# Svein Gjedrem: On monetary policy and the krone

Speech by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), to Industrinettverket Sunnhordland, Stord, 7 June 2004.

*The text below may differ slightly from the actual presentation. The address is based on the assessments presented at Norges Bank's press conference following the Executive Board's monetary policy meeting on 26 May, Inflation Report 1/04 and on previous speeches.*

*The charts in pdf-format can be found on the Norges Bank's website.*

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The primary objective of monetary policy is to ensure nominal stability.

There were wide fluctuations in the Norwegian economy in the 1970s and 1980s. Economic developments were marked by high and variable inflation. Inflation rose gradually and it took a long time before it fell.

The absence of a nominal anchor was one of the main reasons behind these pronounced swings in the Norwegian economy. With a policy of low interest rates and devaluations, inflation took root. Nominal interest rates were kept at a low level even though inflation and the value of tax- deductible interest expenses rose. Frequent devaluations from 1976 were unable in the long term to prevent a decline in the manufacturing sector. On the contrary, they proved to be self-reinforcing. The wide fluctuations culminated in a credit boom in the mid-1980s, and a rise in costs as a consequence of the spring 1986 wage settlement. A pronounced downturn and high unemployment followed at the end of the 1980s.

In order to achieve nominal stability, monetary policy must provide a nominal anchor. Since the Second World War, there have been several monetary policy reforms in Norway. In the period between 1972 and 1986, monetary policy was to a limited extent focused on stabilising the rise in prices.

During this period, inflation was high and variable. Consumer prices in Norway rose almost twice as much as in Germany. At the same time, the value of the Norwegian krone against the German mark was almost halved, contributing to high imported inflation.

From the mid-1980s, during and after the credit bubble and the cost shock, it was recognised that a substantial revision of economic policy would be necessary and that the problems created by inflation had to be taken seriously. From 1986 to 1992, Norway operated a fixed exchange rate regime. The fixed exchange rate was the anchor for inflation in Norway. The difference between inflation in Norway and Germany narrowed substantially. Deteriorating competitiveness due to high wage growth would no longer be remedied by means of devaluations. Substantial emphasis was placed on the importance of wage formation for developments in employment. Only when wage growth dropped below the level of our trading partners did unemployment begin to fall and the manufacturing sector began to pick up. Thus, the fixed exchange rate policy was not introduced in order to strengthen the internationally exposed business sector. On the contrary, it was a breach in the approach whereby monetary policy and frequent devaluations had been used to shelter these sectors. The fixed exchange rate was an intermediate target for achieving low and stable inflation.

The exchange rate remained stable up to autumn 1996, partly because wage growth was low and overall demand did not generate pressures in the economy. Gradually, the krone began to show wider fluctuations. The experience of the last half of the 1990s demonstrated that monetary policy cannot fine-tune the exchange rate. Developments in international financial markets led to more pronounced fluctuations. And more fundamentally, when labour market pressures rose and incomes policy failed, exchange rate developments no longer provided signals for wage formation and fiscal policy. High petroleum revenues, fiscal slippage and expectations of increased use of petroleum revenues contributed to this. The exchange rate was therefore no longer suitable as a nominal anchor. Towards the end of the 1990s, increased emphasis was placed on the fundamental preconditions for exchange rate stability. Monetary policy instruments were oriented with a view to bringing price and cost inflation down towards the price stability objective of the European Central Bank (ECB).

## Monetary policy

In most countries, price stability, or low and stable inflation, is the objective of monetary policy. Historical experience from Norway and other countries has shown that the absence of price stability has resulted in unstable output and employment.

History shows that higher growth cannot ultimately be achieved in exchange for higher inflation. An economic policy that fuels inflation does not generate higher economic growth. On the contrary, it paves the way for subsequent recession and unemployment.

After the Second World War, there was a long period of trying to achieve price stability by means of various intermediate targets such as a fixed exchange rate and a target for growth in the money supply. The first explicit inflation target was introduced in New Zealand in 1990. Canada followed in 1991, the UK in 1992, and Sweden and Australia in 1993. Inflation targeting is now the norm in small and medium-sized open economies. Denmark is an important exception. Since the mid-1980s, Denmark has conducted a very disciplined fiscal and wage policy. Combined with ERM II membership, this has enabled Denmark to maintain a credible and successful fixed exchange rate regime.

