

# Business cycles and monetary policy

Address by Deputy Governor Jarle Berge at a meeting hosted by Handelsbanken and the Centre for Economic Research at NTNU, Trondheim, 21 April 2005.

Please note that 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 20 April, Inflation Report 1/05 and on previous speeches.

The Norwegian economy is growing at a solid pace and there are prospects that growth will remain high. The recession was mild after the previous expansion culminated two and a half years ago. The period of relatively high cost inflation in Norway came to an end without production being impacted to the same extent as during the recessions in the early 1980s and around 1990. One of the main reasons for this is probably that low inflation in the 1990s and current monetary policy have anchored expectations of low and stable inflation among economic agents.

The need to bring down inflation was the main reason why New Zealand introduced an inflation target for monetary policy, as the first country to do so, at the end of the 1980s. Canada, the UK, Sweden and Australia followed suit later in the 1990s. Inflation targeting has gradually become the standard monetary policy regime in developed economies. In Norway, the Government introduced an inflation target in 2001. The target is set at 2.5 per cent.

The various components of economic policy in Norway have varying effects. This is why they have different functions:

- Monetary policy steers inflation in the medium and long term and can also contribute to smoothing swings in output and employment.
- The central government budget - growth in public expenditure - influences the krone and the size of the internationally exposed business sector in the medium term. Government expenditure and revenues must be in balance in the long term.
- Wage formation, the structure of the economy and incentives determine how well and how efficiently we utilise our labour resources and other economic resources.

There is also an interaction:

- In its budget resolutions, the government authorities will attach importance to the effects of the budget on the Norwegian economy and will therefore take account of interest rate effects. In this way, they avoid a situation where growth in public expenditure and the interest rate push the economy in different directions.
- With a known monetary policy response pattern, the parties to the centralised income settlements can take interest rate effects into account when wage increases are negotiated.
- Moreover, the parties to public sector negotiations can take into account that the higher pay increases are, the fewer people that can be paid over government

budgets. The interaction here came into clear evidence when employment in the general government sector fell after the expensive wage settlement in 2002.

The authorities can achieve better economic policy results if they can commit in advance to a set of credible policy rules. Households, enterprises and capital market participants are forward-looking in their decision-making. It is therefore important that the authorities do not sow doubt, but on the contrary act in a long-term and predictable manner. There must be consistency between plans and actions.

Monetary policy's role is to ensure low and stable inflation. Experience shows that we cannot reduce unemployment over time by simply accepting somewhat higher inflation. In many countries, including Norway, confidence that inflation will be held at bay has increased because interest rate setting has been delegated to the central bank.

For monetary policy to contribute to stabilising developments in output and employment, economic agents must be confident that the inflation target will be reached.

Inflation targeting has proved to be a sound system and particularly well suited to small, open economies. Normally, interest rate setting under an inflation targeting regime will also contribute to stabilising output and employment. In downturns, with prospects of low and falling inflation, the interest rate will be reduced to boost demand and prevent an inflation level that is too low. During an upturn when there are prospects of high inflation, the interest rate will be increased. Inflation targeting is softer around the edges than the exchange rate regimes Norway and many other countries operated earlier. The system has proved fairly robust to disturbances.

Nevertheless, the soft landing of the Norwegian economy after several years of high domestic cost inflation and a low level of activity abroad must not lead us to believe that output and employment cannot show pronounced fluctuations in the future. We cannot expect the interest rate to have the same impact from one period to the next. The economy is exposed to unexpected disturbances. As a result, we cannot fine-tune economic developments, but we can avoid the largest effects when the economy is exposed to disturbances. Monetary policy's most important contribution is to anchor inflation expectations. Experience indicates that inflation expectations remain stable even if inflation varies somewhat as long as the interest rate is used actively to moderate the variations in inflation. Given our highly open economy, we may have to accept somewhat wider variations in inflation than some other countries.

