The economic situation, global uncertainty and monetary policy

Speech by Deputy Governor Jarle Bergo at the Annual General Meeting of ACI Norge - The Financial Markets Association on 6 September 2007

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 15 August and in Monetary Policy Report 2/07.

Introduction

First of all, I would like to thank you for inviting me to your Annual General Meeting. In modern central banks, increasing emphasis is placed on transparency and communication, and we feel that coming here to talk about monetary policy is an important part of our work to increase understanding of our activities. This has not always been the case in all central banks. For example, it was not until 1994 that the Federal Reserve began to publish its interest rate decisions. Until that time, market participants had to follow changes in market interest rates in order to guess what decision the central bank had taken. I assume that most of you present here today are glad that time is past.

In this address, I will first discuss economic developments in Norway, and the orientation of monetary policy. I will then comment on the turbulence in international financial markets in recent weeks. I believe many of those present here have a special interest in developments in the exchange rate, and will therefore discuss this in more depth towards the end of the address.

The economic situation and the orientation of monetary policy

The Norwegian economy is now in a cyclical upturn. Over the past three years, mainland GDP has grown by approximately 4½ per cent annually, and the strong growth has continued in 2007. In the first half of the year, annualised growth was close to 6 per cent, and even if GDP growth in the third and fourth quarters should be zero, annual growth will be well over 4 per cent. As the chart shows, there have not been four consecutive years with such strong growth since 1971.

At the same time, productivity growth in the Norwegian economy has been strong, and the supply of labour has been ample. The growth capacity of the economy has therefore been high. Low interest rates, growth in public demand and in petroleum investment and vigorous international growth have resulted in high income growth in the household and business sectors. Moreover, low interest rates have made it more profitable to bring forward consumption. In addition to contributing to the increase in actual income, the sharp improvement in the terms of trade may have raised households' income expectations. On balance, this has boosted demand for goods and services.

So far, there are few signs of a slowdown in the Norwegian economy. Growth in demand is still robust, and investment in the petroleum sector has increased further. Solid growth in

other countries and high prices for Norwegian goods are still generating strong positive impulses to export-oriented mainland enterprises. A number of factors are buoying up growth in household demand this year. As a result of a continued increase in employment and rising wage growth, household real disposable income is growing at a faster pace this year than in 2006. Households are optimistic regarding their own financial situation and the Norwegian economy. Growth in housing investment nevertheless appears to be slowing. This may partly reflect rising construction costs and a growing share of capacity in the construction sector being used for commercial buildings. The favourable trend is also reflected in Norges Bank's regional network, which so far has reported continued solid production growth in most sectors.

Capacity utilisation has reached a high level as a result of strong activity growth. Employment has risen as rapidly as in the years prior to the cyclical peaks in the 1980s and 1990s, and unemployment is now at a very low level, measured both in terms of the number of registered unemployed and according to Statistics Norway's labour force survey (LFS). Enterprises report a shortage of qualified labour, and many positions are vacant. The number of vacancies per unemployed person has not been higher since the 1980s. According to Statistics Norway's business tendency survey, the shortage of labour and intermediate goods is now at a higher level than during the booms in the 1980s and 1990s.

The strong rate of growth has only to a limited extent fed through to a higher rise in prices for consumer goods and services. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) has admittedly picked up gradually since late summer 2006, but in relation to the economic situation, underlying inflation remains low. The year-on-year rise in the CPI-ATE was 1.4 per cent in July. Other measures of underlying inflation show approximately the same rise in prices. According to our assessment, underlying inflation is between 1 and 1½ per cent, as it has been for a longer period.

The year-on-year rise in the total consumer price index (CPI) has been just under ½ per cent in recent months. This is because electricity prices have been substantially lower this year than in 2006, when unusually high electricity prices due to low precipitation levels pushed up the year-on-year rise in the CPI close to the inflation target. In recent months, electricity prices have been at their lowest level since 2002.

There are probably a number of reasons why inflation has been low in an environment of high economic growth.

First, Norway's terms of trade have improved. Prices for oil and gas, freight, fish, industrial commodities and engineering products have increased considerably. In addition, market growth abroad has provided market opportunities for Norwegian export goods. At the same time, Norwegian importers have been able to shift demand to new markets in central Europe and Asia, which has led to a fall in prices for a number of consumer goods. The terms of trade have improved by about 40 per cent since 2002. A similar situation has not been seen since World War I when earnings in the shipping industry and other export industries were exceptionally high for a period.