Pursuant to the Regulation on Monetary Policy laid down by the Government on 29 March 2001, the operational objective of monetary policy is low and stable inflation.

Norway's mandate is as follows:

"Monetary policy shall be aimed at stability in the Norwegian krone's national and international value, contributing to stable expectations concerning exchange rate developments. At the same time, monetary policy shall underpin fiscal policy by contributing to stable developments in output and employment.

Norges Bank is responsible for the implementation of monetary policy.

Norges Bank's implementation of monetary policy shall, in accordance with the first paragraph, be oriented towards low and stable inflation. The operational target of monetary policy shall be annual consumer price inflation of approximately 2.5 per cent over time. [...]"

The first paragraph of the mandate sets forth its intentions. The last paragraph specifies what Norges Bank is required to do.

The first sentence in the mandate refers to the value of the krone. Stability in the internal value of the krone implies that inflation must be low and stable. Low and stable inflation fosters economic growth and stability in financial and property markets.

The regulation also states that monetary policy shall be aimed at stability in the Norwegian krone's external value, contributing to stable expectations concerning exchange rate developments.

With open trade with other countries and free capital movements, we do not have the instruments to fine-tune the krone exchange rate. The krone has appreciated when economic activity has been high and there have been expectations of a wide interest rate differential between Norway and other countries. The krone has depreciated when activity has declined and the interest rate differential has narrowed. There is also a strong tendency for the krone to revert to a level that stabilises the price level in Norway relative to our trading partners, measured in a common currency.[1]

The task of monetary policy is to provide a nominal anchor. The inflation target is such an anchor.

## The conduct of monetary policy

Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. Norges Bank operates a flexible inflation targeting regime, so that weight is given to variability in inflation as well as variability in output and employment. Inflation shall be 2½ per cent over time. Monetary policy affects the economy with long and variable lags, and the Bank must therefore be forward-looking in interest-rate setting. In the operational conduct of monetary policy in Norway, the path of inflation and the real economy in the period ahead will be taken into account.

[1] See Akram, Farooq Q (2003): "Reell likevektsvalutakurs for Norge" (Real equilibrium exchange rate for Norway), in *Norsk Økonomisk Tidsskrift*, 118, pp 89-112.

Normally, the interest rate is set with a view to achieving inflation of 2½ per cent at the two-year horizon. This time horizon usually provides a reasonable balance between stabilising inflation on the one hand and smoothing fluctuations in output and employment on the other. If extraordinary conditions prompt Norges Bank to apply a different time horizon than two years, the Bank will provide an assessment of this. The same applies if special emphasis is placed on developments in financial markets.

There is one main monetary policy instrument: the interest rate. The interest rate is set with a view to achieving low and stable inflation, while at the same time seeking to avoid substantial variations in output and employment.

In the long run, output is determined by the supply of labour, capital and technology and by the ability to adapt, but in the short and medium term monetary policy can also have an impact on the real economy.

**Flexible exchange rates**

In a small, open economy, the exchange rate is an important channel for monetary policy.

The krone fluctuates. This is not surprising because other countries' currencies also fluctuate. The krone exchange rate is the price of our currency measured in a foreign currency. Developments in other countries are just as important for the krone as developments in the Norwegian economy. Capital flows freely and flows can change rapidly. This can spill over to exchange rates and interest rates as well as output and employment.

The chart shows the effective exchange rate for Norway and a number of other small countries with inflation targeting. Exchange rate fluctuations are approximately the same for Norway, Sweden and Canada, whereas the krone exchange rate fluctuates less than the exchange rate for Australia and New Zealand. Therefore, the krone does not stand out as particularly unstable compared with other countries' currencies.

The forward exchange and options markets have expanded in recent years. A deeper market reduces transaction costs and it is easier to find counterparties. This has provided companies with greater scope for hedging against foreign exchange risk. Instruments that reduce the risks associated with a floating krone are increasingly being used, also in Norway.

