## Jarle Bergo: Monetary policy and its role in economic policy

Address by Mr Jarle Bergo, Deputy Governor of Norges Bank (Central Bank of Norway), at the Confederation of Vocational Unions, Oslo, 7 February 2003.

*The address is based on the assessments presented at Norges Bank's press conference following the Executive Board's monetary policy meeting on 22 January and on previous speeches. Please note that the text below may differ slightly from the actual presentation.*

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The objective of monetary policy is to ensure nominal stability.

There were wide fluctuations in the Norwegian economy in the 1970s and 1980s. Economic developments were marked by high and variable inflation. Inflation accelerated in the beginning of the 1980s and it took a long time before it fell.

The absence of a nominal anchor was one of the main reasons behind these pronounced swings in the Norwegian economy. With a policy of low interest rates and devaluations, inflation took root. Nominal interest rates were kept at a low level even though inflation and the value of tax-deductible interest expenditure rose. Frequent devaluations from 1976 were not able to prevent a decline in the manufacturing sector. On the contrary, they proved to be self-reinforcing. The wide fluctuations culminated in a credit boom in the mid-1980s, followed by a deep recession and high unemployment towards the end of the 1980s.

From the mid-1980s, during and after the credit bubble, it was recognised that a substantial revision of economic policy would be necessary and that the problems created by inflation had to be taken seriously. The exchange rate was chosen as the nominal anchor. Deteriorating competitiveness due to high wage growth would no longer be remedied by means of devaluations. Instead, imbalances in the labour market would be addressed by means of a counter-cyclical policy. Substantial emphasis was placed on the importance of wage formation for developments in employment. Only when wage growth dropped below the level of our trading partners did unemployment begin to fall and the manufacturing sector began to pick up. Thus, the fixed exchange rate policy was not introduced in order to strengthen the internationally exposed business sector. On the contrary, it was a breach in the approach whereby monetary policy and "exchange rate policy" had been oriented towards safeguarding these sectors. The fixed exchange rate was an intermediate target for achieving low and stable inflation.

The exchange rate remained stable up to the autumn of 1986, partly because wage growth was low and aggregate demand did not fuel pressures in the economy. Gradually, the krone began to show wider fluctuations. The experience of the last half of the 1990s demonstrated that monetary policy cannot fine-tune the exchange rate. Developments in international financial markets led to more pronounced fluctuations. High petroleum revenues, fiscal slippage and expectations of increased use of petroleum revenues also contributed to this. Wage growth increased. The exchange rate was therefore no longer suitable as a nominal anchor.

A little less than two years ago, the Storting and the Government adopted new guidelines for economic policy. According to the mandate, Norges Bank shall orient monetary policy towards low and stable inflation. The inflation target is set at 2.5%. The introduction of new guidelines for economic policy in March 2001 and the conduct of fiscal policy have altered the interplay between economic policy components.

In the past, growth in public spending was to be reduced or other fiscal policy measures implemented if the labour market was tight and wage growth high. With today's guidelines, it is primarily monetary policy that is tightened in a similar situation. The rise in labour costs is important when Norges Bank assesses the inflation outlook and sets interest rates. Excessive wage growth, in both manufacturing and other industries, will affect the internationally exposed sector through two channels. First, high wage growth will in itself reduce earnings and employment. Second, the interest rate will be increased. Normally, this will lead to an appreciation of the krone, with a further reduction in earnings and employment. The manufacturing sector will therefore feel the effects of excessive wage growth to an even greater extent than earlier. Since the new fiscal guidelines, which entail an increased use of petroleum revenues, were introduced during a period with a tight labour market, it was to be expected that the krone would be strong at times.

Interest rates influence inflation throught their impact on domestic demand and on the market for NOK.

When interest rates rise, it becomes more profitable to save and more costly to borrow. This dampens consumption and investment and thereby aggregate demand. Lower demand in turn curbs the rise in prices and wages.

Higher interest rates make it more attractive to invest in NOK and borrow in foreign currency. Therefore, higher interest rates normally lead to an appreciation of the krone. This makes imported goods cheaper. In addition, a strong krone reduces activity, profitability and the ability to pay in the internationally exposed sector.

