Monetary policy in an oil economy

Address by Deputy Governor Jarle Bergo at a Business Conference, Molde, 6 March 2001

I appreciate being given this opportunity to speak to you about Norwegian monetary policy at Business Conference 2001 here in Molde. Monetary policy defines important operating parameters for the business sector. Even though we perhaps primarily think of Molde as an administrative and service centre, not to mention a jazz centre - and a very attractive one at that - the city has many internationally exposed enterprises. This is even more apparent when we look at the county as a whole. In a new report by Arild Hervik at the Møre Research Centre here in Molde, it emerges that merchandise exports from Møre and Romsdal both in total terms and per capita rank third among Norway's counties. The formulation of monetary policy and the management of petroleum revenues therefore have a considerable effect on these internationally exposed activities.

The long-term task of monetary policy is to provide the economy with a nominal anchor. Economic agents must be relatively certain of the future value of money. Agreements relating to purchases and sales, loans and interest rates are concluded in nominal terms. The decentralisation of decisions both in the public and business sector is based on nominal budget limits. The tax system is in nominal rates. When prices fluctuate widely, it is impossible to foresee the content of such agreements and budgets in real terms. Unexpected fluctuations in the level of prices will thus translate into undesirable fluctuations in the real economy.

A credible and consistent monetary policy provides enterprises, households and institutions with the confidence that the value of the krone will be stable over time. This confidence is the best contribution monetary policy can make to employment, economic growth and welfare. We thereby avoid high and varying inflation and boom periods that are followed by recessions. Norges Bank's main monetary policy instrument is the interest rate. This instrument must be oriented towards the long-term objective of nominal stability in the economy.

Norway's choice of monetary policy regime is closely linked to the structure of the Norwegian economy. Norway is a welfare society with a large public sector, a high level of transfers to households and enterprises and high direct and indirect taxes. Our economy is also characterised by the substantial importance of petroleum activities. The exposed sector of the mainland economy has been fragile and vulnerable. An important concern of economic policy since the 1970s has been to avoid undermining the exposed sector too much. In this address, I will first look at the formulation of Norwegian monetary policy in recent years and then discuss the relationships between the special structure of the Norwegian economy and monetary policy.

The objective of monetary policy

Norway has a tradition of a fixed or stable exchange rate objective, although we cannot say that we have always had a high degree of continuity in monetary policy. On the contrary, in the 1970s and 1980s, the economy lacked a nominal anchor. Interest rates were low in nominal terms and they were politically determined. Frequent devaluations were used to redress the negative effects of high price and wage inflation on competitiveness. The average rate of increase in prices between 1973 and 1987 was almost 10 per cent. The value of the Norwegian krone against the German mark was nearly halved between 1973 and 1987. We paid about 2 kroner for 1 mark in 1973 and close to 4 kroner in 1987.

The low interest rate and devaluation policy collapsed in the mid-1980s. Following a shift, which can said to have occurred in 1986, monetary policy has created nominal stability. Through the 1990s inflation in Norway was on a par with the level elsewhere in Europe. At the same time, the value of the krone against European currencies is about the same today as it was in the early 1990s. The exchange rate against the German mark is still around 4 kroner.

Norway abandoned a fixed exchange rate system in 1992, in the wake of heavy speculation against the krone during the period of turbulence in European foreign exchange markets. The krone was very stable in the first years following this episode, with small daily fluctuations in the exchange rate. Looking back at developments in the Norwegian foreign exchange market in the 1990s, it appears that no significant change occurred in 1992 even though the situation was very dramatic at the time.

However, there was a marked shift at the beginning of 1997. From that time, daily and monthly variations in the krone exchange rate show that the krone is floating.

The krone is floating, but monetary policy is oriented towards stability in the value of the krone. The Exchange Rate Regulation - which is the mandate assigned to Norges Bank by the political authorities - states that monetary policy shall be aimed at maintaining a stable krone exchange rate against European currencies. Since 1 January 1999, Norges Bank has defined European currencies as the euro.

The Exchange Rate Regulation takes into account that the krone exchange rate may remain outside its normal range. In the event of significant changes in the exchange rate, Norges Bank shall orient instruments with a view to returning the exchange rate over time to its initial range. Norges Bank considers an exchange rate change to be significant if it influences expectations concerning price and cost inflation to the extent that the change in the exchange rate becomes self-reinforcing.

