

## Svein Gjedrem: Business cycles and monetary policy

Speech by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), for Norges Bank's regional network, arranged by the Centre for Economic Research at NTNU – Norwegian University of Science and Technology in Trondheim, Fosen, 3 May 2006.

*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 26 April, Inflation Report 1/06 and on previous speeches.*

The  [Charts in pdf-format](#) can be found on the Norges Bank's website.

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### Introduction

Monetary policy in Norway is oriented towards low and stable inflation, with annual consumer price inflation of close to 2.5 per cent over time. This is also the most important contribution monetary policy can make to sound economic developments in the long term. Low and stable inflation provides the economy with a nominal anchor. This contributes to predictability for agents who make decisions about saving and investment today, although the result depends on economic developments ahead.

In its conduct of monetary policy, Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment. Flexible inflation targeting builds a bridge between the long-term objective of monetary policy, which is to keep inflation on target and provide an anchor for inflation expectations, and the more short-term objective of stability in the real economy.

### The economic situation

Growth in the Norwegian economy has been strong since summer 2003. The reduction in Norges Bank's key rate through 2003 and into 2004 resulted in low interest rates. Low interest rates have contributed to a relatively sharp rise in household demand throughout this upturn. At the same time, solid growth globally has generated increased demand for many Norwegian export goods and thereby high prices. Fixed investment in the petroleum sector has increased strongly, resulting in growing demand for goods and services supplied by mainland enterprises. Mainland fixed investment has also picked up gradually.

The mainland economy expanded by 3.7 per cent in 2005. Growth in private services, construction and electricity production was strong. So far, a substantial share of output growth has been attributable to strong growth in person-hours worked. The fall in sickness absence in 2004 provided an additional supply of labour to enterprises, but sickness absence increased through 2005.

Wage developments reflect and influence business cycles. Strong employment growth in the 1990s resulted in a rise in labour costs, which in turn had a dampening impact on growth. Moderate wage growth in recent years is being accompanied by a strong cyclical upturn.

The increase in the number of employed has been relatively moderate throughout the upturn. Employment has shown a smaller rise than in previous cyclical upturns in the 1980s and 1990s, but this is now changing.

The labour market continues to tighten at a rapid pace. It is likely that continued strong growth in output and employment will result in a higher rise in prices and costs, but it may take time. According to Statistics Norway's Labour Force Survey (LFS), employment growth picked up markedly towards the end of 2005 and into 2006. LFS unemployment fell further in January, while the number of registered unemployed was approximately unchanged in March. Measured in per cent of the labour force, seasonally adjusted LFS unemployment was 3.9 per cent.

The labour supply is also being influenced by an increase in inward labour migration from the new EU accession countries. These changes are difficult to measure in official labour market statistics. The Central Office – Foreign Tax Affairs recorded an increase of about 7400 employees from the new EU accession countries from 2004 to 2005. This figure covers employees in both Norwegian and foreign enterprises. The size of the actual supply of labour behind these figures is uncertain, because there is

no information about the duration of such employment relationships. On balance, however, there are signs that the use of foreign labour has contributed to dampening pressures on real economic resources through the upturn. The effect has probably been largest in the construction industry, as evidenced in particular by continued moderate wage growth last year, despite very high activity. The figures for the first quarter of this year indicate that inward labour migration is still rising.

There is competition for the best labour in the EU countries. Many people have travelled to the UK and Ireland in particular, and the barriers to inward labour migration may be greater in the Norwegian labour market than in the British and Irish labour markets. Activity is edging up in the central European countries. Therefore, there is uncertainty about how large the supply of labour will be from these countries in the future.

There is also considerable inward labour migration from other Nordic countries, but measured in terms of number of persons, the supply of labour from these countries has not changed substantially in recent years. Swedish nationals have comprised the bulk of the supply of labour from the Nordic countries. In view of the tightening taking place in the Swedish labour market, there may be reason to expect a reduction in the supply of Swedish labour to Norway.

The supply of labour is also affected by developments in persons on disability benefit and sickness absence. The trend in sickness absence has reversed and is now rising, and the number of persons on disability benefit continues to show a steady increase. This is offsetting the rise in the supply of labour stemming from inward labour migration when we look at the labour market as a whole.

Behind us, we have a period of moderate wage settlements. It appears that the wage settlements this spring will, as expected, result in somewhat higher wage growth. Measured in terms of relative labour costs in a common currency, competitiveness can be estimated to be close to 8 per cent weaker than the average for the past 30 years.

