 per cent in December 2002 to 5.2 per cent in December 2003. Developments in overall credit growth do not therefore indicate that pressures are strong. The signals given by credit developments vary, however. Growth in household borrowing has been high, while enterprises have reduced debt.

### Has the conduct of monetary policy in 2003 increased the prospects of bringing inflation close to target two years ahead?

The easing of monetary policy has aimed to bring inflation up to the target of 2½ per cent. Core inflation will nevertheless be lower than the inflation target for a period ahead. The period in 2002 and early in 2003 when the krone was strong will continue to contribute to a low rise in prices for imported goods and services. External inflation is still likely to remain low.

The pay increases in the 2003 wage settlement were lower than projected by Norges Bank. This break with the relatively high wage growth in Norway from 1998 to 2002 must be viewed in connection with the monetary policy tightening in 2002 and weak developments in the global economy. It has probably also been of considerable importance that the expensive wage settlement in 2002 had strong negative effects on the economy and activity in the public sector and that this was taken into account in the 2003 wage settlement. In many service industries, the possibility of passing on higher labour costs to prices has probably been more limited than earlier.

Consumer price inflation was projected to be well below the inflation target in 2003, but as indicated earlier, the year-on-year rise in inflation was less than 1 per cent in summer 2003. Without a pronounced easing of monetary policy, inflation might be too low for an extended period. This might lead to expectations of continued very low inflation. In such a situation, it may be more demanding to increase economic activity. The Executive Board decided, therefore, that it was appropriate to reduce the interest rate considerably. Nonetheless, inflation fell further to 0.4 per cent in December 2003 and -0.1 per cent in February 2004.

Monetary policy was also eased in 2003 because the effects of the interest rate reduction seemed to be weaker than assumed. The effect on the exchange rate was dampened because interest rates in other countries were kept at a low level or reduced.

When assessing the inflation outlook, it must be taken into account that the low rate of inflation primarily reflects the development in prices for imported consumer goods and domestically produced goods that are sold in competition with foreign goods. The rise in prices for other domestically produced goods and services has not declined to the same extent. If the fall in prices for imported consumer goods can largely be attributed to the strong krone exchange rate in 2002 and early in 2003, it may be assumed that a large portion of the fall in inflation will be temporary. For some imported consumer goods, however, we have observed a falling trend in prices as a result of a shift in trade patterns. This may continue to contribute to low inflation ahead. As mentioned, increased competition has also boosted productivity and curbed the rise in prices for domestically produced goods and services.

The inflation outlook was assessed in *Inflation Report* 1/04, presented on 11 March 2004. Under the assumption that the interest rate and the exchange rate will move in line with forward market expectations, the projections in the *Inflation Report* indicate that inflation will be close to target at the two-year horizon. Inflation will rise considerably in the course of 2004, primarily owing to the unwinding of the effects of the krone appreciation in the near term. The krone has now reverted to its long-term average so that the effect of the appreciation may be reversed. In the somewhat longer term, the interest rate reductions will also have an effect through higher demand in Norway. The easing of monetary policy in 2003 may make a substantial contribution to bringing inflation back to target. At the same time, Norges Bank expects global activity to continue to increase and externally generated inflationary impulses to pick up somewhat.

### Confidence and predictability

With confidence in the inflation target, monetary policy can make a greater contribution to smoothing fluctuations in the economy. Inflation expectations in Norway provide an indication of whether there is confidence that the inflation target will be achieved.

The survey of the first quarter of 2004 carried out by TNS Gallup shows that inflation two years ahead is generally expected to be slightly lower than the inflation target of 2½ per cent. Over the past year, analysts, researchers and employer organisations have lowered their expectations somewhat concerning inflation two years ahead. These groups' inflation expectations five years ahead have, however, remained fairly stable around the inflation target. Inflation expectations among employee organisations seem to vary relatively widely from one survey to the next.

Consensus Forecasts Inc. provides a monthly summary of various institutions' forecasts for consumer price inflation in Norway. Forecasts are provided for up to two years ahead. In the February survey, the average forecasts for 2004 and 2005 were 1.2 and 2.3 per cent respectively. The low forecast for 2004 must be viewed in connection with developments in electricity prices. Forecasts with a longer time horizon are published twice a year, in October and April. The forecasts published in October 2003 showed that inflation was expected to edge up. At both the 5-year and 10-year horizon, inflation was forecast at 2.4 per cent. This was 0.1 per cent lower than in October 2002.

