NORGES BANK

Reports from the Central Bank of Norway No 1/2004

Inflation Report

1
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March

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Monetary policy in Norway

Objectives

The Government has defined an inflation target for monetary policy in Norway. The operational objective is an inflation rate of 2½ per cent over time. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances are not taken into account. Norges Bank places particular emphasis on CPI inflation adjusted for tax changes and excluding energy products (CPI-ATE) when assessing underlying inflation.

Horizon and implementation

Normally, the interest rate is set with a view to achieving inflation of 2½% at the two-year horizon. Norges Bank operates a flexible inflation targeting regime, so that weight is given to variability in inflation as well as to variability in output and employment. Monetary policy affects the economy with a lag. The choice of a two-year horizon is thus based on striking a balance between variability in inflation and variability in output and employment, and a perception of how interest rates influence these variables. If extraordinary conditions prompt Norges Bank to apply a different time horizon than two years, the Bank will provide an assessment of this. The same applies if special emphasis is placed on developments in financial markets.

The decision-making process

The key interest rate is set by Norges Bank's Executive Board. Decisions concerning interest rates and other important changes in the use of instruments will normally be taken at the Executive Board's monetary policy meeting every sixth week. The analyses in Norges Bank's *Inflation Reports*, together with assessments of price and cost developments and conditions in the money and foreign exchange markets, form the basis for monetary policy decisions.

The assessment of the inflation outlook is presented in the *Inflation Report*, which is published three times a year, normally in February/March, June and October. The main content of the *Inflation Report* is presented to and discussed by the Executive Board before the report is published. The Central Bank Governor is the editor of the *Inflation Report*. On the basis of the analyses and discussion, the Executive Board assesses the consequences for the monetary policy strategy in the period to the next *Inflation Report*. These assessments are set out in a strategy document which is published at the end of the period.

Communication and reporting

The monetary policy decision is announced on the same day at 2pm. The Bank holds a press conference at 2.45pm on the same day, also when interest rates are left unchanged. The press release and the press conference are available on Norges Bank's website, www.norges-bank.no.

The *Inflation Reports* discuss monetary policy in the preceding four-month period. In addition, Norges Bank reports on the conduct of monetary policy in its *Annual Report*. The Bank's reporting obligation is set out in §75c of the Constitution, which stipulates that the Storting shall supervise Norway's monetary system, and in §3 of the Central Bank Act. The *Annual Report* is submitted to the Ministry of Finance and communicated to the King in Council and to the Storting in the Government's Kredittmeldingen (Credit Report). The Central Bank Governor provides an assessment of monetary policy in an open hearing in the Standing Committee on Finance and Economic Affairs in connection with the Storting deliberation on the Credit Report.

Inflation Report 1/2004

The cut-off date for the Inflation Report was 4 March 2004

Editorial

Low inflation and low interest rates at home and abroad

Growth in the Norwegian economy is rising. Unemployment has stabilised. The exchange rate for the krone has depreciated after a period of appreciation. An economic turnaround has occurred, with a soft landing after the long period of high cost inflation in Norway and a low level of activity in other countries. Monetary policy has contributed to stabilising output and employment, but inflation is low.

The interest rate cuts this winter must be seen against the background of the inflation rate which has been considerably lower than target. Norges Bank has weighed the objective of bringing inflation back to target against the risk that output growth might eventually be too high. Other countries have experienced a past period of weak growth in output and employment. External inflation is low. Interest rates are historically low in Europe, the US and Japan. Interest rates in Norway are broadly in line with interest rates among trading partners.

Even if the real economy experienced a soft landing, inflation is too low in Norway. It is just as important to avoid inflation that is too low as inflation that is too high. Should low inflation persist, inflation expectations may be negatively influenced. If inflation becomes entrenched at a low level or close to zero, the interest rate will become less effective as an instrument. So far, it appears that inflation expectations have held steady even though inflation has fallen. The sharp interest rate reductions over the past year have probably sustained economic agents' expectations that inflation will rise gradually again.

The analyses in this *Inflation Report* indicate that inflation will remain low in the months ahead and edge up from summer. There are prospects of a moderate main settlement this spring, the first in eight years. In wage negotiations, the social partners at the local and centralised level weigh the objective of strengthening employment against a satisfactory increase in purchasing power. Wage growth is projected at 3¾% in 2004.