Over the past 30 years, manufacturing industry has been scaled back in waves. Ahead of these periods, the manufacturing sector's competitiveness deteriorated. The last wave came after the turn of the millennium. The decline has now come to a halt, or at least taken a break, in spite of the strong real exchange rate. High export prices, solid demand for many Norwegian export goods and buoyant growth in oil-related industries are making a contribution. According to Statistics Norway's business sentiment survey of industrial leaders, growth in production and employment is expected to continue in the period ahead. According to Norges Bank's regional network, capacity utilisation is high in manufacturing, particularly among suppliers to the oil industry.

Norges Bank's regional network is an important part of the information basis for our analyses of the Norwegian economy. Information about the state of the Norwegian economy is available earlier than information provided by official statistics, and it is edifying to have closer contact with the labour market and business and industry throughout the country. The main impression from the latest round of interviews is that demand and output are rising in all sectors. Growth is expected to remain high over the next six months.

The industry structure in North and South Trøndelag does not differ substantially in most sectors from the country as a whole. The exception is the primary industries, which play a far more important role in these two counties than in the rest of the country. The share employed in the public sector is also somewhat higher than in Norway as a whole.

Developments in North and South Trøndelag counties are largely consistent with the overall picture for Norway. Suppliers to the petroleum industry and business sector services report particularly strong growth. The interviews reflect optimism with respect to the next half year with confidence in continued growth. The service sector and suppliers to the petroleum industry are also expecting the strongest growth ahead. With the exception of retail trade, all industries appear to be increasing investment. Construction of day-care centres is pushing up investment in the local government sector. Investment is still high in the service sector, but high investment over the past year is pushing down growth ahead. In general, profitability developments are favourable. The retail industry reports unchanged profitability, while the building and construction industry has reported an improvement in profitability. Profitability growth in the export and service industries appears to be solid.

Employment is rising in the region and unemployment is at its lowest level for five years. For manufacturing and retail, the rate of employment seems to be constant, while the construction and service sectors are showing a clear rise. There are clear indications of growth in employment in the local government sector. Skills shortages are increasingly being perceived as a constraint on production growth. In the retail sector and household service industry, prices are expected to show

only a moderate rise in the period ahead. In the building and construction industry, there are now more signals of rising prices.

Consumer price inflation has edged up, but is still very low even 2½ years after the cyclical change. The year-on-year rise in the consumer price index (CPI) was 2.4 per cent in March. Price impulses from consumer goods that are imported to Norway have been negative in almost all the years since the mid-1990s, reflecting the liberalisation of international trade and the shift in imports towards low-cost countries.

The rise in prices for domestically produced goods and services slowed somewhat towards the end of 2005 and into 2006. The 12-month rise in prices for these products is estimated at 1.6 per cent in March adjusted for the effects of lower maximum day-care rates. However, several factors point towards rising inflation. Capacity utilisation in the Norwegian economy is increasing, and tighter labour market conditions may result in higher wage growth in the coming years. The rise in oil prices is resulting in higher input costs for producers.

As a rule, monetary policy shall not take account of the direct effects on consumer prices resulting from changes in the interest rate level, taxes, excise duties and extraordinary, temporary disturbances. However, there is no certain method for distinguishing extraordinary, temporary disturbances from more long-lasting price changes. The inflation measure CPI-ATE excludes the effects of changes in taxes and energy prices. Norges Bank has given weight to this indicator of underlying inflationary pressures in the economy, but also keeps an eye on other indicators. The 12-month rise in the CPI-ATE adjusted for the effects of lower maximum day-care rates is estimated at 1.1 per cent in March.

However, the CPI-ATE not only strips out temporary effects of changes in tax changes and fluctuations in energy prices, but also trend changes in these variables. Thus, this indicator is not a full-proof measure of underlying inflation. In the last 10-20 years, where energy prices have risen at a faster pace than other consumer prices and the tax level has increased somewhat, the CPI-ATE has tended to underestimate underlying inflation. This is illustrated in the chart, which shows the difference between the year-on-year rise in the CPI and the CPI-ATE over a moving 10-year average. Since 1997, the difference has been about 0.35 percentage point. Even when taking into account trend increases in energy prices, inflation is still moderate. The indicators that provide the best expression of underlying inflationary pressures in the economy may vary over time.

### **Driving forces ahead**

Monetary policy influences the economy with long and variable lags. This means we must look ahead when setting interest rates. I would therefore like to comment briefly on some international developments that are important to the Norwegian economy and the assumptions concerning developments in Norway on which Norges Bank's assessments are based.

Oil prices are of importance for the activity level in the Norwegian economy and the government revenues. In recent years, oil prices have risen sharply. High demand for oil, limited idle production capacity and uncertain production levels in many oil-producing countries have contributed to this. Oil prices have risen to over USD 74 per barrel, partly as a result of the uncertain political situation in a number of producer countries. Futures prices for Brent Blend are now more than USD 72 per barrel until autumn 2008. Futures prices indicate that oil prices will remain at around USD 70 per barrel several years ahead. This is higher than the level assumed in the March 2006 *Inflation Report*. Statoil and Hydro gas prices have also increased sharply in recent months.

