

## Jarle Bergo: Oil prices, cyclical developments and monetary policy

Speech by Mr Jarle Bergo, Deputy Governor of Norges Bank (Central Bank of Norway), at Vest-Norsk Sparebanklag's autumn conference, Bergen, 12 November 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 3 November, Inflation Report 3/04 and on previous speeches.*

The references and the  Charts in pdf-format can also be found on the website of the Norges Bank.

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The objective of monetary policy is to safeguard the value of money in the long term. In the short and medium term, monetary policy can also contribute to stabilising production and employment. Historically, the experience of Norway and other countries is that high inflation has resulted in unstable output and employment. A fall in the price level will often occur in tandem with a downturn.

The objective of low and stable inflation provides an anchor for economic agents' expectations concerning future inflation. We have a very open economy with free capital movements. Stable inflation expectations also contribute to more stable krone exchange rate expectations. I will discuss this aspect in more detail later.

Inflation targeting has proved to be particularly appropriate in very open, small and medium-sized economies such as the Norwegian economy. Commodity exports play a key role in several of the countries that were the first to introduce inflation targeting and, as an oil exporter, we have learned from their experience.

The first inflation target was introduced in New Zealand in 1990. Canada followed in 1991, the UK in 1992, and Sweden and Australia in 1993. A number of other countries have followed suit. In Norway, the Government issued a regulation introducing an inflation target in 2001. Monetary policy in euro area countries and Switzerland is also aimed at price stability, even though this is not referred to as inflation targeting in these countries.

Inflation targeting means setting the interest rate so as to achieve a numerical target for inflation. Norges Bank sets the interest rate with a view to stabilising inflation at 2.5 per cent within a reasonable time horizon, normally 1-3 years. The more precise horizon will depend on disturbances to which the economy is exposed, and how they affect the path for inflation and output. The inflation target represents a framework for, not an obstacle to, monetary policy's contribution to stabilising output and employment. We have a flexible inflation targeting regime, i.e. both variability in inflation in relation to the target and variability in output and employment in relation to trend are given weight.

The objective of monetary policy is low and stable inflation. The instrument is the interest rate. The interest rate influences inflation with a lag and with varying intensity. As interest rates fall, household and local government consumption and investment tend to pick up. 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.

Lower interest rates normally also lead to a depreciation of the krone. Imported goods then become more expensive and inflation accelerates.

Expectations play a key role in price and wage formation, and they are influenced by the interest rate. Expectations concerning inflation and economic stability have considerable impact, not least in the foreign exchange market.

Petroleum activity constitutes an important part of the Norwegian economy. Oil gives us an economic base that is not available to many other countries. At the same time, the extent of, and fluctuations in, petroleum activity pose a challenge to economic policy in Norway. In a long-term perspective, Norway's petroleum wealth is to be distributed across generations. In the short term, the substantial capital revenues from the petroleum sector must be managed in such a way that they do not amplify cyclical fluctuations.

The Government Petroleum Fund was established in 1990 with a view to safeguarding long-term considerations in the use of petroleum revenues. The idea behind the Petroleum Fund is that the cash flow from an increase in oil prices should accrue to the Fund and be invested abroad so that the

increase in oil prices does not affect the wider budget. As a result, the increase in the cash flow does not affect the domestic economy. Likewise, a fall in oil prices does not have an impact on the domestic economy, but results in a lower accumulation of foreign assets. The Fund thus acts as a buffer against disturbances. By building up the Fund, the aim of ensuring that several generations will enjoy the benefits of our petroleum wealth is also taken into account.

In 2001, the Storting adopted new economic policy guidelines in Norway. At the same time as the inflation target was introduced in monetary policy, a strategy was drawn up for the use of petroleum revenues over the government budget, i.e. the fiscal rule. The fiscal rule is designed to prevent swings in the petroleum sector from spreading to the mainland economy. This ensures that petroleum revenues are phased in at a steady pace. The guideline specifying that only the real return on the Petroleum Fund is to be used, means that the capital in the Fund is not depleted over time.

