Svein Gjedrem: The conduct of monetary policy

Introductory statement by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), at a hearing before the Standing Committee on Finance and Economic Affairs of the Storting (Norwegian parliament), Oslo, 1 December 2003.

Please note that the text below may differ slightly from the actual presentation. The statement is partly based on the assessments presented in "Report on monetary policy in 2003 - the first eight months" and Norges Bank's Inflation Report 3/2003.

The Charts in pdf can be found on the Norges Bank's website.

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I would like to thank the Storting for inviting Norges Bank to appear for the first time before this Committee to report and answer questions on monetary policy in connection with the Storting's deliberations on the Government's credit report.

The mandate

The operational target of monetary policy as defined by the Government is inflation of close to 2½ per cent over time. The target is symmetrical - it is equally 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. Households, businesses, public entities, employees and employers can base decisions on the assumption that inflation in Norway will be 2½ per cent over time.

We have a very open economy with free capital movements. The krone exchange rate fluctuates from day to day. We do not have the instruments to fine-tune the krone exchange rate. Stable inflation expectations may nonetheless contribute to stabilising the exchange rate. Stability in the exchange rate and in exchange rate expectations over time are dependent on stable inflation expectations, which in turn depend on low and stable inflation.

Norges Bank sets the interest rate so that future inflation will be equal to the inflation target of 2½ per cent. High demand for goods and services and labour shortages normally point to higher inflation. An increase in interest rates curbs demand and keeps inflation at bay. When demand is low and unemployment rises, inflation will tend to slow. Interest rates will then be reduced. The inflation target is therefore a vehicle for, not an obstacle to, monetary policy's contribution to stabilising output and employment. This objective is also expressed in the Regulation on Monetary Policy.

Normally, Norges Bank sets the interest rate with a view to achieving inflation of 2½ per cent at the two-year horizon. There are two reasons for this:

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

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.

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

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.

Norges Bank has based its monetary policy on flexible inflation targeting, where variability in output, employment and inflation are given weight.

How do changes in the interest rate affect the economy?

Norges Bank’s monetary policy instrument is the key rate. Norges Bank’s key rate affects short-term money market rates, and expectations concerning future developments in the key rate are decisive for banks’ deposit and lending rates and bond yields. It may be useful to distinguish between three channels through which monetary policy operates:

- The demand channel
- The exchange rate channel
- The expectations channel

The effect on inflation of changes in interest rates occurs with a lag and may vary in intensity. In the time it takes for a change in interest rates to feed through, other factors will also have an impact resulting in changes in inflation and output. We cannot assume that the various relationships are entirely stable.

As interest rates fall, household and municipal consumption and investment will tend to accelerate. This is because they have more money left over after servicing their debt and because borrowing is less expensive. Corporate finances are strengthened and investment may become more attractive. Higher demand leads to higher output and employment. Wage growth may pick up. Higher wage growth combined with higher profit margins will result in higher inflation.

The effect of interest rate changes may be amplified because the interest rate also affects the krone exchange rate. When interest rates are lower, more people will borrow money and fewer will invest in NOK. Lower interest rates will thus normally lead to a depreciation of the krone. Imported goods will then become more expensive and inflation will accelerate. A weaker krone also boosts exports and improves profitability in Norwegian business and industry. The effect on the exchange rate of a change in interest rates will vary as themes and sentiments shift in the foreign exchange market.

We believe that expectations play an important role when prices and wages are set. Expectations concerning future inflation and economic stability have considerable impact, not least in the foreign exchange market. Inflation expectations also influence wage demands and have an effect when companies adjust their prices. It may be difficult to form an opinion about how expectations are generated. Confidence in the inflation target may provide an anchor. Past inflation rates may also influence what we think inflation will be in the future. There is thus an interaction between inflation expectations and inflation.

If there is confidence in monetary policy, expected inflation will be equal to or close to the inflation target. This contributes to stabilising inflation around the target. The expectations channel thus amplifies the effects of monetary policy. We therefore place considerable emphasis on ensuring that households, companies, the social partners and financial market participants are confident that inflation will remain low and stable.

To the question of how high prices are expected to rise, companies, the social partners and others answer that they expect a rise of 2½ per cent over time. Financial market participants also expect future inflation to be 2½ per cent. This is reflected in developments in long-term bond yields. This indicates that monetary policy has underpinned confidence that future inflation will be 2½ per cent.

Consumer price developments

There were wide fluctuations in the Norwegian economy in the 1970s and 1980s. Economic developments were marked by high and variable inflation. The fixed exchange rate regime, which was introduced in 1986, reinstated monetary policy as an instrument of economic policy in Norway and laid the foundation for more stable economic developments later on. Inflation slowed gradually from the end of the 1980s and has been around 2½ per cent on average since then. The prolonged period of low and stable inflation has probably contributed to anchoring inflation expectations.