Petroleum production is expected to increase gradually in the period to 2011, and decline thereafter. Developments in the gas market will become increasingly important. During the next 10 years, gas production could become as high as oil production, measured by energy content.

High oil prices have led to a strong increase in activity on the Norwegian continental shelf. Many projects have been launched to increase recovery from fields in operation. A number of companies have revised up the long-term oil prices that are used as a basis for investment decisions, but they are still moderate compared with futures prices.

Further out in the projection period, developments in petroleum-related investment become highly uncertain. It is assumed that overall activity will decline somewhat when the Snøhvit and Ormen Lange projects are completed, but high oil prices are expected to contribute to maintaining investment at a relatively high level throughout the projection period.

The Government Pension Fund – Global, previously called the Government Petroleum Fund, will increase substantially in the years ahead. The fiscal rule entails a gradual phasing-in of petroleum revenues into the economy, approximately in pace with the expected real return on the Fund, which is estimated at 4 per cent. On the basis of our assumption in the March *Inflation Report* for developments in oil prices (oil futures prices), the fiscal rule allows for an increase in petroleum revenue spending of more than NOK 30 billion from 2006 to 2009.

If the Norwegian economy continues to exhibit solid growth, it will nevertheless be in line with the fiscal guidelines that petroleum revenue spending is lower than the expected real return for a few years. Our projections are based on the assumption that fiscal policy will provide some stimulus to aggregate demand and output in 2008 and 2009, but somewhat less than a mechanical application of the fiscal rule based on our oil price assumption would imply.

High growth in the global economy has contributed to pushing up prices for non-oil commodities as well. Over the past year, copper prices have almost doubled and aluminium prices have risen by around 50 per cent. Futures prices have also risen markedly, indicating expectations of a sustained increase in metal prices similar to the increase in oil prices.

Prices for fresh farmed salmon have also exhibited a pronounced rise.

Rising commodity prices and buoyant activity in markets that are important for Norway have fuelled growth in the Norwegian economy, even though growth has been low in some of Norway's most important export markets.

Overall, prices for our imported goods are falling in relation to prices for goods we export. Norway's terms of trade are improving. The impact of the rise in oil and gas prices is particularly strong, but the terms-of-trade gains for the mainland economy have also been high. The domestic economy is partly insulated thanks to the oil fund mechanism. The situation in Norway differs from that of its Nordic neighbour countries. Sales of Swedish and Finnish high-tech products are growing strongly in volume terms, but prices are falling. Denmark has a diversified business sector, which is overall moving on a steady path.

Growth among our trading partners remains solid. High commodity prices are exerting upward pressure on consumer price inflation in a number of countries, although underlying inflation remains low. Economic growth in the US probably picked up again in the first quarter. In Japan, growth appears to be solid. In the euro area, confidence indicators point to optimism in the business sector. There is a broad-based expansion in the Swedish economy, while some indicators in the UK have shown weak developments.

The central banks in the US, Canada and Switzerland have raised their key rates by 0.25 percentage points since mid-March. Market expectations concerning key rates in other countries have risen slightly. For the next year, market pricing indicates that key rates will be increased in the euro area, the UK, Sweden, Switzerland, the US, Canada, Japan and Australia.

In Norway, the key rate was last raised by 0.25 percentage point to 2.5 per cent at the monetary policy meeting on 16 March this year. Financial markets still expect a gradual increase in the sight deposit rate ahead. In line with developments in global markets, the rise in Norwegian long-term interest rates has gathered pace. Markets have factored in that the key rate will be lower in Norway than in the US and the UK at the end of 2009, but higher than in the euro area and Sweden.

In the past couple of years, low interest rates and relatively high growth in real wages has contributed to strong growth in household purchasing power and consumption. Increased housing wealth and equity price gains may also have contributed to the high level of consumer demand and will probably continue to make a contribution ahead. With the prospect of an improving labour market and relatively low inflation through the projection period, growth in household real wage income will probably remain fairly high in the years ahead. A gradual normalisation of the interest rate level will curb growth in disposable income as the interest burden increases. Consumption growth is also expected to moderate in the years ahead.

Wide fluctuations in asset prices may be a potential source of instability in demand and output in the somewhat longer run. House prices and household debt have risen sharply since the mid-1990s. Developments in the 1990s can probably be viewed to some extent as a delayed adaptation to the deregulation of the housing and credit markets in the 1980s, after many households burned their fingers immediately after deregulation. In recent years, household income growth has been solid, household confidence regarding the future has been strong and households probably perceive higher

income levels as permanent. This may have resulted in a further rise in house prices and debt. In addition, low real interest rates are currently making a contribution.