Norges Bank has no set target for the level of the exchange rate. Nevertheless, developments in the krone are of considerable importance to interest-rate setting because the exchange rate has an impact on inflation and output. An important channel for monetary policy is the foreign exchange market and the krone exchange rate.

Although the krone fluctuates, the krone exchange rate is not particularly unstable compared with other countries' currencies.

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. There is a cost involved for businesses in hedging against fluctuations in the krone. A krone that is stable - but too strong - also entails social costs in the form of low activity. Likewise, a krone that is stable - but too weak - is a source of high inflation.

Norway is running a current account surplus as a result of sizeable oil and gas exports. Owing to high oil prices, the current account surplus is rising this year. An increase in the current account surplus will normally result in higher net demand for the domestic currency. In Norway, however, the additional foreign exchange revenues that accrue to the Norwegian state as a result of high oil prices will be invested in foreign securities through the Government Petroleum Fund. As a result, they will not have a direct impact on the balance in the Norwegian foreign exchange market. Oil companies hold a large share of their financial capital in foreign currency, and higher revenues in these companies therefore results in an increase in capital outflows.

The effects of changes in the current account on net demand for the Norwegian krone can be illustrated by adjusting the basic balance for transfers and earnings to the Petroleum Fund and oil companies' estimated cash surplus. Even though the current account surplus is increasing from 2003 to 2004 as a result of high oil prices, the adjusted basic balance is falling. In isolation, this is contributing to a decline in demand for the Norwegian krone. The decline is due to high import growth, which is reducing the current account surplus.

In the Government's budget proposal, the use of petroleum revenues remains virtually unchanged between 2004 and 2005. In spite of this, the krone exchange rate has appreciated recently. This reflects short-term capital inflows and may indicate that foreign exchange market operators expect that the use of petroleum revenues will increase in the years ahead.

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 the autumn of 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.

Fluctuations between major currencies also affect the krone exchange rate. In recent weeks, investors have withdrawn from the US dollar and a number of currencies have appreciated. The Norwegian krone market is less liquid than many other foreign exchange markets. This may have contributed to amplifying the appreciation of the Norwegian krone.

The krone exchange rate has appreciated during the autumn. Expectations that the interest rate has reached a trough, in conjunction with high spot and futures prices for oil, have probably supported the krone. Our previous experience suggests that the value of the Norwegian krone is primarily affected when oil prices are unusually low and/or falling. Through 2004, the krone exchange rate has appreciated in line with oil prices. Oil prices have not, however, been as high, in nominal or real terms,

in since the krone was floated in late 1992. We have therefore no previous experience to draw on. It appears that the krone exchange rate also reacts to abrupt upward movements in spot and futures prices for oil. Oil prices have declined somewhat since end-October. A levelling off or a fall in oil prices and a stable use of petroleum revenues could reverse the short-term capital flows.

The strong krone has a dampening effect on the inflation outlook. This provides a basis for keeping the interest rate level in Norway low for a longer period than would otherwise have been the case and for maintaining this low level even though interest rates rise in other countries. Inflation targeting will therefore ease the pressure on the krone and stabilise exchange rate expectations.

Inflation has been low this year. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) was very low up to the end of the summer, but moved up slightly in September. Inflation is still being curbed by the fall in prices for imported consumer goods, in spite of the depreciation of the krone through 2003 and the global rise in producer and commodity prices. This is partly due to the increasing share of Norwegian imports from low-cost countries. Strong competition and high productivity growth in many industries in Norway have also exerted downward pressure on inflation.

The objective of monetary policy is inflation of 2½ per cent over time. Inflation is now considerably lower. The monetary stance is therefore expansionary.

