

Svein Gjedrem: Inflation targeting in an oil economy

Address by Mr Svein Gjedrem, Governor of Norges Bank (Central Bank of Norway), at Sparebanken Møre, Ålesund, 4 June 2002.

Please note that the text below may differ slightly from the actual presentation.

* * *

Norway is unique in being both a fully developed economy and a major oil exporter. Last year, Norway was the world's third largest exporter of oil. In the future, we will become an increasingly important exporter of natural gas.

The present value of remaining petroleum reserves has been estimated at NOK 2 200bn, or roughly 1½ times our current GDP. The bulk of Norway's petroleum wealth will be extracted over a period of 40 years, from 1990 to 2030.

New technology has had a significant impact on our future production potential. In spite of rapid production growth, the estimated present value of our petroleum wealth has increased some 35-40 per cent over the last ten years, measured in real terms. As an example, the registered oil reserves in the Ekofisk field are larger today than when the field started production 30 years ago.

Revenues from the petroleum sector have generated a fiscal surplus of some 10-15 per cent since 2000. A similar surplus is generated on the current account, reflecting capital outflows to the Government Petroleum Fund. Even in 1998, when the oil price fell to 10 USD/barrel, Norway had a fiscal surplus of some 4 per cent of GDP.

The existence of abundant natural resources can be a mixed blessing. Experience elsewhere suggests that the sudden occurrence of major income flows tends to undermine future production potential.

In the long term, it is difficult to ensure an efficient distribution of wealth between and within generations without triggering rent-seeking behaviour among households and firms. In the short term, the volatility in income flows and in terms of trade poses a challenge for monetary and fiscal policy.

The mixed blessing of national wealth is not a new problem. Vigilant observers were already aware of this in the 17th century. In modern economic language, the Moroccan ambassador to Spain pointed to the problem of deteriorating competitiveness 300 years ago (see Chart 2).

The main long-term challenge to economic policy is how the returns on petroleum wealth can be phased into the economy without a deterioration of our future growth potential.

Even with our substantial petroleum reserves, human capital is by far our most important resource. It accounts for over 80 per cent of Norway's national wealth (present value of future labour).

Income from oil and gas is transferred to financial assets through the government budget. These transfers are large in terms of GDP, but still minor compared with our human capital. Oil and gas reserves account for about 7 percent of national wealth today, whereas in 2030 these reserves will be reduced to only 1-2 per cent.

To meet these challenges, the Norwegian Government Petroleum Fund was established on 22 June 1990. Its main objective is to manage assets and distribute wealth between generations. It also serves as a buffer against shocks: changes in petroleum revenues are absorbed by the Fund, not by the domestic economy. This reduces the need for structural adjustments and thus promotes exchange rate stability.

The Fund invests only in foreign markets. Investments are spread between equities and fixed income instruments, as well as across countries. The net annual inflow to the Fund equals the net fiscal surplus plus the return on the Fund's capital.

In March 2001, a broad majority in the Norwegian parliament (the Storting) adopted a new set of guidelines for fiscal and monetary policy. According to the new guideline for fiscal policy, petroleum revenues are to be phased in approximately in pace with the expected real return on the Government Petroleum Fund.

The guideline makes fiscal policy predictable and anchors it in a long-term strategy. It also makes policy robust to changes in oil prices and ensures that petroleum wealth will be of benefit both today and in the future.

The guidelines imply that the structural non-oil budget deficit will equal 4 per cent of the total value of the Fund. The non-oil deficit is thus financed by the return on the Fund, ensuring both long-term fiscal balance and a continued phasing in of petroleum revenues.

The use of petroleum revenues will accordingly increase as long as the Petroleum Fund is expanding. Fiscal policy will contribute to stimulating aggregate demand in the Norwegian economy every year. This annual expansionary fiscal impact poses a challenge to stabilisation policy in general and monetary policy in particular.

Underlying real expenditure growth has exceeded mainland GDP for the last 4 years. Nominal growth in 2002 is 7 per cent. (The deflator, mainly wages, is 4½ per cent).