Exchange rate expectations are influenced by growth in public expenditure and developments in terms of trade, although stable inflation expectations can also have a stabilising effect on exchange rate expectations.

Just over a year ago, the interest rate was reduced by 0.25 percentage point to 1.75 per cent. Since then, the key rate has remained at this historically low level.

Real interest rates are also low. Between December 2002 and March 2004, the key rate was reduced by a total of 5.25 percentage points. The interest rate decline can be ascribed to a number of factors.

In late autumn 2002, inflation started to fall. The inflation projections were also revised down. New information gradually emerged about the outlook for other countries and the Norwegian economy, indicating that inflation might be very low. Short-term real interest rates have fallen by close to 4 percentage points. It would seem that it is not only changes in the real interest rate that have an influence, but also its level. Between December 2002 and March 2004, the interest rate has moved from a high to a low level. The real interest rate is now lower than a neutral real interest rate. A real interest rate that is lower than the neutral rate will stimulate activity even after the effects of the interest rate fall itself have been exhausted.

Calculations seem to indicate that the neutral real interest rate for Norway is between 2½ and 3½ per cent, and it has probably fallen somewhat in recent years.

It takes time for an interest rate reduction to have an impact on inflation. We are now seeing the effects of previous monetary policy decisions, some of which were taken two years ago.

The interest rate has affected inflation via the krone exchange rate and via demand for goods and services. In particular, the rise in prices for domestically produced goods and services has picked up. In addition, the reduction in the interest rate has probably contributed to holding up expectations of future inflation even when inflation is low.

If there is confidence in monetary policy, economic agents will expect inflation to be close to target over time. Companies will draw up their budgets on this basis. This will then contribute to stabilising inflation. Many companies change their prices only once or twice a year. When they change prices, they probably take into account the expected rise in other prices.

It has been important to prevent inflation expectations from falling and becoming entrenched at a low level. Surveys of inflation expectations nevertheless indicate that expectations are well anchored around the inflation target in the long term.

The first signs of the effects of the interest rate cuts appeared in the foreign exchange market. The interest rate differential against other countries narrowed. It became more attractive to borrow and less profitable to invest in the Norwegian krone. The movement in the krone exchange rate was reversed and the krone depreciated through 2003 and into 2004. However, the impact on the krone exchange rate has been considerably dampened because external interest rates have remained low. High prices for oil and gas and other export goods also contributed to an appreciation of the krone last year.

The depreciation of the krone in 2003 contributed to restraining the fall in prices for imported goods. The effect occurred gradually. Companies and importers may have preferred to observe changes in the exchange rate over time before changing their selling prices.

After several expensive wage settlements and a short period of a strong krone had weakened profitability in the Norwegian business sector, the depreciation of the krone contributed to curbing the decline in activity and employment. The downturn was short-lived.

Together with private consumption and fixed investment in the petroleum sector, traditional exports were an important factor underlying growth in the early stages of the recovery that started in the first half of 2003. Prices for many of our main export goods have risen as a result of strong growth in new markets. However, growth in Norway's total exports excluding oil and gas is lower than import growth among our trading partners.

Mainland fixed investment has gradually become an important driving force in the upturn. Investment has picked up in most industries and growth was stronger than expected towards the end of 2004. Norges Bank's regional network has registered rising investment in all industries. Petroleum investment in particular appears to be growing at a faster pace than projected. This may continue to boost mainland output.

In the last few years, household demand has been underpinned by low interest rates, high real wage growth and higher asset prices. According to preliminary national accounts figures, private consumption expanded by 4.3 per cent last year. House price inflation has slowed somewhat, but remains high. In 2004, housing starts were the highest in several years. Home refurbishment is probably also rising sharply.

Overall, the supply of capital to households has increased sharply. Debt accumulation was somewhat more than 11 per cent in 2004 and is now considerably higher than growth in household disposable income. This largely reflects the sharp rise in house prices since the mid-1990s.