As a result of the prospect of low inflation and moderate growth in output and employment, the key rate (the sight deposit rate) was reduced by a total of 5.25 percentage points between December 2002 and March 2004. The key rate has been kept unchanged at 1.75 per cent since then. The reductions in the interest rate have contributed to the depreciation of the krone. Measured by an index of 44 trading partners (I-44), the krone depreciated through 2003 by almost 11 per cent from its highest level in January of the same year. The krone has appreciated again somewhat through 2004.

Growth in the world economy has been strong over the past year, particularly in the US and China. The recovery has also gradually broadened. A number of countries raised their key rates in the course of 2004. The Federal Reserve has raised its key rate four times, by a total of 1 percentage point. The Bank of England has raised its key rate by 1 percentage point. In October, the People's Bank of China raised its key rate for the first time in nine years.

After rising sharply for several quarters, economic growth in the US slowed somewhat in the second and third quarters of 2004. Looking ahead, growth among our trading partners is projected to moderate, but resource utilisation is expected to increase gradually. Increased global activity has led to rising commodity prices. Oil prices are high. There are still expectations of an increase in international interest rates, but market participants have lowered their growth and interest rate expectations as a result of high oil prices.

Growth in the Norwegian economy picked up during the second half of 2003. The low interest rate has contributed to strong growth in private consumption and housing investment. Activity has picked up in service industries and the construction sector. High petroleum investment, the global economic recovery and a weaker krone through 2003 have improved conditions for manufacturing. Profitability is improving for mainland enterprises. There are signs of renewed growth in investment in a number of industries. Imports have expanded markedly.

Potential growth in the Norwegian economy is estimated to increase somewhat more than normal this year as a result of increased competition and rationalisation in many sectors. This will contribute to fairly high growth in the Norwegian economy without the emergence of constraints on the supply of labour or productive capital. The high rate of growth in output nevertheless implies that the output gap will approach zero towards the end of 2004.

The output gap is a measure of the difference between the actual level of output and potential output. Developments in the output gap provide a basis for assessing cyclical developments and can thus shed light on domestic price and cost pressures in the economy. It is difficult to know how high capacity utilisation is at any given time. Output and employment figures are often revised and do not therefore always present an accurate picture of the current economic situation. Norges Bank therefore also uses a number of other indicators to gauge the temperature of the Norwegian economy.

Fiscal policy in 2004 appears to be somewhat more expansionary than assumed in the Revised National Budget. The Government estimates that underlying nominal spending growth over the central government budget will be close to 11 per cent between 2003 and 2005. Local government revenues

are estimated to rise by slightly more than 11 per cent in nominal terms during the period, which is more than nominal growth in mainland GDP.

Employment has picked up. The number of persons employed in the second quarter of 2004 was 0.2 per cent higher than in the same quarter of 2003. Employment growth has mainly occurred in retail trade, commercial services, education and health and social services. Manufacturing employment is still falling. Companies often wait to increase employment until the recovery has gained a firm footing. Compared with the recoveries in 1982 and 1991, employment growth in the current recovery has been weaker relative to output growth. The moderate increase in employment indicates that companies are still reaping the benefits of rationalisation measures.

Household demand is one of the most important driving forces in the Norwegian economy. Low interest rates, high growth in real wages and rising housing wealth are stimulating private consumption. Consumption is projected to rise by about 5 per cent in 2004, then slow through the projection period as a result of lower growth in real disposable income. Looking ahead, an increase in employment and a tighter labour market are expected to result in somewhat higher wage growth. For 2005, the Government has proposed income tax reductions for households, but the effect on real disposable income will be partly offset by a higher rise in prices as a result of the increase in VAT. Debt accumulation in the household sector has been approximately 11 per cent in the last year. Debt has risen at a markedly faster pace than income. Our projections are based on a gradual increase in the interest rate in line with forward interest rates. Rising debt and higher interest rates will contribute over time to lower growth in household disposable income.

In the first three quarters of 2004, imports increased markedly compared with the same period last year. This may indicate that some of the growth in demand has resulted in an increase in imports instead of higher domestic output. Imports as a share of mainland GDP are rising. This is a result of an increase in the international division of labour, due in part to the removal of trade barriers. The rise in the share of imports must also be seen in relation to low prices for imports from many low-cost countries and the weak competitiveness of domestically-oriented industries.