Measured as a share of GDP, public expenditure is growing rapidly. In 2002 alone, this share will increase by some 2½ percentage points. According to the Revised National Budget, an increase in expenditure of 7 per cent this year will lead to an estimated growth in public sector consumption of only 1½ per cent. The rest will be spent on government transfers and wage growth. This is consistent with close adherence to the new fiscal guidelines.

The new guidelines for fiscal and monetary policy were introduced simultaneously, and are not independent of each other. Fiscal policy is geared towards the phasing in of oil revenues; monetary policy has been given a more explicit responsibility for macroeconomic stabilisation. Monetary policy is to be oriented towards low and stable inflation. The inflation target is set at 2½ per cent.

Monetary policy affects the economy with considerable and variable lags. The key rate is set on the basis of an overall assessment of the inflation outlook two years ahead. If it appears that inflation will be higher than 2½ per cent with unchanged interest rates, the interest rate will be increased. If it appears that inflation will be lower than 2½ per cent with unchanged interest rates, the interest rate will be reduced.

It is just as important to avoid an inflation rate that is too low as it is to avoid an inflation rate that is too high.

Up to March 2001, the Bank pursued exchange rate stability against European currencies. Implicitly, this meant that inflation in Norway had to be kept at the target for the euro area. From 1999 onwards, the ECB's target was defined as an inflation rate below 2 per cent. Since the introduction of an inflation target, the underlying inflation rate has been around 2½ per cent. The rate of increase in the headline CPI has shown somewhat wider variations, but averaged 2¼ per cent in the 1990s.

The use of oil revenues must be counteracted by a tight monetary policy. A tight monetary policy implies relatively high interest rates, a strong krone, or both.

As fiscal policy creates demand for resources in public services and other sheltered sectors, industries exposed to foreign competition may be faced with difficulties finding labour and higher labour costs. The contest for resources is likely to lead to a real appreciation of the krone and a deterioration of competitiveness in our exposed sectors.

The krone exchange rate has appreciated as a result of a wider interest rate differential between Norway and other countries. Combined with low growth abroad and increased trade with low-cost countries such as China, this has led to a fall in import prices. The relatively high price increases of Norwegian products reflect high wage growth and a tight labour market.

The krone exchange rate, measured against the trade-weighted index, has appreciated around 13 per cent in the last two years. However, the krone was exceptionally weak in mid-2000. The krone is 4-5 per cent stronger today than in the early 1990s, and about as strong as the previous high in early 1997. Thus, the recent strong showing of the krone is not without precedent.

Changes in the oil price have time and again been an important factor behind exchange rate movements. Empirical evidence shows that the exchange rate is affected mainly by large fluctuations in the oil price. The krone tends to depreciate if the oil price is very low, as happened during the Russian crisis in 1998. On the other hand, the krone did not appreciate accordingly when the oil price surged from 1999 onwards. Hence, the relationship between the oil price and the exchange rate has not been evident for the last two years. Since late 2001, however, our currency may have been used as a hedge against the upside risk to the oil price, and this may have contributed to its appreciation.

Another factor behind the appreciation of the krone is the current low risk premium in global currency markets (measured by a global risk index, GRI). Since the beginning of this year, lower risk premiums have accompanied a stronger krone. Developments in the GRI were also an important factor during the Russian crisis in 1998-1999.

When global risk premiums and interest rates are low, investors may turn to higher-yield currencies. There is also a tendency for more peripheral currencies to attract increased attention when volatility between the major global currencies is subdued and risk premiums are low.

The interest rate differential has been an important explanation for the movements in the krone exchange rate, at least since the summer of 1999. A higher interest rate differential has accompanied a stronger krone. The krone has appreciated significantly since the beginning of this year, however, and apparently somewhat more than what can be explained by the interest rate differential alone.

One explanation may be that market participants react to signs of pressure in the economy by adjusting their interest rate expectations in the longer term. This has an impact on longer-term interest rates. Thus, movements in the exchange rate may be a result of changes in forward rates, as well as current interest rates.