Hedging against fluctuations in the krone involves costs for businesses. A krone that is stable - but too strong - also entails costs to the economy in the form of low activity. Similarly, a krone that is stable - but weak - is a source of high inflation.

Petroleum revenues generally provide substantial, but uneven currency inflows into Norway. The currency flows might have resulted in a strong krone and large variations in the exchange rate. This tendency is countered when the annual use of petroleum revenues over the central government budget is predictable and independent of annual revenue flows, and the remainder is invested abroad.

Investments by the Government Petroleum Fund in foreign currencies create a capital outflow that contributes to curbing the appreciation of the krone and maintaining its stability.

Norges Bank has not defined an exchange rate target. Nevertheless, developments in the krone are of considerable importance to interest-rate setting because exchange rate developments have an impact on inflation and output. When there are prospects of moderate economic activity, low wage growth and low inflation, Norges Bank will reduce the interest rate. This will normally result in a depreciation of the krone. Prices for imported goods and services will increase. A weaker krone strengthens the competitiveness of Norwegian enterprises and indirectly leads to higher output, employment and inflation.

Themes in foreign exchange markets shift. In periods, investor focus on stock returns feeds through to exchange rate movements. During periods of political and economic unrest, investors may choose individual currencies as a safe haven - often the Swiss franc. In autumn 2002, the Norwegian krone was probably also perceived as a safe haven. In addition, oil prices rose as a result of the uncertainty associated with the war in Iraq.

Since December 2002, the interest rate has been reduced by a total of 5¼ percentage points. The krone depreciated by about 13 per cent from its strongest level in January 2003 up to summer 2003. In autumn 2003, the krone showed a tendency to appreciate against the euro. This partly reflected lowered market expectations concerning an interest rate increase abroad and expectations that interest rates might rise earlier in Norway than in other countries. At the same time, the euro appreciated in relation to other currencies. Changes in the krone resulted in an unintended tightening of monetary policy. The krone depreciated again in December, however, owing to low inflation figures and a reduction in interest rates. The interest rate reduction was probably of considerable importance as it eliminated the excess return on NOK investments.

The krone has again appreciated since last winter. Parallels can be drawn with the situation towards the end of 2002. The current high oil prices and expectations that oil prices will remain high for a long period may have been important for the appreciation of the krone. When there is considerable uncertainty with regard to future developments in oil prices, market participants may hedge against risk by investing in NOK.

As mentioned earlier, the Petroleum Fund acts as a buffer against wide fluctuations in the krone exchange rate as a result of petroleum revenues. An increase in petroleum revenues will normally also result in higher capital outflow from the Petroleum Fund. The market may at times have a tendency to underestimate this stabilisation mechanism. If oil prices develop through the rest of 2004 in line with current forward prices, and the other assumptions in the Revised National Budget for 2004 for calculating allocations to the Petroleum Fund for 2004 prove to be correct, purchases of foreign currency for the Petroleum Fund may be resumed this year. This will then be in addition to the regular transfers of profit from the State’s Direct Financial Interest in petroleum activities (SDFI) to the Petroleum Fund, which are invested abroad.

Higher oil prices mean higher revenues for the oil companies. International and Norwegian oil companies with activities in Norway increase their capital outflow when profits increase. Thus, in the short and medium term, cumulative profits in the petroleum sector generate little added capital in the domestic economy.

If petroleum revenues are disregarded, Norway has a current account deficit. The deficit has been increasing in recent months, and this may also, in isolation, boost demand for foreign exchange in the Norwegian foreign exchange market.

The krone appreciation has probably been affected by shifts in themes in the international foreign exchange markets, due in part to an upward adjustment of interest rate expectations in the US in April. In addition, financial market expectations of higher interest rate increases in Norway in 2005 and 2006 relative to other countries have probably contributed. A self-reinforcing mechanism may have been functioning for a short period after the krone began to rise in value at the beginning of March this year.