It is important to be aware of the relationships between employment, output and inflation. If there is a shortage of labour and other economic resources, a tight monetary policy stance will reduce inflation by affecting aggregate demand. Conversely, when unemployment is high, low interest rates will stimulate demand and contribute to stable wages and prices. A monetary policy stance that is aimed at stabilising inflation will thus also contribute to stabilising aggregate output and employment.

The time it takes for a change in interest rates to affect demand and inflation will vary. Our analyses[1] indicate that an interest rate increase of 1 percentage point over two years reduced mainland GDP by ¾ -1 percentage point after two years. The effect is thereafter reversed. The inflation rate is reduced by an estimated 0.20-0.35 percentage point after two years and 0.30-0.40 percentage point after three years. We have taken into account that an interest rate change will affect the krone exchange rate. It is assumed that monetary policy credibility remains intact.

Developments in the krone exchange rate have a considerable impact on inflation in a small economy such as Norway. Our analyses, which are based on relationships in the Norwegian economy over the past 20-30 years, indicate that it takes some time for the effects of a lasting change in the exchange rate to pass through to consumer price inflation. The effect seems to be strongest the second year and then shows a gradual decline. A sustained appreciation of the effective krone exchange rate of 5% could reduce the rise in consumer prices by a quarter percentage point the first year, by close to half a percentage point the second year and about a quarter percentage point the third year[2].

Our analyses indicate that a sustained increase in wage growth of 1 percentage point will, in isolation, push up consumer price inflation by a quarter percentage point the first year and half a percentage point the second year.

The mandate implies that the interest rate must be adapted to the outlook for the Norwegian economy. If it appears that inflation will be higher than 2½% with unchanged interest rates, the interest rate will be increased. If it appears that inflation will be lower than 2½% with unchanged interest rates, the interest rate will be reduced. This orientation of monetary policy will normally also contribute to stabilising output and employment.

The impact of monetary policy occurs with long and variable lags. Our analyses indicate that a substantial share of the effects occurs within two years. A time horizon of two years when setting interest rates allows monetary policy to contribute to stabilising production. This horizon prevents monetary policy in itself from causing unnecessary fluctuations in the economy.

The sharp rise in labour costs in recent years carries with it a potential for higher unemployment. The interest rate is an effective instrument for countering lower demand and growing unemployment when measures to stimulate demand do not translate into higher wage growth or unstable financial markets. However, there is little monetary policy can do to prevent an increase in unemployment that is driven by high cost inflation. A pre-condition for an effective interplay between wage settlements and monetary policy is that the response pattern in monetary policy is known and consistent. When the response pattern in monetary policy is known and consistent over time, the social partners can take into account monetary policy responses when negotiating wages.

In 2002, wage growth was higher than we had expected up to the wage settlement in the spring of 2002. In spite of the rise in unemployment, the wage settlement in 2002 indicated that the social partners still perceived the labour market as tight. Preliminary figures indicate annual wage growth between 5½ og 6% in 2002, which is substantially higher than projected. The high level of wage

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1 See box in Inflation Report 2000/4: Effects of an interest rate change.

2 See box in Inflation Report 2002/2: How does the krone exchange rate influence the CPI.

growth fuelled expectations of continued high interest rates in Norway relative to other countries and appears to have contributed to the appreciation of the krone.

The unexpected high level of wage growth required a tight monetary stance. Norges Bank increased its key rate last summer. The interest rate differential against trading partners widened and the krone appreciated. This appreciation also reflected other factors, such as uncertainty in stock markets and higher demand for NOK-denominated assets, which were perceived as a safe investment in an otherwise turbulent period.

In the long run, wages must be commensurate with the value added that is generated by workers. Real wage growth is thus determined over time by developments in labour productivity in all sectors of the economy.

If historical productivity growth trends persist, the long-term rate of growth in labour costs that is compatible with the inflation target is 4½%. The outcome of the wage settlements we have observed in recent years is not consistent with this.

If monetary policy is to have an impact, it is important that wage growth responds to labour market tightness.

Since the mid-1980s, wage growth has been markedly higher in Norway than among trading partners.