Since early January, the 12-month money market differential appears to have followed the krone exchange rate more closely than the 3-month differential. The pressure on internal resources seems to have resulted in expectations of tight monetary conditions, which contributed to the recent appreciation of the krone.

The nominal appreciation of the krone has been accompanied by a significant real appreciation of Norwegian labour. Measured in local labour costs, cost competitiveness has been deteriorating since 1997. For a time, profits in the exposed sector were not affected by the increase in labour costs, as the krone depreciated. However, this depreciation could not last, as it would have ignited domestic inflationary pressures.

Tight labour market conditions warrant a relatively tight monetary policy. Norwegian interest rates are not very high, however, when our wage growth is compared with that of other countries. On the contrary, the recent appreciation of the krone will have a cushioning effect on inflation and thus on interest rates.

Since 1998, the increase in labour costs has been between 5 and 7 per cent. This year's wage negotiations were no exception. It now seems evident that wage growth will be significantly higher than our previous estimate of 5 per cent this year. The carry-over to next year is also substantial, especially in retail trade and the public sector.

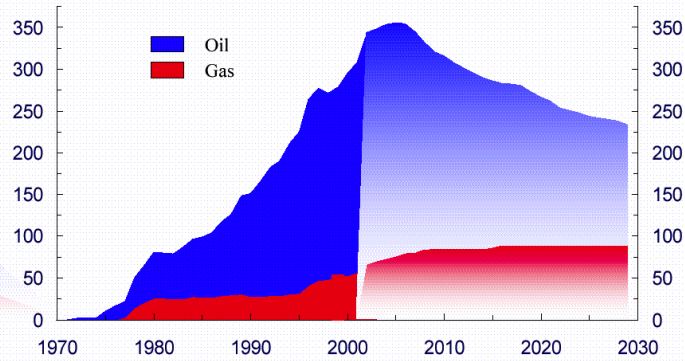
It is evident from this year's wage negotiations that our labour market is tight.

Norges Bank kept interest rates unchanged at the Executive Board meeting on Wednesday, 22 May. The Bank changed its stance on future inflation risks. The main reason was the higher-than-projected wage increases.

According to the Bank's assessment of the risks associated with the inflation outlook, the appreciation of the krone cannot fully counteract stronger wage growth, faster growth in consumption, a higher oil price and a somewhat more favourable global economic outlook.

Petroleum production in Norway

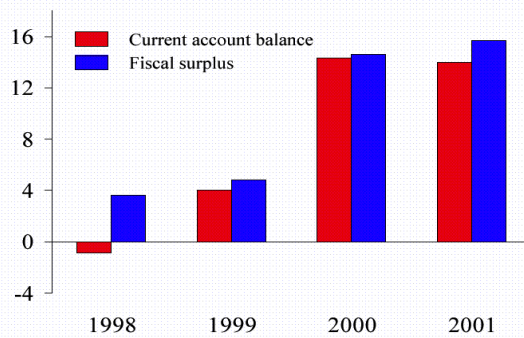
In millions of Sm³ o.e.



Source: Ministry of Finance (Long-Term Programme 2002-2005)