In its conduct of monetary policy, Norges Bank places emphasis on satisfying the fundamental preconditions for exchange rate stability against the euro: instruments must be oriented with a view to reducing price and cost inflation towards the corresponding aim for inflation of the European Central Bank (ECB). At the same time, monetary policy must not in itself contribute to deflationary recessions, as this could undermine confidence in the krone.

According to the Maastricht Treaty, the main objective of the ECB is the maintenance of price stability. The ECB has defined price stability as inflation of less than 2 per cent. The objective of a stable exchange rate against the euro means that we have chosen the same standard for nominal stability as the ECB.

Inflation in Norway cannot remain higher than inflation in the euro area year after year without this having consequences for the exchange rate of the Norwegian krone against the euro. In this respect, the objective of our monetary policy bears some similarity to an inflation target.

But there are also differences. If a situation arises - for example a change in the exchange rate triggered by a substantial and sustained fall in oil prices - where Norges Bank is not able to return the krone to its initial range without contributing to a deflationary recession, the Bank will inform the authorities that measures other than those available to the Bank are required. We would do the same in a situation where the strict pursuit of an exchange rate objective could lead to inflation in the long term. This may involve recommendations concerning fiscal measures that make it possible to return the krone exchange rate to its initial range and to stabilise it. In the event of pronounced and prolonged shifts in the economy, fiscal policy and wage determination must contribute to restoring balance in the economy. However, if fundamental and permanent changes have taken place in the framework conditions for the Norwegian economy, it may also be appropriate to consider a revision of the guidelines for monetary policy.

The effects of monetary policy

In theory, Norges Bank conducts its monetary policy through two main instruments: the interest rate and exchange market interventions. However, in Norges Bank's experience, extensive and sustained interventions to influence exchange rates have yielded poor results. Interventions can often lead to game situations in which market operators regard the central bank's attempts to influence the exchange rate as an interesting opportunity to make a profit. The experience of autumn 1992, the beginning of 1997 and autumn 1998 showed that interventions could not contain pressures on the krone.

We must therefore assume that, normally, the interest rate is the main monetary policy instrument even though interventions may be used to a limited extent in special situations. The interest rate can influence the exchange rate directly through the differential between domestic and foreign interest rates, and indirectly through inflation expectations. The interest rate will also influence rice and cost inflation and thereby the fundamental preconditons for exchange rate stability.

Higher interest rates normally make it more attractive to hold NOK-denominated assets. An increase in the interest rate will therefore result in an appreciation of the krone, and a lower interest rate will weaken the krone. However, this relationship presupposes that the market is confident that monetary policy provides the economy with a nominal anchor. In some situations, interest rate changes may have the opposite effect. A higher interest rate can weaken the krone if it contributes to a deflationary recession, and a lower interest rate can strengthen the krone if it contributes to preventing a deflationary recession. The interest rate only has a predictable effect on the krone exchange rate when it affects price inflation in the right direction.

Price and cost inflation are influenced by monetary policy through a number of channels. When the interest rate is raised, it becomes more profitable to save and to postpone consumption. This reduces growth in household consumption. At the same time, a higher interest rate may increase the required rate of return, thereby reducing business investment.

In addition to the direct effect on demand, a rise in interest rates may moderate demand through reduced access to liquidity, depreciation of assets and a stronger exchange rate. Moreover, a stronger exchange rate will reduce the rise in prices for imports, which account for 40 per cent of goods and services in the consumer price index.

An increase in interest rates may also have an effect through inflation expectations. Expectations of lower future inflation will increase the real interest rate, and may therefore in itself have an impact on the real economy. Inflation expectations may also influence price and wage formation as well as the exchange rate.

However, the relationships between interest rates, expectations, demand and inflation vary over time, depending on the prevailing situation. There is nevertheless no reason to doubt that the interest rate is a powerful tool. Analyses have been published showing how changes in interest rates affect the economy in various countries. Just over a year ago, Norges Bank presented an analysis showing that an interest rate rise of 1 percentage point reduces GDP growth and price inflation by just under half a percentage point. A substantial part of the effect on price inflation is due to effects channelled via the exchange rate. The central banks of England and Sweden have both published calculations that show effects of roughly the same order.