Earlier, the krone was devalued in response to high wage growth, which contributed to veiling the effect of relatively high wage growth on manufacturing industry's competitiveness. With an inflation target, monetary policy has become forward-looking. The high pay increases awarded in last year's wage settlements therefore engendered expectations of higher interest rates. This led to an appreciation of the krone. Manufacturing industry is thus faced with a double burden: high wage growth and a strong krone.

Over the last 30 years, manufacturing has been scaled back in waves, particularly in the years between 1977 and 1987. In the years leading up to the periods of contraction, profitability in the manufacturing sector deteriorated. It can take time for such a deterioration to translate into lower output and employment. But when the turnaround does occur, it tends to be swift and pronounced. It now appears that a new period of downscaling is under way.

Several factors point to this. First, a trend analysis suggests that manufacturing employment will decline in the years ahead. This is partly related to an expected decline in petroleum investment and somewhat higher productivity growth in manufacturing than in other industries.

Second, manufacturing costs have increased sharply since 1988 as a consequence of high wage growth. The appreciation of the krone since the summer of 2000 has amplified the deterioration in cost competitiveness.

Third, as a result of the fiscal guideline, the internationally exposed sector is exposed to additional pressure. Over time, the phasing in of petroleum revenues will lead to restructuring and the transfer of resources from the exposed to the sheltered sector.

Fourth, the response patterns in stabilisation policy function in a different way than previously. In the past, it was generally understood that high wage growth and overheating of the economy must be met by fiscal tightening. Today, with the fiscal guideline and inflation targeting, it is monetary policy that is tightened to a greater extent in such a situation. The burden of stabilisation policy is thus at times transferred to the internationally exposed sector.

Public expenditure grew by 7% from 2001 to 2002. This is considerably higher than the growth in value-added in the private sector of the mainland economy, which is estimated at around 4%.

Real growth in public consumption is estimated at 1¾%. In other words, there will only be moderate growth in the production of public services even with a sharp increase in central government allocations. According to the National Budget, there will be virtually no growth in public consumption this year.

This is because the cost of producing public services is rising substantially, to some extent reflecting the very high level of wage growth in the public sector. There have also been substantial increases in transfers to the household sector through our social security system.

The room for public consumption is influenced by the outcome of wage settlements. If wage growth in the general government sector is 1 percentage point higher than assumed, labour costs will increase by a little more than NOK 2 billion. This is the equivalent of the entire increase in the use of petroleum revenues over the central government budget for 2003.

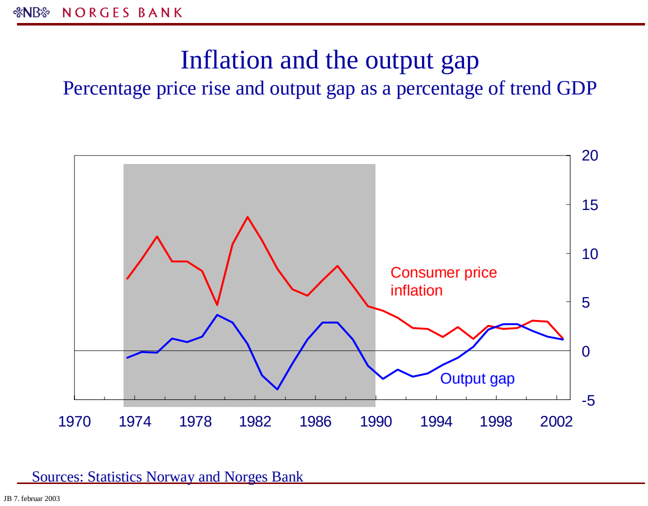
The bulk of the high growth in central government allocations translates into strong growth in household consumption, while growth in public services production is moderate. This is only to be expected when there is a steep increase in public sector allocations in an economy where there are no available resources.