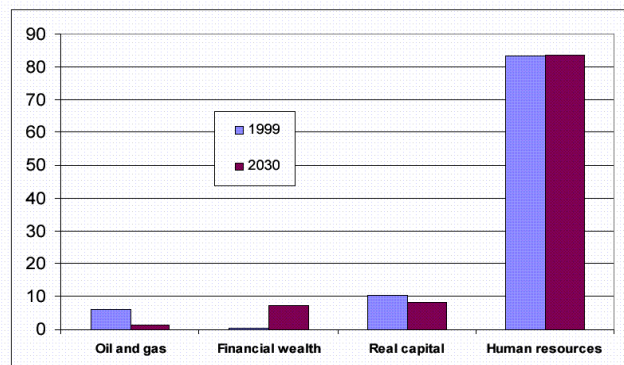
A twin surplus

Percentage of GDP



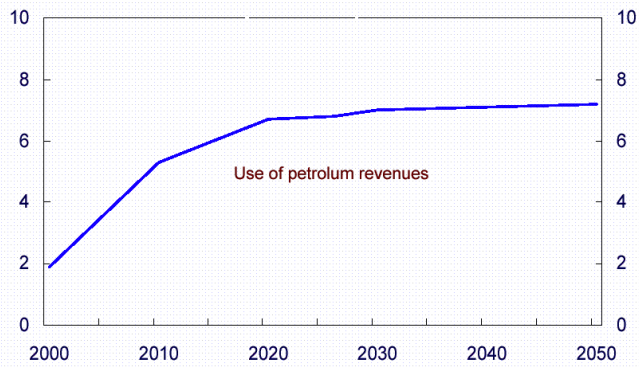
Norway's national wealth

Percentage breakdown



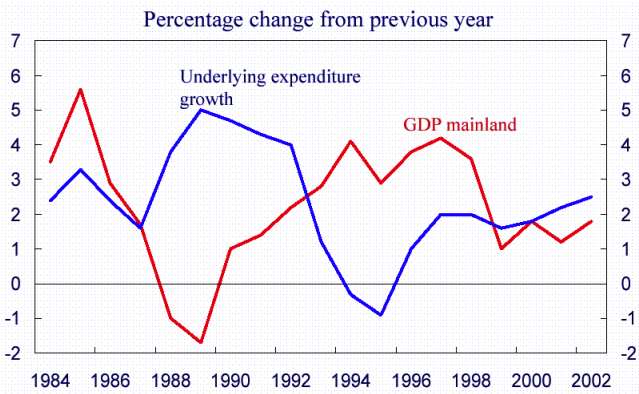
Source: Long-term programme 2002-2005

Structural non-oil budget deficit Percentage of GDP mainland Norway



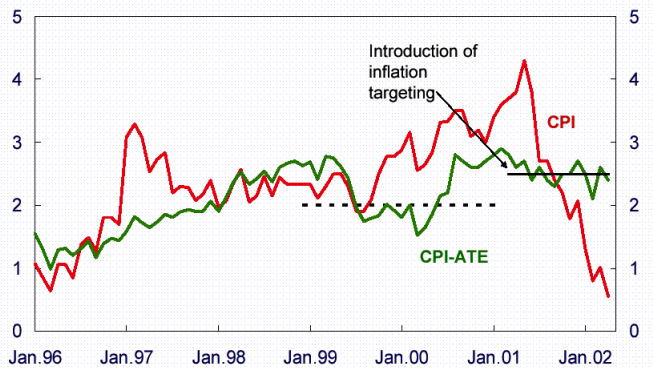
Source: Ministry of Finance

Real underlying expenditure growth and growth in mainland GDP Percentage change from previous year



Sources: Statistics Norway and Ministry of Finance

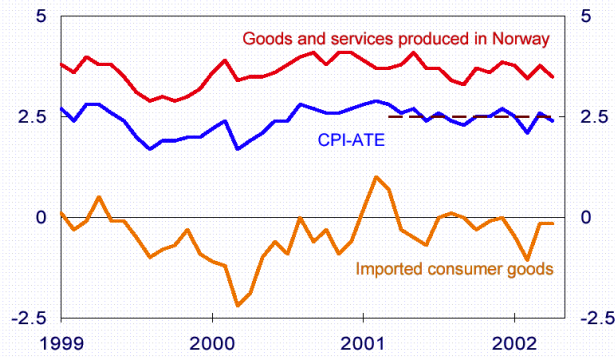
Norway – CPI and CPI-ATE¹ 12 month rise, per cent



¹) CPI-ATE: CPI adjusted for tax changes and excluding energy products

Sources: Statistics Norway and Norges Bank

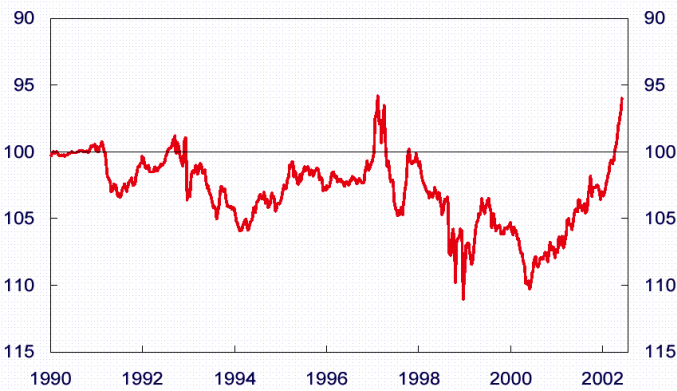
Domestic price increases counterbalanced by external inflationary pressures



