The krone exchange rate and competitiveness in the business sector

Address by Governor Svein Gjedrem to the Federation of Norwegian Process Industries in Oslo on 29 April 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 21 April, Inflation Report 1/04 and on previous speeches.

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 expenditure rose. Frequent devaluations from 1976 were not able 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 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. Instead, imbalances in the labour market would be addressed by means of a counter-cyclical policy. Substantial emphasis was placed on the importance of wage formation for 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 were no longer providing 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, increasing emphasis was placed on the fundamental preconditions for exchange rate stability. Monetary policy instruments were oriented in such a way that price and cost inflation was brought down to 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 low and unstable output and employment.

History shows that there is no long-term trade-off between higher growth and 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 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. 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.

Pursuant to the Regulation, Norges Bank'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. 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 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 variability in output and employment and in inflation is given weight. Inflation shall be 2½ per cent over time. Monetary policy influences 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. We also give emphasis to predictability and transparency. 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 demand for goods and services is high and there is a shortage of labour, there will normally be prospects of higher inflation. When the interest rate is raised, demand is dampened and inflation is kept in check. If demand is low and unemployment rises, there will be prospects of lower inflation. The interest rate will then be lowered. The inflation target thus represents a framework, not an obstacle, for monetary policy to contribute to stability in output and employment.

Section 1 of the Regulation on Monetary Policy states that in addition to sustaining the level of inflation at approximately 2½ per cent over time, monetary policy shall also contribute to stable developments in output and employment. The mandate therefore establishes a flexible inflation target for monetary policy where variations in output and employment are also given emphasis.

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.

The economy grows over time. Output will in some periods lie above trend growth and in others below trend[2]. Stabilising output means seeking to maintain actual output near trend.

There is one main monetary policy instrument: the interest rate. Interest rates are 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 recent years, household income has shown solid growth, and household confidence has been high. Corporate earnings, however, have been low, and until recently enterprises have primarily focused on enhancing efficiency. The level of household borrowing is high, while enterprises are reducing debt. Credit developments are thus giving ambiguous signals to our interest-rate setting.

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.

A flexible inflation targeting regime reduces the possibility of exposing households to a double shock in the form of higher unemployment and higher interest rates, as was the case at the beginning of the 1990s. If the economy is exposed to disturbances that may lead to higher unemployment, inflation will normally decline and interest rates will be lowered.

Flexible exchange rate

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. Exchanges 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. The use of instruments that reduce the risks associated with a floating krone is also increasing in Norway.

There is a cost involved for businesses in hedging against fluctuations in the krone. 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 led to a strong and volatile krone. 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.

The capital outflow through the Petroleum Fund contributes to both 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.

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. This trend was reversed in December 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 appreciated again in the last couple of months. The appreciation of the krone, if it persists, may curb inflation one to two years ahead. Past experience shows that the krone is at times heavily influenced by developments in the interest rate differential between Norway and other countries. This is given weight in interest-rate setting. However, as mentioned, themes in foreign exchange markets shift, and Norges Bank does not have instruments to fine-tune the exchange rate.

Normally, Norges Bank will not intervene in the foreign exchange market in order to influence the exchange rate. 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, it 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 normally also return to its normal range following periods when the krone has been particularly strong or particularly weak.

Exchange rate expectations cannot be directly observed, but information from Consensus Forecast, a survey conducted among economists, may be an indicator.

The chart shows the actual trade-weighted exchange rate (TWI) and expected TWI one year ahead as from 1998[3]. When the krone is "weak", the expected exchange rate one year ahead tends to be stronger than the actual rate. Likewise, the expected exchange rate one year ahead tends to be weaker than the actual exchange rate when the krone is strong. In the period 2002-2003, the krone exchange rate varied considerably. Movements in exchange rate expectations, however, were less volatile. When the krone was at its strongest in the second half of 2002, the expected exchange rate one year ahead was 4-5 per cent weaker. This illustrates that exchange rate expectations seem to be more stable than actual exchange rate movements and that after moving markedly beyond a long-term equilibrium level, the krone exchange rate is expected to revert to around this level. The equilibrium level for the nominal exchange rate is not, however, constant over time, but partly depends on price and cost developments in Norway relative to our trading partners.

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[4] have also suggested that economic growth in industrialised countries with floating exchange rates has been as strong, and often stronger than 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 wage 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. The points on the chart marked 2004 show the real exchange rate with wage and inflation projections for 2004 from Inflation Report 1/04. 1 2004. In relative prices, the real exchange rate is now about 3.5 per cent weaker than the average since 1970, whereas it is approximately 2.5 per cent stronger than its historical average measured in terms of relative labour costs.

The exchange rate in the long term

There has been divergence between cyclical developments in Norway and other countries. This was most pronounced in the 1980s when we had a strong upturn while Europe was in a recession. Although the economic cycles have been somewhat more similar over the years, there is still a time divergence. While the global turnaround took place in 2000, with a subsequent reduction in interest rates abroad, the Norwegian economy continued to show a high level of activity. Towards the end of the upturn, the economy was facing labour shortages, accelerating wage growth and a sharp increase in household consumption and debt. Interest rates in Norway remained high and the interest rate differential gradually widened.