In view of the uncertainty concerning the effects of the interest rate on economic developments, it is not possible to fine-tune price developments and the exchange rate. However, it is possible to conduct a monetary policy that reinforces confidence in nominal stability. However, favourable developments in the Norwegian economy depend on more than monetary policy alone.

Interaction between economic policy components - the importance of petroleum revenues

The basis for achieving stable economic growth is created through a successful interplay between the various components of economic policy, ie between fiscal policy, monetary policy, the system for income settlements and other measures aimed at improving the functioning of the economy - often referred to as structural policy. The Norwegian economy is vulnerable to abrupt shifts in the global economy. We cannot fully shield ourselves against external shocks, but we can curb the effects to ensure that economic developments are optimal in the long term.

Fiscal policy in Norway has had an important role in stabilising demand and production. Developments in the real economy are of importance to price and cost inflation and hence for Norges Bank's setting of interest rates. At the same time, changes in the interest rate and exchange rate may influence developments in the real economy in the short run. This means that fiscal and monetary policy have a combined effect on the overall level of activity in the economy.

The revenues from the petroleum sector are very substantial, and how they are managed is of fundamental importance to developments in the Norwegian economy and the implementation of monetary policy.

Today's sizeable petroleum revenues are due to high oil prices coupled with high production volumes. Current projections indicate that petroleum revenues will peak in the near future, and thereafter decline in pace with the production volume and lower oil prices.

Government revenues from petroleum activities have contributed to substantial government budget surpluses in recent years. As can be seen from the chart, considerable surpluses are also expected in the next few years. A share of the petroleum revenues is used to finance public expenditure from one year to the next. A large portion of the revenues is saved and invested in foreign equities and bonds through the Government Petroleum Fund.

This may be very useful. The Norwegian economy is facing considerable challenges as a result of an ageing population and a marked rise in pension expenses and the cost of nursing and care services.

The number of old-age and disability pensioners is estimated to rise by 50 per cent by 2030, and central government expenditure on old-age and disability pensions is expected to increase from approximately 7 per cent of GDP in 2000 to 15 per cent in 30 years.

In order to meet these long-term fiscal policy challenges, it is appropriate for resources to be put aside in times of high petroleum revenues. The larger the Petroleum Fund, the less dependent we will be on petroleum revenues in the future. And this is wise, because in the not too distant future, these revenues will no longer be there. This is the long-term reason for the high rate of government saving today.

Fluctuations in the oil price and petroleum revenues also give rise to challenges for economy policy in the short and medium term, however. Let us suppose that the oil price temporarily increased by USD 1 per barrel. This is a small change, well within normal variations from one year to the next. Government revenues - and thus the budget surplus - would increase by almost 1 per cent of Norway's annual GDP. If the increase in petroleum revenues is used in Norway, it would correspond to almost half of the annual growth in the non-oil economy in a normal year. If the private sector of the economy is also expanding, and the economy is already close to capacity, such a policy would swiftly lead to strong pressures on the resources in the economy and fuel inflation, which will have to be countered by higher interest rates. Such fluctuations in public expenditure would also lead to unstable conditions in the foreign exchange market.

The Government Petroleum Fund shall serve as a buffer against short-term fluctuations in oil revenues. As large portions of the revenues from oil activities accrue to the state, fluctuations in oil prices and oil revenues will primarily result in changes in allocations to the Petroleum Fund. Since all of the capital in the Petroleum Fund is invested abroad, such changes will in principle not influence the level of activity in the economy. The foreign exchange remains in balance as the petroleum fund mechanism acts as a "swing door" for foreign exchange flows. This makes the Norwegian economy more robust to fluctuations in oil prices and thus less dependent on oil, even in the short run.

We can say that oil revenues enter the Norwegian economy through an external and an internal circular flow. The distinction between the external and internal circular flow is important for exchange rate stability. This means, among other things, that short-term changes in oil prices shall not influence the orientation of economic policy. If the distinction between the two circular flows were to break down, and the use of oil revenues were to fluctuate more in step with oil prices, we would have an unstable economy. There is a risk that this may happen.