Sources: Statistics Norway and Norges Bank

SG SBM, Ålesund 4 juni 2002

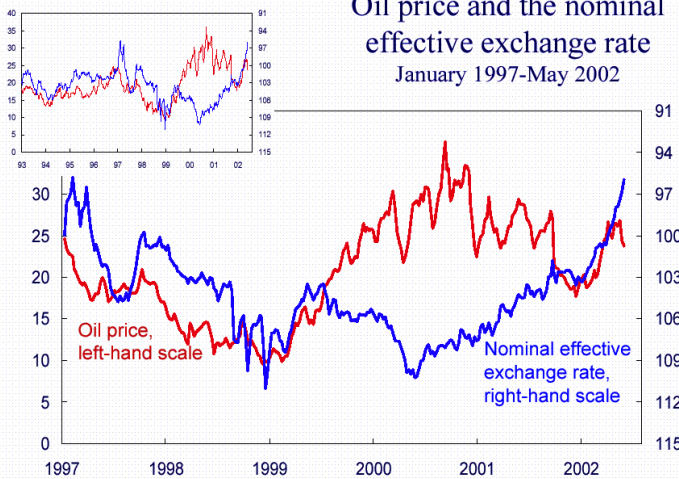
Nominal effective exchange rate (trade-weighted index) 1990=100



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

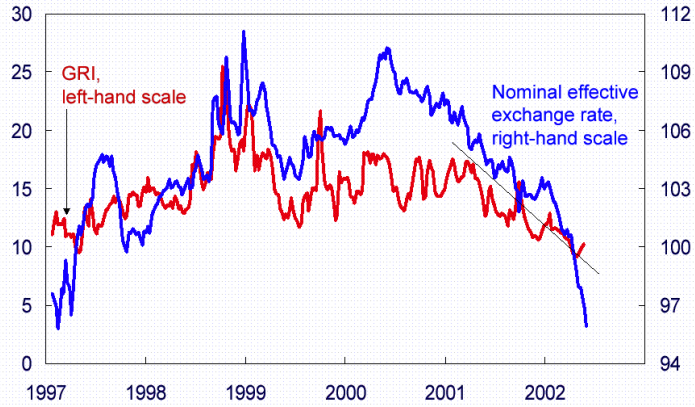
Oil price and the nominal effective exchange rate January 1997-May 2002



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

The nominal effective exchange rate and GRI January 1997-May 2002



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

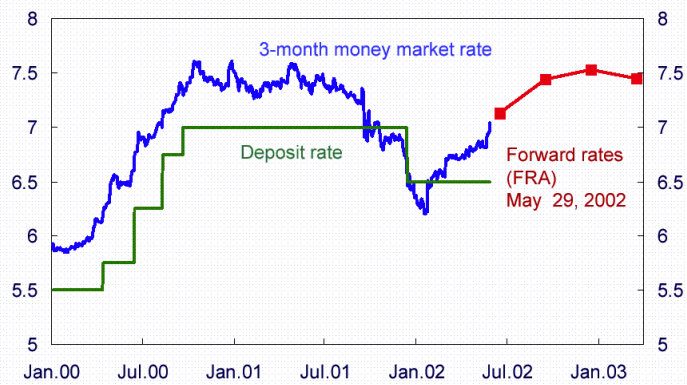
The nominal effective exchange rate and 3-month money market rate differential January 1997-May 2002