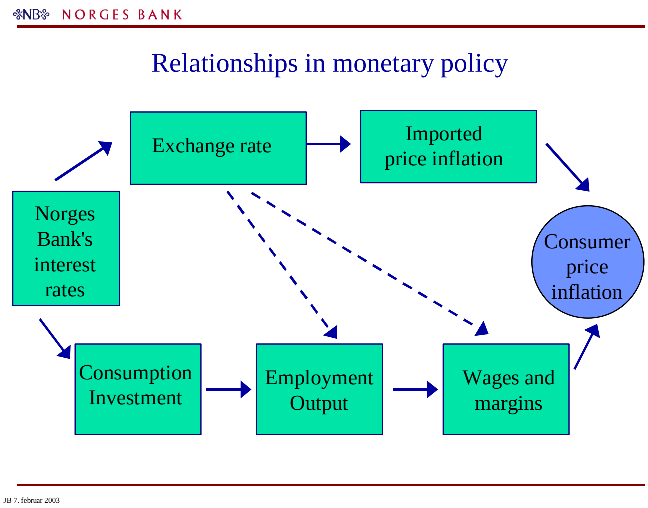
The high level of wage growth is thus having a negative impact on both the internationally exposed sector and the more sheltered sectors of the economy. Public sector budgets are being consumed by wage growth, and growth in service production is being stifled. Teachers are being made redundant. The internationally exposed sector is feeling the double impact of high wage growth and a strong krone.

Norges Bank has one instrument, the key rate, which has effects on the wider economy. This means that monetary policy cannot be oriented towards stabilising developments only in the internationally exposed sector. This would cause considerable imbalances in the Norwegian economy.

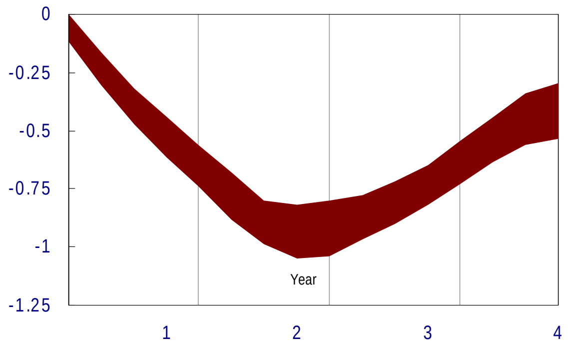
It is important to be aware that low wage growth will be of double benefit to the exposed business sector. If wage growth were as low as the level achieved partly through incomes policy in the mid-1990s, and other things being equal, the interest rate would probably have to be set in such a way that the krone would fall in value in order to bring inflation up to 2.5%.

Lower wage growth will also, other things being equal, provide room for higher production in the public sector within the fiscal policy guideline.



## Effects of a 1 percentage point increase in the interest rate over 2 years. Percentage change in mainland GDP




Source: Norges Bank



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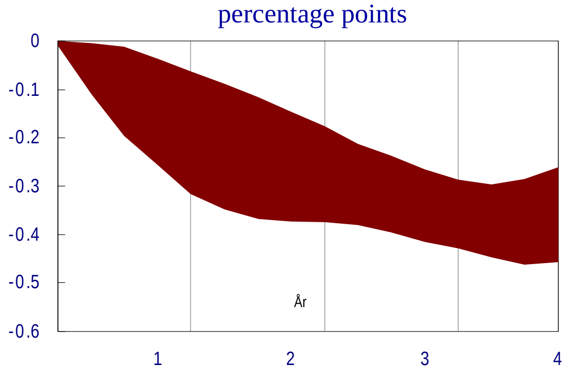
## Effects of a 1 percentage point increase in the interest rate over 2 years. Change in consumer price inflation in percentage points




Source: Norges Bank



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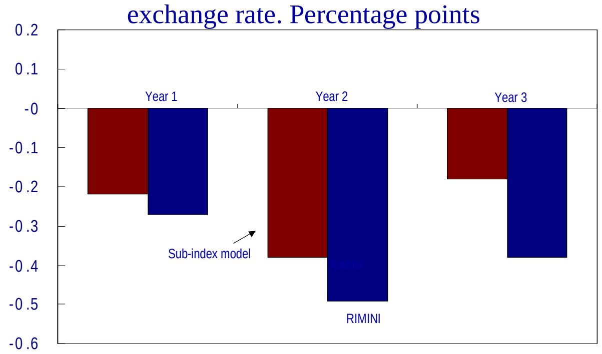
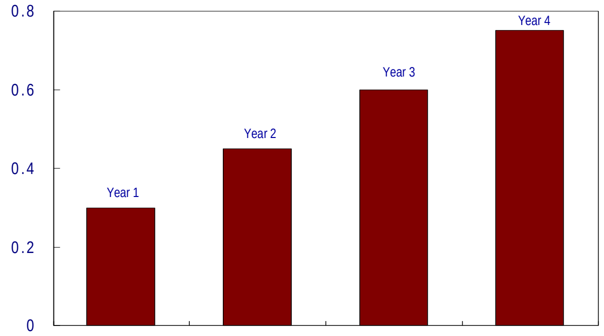
## Effects on consumer price inflation of a persistent appreciation of 5 per cent of the import-weighted krone exchange rate. Percentage points