Second, an ample supply of labour has been an important factor behind output growth. In particular, the supply of foreign labour has increased sharply after EU enlargement in 2004.

Over the past two years, these labour inflows have accounted for over 30 per cent of growth in the labour force in Norway. At the same time, this has enabled Norwegian companies to be bolder in accepting new assignments and make investments knowing that they can procure labour throughout Europe. In addition to increased labour inflows from Poland, Lithuania and other central European countries, we have long benefited from inflows of labour from Sweden. Many workers are on temporary assignment and their consumption is primarily concentrated in their home country. The Norwegian economy has seen a net capacity increase. High inward labour migration and the scope for relocating portions of production abroad have led to increased competition in the labour market and have probably curbed wage growth.

Third, the Norwegian business sector has been quick to adopt new technology and to reap the benefits. This applies both to companies competing on international markets and those supplying goods and services to the domestic market. In comparison with other countries, it is particularly productivity gains in service sectors that stand out. Examples are automated processes and swifter payments in the financial industry and improved inventory and management systems in commerce and transport. This results in lower production costs.

Monetary policy is oriented towards low and stable inflation. The operational target is annual consumer price inflation of close to 2½ per cent over time. The objective of low and stable inflation provides the economy with a nominal anchor. Monetary policy shall also contribute to stabilising output and employment. In a small, open and decentralised market economy like Norway, and with our particular industry structure, there will be cyclical fluctuations. When economic agents have confidence that inflation is low and stable over time, the interest rate can also be set with a view to dampening the fluctuations somewhat.

Monetary policy in Norway is in line with the monetary policy conducted by most central banks in the OECD area.

The challenge of monetary policy is how the interest rate should be set ahead in order to bring inflation close to target while avoiding an overheating of the real economy.

As a general rule, central banks influence the shortest money market rates via the key policy rate. However, economic agents' consumption and investment decisions depend more on their interest rate expectations. Hence, monetary policy functions primarily by influencing expectations regarding future interest rates. Economic agents therefore need to understand the central bank's intentions in its interest rate setting.

In the November 2005 *Inflation Report*, Norges Bank published its own forecast for the interest rate for the first time. The aim is to enhance the predictability of monetary policy. With a predictable monetary policy, market participants can react to new information in a way that contributes to stabilising developments in output and inflation.

Norges Bank's interest rate forecast should satisfy two main criteria. First, the interest rate should be set with a view to stabilising inflation close to the target in the medium term. The horizon will depend on disturbances to which the economy is exposed and the effects on the path for inflation and the real economy ahead. Second, the interest rate path should provide a reasonable balance between the path for inflation and the path for capacity utilisation. In

the assessment, potential effects of asset prices, such as property prices, equity prices and the krone exchange rate on the prospects for output, employment and inflation are also taken into account.

Norges Bank forecasts inflation, output and the interest rate simultaneously. There is considerable uncertainty associated with the forecasts for capacity utilisation in the economy (the output gap), and there is no simple relationship between developments in capacity utilisation and inflation. It cannot therefore be argued with great conviction that it is possible to identify one particular interest rate forecast that provides the indisputably "best" trade-off in monetary policy. More often than not, there will be a number of possible interest rate paths that might be said to provide a reasonable balance in view of the uncertainty involved.

The results of this trade-off are presented in the *Monetary Policy Report* in the form of a chart that presents central projections for the interest rate, inflation and capacity utilisation in the economy.

The formulation of a precise inflation target, our projection for the interest rate 3-4 years ahead and our desire to achieve a balance between output and inflation stability may perhaps give an impression of excessive optimism with respect to managing the economy and invite a repeat of earlier attempts to fine-tune the economy. But it is important to bear in mind the lessons drawn from the 1970s and 1980s, i.e. high stabilisation policy ambitions may lead to wide fluctuations in the economy, with high and variable inflation. In our conduct of monetary policy, we must not underestimate the uncertainty surrounding the decisions taken.

Even if Norges Bank publishes an interest rate forecast, this does not mean that the interest rate will follow this precise path throughout the projection period. Forecasts of inflation, output, the interest rate and other variables are based on an assessment of the current situation and a perception of how the economy functions. Disturbances to the economy may result in changes in the forecasts. Data revisions imply that the current economic situation is not fully known. Our ambition must be to reduce uncertainty with regard to our own response pattern. That actual interest rate developments will deviate somewhat from the Bank's forecast will probably be the rule rather than the exception.