According to TNS Gallup's consumer confidence indicator for the first quarter of 2005, households are still highly optimistic with regard to their personal finances and the domestic economy. Our regional network confirms this impression, with reports of strong growth in companies that provide goods and services to households. On the whole, household consumption and housing investment are projected to show fairly strong growth over the next few quarters.

Even with a strong upturn in the mainland economy, the increase in the number employed has been relatively modest. Productivity rose fairly sharply in the first few quarters after economic growth picked up. Normally, when productivity growth is strong, enterprises again begin to hire new staff. The current upturn has lasted about two years. The fairly low level of growth in employment, as measured by the number of employed, must be seen in the light of the sharp decline in sickness absence through 2004 after rising for several years. The decrease in sickness absence has increased companies' supply of labour and reduced the need for new employees. Measured in person-hours worked, employment growth was solid last year. The number of person-hours worked rose by 2.2 per cent from 2003 to 2004. A corollary to the increase in the number of person-hours worked is partly reduced sickness absence and partly three more working days in 2004 compared with 2003.

An increase in available person-hours and increased competition and rationalisation in many sectors led to higher-than-normal growth in potential output last year. The economy has therefore been able to grow fairly rapidly for a period without the emergence of bottlenecks in the labour market.

In the business tendency survey, manufacturing industry reported rising output volumes and capacity utilisation. Average capacity utilisation in the manufacturing sector is now close to its historical average. Information from Norges Bank's regional network also indicates an approximate balance between supply and demand in the economy, and that capacity utilisation is close to normal. A normal level of capacity utilisation is consistent with an output gap - the percentage difference between actual output and potential output - that is close to zero.

Growth in demand and output is expected to remain high in the near term. Unemployment may fall somewhat more quickly than has been the case over the past year. The output gap is expected to be positive in 2005.

Higher demand for companies' goods provides scope for increasing prices. Experience shows that inflation is directly influenced by the level of capacity utilisation in the Norwegian economy. Some of the rise in prices for domestically produced goods and services can be attributed to higher margins in the business sector.

The effects of the interest rate decline on demand, output and employment have been pronounced. It has taken time for inflation to pick up. This partly reflects low external interest rates and high oil prices, which have moderated the impact on the krone exchange rate. Higher imports from low-cost countries, competition and improved efficiency in Norwegian production have also kept inflation at a low level.

Initially, it was the fall in prices for imported consumer goods that pushed down underlying inflation. After a period, the rise in prices for domestically produced goods and services also slowed. This was due in particular to increased competition in some goods and service markets. At the same time, wage growth eased as a result of lower capacity utilisation in the economy. A more subdued rise in house rents also contributed. Inflation measured by the CPI-ATE reached its lowest level in the first months of 2004. Inflation remained at below ½ per cent until the end of summer and then picked up through the autumn. Inflation moved up primarily as a result of a slower decline in prices for imported consumer goods. The depreciation of the krone since the beginning of 2003 has contributed to these developments. In addition, the rise in prices for domestically produced goods and services stabilised, and towards the end of 2004 there was a tendency towards a higher rise in prices for these goods and services.

At the beginning of 2005, inflation measured by the CPI-ATE was lower than expected. The fall in prices for imported consumer goods was unexpectedly sharp. It is uncertain whether this price fall was due to abnormal seasonal patterns or a decline in underlying inflation. The fall in prices may be related to an unusually warm winter, which has made it more difficult to sell winter clothing and sports equipment at ordinary prices. On the other hand, there are indications that prices for imported consumer goods in foreign currency may have fallen somewhat more than previously assumed.

The wide variations in prices for some imported consumer goods, especially clothing and footwear, may lead to wide monthly variations in consumer price figures. Excluding changes in prices for clothing and footwear, the year-on-year rise in the CPI-ATE in March was 1.2 per cent, down from 1.3 per cent in February.