With large and to some extent varying budget revenues, the basis for determining central government expenditure and taxes from one year to the next may easily be impaired. If budget expenditure fluctuates to a large extent in step with oil prices, the result will be abrupt shifts and instability in the Norwegian economy. Changes in oil prices may then quickly influence wage and price expectations, the exchange rate and long-term rates. In will then be very demanding to achieve nominal stability. Short-term interest rates will have to be changed frequently and sharply, and long-term rates will reflect a high risk premium for the Norwegian krone. It is therefore important that the annual budgets are anchored in a long-term strategy that takes sufficiently into account that oil revenues can fluctuate from one year to the next.

If fiscal policy lacks a long-term anchor, the interplay in economic policy will not function and the result will be a more unstable krone exchange rate and wider cyclical fluctuations. This will also result in poorer use of our resources, partly because strong fluctuations in domestic activity and long-term interest rates and the exchange rate will prompt investment decisions that are made on a very uncertain basis.

In recent years, central government real underlying spending growth has accelerated somewhat. Both in 2000 and 2001, spending growth has been higher than two per cent, which is above potential growth in the mainland economy. At the same time, taxes have increased. Fiscal policy has thus had an approximately neutral effect on domestic demand. However, given the markedly higher rate of increase in wages in Norway compared with other countries, many observers would call for a tighter fiscal policy.

A possible interpretation of this development is that it is more demanding to use the government budget to dampen cyclical fluctuations during an upturn than during a downturn. The willingness and ability to pursue a counter-cyclical policy may in itself be cyclical. Another interpretation is that a neutral fiscal policy in a year featuring a sharp increase in government financial assets reflects a balance between using the government budget to stabilise the economy and phasing in higher financial revenues in the economy.

Given our monetary policy objective, the result will irrespective be some shift in economic policy. Whereas fiscal policy has a neutral effect on domestic demand, monetary policy has a tightening effect. Among other things, this is reflected in the fact that short-term interest rates are now higher than long-term rates. There has also been a shift in the focus of wage settlements since the mid-1990s, with less emphasis on a balanced labour market.

A fiscal policy that allows expenditure to vary in step with oil revenues will have adverse effects. What about stable, increased use of oil revenues? There are so many laudable projects and programmes that merit funding. With limited available resources in the economy, an increase in government expenditure will result in deteriorating competitiveness and a decrease in value added in the internationally exposed sector. Major restructuring problems may arise when oil and gas revenues fall in 10 -15 years.

Monetary policy can secure nominal stability, and that is important. But monetary policy cannot assure a flourishing internationally exposed sector. This requires contributions from fiscal policy and the social partners. If these are not in place, a relaxation of monetary policy is still not the answer. This will lead to inflation, with booms and busts ending in recession and crisis. The events of the 1980s and early 1990s brought us a painful experience, and we must not repeat the same mistakes.

The future of our internationally exposed sector will be largely determined by the amount of oil revenues that are used in the economy. If our politicians choose to use more - and it is their privilege to do so, and we can all see areas in which we should like to do more - the internationally exposed sector will inexorably be scaled back more rapidly and to a greater than extent than would otherwise be the case. In some quarters, it may be argued that additional resources should be allocated to expand public services. Others would maintain that the problems in the public sector are not due to inadequate allocations but that we tend to shoot ourselves in the foot by scaling back internationally exposed, and thus as a rule the most dynamic, industries.

I have great deal of sympathy for the latter viewpoint.

Fiscal policy also makes a decisive contribution to a successful incomes policy, ie a policy that keeps wage growth in line with that of trading partners. With the current pressures in the labour market and a shortage of labour in a number of sectors, incomes policy will be faced with considerable challenges. Developments in recent years are cause for concern. Wage growth has been roughly 11 percentage points higher in Norway than in the euro area and 10 percentage points higher than among trading partners for the past three years. This not only implies a weakening of Norway's competitiveness, but also means that higher interest rates are required to dampen price and cost inflation.

We have higher interest rates than the euro area. We have higher price inflation.

In the last *Inflation Report,* Norges Bank estimated that given unchanged interest rates, price inflation in Norway could edge down to a little less than 2 per cent in a couple of years. And it should if we are to maintain a stable exchange rate over time.

Conclusion

Allow me to conclude and try to sum up.

The primary objective of monetary policy is to ensure nominal stability. This is the best contribution monetary policy can make to economic growth and welfare.

The Norwegian economy is vulnerable to abrupt shifts in the world economy. The substantial size of our petroleum sector amplifies this. For that reason, a successful interaction between various policy components is important with a view to ensuring optimal economic in the long term.

Thank you for your attention.