The forward rate differential between Norway and Germany may also provide an indication of developments in inflation expectations in Norway. The inflation target for Norway may be somewhat higher than the objective for the euro area.[1] In the euro area, long-term expectations are just below 2 per cent.[2] With confidence in the inflation target, forward rates in Norway should be somewhat higher than in Germany. The forward rate differential also reflects premia for differences in liquidity in the Norwegian and German markets. The long-term forward rate differential between Norway and Germany was a little less than 1 percentage point in 2002 and narrowed somewhat in 2003. On the whole, pricing in the capital market indicates so far that there is market confidence that the inflation target will be achieved.

The information from expectations surveys and long-term interest rates indicate that the market expects inflation to be lower than 2½ per cent over the next year. Looking further ahead, inflation expectations do not seem to deviate substantially from the inflation target. The easing of monetary policy this year has contributed to relatively stable expectations about future inflation around the inflation target.

Compared with other inflation-targeting countries, the average impact on Norwegian money market rates was fairly pronounced around the monetary policy meetings in 2002. The impact was considerably less pronounced in 2003. The interest rate decisions were therefore somewhat more predictable.

### Conclusion

Norway is not the only country to have experienced sharp falls in inflation. In Sweden, core inflation has fallen sharply over the past months to 0.1 per cent. Excluding energy prices, core inflation stands at 0.7 per cent in Sweden. Inflation is also falling in Finland and Denmark. The decline in prices for imported goods is pushing down prices, but high productivity growth may also have made a contribution.

Inflation has also decelerated in the US and the euro area, although the impact in the euro area is less pronounced than in Scandinavia.

An economic turnaround has occurred in Norway, with a soft landing after the long period of high domestic cost inflation and sluggish external activity.

Output has returned to trend. Employment has returned to trend. Unemployment is at the 1996-level, and is at the average for the 1990s. Wage growth is at a level that is consistent with stable competitiveness over time with normal productivity growth. Overall credit growth is balanced. Credit is expanding broadly in line with trend growth in nominal GDP. Labour costs in Norway relative to our trading partners have now reverted to a long-term average. The nominal krone exchange rate as measured by the I-44 is in line with the average for the 1990s. The interest rate is on a par with the level among our trading partners. Inflation expectations are approximately consistent with the target.

In that respect, there is equilibrium in the Norwegian economy at present.

But inflation is low. Lagged effects of the strong krone in 2002 are exerting downward pressure on inflation. At the same time, a change in trade patterns and external economic conditions are pushing down import prices, even when measured in terms of what Norwegian importers pay in foreign currency. In Norway, intensified competition appears to be resulting in high productivity growth, which is probably contributing to low inflation.

We expect inflation to rise considerably, however, in the course of 2004, primarily owing to the unwinding of the effects of the 2002 krone appreciation in the near term. In the somewhat longer term, interest rate reductions will also have an effect through increased demand in Norway.

But the Norwegian economy faces a number of challenges.

It may take time before interest rates in other countries are raised substantially. We have seen that in periods, the krone is heavily influenced by changes in the difference between interest rates at home and abroad, and we must take this into account in our interest-rate setting. Themes in foreign exchange markets may shift, however. The impact of interest rate changes on the exchange rate may be less pronounced.

House prices and developments in household credit influence consumption and housing investment. We seek to take account of these indirect effects in our interest-rate setting.

Sharp increases in asset prices and debt accumulation may pose a risk to economic stability. At present, however, debt accumulation is high only in the household sector. There is little borrowing activity in the enterprise sector. House prices are rising, but prices for non-residential property are stable. We have limited scope for restraining structural changes that occur when households increase their debt over several years to invest in housing and other property and assets. The interest rate can be used to reduce credit demand. At present - with low interest rates abroad and a close link between domestic interest rates and the krone - a tighter monetary policy would restrain credit demand primarily because job security would be reduced.

The fall in the value of the krone over the past year has strengthened Norwegian business and industry. The business sector is, however, still feeling the effects of a sharp rise in labour costs over a period of several years. Relative labour costs measured in a common currency are in line with the level prevailing in 1990, but approximately 10 per cent higher than in the mid-1990s. The internationally exposed sector has been scaled back. Those companies that are still operating may be in a better position to bear the high wage level. Nevertheless, costs may hamper activity and employment growth.

Thank you for your attention.

**Footnotes**

[1] The Norwegian inflation target is linked to the CPI, while the ECB follows the HICP. For Norwegian data, HICP inflation has been somewhat lower than CPI inflation.

[2] See the ECB's «Monthly Bulletin», January 2004.