Interest rate developments abroad may have a considerable influence on movements in the krone exchange rate. The inflation outlook in Norway implies that Norway will not be the frontrunner when other countries increase interest rates. As mentioned earlier, themes shift in foreign exchange markets. Norges Bank does not have the instruments for fine-tuning the exchange rate.

Normally, Norges Bank will not intervene in the foreign exchange market in order to influence the exchange rate. Foreign exchange market intervention, irrespective of whether foreign exchange is bought or sold, is not an appropriate instrument for influencing the krone over a longer period. We do not wish to act in a way that may trigger a game situation in the foreign exchange market. Foreign exchange intervention rather than a change in the interest rate may give ambiguous signals to foreign exchange operators and a game situation may arise. However, interventions may be appropriate if the krone deviates substantially from the level that the Bank judges to be reasonable in relation to fundamentals, and if exchange rate developments weaken the prospect of achieving the inflation target. Interventions may also be appropriate in response to pronounced short-term fluctuations in the krone when liquidity in the foreign exchange market falls to a very low level.

Although the krone may fluctuate in the short term, when inflation is low and stable, the exchange rate will generally stabilise over time. When inflation has been higher in Norway than among our trading partners for a longer period, the krone has generally depreciated. When inflation in Norway is expected to be broadly in line with that of other countries, the exchange rate will usually also return to its normal range following periods when the krone has been particularly strong or particularly weak.

The advantage of a flexible exchange rate is perhaps most evident when the economy is sluggish. If the krone were to remain at a level that is too strong, nominal wages would have to remain unchanged over a longer period or fall in order to bolster companies and jobs. This only occurs when unemployment is very high. With a flexible exchange rate, a depreciation of the krone can also boost competitiveness. A flexible exchange rate can reduce fluctuations in employment and output.

Empirical studies[2] have also suggested that economic growth in industrialised countries with floating exchange rates has been as strong as, and often stronger than, growth in countries with a stable exchange rate. A precondition is that there is an economic policy framework so that inflation does not spin out of control.

**The real exchange rate**

The chart shows developments in two measures of the real krone exchange rate, i.e. consumer prices and relative labour costs in Norway relative to trading partners, measured in a common currency. The real exchange rate measured by relative labour costs in a common currency is an expression of the cost competitiveness of Norwegian companies. The real krone exchange rate as measured in terms of developments in relative prices is an expression of the Norwegian krone's purchasing power. When the curves in the chart are above zero, the exchange rate is stronger and competitiveness weaker than the average level since 1970. The real exchange rate has fluctuated considerably over time and has deviated substantially from the average level over longer periods. Nevertheless, there has been a tendency for the real exchange rate to revert to this level. In the chart, the point for 2004 shows the real exchange rate with wage and inflation projections for 2004 from Inflation Report 1/2004. In relative prices, the real exchange rate is now about 2 per cent weaker than the average since 1970, whereas it is almost 4 per cent stronger than its historical average measured in terms of relative labour costs.

**Economic developments**

Interest rate expectations have been revised upwards in a number of countries.

Growth has picked up in the US. As in the second half of 2003, growth is primarily being driven by private consumption and business investment. Following a surprisingly long period of weak labour market developments, employment has begun to edge up and is now higher than at the same time last year. In recent months, inflation has increased from a very low level. As a result, interest rate expectations have been revised upwards, and the key rate in the US is expected to be raised at the end of June.

In the euro area, inflation has been approximately in line with the objective defined by the European Central Bank. The preliminary estimate for May points towards rising inflation, particularly as a result of higher oil prices. Capacity utilisation in the euro area is low and unemployment remains high. Growth potential is weaker than in the US, although GDP growth picked up in the first quarter. As in the US, private consumption is an important factor driving growth. Increased net exports also contributed to growth in the euro area in the first quarter. Interest rate expectations in the euro area have also been revised upwards somewhat recently. The market now expects the ECB to raise interest rates at the end of 2004 or the beginning of 2005.

Interest rate expectations were continuously revised downwards up to March 2004. Interest rates abroad have been unusually low for 2½ years. This has been the greatest challenge for our monetary policy. Even though a somewhat swifter rise is now expected, it appears that interest rates among our most important trading partners will remain low for a period ahead.