What Norges Bank's Executive Board actually adopts is a monetary policy strategy that applies until the next Report. When *Monetary Policy Report* 2/07 was presented in June, the Executive Board decided that the key policy rate should be in the interval 4½ - 5½ per cent in the period to the publication of the next Report on 31 October. And even that is conditional on economic developments that are broadly in line with projections.

Financial market turbulence

Global economic developments are important for economic developments in Norway, and changes in the growth prospects for the world economy may influence our projections. The turbulence in international financial markets in recent weeks has heightened the uncertainty concerning developments ahead.

The source of the turbulence can be found in the US housing market and particularly in the subprime mortgage market. This segment of the US credit market has expanded sharply in recent years. The loans often feature an interest-only period and low interest rates in the first years of the loan's term and higher interest rates thereafter. It has been tempting for many to take up this type of loan for home purchases even with a poor debt-servicing capacity. These borrowers were banking on a rise in house prices that would allow them to service the loans once interest payments increased and principal payments fell due. Securities were developed around these loan portfolios. A large number of risk-prone investors who were seeking high returns – and with a similar belief that a continued rise in house prices would secure the collateral values - made it easy to find buyers for these securities.

Weak developments in house prices towards the end of 2006 and into 2007 led to rising defaults on subprime mortgages. This resulted in a sharp increase in credit spreads for securities backed by this type of loans. Into spring and the early part of summer, a succession of news releases reported large losses and collapses in funds that had specialised in these investments. It was not primarily the size of the actual losses that led to the collapse of the funds, but a shortage of liquidity. The news of mounting losses prompted a sell-off by investors in these funds. As a result of increased losses and sell-offs, the funds had to sell other, more solid securities in a weak market, which made the losses visible and reinforced the exit of depositors and other creditors. The unfolding of events became increasingly redolent of a classic bank run.

The turbulence spread during summer. Funds and investors in Europe, Australia and Asia started reporting higher losses. The turbulence also spread to other financial market segments, for example stock markets which have declined sharply since mid-July.

The contagion to other markets was caused by uncertainty about the risk associated with securities backed by subprime mortgages, and a lack of information about the investors in this market. As a result, financial institutions became highly reluctant to provide credit. This had a considerable impact on money market rates and gave rise to liquidity problems. On 9 August and in the days ensuing, many central banks offered extra liquidity to the banking system to ensure the functioning of the money market. Norges Bank supplied liquidity to the Norwegian banking system through ordinary market operations on 9 August. A few days later, the US Federal Reserve lowered its discount rate by 50 basis points.

The turbulence led to a marked increase in risk premia in financial markets as investors fled to safer havens. The price of credit risk in terms of the price of credit default swaps (CDS) rose sharply for both banks and other companies, also in Norway. As shown in the chart, the increase in the CDS price for DnB NOR was appreciably smaller than for an index of European banks, however.

Such an increase in the price of risk in some financial market segments is not necessarily negative. A normalisation of risk premia in relation to the particularly low risk premia prevailing in recent years has its advantages. But the adjustments seem to be marked by overshooting and considerable volatility.

We do not know how long the turbulence will last or what consequences will be for the real economy. So far the turbulence has not led to any major reassessments of the global growth outlook among most observers, although it seems obvious that it will have a negative effect. The turbulence has increased the risk that the problems that were initially linked to one segment of the US residential mortgage market will have consequences for the real economy in the US and the rest of the world. This has led to a fall in short-term interest rate expectations, particularly in the US. Long-term interest rates have also declined, reducing funding costs for solid borrowers. Interest rate expectations have also fallen somewhat in Norway.

Developments in the krone exchange rate

In recent weeks, developments in foreign exchange markets have also been marked by the turbulence. For example, there has been a substantial reduction in carry trade, resulting in an appreciating tendency for low interest rate currencies and weakening tendency for high interest rate currencies.

Let us take a closer look at developments in the krone exchange rate and the importance of the krone exchange rate for monetary policy.

Compared to the fluctuations in the first part of the period we see here, from 2002 to date, the krone exchange rate has been relatively stable in recent years, but there have been some short-term movements. An appreciation of the krone has in some periods occurred in tandem with higher oil prices and in other periods with lower oil prices. The krone appreciated when the interest rate differential against other countries was high in 2002, but as interest rates in Norway moved down to the level among trading partners, the value of the krone fell back. In recent years, the actual interest rate differential against trading partners has been close to zero. Earlier analyses conducted at Norges Bank have shown that other factors, such as expected volatility among major international currencies and developments in US equity indices, may have been factors behind developments in the krone exchange rate, but the effects vary over time. This reflects among other things shifts in exchange market themes.[1]

Shifting themes in exchange markets make it difficult to predict short- and medium-term exchange rate developments. The exchange rate projections in the *monetary policy report*s are based on the theory of uncovered interest rate parity. According to the theory, the return on financial investments will be the same irrespective of the currency involved. If Norwegian interest rates are higher than external interest rates over a period, the krone exchange rate must depreciate during that period or NOK-denominated investments generate an excess return. If the interest rate differential against other currencies is small, the exchange rate will remain stable.