Source: Norges Bank

## Isolated effect on consumer price inflation of a persistent rise in labour costs of 1 percentage point



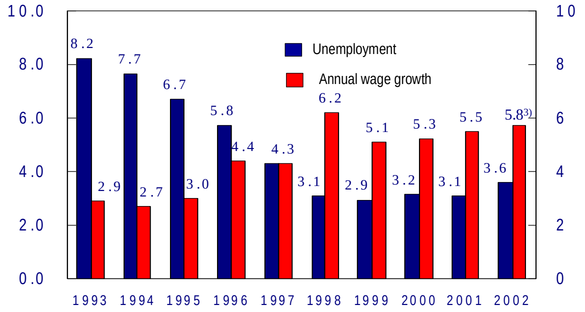

Source: Norges Bank





## Annual wage growth[1)] and unemployment[2)]

Per cent



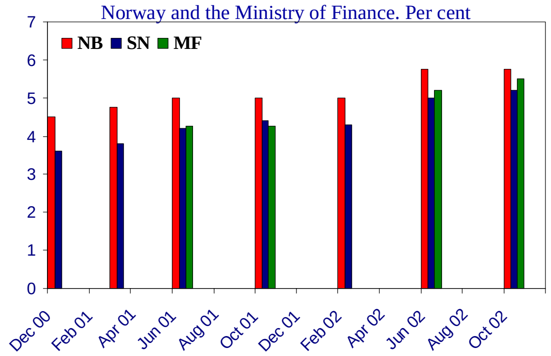

1) Average for all groups. Including costs of additional vacation days
2) Registered unemployed and persons on labour market programmes. Per cent of labour force
3) Projection
Sources: TRCIS, the Directorate of Labour and Norges Bank





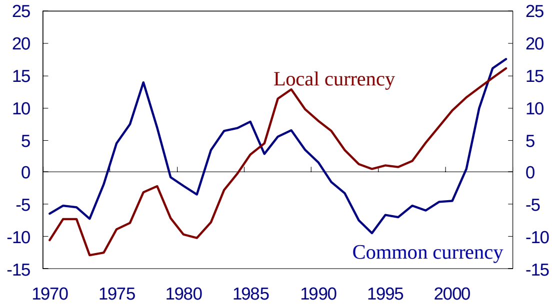
## Annual wage growth[1)] in 2002

Forecasts made at different points in time by Norges Bank, Statistics Norway and the Ministry of Finance. Per cent




1) Statistics Norway: Wages per normal person-year
Sources: Norges Bank, Statistics Norway and the Ministry of Finance

## Relative labour costs: deviation from historical average 1970-2003




Sources: Statistics Norway, TRCIS/IMF and Norges Bank



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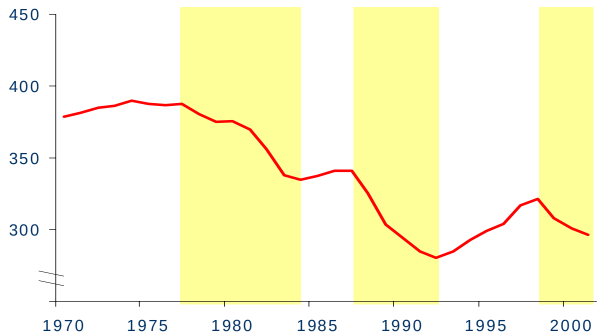
## Manufacturing employment, 1970-2001

In thousands employed




Source: Statistics Norway

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