In Norway, output growth has picked up after a growth pause. The interest rate reductions since 2002 have contributed to the turnaround and a soft landing for the economy. Private consumption is showing fairly strong growth. Household demand will probably be the most important driving force in the Norwegian economy in the period ahead.

The analyses in Inflation Report 1/2004 indicate that inflation will remain low for a period, then rise through the summer and autumn. The depreciation of the krone from January 2003 and up to last winter is expected to push up prices for imported consumer goods, while the recent appreciation will have a dampening effect.

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2 See Kenneth Rogoff, Aasim M Husain, Ashoka Mody, Robin Brooks and Nienke Oomes (2003): "Evolution and Performance of Exchange Rate Regimes", *IMF Working Paper*, 03/243, Eduardo Levy-Yeyati and Frederico Sturzenegger (2003): "To Float or to Fix: Evidence on the Impact of Exchange Rate Regimes on Growth", *American Economic Review*, September 2003, pp 1173-93, and Jeannine Bailliu, Robert Lafrance and Jean-Francois Perrault (2003): "Does Exchange Rate Policy Matter for Growth?", *International Finance*, 6:3, pp 381-414.

In both March and April, inflation in Norway was approximately as projected in the Inflation Report. In April, the year-on-year rise in the CPI-ATE was 0.2 per cent. Adjusted for some temporary factors, the year-on-year rise was 0.5 per cent.[3] The rate of increase in the last three months was 1.1 per cent annualised.[4] TNS Gallup's expectations survey indicates that expectations concerning inflation ahead are stable at about 2½ per cent.

As you know, Norges Bank has established a regional network. In the interview round conducted earlier this spring, our contacts in Region South-West reported that the pick-up in the economy is broadening out and gaining strength, and that it is no longer solely driven by stronger household demand. In addition to a high level of activity in the construction industry and strong growth in retail trade, the upturn is now also being driven by higher exports and increased activity in the petroleum industry. Optimism seems to be holding up, and the market outlook for the next six months is bright for all sectors, although brightest for retail trade and construction. So far, optimism has only resulted in a moderate willingness to invest. In general, investment remains at a normal, average level. The exception is housing investment and investment within retail trade. In contrast to earlier periods, several sectors, such as petroleum-related manufacturing, retail trade and services for the business sector, are now reporting rising employment.

Growth in the Norwegian economy is probably somewhat stronger than projected in Inflation Report 1/04. On the other hand, capacity utilisation at the end of 2003 may have been somewhat lower than projected earlier. Consumer prices have moved approximately in line with projections in Inflation Report 1/2004.

The aim of monetary policy is higher inflation. With the current low level of inflation, it is appropriate to be particularly vigilant with regard to developments in consumer prices. However, consumer prices may show random variations from one month to the next. We now have several monthly observations showing a rise in prices that is consistent with the most recent forecasts. Later this year, we will receive further confirmation of whether consumer prices are rising in line with our projections. We also place emphasis on avoiding imbalances in the real economy. The economy is probably approaching a normal rate of capacity utilisation. When inflation increases from a very low level, this will provide a basis for gradually moving towards a more normal short- term interest rate level in Norway. This may counter excessive credit growth and excessive pressures on domestic resources in the medium term. Interest rate developments abroad may have a considerable influence on movements in the krone exchange rate. The inflation outlook in Norway implies that Norway will not be the frontrunner when other countries increase interest rates.

Interest rates were left unchanged at Norges Bank's Executive Board meeting on 26 May 2004. Norges Bank's key interest rate, the sight deposit rate, therefore remains at 1.75 per cent. According to Norges Bank's assessment, with a sight deposit rate of 1.75 per cent at present, the probability that inflation two years ahead will be lower than 2½ per cent is greater than the probability that it will be higher.

[3] Adjusted for the effect of the interest rate's direct impact on house rents, changes in parental payments to day-care centres and for special factors relating to indirect tax changes earlier in the year.

[4] Seasonally adjusted, three-month moving average recalculated as an annual rate.