The deterioration in Norway's competitiveness relative to other countries stems from high wage growth over several years since 1998. The nominal krone exchange rate measured by the trade-weighted index (TWI) is now approximately at the level prevailing in the mid-1990s, while labour costs in manufacturing have risen considerably more than among our trading partners in the same period. The business sector is still burdened with the loss in competitiveness that can be attributed to high wage increases in the period 1998-2002. The exposed sector has been scaled back. Companies that are still in operation may be in a better position to cope with the high wage level. A more efficient service sector may also have strengthened the export industry. Nevertheless, costs may have negative impact on activity and employment.

The cost level with the current krone exchange rate is close to 15 per cent higher than in the mid-1990s and about 6 per cent higher than the average for the past 30-35 years. Norwegian businesses are losing market shares in domestic and foreign markets partly because of the strong real krone exchange rate. In the face of major restructuring as a result of shifts in the international division of labour, it is a disadvantage for Norwegian business and industry that costs are high.

Reports from Norges Bank's regional network confirm the picture of an expanding economy. In the September round of interviews, our contacts throughout the country reported continued growth in all the main industries.

Our contacts here in western Norway report continued recovery in all industries. Suppliers to the petroleum sector report solid growth, while the export industry reports somewhat lower growth now than before the summer. Growth is picking up in the building and construction sector. New developments include activity in commercial construction, which has also increased this time. Growth in retail trade is solid, and reports of increased willingness to invest apply primarily to this sector. Signals from the regional network indicate some increase in employment in retail trade and the building and construction sector. Manufacturing now reports no change in employment after a moderate rise in the last couple of rounds.

Directorate of Labour figures show that unemployment in Region South-West is a little lower than in the country as a whole. Measured as a share of the labour force, seasonally adjusted unemployment is now 4.4 per cent, including persons on labour market programmes. The number of unemployed persons not on labour market programmes has fallen by 8 per cent since October 2003 to about 15 500. The largest reduction has been in manufacturing and the building and construction industry.

According to the Directorate of Labour, a sharp decrease in the number of lay-offs has contributed to lower unemployment in manufacturing.

Since July, oil prices have varied between USD 34 and 52, the highest nominal levels recorded. Measured in real prices, oil prices are nonetheless clearly lower than the levels recorded in the beginning of the 1980s. In contrast to earlier periods of sharply rising oil prices, the main reason behind the current rise in oil prices is a surge in demand and limited excess production capacity. Growth in oil demand has been particularly strong in regions where production is relatively energy-intensive, such as China and other non-OECD countries. China alone accounts for about 1/3 of global growth in oil demand this year. Moreover, there has been a marked reduction in excess production capacity in OPEC countries. Small production problems have therefore affected prices more than would otherwise have been the case.

In the short term, oil prices constitute the greatest risk to the outlook for the global economy. High oil prices may contribute to a sharper-than-expected slowdown in global economic growth. This could in turn result in lower demand and lower commodity prices. High oil prices have mixed effects on the Norwegian economy. Lower demand abroad will have a negative impact on parts of the Norwegian economy. At the same time, domestic demand is normally stimulated by higher petroleum investment. The balance in the Norwegian foreign exchange market will not be affected to any appreciable extent. So far, the effects of high oil prices on developments in the real economy have been relatively limited.

Credit developments in the past year have given ambiguous signals to our interest-rate setting. Growth in household debt is high. Enterprises have been reducing their debt for some time, but developments over the past months may suggest that this trend has been reversed.

Norwegian enterprises and households borrow primarily at variable rates. Loans with no form of fixed rate agreement account for over 80 per cent of the value of loans to the household and enterprise sector. The current interest rate level is very low. Long-term investments cannot be made based on the assumption that this interest rate level will persist. According to money market expectations, the interest rate will eventually stabilise at close to 5½ per cent. This interest rate, plus a premium for banks' margins, provides a more realistic indication of the interest rate level that will apply over the loan's life than the variable interest rates prevailing today.