Changes in indirect taxes, and particularly in VAT rates, have made it more difficult to interpret the price figures for the beginning of the year. The low level of inflation may be partly due to a lag in price adjustments following the indirect tax changes.

Among the companies in our regional network, the share expecting a sharper rise in selling prices in the coming year is larger than the share expecting a slower rise in prices. TNS Gallup's business sentiment survey conveys a more neutral impression. Nevertheless, both surveys indicate expectations of a sharper rise in prices in the service sector.

The other Nordic countries have also experienced falling inflation.

Inflation in the Nordic countries has declined, and is now relatively low in Sweden, Denmark, Finland and Norway. According to the harmonised indices of consumer prices, inflation in February was around 1 per cent in Denmark, Sweden and Norway, while the year-on-year rise in prices was unchanged in Finland. By way of comparison, inflation in the euro area was a good 2 per cent.

A common feature of the low level of inflation in the Nordic countries seems to be the sluggish trend in prices for imported consumer goods, even though developments have not been entirely the same in all the Nordic countries.

The upturn is broadly based. This also applies to the counties in the central Norway region. Most industries here are continuing to show solid growth, and there is confidence that growth will remain firm for the rest of the year.

The level of activity in the construction sector is high. Manufacturing industry producing goods for the construction sector is experiencing solid growth. In contrast to the prospects for the rest of the country, however, the pace of growth in the construction sector in central Norway seems to be moderating. Turnover growth is stable in retail trade, partly due to an increase in the number of sales outlets. The fish farming industry has also shown considerable turnover growth recently. The printing industry is still in decline.

Employment is largely stable. In the construction industry, the labour market is tight and enterprises are making use of foreign labour to some extent. The supply of skilled labour is, however, a constraint on growth potential. Signals from service industries also indicate that the supply of labour is becoming more limited.

The general level of investment in this region is relatively stable. Investment activity in the public sector appears to be somewhat lower in 2005 than in 2004. In manufacturing and services, there are signs of increased investment activity.

Tender prices are rising slightly in the building and construction industry as a result of increased costs and a higher level of activity throughout the country. Prices have risen slightly in manufacturing and service industries. In retail trade, prices have changed little or remained unchanged.

Profitability is improving due to increased activity, but there are no major changes for small and medium-sized enterprises.

In the approved budget for 2005, the structural, non-oil deficit increases compared with 2004. It therefore appears that fiscal policy will provide some stimulus to growth this year. In the National Budget for 2005, underlying spending growth over the central government budget was estimated at 5.2 per cent, which is somewhat lower than the previous year and somewhat lower than estimated nominal growth in mainland GDP. As from 2006, it is assumed that nominal growth in central government expenditure will be approximately the same as nominal growth in central government revenues and that the real tax level will remain unchanged.

Growth in the global economy is expected to moderate somewhat this year and stabilise in the years ahead. In the US, growth seems to have remained solid in the first quarter. Heightened uncertainty with regard to developments in the US economy and weaker results for some large companies have resulted in falling prices on world stock markets. Developments are weaker in the euro area - unemployment remains high and consumer confidence has fallen. In Japan, it appears that growth will be positive from the fourth quarter of 2004 to the first quarter of 2005.

Growth in Asia, except Japan, and in Central and Eastern Europe is expected to moderate but to remain strong.

The outlook for growth in different regions indicates that the imbalances in the global economy, with large deficits in the US and large surpluses in some other countries, will persist. Low growth in the euro area and Japan is weakening the prospect of a gradual correction. This increases the risk associated with these imbalances. Increased imbalances in addition to high oil prices and volatile oil markets are contributing to the uncertainty surrounding developments in the global economy.

Robust expansion in China and India has in particular pushed up prices for oil and other important commodities. Growth impulses to the Norwegian economy may therefore be somewhat stronger than the overall outlook for our most important trading partners would indicate. High demand for commodities produced by Norway is boosting activity and strengthening profitability for Norwegian enterprises.