When the Government introduced flexible inflation targeting, it set a target for core inflation of 2½ per cent over time.[1]

Core inflation has slowed over the past 12 months and is now considerably below target.

Stabilising developments in output and employment

According to the mandate, one of the aims of monetary policy is to stabilise developments in output and employment. The economy grows over time. Output moves in waves. Actual output will be alternately above and below the long- term trend. The difference between trend output and actual output is called the output gap. Stabilising output means aiming to keep actual output close to trend level.

We have had pronounced economic cycles in the Norwegian economy. The downturn at the beginning of the 1990s was followed by an upturn from 1993. This upturn peaked in 1998. The economy then shifted from an upturn with high growth rates to an expansion with lower growth but low unemployment, labour shortages in many sectors and strong growth in labour costs.

In recent years, capacity utilisation has declined from a high level and is now on a par with the level prevailing in the years 1995-1997, before the rise in costs accelerated.

Consumer price inflation in 2003 and the background for the deviation from the target

In the years 1998-2002, the Norwegian economy was characterised by substantial labour shortages and a considerably higher rise in labour costs than among trading partners. Last year was the fifth consecutive year of very high annual 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 decline in output and employment.

Monetary policy was therefore tightened through an interest rate increase last summer while the krone remained strong. At the one-year horizon, the strong krone would push down inflation to below 2½ per cent, but subsequently the effects of strong wage growth would dominate. Last year, Norges Bank's Executive Board struck a balance between the consideration of stable inflation developments in the short term and the consideration of stabilising developments in output and employment.

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. As from May 2003, core inflation (measured by the CPI-ATE) has been more than one percentage point below target. Average core inflation in 2003 is now projected at 1¼ per cent. The difference between the outcome and the projection thus proved nevertheless to be unusually wide, largely reflecting the fact that the economy was exposed to sizeable, unexpected disturbances.

Inflation through 2003 has been pushed down in particular by the fall in prices for imported consumer goods. The low rise in imported price inflation is a consequence of the appreciation of the krone throughout 2002 and low inflation abroad. The rise in prices for domestically produced goods and services has also slowed somewhat. This is particularly the case for prices for domestically produced goods influenced by world market prices.

Weaker than expected economic developments in 2003

The krone appreciated more in autumn 2002 and at the end of the year than assumed in our projections. This was related to unexpectedly weak developments in the global economy resulting in lower interest rates abroad and a wider interest rate differential between Norway and other countries.

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[1] A measure of core inflation is the rise in consumer prices adjusted for tax changes and excluding energy products (CPI-ATE).

Negative events such as the accounting scandals in large US companies, fears of terror, war in Iraq and the spread of SARS contributed to weak growth and low inflation in other countries. Developments in the international equity markets and the risk of higher oil prices also contributed to strengthening the krone.

Changes in the economic outlook abroad are clearly reflected in developments in interest rate expectations. Interest rate expectations in the US have been adjusted downwards considerably since summer 2002. The same applies to Europe. Developments in interest rate expectations were a reflection of an ailing world economy.

The situation has changed somewhat since the summer. A slightly more rapid rise in interest rates abroad is now expected.

Fluctuations in the exchange rate and monetary policy easing

Interest rate developments abroad have had substantial influence on the effect of interest rate setting in Norway. About 40 per cent of the appreciation of the krone from May 2000 to January 2003 can be explained by the increase in the interest rate differential between Norway and other countries. When the equity bubble burst in 2000, capital was moved from equities to interest-bearing securities, affecting capital flows and exchange rate movements. This shift in themes can explain 55 per cent of the appreciation of the krone. A third reason may have been high oil prices and fears that war and terror would disrupt the oil supply.[2]

While growth in the Norwegian economy stalled last winter, wage growth has moderated more rapidly than expected. This has had a considerable influence on the inflation outlook. The interest rate has been reduced by 4.5 percentage points, and the krone has appreciated by about 10 per cent.

The interest rate reductions this year will make a significant contribution to bringing inflation back to target. In the short term, the effects will primarily be channelled through a weaker krone. In the somewhat longer term, the fall in interest rates will also lead to higher inflation than would otherwise have been the case through stronger demand in Norway.

Inflation back on target at the two-year horizon

We now expect inflation to move up and stabilise around the inflation target at the two-year horizon. Output and employment are picking up. In our projections, capacity utilisation is stable with an output gap, as calculated by Norges Bank, close to zero.[3]

Uncertainty associated with inflation projections

Projections are uncertain. Experience of uncertainty surrounding inflation forecasts would indicate that when monetary policy is oriented towards reaching the target of 2½ per cent, inflation will remain within the interval of +/- 1 percentage point around the target in four out of five years. This is consistent with the experience of other countries with an inflation targeting regime. It should be noted, however, that this level of accuracy is based on a period of stable inflation in the OECD countries.