In practice, this is not always the case. On the contrary, studies indicate that short-term movements in the exchange rate are best described by the random walk process. This means that the best projection of the krone exchange rate tomorrow is that it will be the same as today.

In the somewhat longer term, we still believe that monetary policy and the interest rate differential against other countries are important for developments in the exchange rate.

But in the short run the krone fluctuates to some extent and not necessarily in line with the interest rate differential.

The chart shows the effective exchange rate for Norway and some other countries. Compared with the currencies of Switzerland, the UK and Sweden, the Norwegian krone does not fluctuate to any particular extent.

Compared with other commodity-exporting countries such as Canada, Australia and New Zealand the movements in the krone exchange rate have been modest. If such movements are felt to be uncomfortable, hedging instruments can be used. The markets for the purchase and sale of currency for future delivery - the forward and options markets - have grown in recent years. A deeper market has reduced trading costs and it is easier to find counterparties. This has improved companies' possibilities for hedging against exchange rate risk. Use of instruments that diminish the risk associated with floating exchange rates is also gaining ground in Norway.

The operational target of monetary policy in Norway is low and stable inflation. Developments in the krone exchange rate are nonetheless important when Norges Bank sets the interest rate. There are several reasons for this. First, changes in the krone exchange rate affect prices in krone terms for imported consumer goods and services. Second, exchange rate changes have an impact on competitiveness in Norwegian business and industry and on market opportunities at home and abroad. This affects the level of activity in the economy and, in turn, price and cost developments.

In the period between *Inflation Report* 3/06, presented in November 2006, and *Monetary Policy Report* 1/07, presented in March this year, the krone appreciated more markedly than we had assumed. As a result, *Monetary Policy Report* 1/07 was based on the assumption that the krone would be somewhat stronger throughout the projection period. The exchange rate assumption in *Inflation Report* 3/06 is shown by the broken blue line in the chart on the left, while the broken red line denotes the exchange rate assumption in *Monetary Policy Report* 1/07. The isolated effect on the interest rate path of a stronger krone is illustrated in a box in *Monetary Policy Report* 1/07. As shown in the chart on the right, the stronger krone pointed to a somewhat lower path for the interest rate.

Given the inflation target, we will be mindful of the effects of higher interest rates on the krone exchange rate when inflation is low. Nonetheless, the interest rate path published in *Monetary Policy Report* 1/07 was higher than in *Inflation Report* 3/06. The reason for this is that the prospect of stronger-than-expected growth in both Norway and among our trading partners pointed to a higher interest rate path. On balance, this had a greater impact on the interest rate path than a stronger krone.

Over time, however, the nominal exchange rate is not the main force. The most important influence on competitiveness in Norwegian business and industry and the purchasing power of the Norwegian krone is changes in the real exchange rate.

The real exchange rate can be measured in a number of ways, for example by consumer prices or labour costs in Norway relative to our trading partners measured in a common currency. The real exchange rate has fluctuated widely over time and has deviated over

longer periods considerably from the average level since 1970. The real exchange rate has nonetheless shown a tendency to revert to this level.

Over time, the exchange rate acts as a buffer in the global economy. When economic activity is high in one country, an appreciation of the country's exchange rate will have a dampening effect. Conversely, when there is a need to stimulate the economy, a weaker exchange rate will boost growth. Over the past few years, the Norwegian real exchange rate, whether measured by relative labour costs or by relative consumer prices, has been stronger than the average since 1970, largely due to a stronger nominal exchange rate. The corollary to these developments is the pronounced improvement in Norway's terms of trade. The strong rise in prices for oil and other Norwegian export products has contributed to the krone appreciation over the past few years. The strong real krone exchange rate is therefore a result of Norway's position as one of the nations that has benefited most from freer global trade and increased cross-border flows of capital, technology and labour. In this respect, the strong krone is a sign that the Norwegian economy is faring well.

Thank you for your attention.

Footnotes:
1 See box "Developments in the krone exchange rate", *Inflation Report* 2/05