Partly due to very high growth in demand for oil, the average price for Brent Blend oil rose to almost USD 40 per barrel in 2004. Strong economic growth, particularly in the US and China, has resulted in high electricity consumption. So far this year, the price of Brent Blend oil has largely moved between USD 45 and 55 per barrel. In the past few days, it has been close to USD 50 per barrel.

Oil futures prices have also increased.

Little excess production capacity in OPEC countries, combined with the prospect of lower production in non-OPEC countries, has probably influenced oil prices. At the same time, there are prospects of continued strong demand growth in important oil-importing countries, such as China and some other emerging economies.

Diminishing petrol stocks in the US and fears of petrol shortages this summer have contributed to fluctuations in oil prices in the past month.

Plans for large-scale development projects resulted in strong growth in petroleum investment in 2004. As a result of persistently high oil prices and expectations that oil prices will remain high, investment in the petroleum sector may reach record levels this year. The investment intentions survey for the petroleum sector points to very high growth. The level is expected to remain high throughout the projection period. Activity in the petroleum sector will have spillover effects on the mainland economy, initially on the shipbuilding industry and the construction sector.

The scale of petroleum investment and its spillover effects are highly uncertain. The last time petroleum investment showed a sharp increase, in 1997/1998, growth was substantially stronger than had been assumed. An upturn occurred in the Norwegian economy as a whole at the same time. The unexpected increase in petroleum investment contributed to an economic upturn that was substantially stronger than projected. If oil prices rise further or remain at the current high level for a long period, petroleum investment may again amplify the cyclical upturn to a greater extent than projected.

Inflation among our trading partners is expected to be low in the next few years. It is likely that high prices for oil and other commodities will continue to push up prices for goods where wages account for a small portion of total costs. On the other hand, growth among most of our main trading partners will probably be too low for idle resources to be utilised in the next few years. Particularly in the euro area, wage growth is likely to be low as a result of moderate economic growth and high unemployment.

Overall, it would appear that external price impulses via consumer goods to the Norwegian economy will remain negative this year and next. There is no indication that growth in imports from low-cost countries is declining. For example, China's share of footwear imports to Norway increased by 4 percentage points to 20 per cent in 2004. The share of clothing imports increased by 2 percentage points to 32 per cent. The decline in prices for clothing and footwear will probably continue in the coming years. Prices for audiovisual equipment are still falling as a result of strong international competition and high productivity growth. We assume that the effects of structural changes in these markets will gradually be exhausted towards the end of the projection period. External price impulses via consumer goods are expected to increase in pace with unit labour costs among our trading partners.

The projections in Inflation Report 1/05, published on 16 March, are based on a gradual increase in the interest rate. This is in line with financial and foreign exchange market expectations. It is assumed that the exchange rate will shadow movements in the forward exchange rate. This implies that the krone will remain fairly stable around the current level in the years ahead.

Growth in private consumption is expected to remain high this year and next. Low real interest rates, solid growth in real disposable income and a continued rise in house prices will contribute. Goods consumption picked up sharply, as expected, from January to February. The upturn was broad-based, with strong growth in car sales, other goods and electricity consumption. In the period ahead, higher employment and wage growth will continue to fuel household demand. On the other hand, household debt has risen sharply. This implies that a normalisation of interest rates will increase household net interest expenses. After a period, growth in consumption may be fairly low. However, we assume



that households will choose to spread consumption over time, so that the saving ratio will continue to fall in spite of an increase in interest rates.

Housing construction activity is still high. In January and February, housing starts were 17.5 per cent higher than in the same period last year. Growth in housing investment is expected to ease through 2005. However, the projection for housing starts is also very high for 2005. Such a high level of housing starts over several years probably means that more dwellings will be constructed than implied by underlying demand. As a result, housing investment is expected to decline after a period. Higher interest rates and weaker developments in the Norwegian economy may also lead to a fall in residential construction after a period. The rise in house prices has moderated, and prices in March were 8.2 per cent higher than in the same month last year.