There have also been other differences between cyclical developments in Norway and other countries. The expansionary period in Norway led to strong wage growth from 1998 to 2002. The upturn in the global economy at the end of the 1990s was largely driven by business investment and wage growth was moderate.

Wage growth in the Norwegian business sector from 1998 to 2002 was higher than the level that over time is consistent with the inflation target and with normal productivity growth.

In 2003, wage growth was considerably lower than in the previous five years. This provided a sounder basis for substantial reductions in Norwegian interest rates, resulting in a narrowing of the interest rate differential between Norway and other countries. The reduction has contributed to a weakening of the krone since December 2002. Thus, the real exchange rate has also weakened and business sector competitiveness has improved. However, the business sector is still feeling the effects of the loss in competitiveness that resulted from high wage increases. 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.

For a long time, a stable exchange rate and the level of cost inflation among our trading partners provided an anchor for wage determination in Norway. To maintain competitive strength, wage growth in Norway had to be on a par with wage growth among our trading partners when productivity growth in Norway was on a par with our trading partners.

With the current monetary policy regime, the inflation target is the nominal anchor. According to updated national accounts figures, an inflation target of 2½ per cent and trend productivity growth of around 2 per cent imply annual nominal wage growth of about 4½ per cent. Wage growth that is lower than 4.5 per cent contributes to increased employment.

The Swedish Trade Union Confederation's recommendations to its members are based on the inflation target:
"It is therefore in the interests of all wage earners to control total wage increases to avoid exceeding the level that is consistent with the inflation target defined by Sveriges Riksdag (Swedish parliament)."

Challenges facing the Norwegian business sector

History has taught us that individual companies and individual industries in wealthy countries may be threatened by the emergence of producers from low-cost countries. Nevertheless, the emerging Asian economies have not posed a threat to industrialised countries' economies as a whole. On the contrary, growth in Asian economies has led to lower prices for a wider range of products. These countries have also gradually developed into important markets. We know from experience that competition from Japanese and then Korean shipyards was an important reason behind the downsizing of our own shipbuilding industry. Japan, however, has also become an important market for Norwegian fish, and Japanese tourists spend a considerable amount of money in Norway. The previous large trade deficit with Japan turned into a surplus in 2002, even excluding oil.

The current strong growth rates in Asia are boosting demand for commodities. This also influences prices for commodities that we produce. Oil prices have risen sharply since 2000. Prices for other products such as paper and aluminium have shown a flatter trend, but have picked up. Salmon prices, which are more heavily influenced by developments in Europe, have risen sharply since spring 2003 following a marked fall in 2002.

The impact of increased competition from low-cost countries on the Norwegian economy

Imports from China to Norway increased considerably after 2001, reflecting in part China's membership of the WTO from December 2001. Imports from China will probably increase in the future. This in itself contributes to lower imported inflation. Moreover, inflation in Norway is restrained because the rise in prices for imports from trading partners other than China is also slowing.

High economic growth in China may persist for a longer period, providing the possibility of a large market that will also be open to Norwegian firms. The enlargement of the EEA and the EU on 1 May this year will also open up new markets and sources of income for Norwegian firms, and increase the supply of labour.

The transition to more open economies in Central and Eastern Europe has already had an impact on Norwegian firms. Trade with the Baltic countries, which used to be minimal, has increased sharply.

Petroleum wealth and the krone exchange rate

Let me conclude by referring to an analysis that can shed light on long-term developments in the real krone exchange rate.

In the long term, the exchange rate tends to adjust so that there will be a balance both in the domestic economy and balance in the current account.

Petroleum wealth, defined as the value of oil and gas under the seabed and the value of the Government Petroleum Fund, provides the basis for substantial foreign exchange revenues in the years ahead. These revenues will decline as the economy grows. The share of imports that can be financed by foreign exchange revenues from petroleum wealth will be reduced. Export earnings other than petroleum revenues will then be necessary. A substantial improvement in competitiveness will be required over time.

Norway's history as an oil nation goes back to the end of the 1960s. Rough estimates suggest that a real exchange rate that ensures balance in the balance of payments when petroleum wealth no longer has the same significant role in the economy is more in line with the real exchange rate prevailing in Norway prior to the discovery of oil. This is shown in the chart, where the real exchange rate in 60 years' time, after a sharp appreciation while we phase in petroleum wealth into the economy, will have reverted to the level prevailing before petroleum extraction began.

On the basis of these analyses, a strong real krone exchange rate and weak competitiveness apply to a period in which the petroleum industry is expanding and we are reaping the biggest economic benefits.

Footnotes

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

[2]Trend growth is used as a rough estimate of potential output. Potential output is the level of output that is consistent with stable inflation over time.

[3]Consensus Forecast data were not available earlier.

[4]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 of the Impact of Exchange Rate Regimes on Growth", American Economic Review, September 2003, pp. 1173-1193; Jeannine Bailliu, Robert Lafrance and Jean-Francois Perrault (2003): "Does Exchange Rate Policy Matter for Growth?", International Finance 6:3, 2003, pp. 381-414