Growth in the Norwegian economy is now solid. It appears that growth will also be high in 2005. From 2006, growth is expected to slow gradually to, and eventually somewhat below, the level of growth in potential output. In Inflation Report 3/04, the output gap is projected to become clearly positive in the course of 2005 and to remain positive until the end of the projection period. Inflation is projected to show a marked increase over the next year. In the short run, the depreciation of the krone in 2003 will continue to exert upward pressure on imported consumer goods. We also assume that the pronounced fall in prices for some goods and services last autumn will to some extent be reversed. In the somewhat longer term, inflation will show a more gradual rise. Higher resource utilisation in the Norwegian economy will lead to somewhat higher wage growth and will also make it possible for enterprises to increase their operating margins. However, inflation will still be restrained by low external price impulses. The positive contributions from the exchange rate depreciation in 2003 will unwind in the course of spring 2005. The contribution from the exchange rate to inflation will then gradually become slightly negative. There are prospects that inflation will reach the inflation target towards the end of the projection period.

There is uncertainty surrounding the projections. The projections are partly based on our analysis of relationships in the economy, the exchange rate assumption and the forward interest rate assumption. We can give some indication of the uncertainty surrounding the projections on the basis of historical deviations between projected and actual price developments. Based on these calculations, inflation at end-2007 is projected with a probability of 50 per cent to be between 1.75 and 3.25 per cent.

In the Inflation Report, we analysed possible effects on inflation and output based on some alternative assumptions about the functioning of the economy and the current economic situation. It was assumed that the krone exchange rate would remain fairly stable in the period ahead. This assumption was based on pricing in the foreign exchange market. The analyses in the Report show that if the exchange rate appreciates more than this, inflation may be considerably lower than projected. If, for example, the exchange rate appreciates by 5 per cent in relation to the baseline scenario, inflation may stand at 2 per cent at end-2007 - ½ per cent below the inflation target. The change in the interest rate path that will also occur if the outlook for inflation and output changes was not taken into account in these calculations.

As mentioned earlier, the strong krone has a dampening effect on the inflation outlook. This provides a basis for keeping the interest rate level in Norway low for a longer period than would otherwise have been the case and for maintaining this low level even though interest rates rise in other countries. Inflation targeting will therefore ease the pressure on the krone and stabilise exchange rate expectations.

The projections in the Inflation Report are based on the assumption that the interest rate moves in line with financial market expectations. This implies that Norges Bank maintains the key interest rate at the current level in the period to summer 2005, with a gradual increase thereafter.

It is the Executive Board's assessment that the projections seem to provide a reasonable balance between the objective of increasing inflation and at the same time avoiding excessive growth in output and employment. The projections imply a sight deposit rate in the interval 1¼ - 2¼ per cent in mid-March 2005. This is conditional on economic developments that are approximately as projected in the strategy period. The interest rate should be assessed regularly on the basis of new information emerging during the strategy period that is of significant importance for the outlook for inflation and output. Particular weight must be given to factors that may delay an increase in inflation.

Uncertainty as to the effects of previous monetary policy easing and the unusually low interest rate level imply, on the one hand, that we should exercise caution with regard to further interest rate reductions. On the other hand, the prospect of continued low inflation for a period ahead implies that wide deviations from projected economic developments would be required before interest rates should be increased. The prospect of continued low inflation in Norway also implies that we should lag behind other countries in setting interest rates at a more normal level.

At its monetary policy meeting on 3 November, the Executive Board decided to leave the sight deposit rate unchanged at 1.75 per cent. At this meeting, the Executive Board did not see any clear alternatives to leaving the interest rate unchanged. In reaching its decision, the Executive Board has weighed the objective of bringing inflation back to target against the risk that output growth may eventually be too high.