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

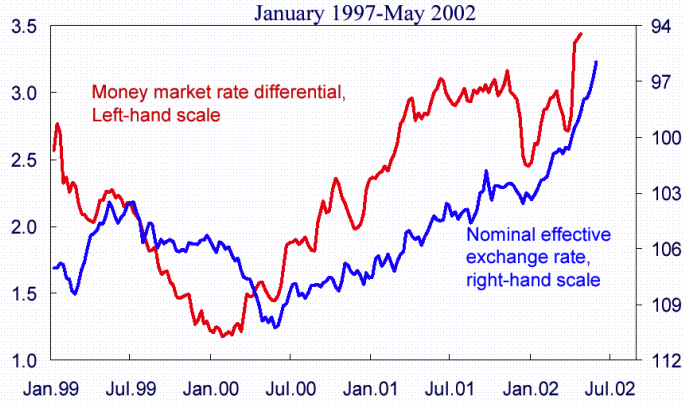
Norges Bank's deposit rate, 3-month money market rates and forward market rates (FRA) January 1997-May 2002



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

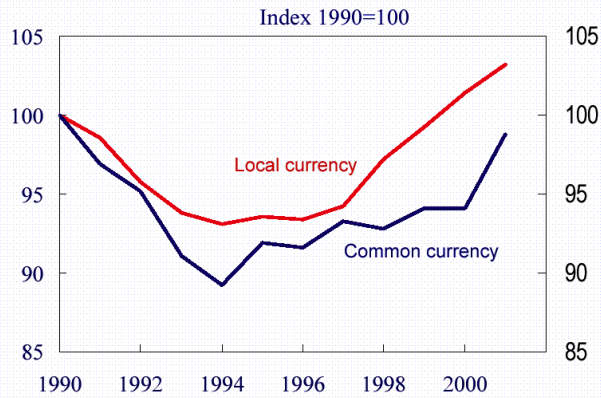
The nominal effective exchange rate and 12-month money market rate differential



Source: Norges Bank

SG SBM, Ålesund 4 juni 2002

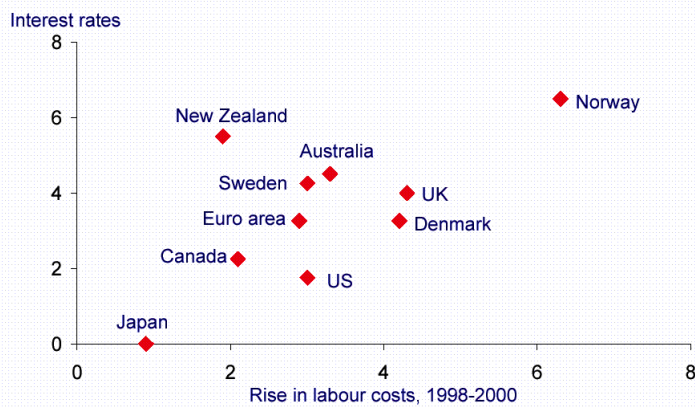
Relative labour costs in manufacturing in Norway compared with trading partners



Sources: Statistics Norway, TBU and Norges Bank

SG SBM, Ålesund 4 juni 2002

Key rates and rise in labour costs in manufacturing

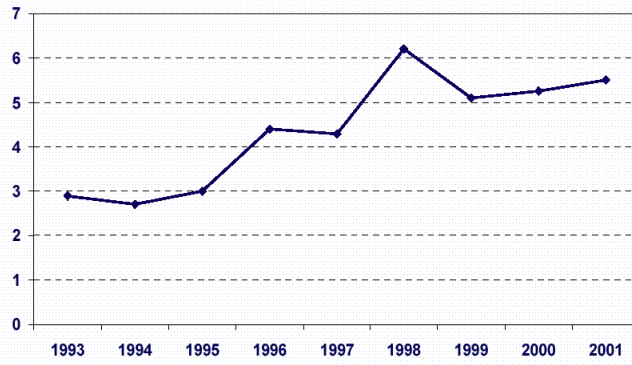


Sources: OECD and Norges Bank

SG SBM, Ålesund 4 juni 2002

Annual wage increase¹

Average all groups. Percentage rise from previous year



¹Including costs due to additional vacation days
Sources: TBU and Norges Bank