In countries whose credit markets have been liberalised for a long period, for example Denmark, where credit markets were liberalised over a hundred years ago, the debt-to-income ratio for households is higher than in other countries.

### **Monetary policy assessments**

Since last summer, interest-rate setting has been oriented towards a gradual increase in the interest rate – in small, not too frequent steps – towards a more normal level. According to the assessment in the March *Inflation Report*, higher growth in the economy could, in isolation, warrant a faster rise in the key rate ahead. This would reduce the risk of bottlenecks in the economy, with rising cost inflation and continued debt build-up. On the other hand, the objective of bringing inflation up to the target of 2.5 per cent and anchoring inflation expectations suggested in isolation that further interest rate increases should be delayed until there are clearer signs of a further rise in inflation.

The trend in prices for consumer goods over the past two or three years is a result of favourable developments in the Norwegian and global economy. The shift in trade towards low-cost countries has led to lower prices and higher real income. In addition, the changes in the world economy have provided Norway with higher income because our terms of trade have improved. Increased competition has curbed the rise in prices for a number of domestically produced goods and services.

When inflation deviates substantially from the target for a period, the interest rate will be set with a view to gradually returning it to the target, so that we avoid substantial variations in output and employment. Through the 1990s, inflation generally remained in the interval 1½ – 3½ per cent. Inflation has varied slightly more in the past few years. In a period of increasing cross-border labour flows, substantial technological advances, changes in competitive conditions and new trading patterns, we may, with our very open economy, have to accept a somewhat greater variation in inflation and deviations from the target, as we have witnessed over the past two to three years.

An overall assessment implies that the interest rate in the baseline scenario gradually increases to a more normal level. The projections are based on the assumption that interest rates in Norway and abroad will rise somewhat faster than may be implied by today's forward rates. Since the previous *Inflation Report*, the upward movement in Norwegian and international long-term interest rates has become more pronounced. Exchange rate movements are difficult to project. In *Inflation Report 1/06*, the path for the interest rate in Norway and abroad was assessed to be consistent with an approximately unchanged krone exchange rate.

The high rate of economic growth implies that price and cost inflation will edge up after a period. Inflation measured by the CPI-ATE is projected to increase from today's level of around 1¼ per cent, up to almost 2 per cent at the end of 2007. There are prospects that inflation will increase further and be close to the target of 2.5 per cent three years ahead. With a gradual reduction in unemployment, Norges Bank expects wage growth to edge up. At the same time, it will probably be easier for enterprises to pass on cost increases to prices in pace with the rise in demand and capacity utilisation.

Capacity utilisation is now projected to be somewhat higher than its normal level. Mainland GDP is still growing strongly in 2006. Capacity utilisation in the economy is expected to rise over the next two years. Even though a gradual increase in the interest rate will result in somewhat weaker growth impulses after a period, monetary policy will still be expansionary. A further interest rate increase will stabilise growth in output and employment. Capacity utilisation may in time be brought down somewhat and stabilise. This will curb the rise in inflation, so that it stabilises close to target.

Developments in inflation and capacity utilisation seem to provide a reasonable balance between the various objectives of monetary policy. The interest rate is sufficiently low for inflation to approach the target of 2.5 per cent while avoiding a capacity utilisation level that is too high.

Projections are uncertain. We have illustrated this uncertainty in the projections for the interest rate, the krone exchange rate, inflation and capacity utilisation using fan charts. The width of the fan is based on historical disturbances. However, there is no certainty that future disturbances will be of the same character or scale. The wider the fans, the more uncertain the forecasts are. In other words, uncertainty with regard to the interest rate reflects the monetary policy response to unexpected disturbances in inflation, output and the exchange rate.

When the interest rate, as forecast in the baseline scenario, is raised to a more normal level, Norges Bank will be able to assess the effects of interest rate changes and other new information about economic developments. According to our projections, inflation will be close to target three years ahead. We are uncertain as to the functioning of the economy and how long it will take for the resource shortages observed in some sectors of the Norwegian economy to translate into higher inflationary pressures. This may warrant small steps in interest-rate setting.

Employment is now rising more rapidly than expected. Corporate earnings are rising sharply, with higher growth in corporate demand for credit. The sharp increase in household debt is persisting. House price inflation remains high. Prices for oil and several other commodities have picked up further. At the same time, the underlying rise in consumer prices remains low. So far, a tighter labour market does not seem to have resulted in higher-than-expected pay increases, but there is a risk that wage growth may subsequently rise faster than projected. The krone is stronger than assumed. Overall, there are not sufficient grounds for changing the outlook for inflation and output or the risk assessment.

Thank you for your attention.