The interest rate reductions and the fall in the krone exchange rate imply that inflation will gradually increase and will be considerably higher than the current level as early as next spring. After such a period of very low inflation as we have now witnessed, it is appropriate to be particularly vigilant in monetary policy in the event that inflation does not increase as projected.

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[2] These estimates are uncertain and must therefore be interpreted with caution. The analysis of developments in the exchange rate from May 2000 to January 2003 is discussed in more detail in Bjørn Naug (2003): "Faktorer bak utviklingen i kronekursen – en empirisk analyse" (Factors underlying developments in the krone exchange rate – an empirical analysis), in Norges Bank's Occasional Papers, no. 31 (Norwegian only).

[3] These projections are discussed in more detail in Norges Bank's Inflation Report 3/2003. The analyses are based on the technical assumption that the interest rate will move in line with expectations in financial and foreign exchange markets, implying that the interest rate will remain at the current level well into 2004. Thereafter, the interest rate in Norway is assumed to rise gradually in pace with interest rates in other countries. The forward exchange rate implies a moderate depreciation of the krone through the projection period.

Share of employment back at trend

As mentioned earlier, developments in the output gap are a measure of output stability.

Fluctuations in output are also reflected in changes in the share of the working age population that are employed. This share of employment has shown a rising trend since the early 1970s, and has been above trend since 1996. This year, it appears that the share of employment will be at about trend level.

The exchange rate fluctuates

Fluctuations in the krone exchange rate have become more pronounced since 1996 and are now more on a par with fluctuations in the currencies of other small economies with a floating exchange rate. The krone has fluctuated between 9.24 and 7.22 kroner to the euro/ecu since 1997.

Norges Bank has not set a specific target for the level of the exchange rate. However, changes in the krone exchange rate are, of course, important in interest rate setting because they affect inflation and developments in activity. The response to a change in the exchange rate will depend on its expected impact on inflation, output and employment. This requires an evaluation of the reasons for and the duration of the change. Very short-term fluctuations in the krone exchange rate tend to have very limited effects on economic developments, while more long-lasting changes can have an impact. However, it is difficult to determine whether exchange rate changes are permanent or temporary.

Long-term relationship between exchange rate and prices

In the 1980s, the rise in prices in Norway was considerably higher than among trading partners. Measured in a common currency, prices are high, but they have over time remained fairly stable in relation to trading partners. The ratio of Norwegian to foreign prices today, converted to the same currency, is not substantially different from the average over the past 30 years.

There is evidence to suggest that the exchange rate will contribute to cushioning changes in the price ratio.[4] When inflation in Norway has been higher than among trading partners for a period, the krone has tended to depreciate. When there are expectations that inflation in Norway will develop approximately in line with other countries, the exchange rate will also normally return to its normal range in periods when the krone has been particularly strong or particularly weak. This relationship is the reason why stability in the exchange rate and in exchange rate expectations over time is dependent on stable inflation expectations, which in turn depend on low and stable inflation. Evidence indicates that an inflation target provides a sound anchor for exchange rate expectations. However, these expectations will also depend on fundamental conditions such as developments in government expenditure and revenues, productivity growth, oil prices and the terms of trade, excluding oil.

Deterioration in competitiveness following several years of high wage growth

High wage growth over several years has eroded the competitiveness of the Norwegian business sector. Last year, the effects of high wage growth were amplified by the changes in the krone exchange rate. Although the nominal krone exchange rate has depreciated this year, the competitiveness of Norwegian industries is still rather weak. The krone has now reverted to around the level prevailing in the mid-1990s, while labour costs in manufacturing rose by 13 per cent[5] more than among our trading partners in the same period.

The developments in the krone exchange rate proved to be reversible, but the loss of competitiveness and jobs caused by relatively high wage growth in Norway is difficult to recoup. A precondition for a considerable improvement in competitiveness is probably that real wage growth is lower than productivity growth in the business sector for a period. Experience shows that this occurs in periods when there is excess capacity in the economy. This means that changes in competitiveness over time

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[4] Q. Farooq Akram (2003): “Reelle likevektsvalutakurser for Norge” (Real equilibrium exchange rates for Norway) in Norges Bank’s Occasional Papers, no. 31 (Norwegian only).

[5] Wage figures for trading partners have been revised since the publication of “Report on monetary policy in 2003 – the first eight months”.

depend on real economic factors and on aspects of wage formation and cannot be controlled by monetary policy. However, with flexible inflation targeting, the social partners can normally expect low wage growth to have a greater impact on competitiveness because it can result in a weaker krone.

In Norges Bank's assessment, the outlook for the internationally exposed sector is brighter today than a year ago because the rise in costs has slowed markedly.

As mentioned earlier, the decrease in wage growth has been of great importance in enabling us to reduce the key rate towards an international level. We expect inflation to pick up in the first half of 2004. Output and employment will probably grow somewhat more than trend.

Again, thank you for giving me the opportunity to deliver this statement.