The upturn in mainland fixed investment is broadly based. Stronger profitability, higher capacity utilisation and solid export growth will contribute to continued investment growth in goods-producing industries. Demand for services is expected to continue to grow for a period ahead with an attendant increase in investment in service sectors. When growth in the economy gradually slows, investment growth will probably slacken.

Mainland exports of goods and services will also benefit from solid global growth this year. Later in the period, a continued loss of market shares as a result of high cost levels will dampen export growth.

Unemployment is projected to decline this year and next. In subsequent years, growth in demand and output is expected to ease and unemployment may edge up again when capacity utilisation approaches a more normal level.

With a somewhat tighter labour market and rising inflation in the years ahead, wage growth may pick up. Over the past year, low consumer price inflation has probably contributed to keeping nominal wage increases lower than implied by labour market tightness in isolation. Low inflation has resulted in high growth in household purchasing power even with moderate pay increases.

The first results from this year's wage settlements may indicate that centralised pay increases this year may be lower than the projection in the March Inflation Report.

With a path for the interest rate and the krone exchange rate in line with the baseline scenario in Inflation Report 1/05, inflation may increase gradually from less than 1 per cent today to close to 2 per cent in mid-2006. Under these assumptions, inflation may stabilise at around 2½ per cent at the three-year horizon. Developments in line with these projections imply that the output gap will increase to about 1¼ per cent in 2006. As the interest rate is gradually increased to a more normal level, growth in private demand will probably ease, and capacity utilisation may be brought down and stabilise. Developments over the past few weeks do not provide grounds for changing this perception of the state of the real economy. The first wage settlements seem to suggest that the negotiated pay increases are somewhat lower than projected by Norges Bank. Inflation, on the other hand, has been broadly in line with expectations, and there has been virtually no change in the krone exchange rate. The

inflation outlook has not changed substantially since the March Inflation Report was published.

The March Inflation Report pointed to the risk that a low interest rate over a long period may gradually result in even stronger pressures in the economy. The Report also noted the possibility that continued changes in trading patterns, with higher imports from Asia and stronger competition in retail trade, may prolong the period of low inflation. These uncertainties still apply. Since the previous monetary policy meeting, oil prices have varied, but have generally remained high.

The real krone exchange rate measured by relative labour costs is strong. Historically, the real krone exchange rate has tended to return to an average, measured over a longer period. Should this occur in today's situation, through a depreciation of the nominal krone exchange rate, inflation will pick up somewhat faster than projected. If the krone appreciates, on the other hand, there is a greater risk that inflation will not move up as quickly as projected.

The Norwegian economy is growing at a solid pace, and capacity utilisation is rising. An interest rate that is kept at the current level for a long period might lead to a situation where capacity utilisation becomes too high further ahead. Bottlenecks may arise in some sectors of the economy, and the sharp rise in property prices and borrowing may persist for a longer period. This could be a source of instability in demand, output and inflation in the somewhat longer run. This implies, in isolation, a higher interest rate. At the same time, the current rate of inflation is low, and there are prospects of low inflation for a period ahead. The objective of bringing inflation back to the target of 2½ per cent and anchoring inflation expectations imply a continued expansionary monetary policy.

The monetary policy assessments presented by Norges Bank in March indicated that the interest rate will rise after a period and at a gradual pace. Economic developments since then have been broadly in line with expectations. International key rates are rising, albeit slowly and from a low level. Although a gradual rise in the interest rate seems to provide a good balance between the different objectives, the Executive Board concluded that it is too early to increase the interest rate at this monetary policy meeting.

The Executive Board decided yesterday, 20 April, to leave the interest rate unchanged at 1.75 per cent. The Executive Board weighed the objective of bringing inflation back to target and stable inflation expectations against the risk that output growth may eventually be too high.