When inflation is low – and as low as it is now - it is appropriate to place considerable emphasis on pushing up inflation. Consumer prices may vary from one month to the next. Later this year, we will receive confirmation of whether consumer prices are rising in line with our projections. This will provide a basis for gradually moving towards a more normal short-term interest rate level in Norway. Such an interest rate path might counter the emergence of excessive pressures on domestic resources in the medium term. Interest rate developments in other countries may also have a considerable impact on the krone and hence on Norwegian interest rates.

Svein Gjedrem
8 March 2004

Summary

Inflation is very low and considerably lower than the inflation target of 2½%. It is primarily the fall in prices for imported consumer goods that is pushing inflation below the inflation target, but the rise in prices for domestically produced goods and services has also edged down.

Capacity utilisation in the mainland economy is about the same as the level prevailing in the mid-1990s. Wage growth has eased, and was at a level last year that is consistent with the inflation target in the long term. There are prospects for a moderate main settlement this year, the first in 8 years. The exchange rate for the krone is in line with level in the mid-1990s. The interest rate is in line with the level among our trading partners.

Unemployment, wage growth and capacity utilisation are broadly in line with the average for the past 10 years. Other factors therefore explain the current low rate of inflation. The appreciation of the krone through 2002 has led to a fall in prices for imported consumer goods. In addition, it appears that subdued external inflationary pressures and intensified competition in some industries have pushed down inflation.

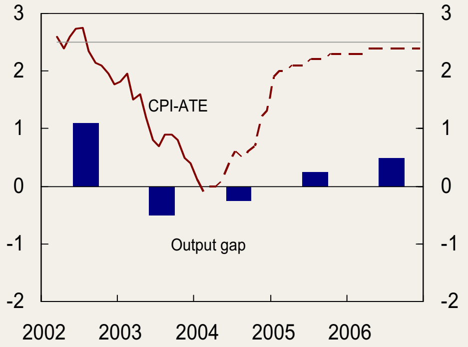
Monetary policy is oriented to returning inflation to the inflation target. Since December 2002, Norges Bank's key interest rate has been reduced from 7% to 2%. The import-weighted exchange rate for the krone has depreciated by about 12% in the same period. This will contribute to higher inflation.

Activity in the Norwegian economy is rising. Current statistics indicate brisk growth in total mainland output in the latter half of 2003. Household consumption is exhibiting high growth, in line with expectations. The level of business investment is low. Business sentiment surveys reflect signs of growing optimism. Equity prices have risen sharply in Norway. There are signs of a sharp rise in house prices, but there is excess capacity in the commercial property market. The number of employed has edged up since summer, but has remained virtually unchanged in recent months. Unemployment, as measured by the Labour Force Survey, has hovered around 4½% in recent months.

Norges Bank's regional network reports that the level of activity is rising in most industries, and the market outlook is favourable for the next six months. In spite of an improved economic situation, few private enterprises are planning to increase investment. Employment does not appear to be rising in pace with the increase in demand and activity.

The global economic recovery has gained a firmer footing, but growth remains sluggish in the euro area. The recovery is primarily concentrated in the US, Asia and Eastern Europe. The global economy appears to be vulnerable to new disturbances, however. Inflation is low in most countries.

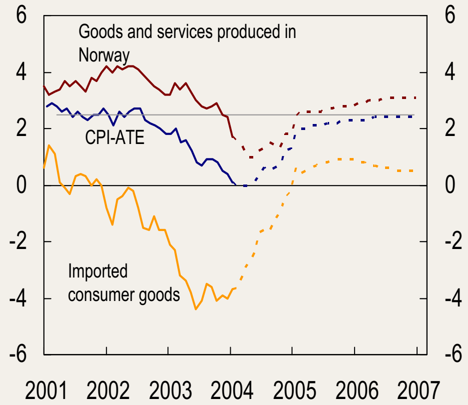
Chart 1 Projections for CPI-ATE[1)] and the output gap[2)]. Per cent



[1)] CPI-ATE: CPI adjusted for tax changes and excl. energy products
[2)] The output gap is a measure of the difference between actual and trend output. See box in IR 1/03

Sources: Statistics Norway and Norges Bank

Chart 2 CPI-ATE. Total and by supplier sector. 12-month rise. Per cent. Jan 2001 - Dec 2006



Sources: Statistics Norway and Norges Bank

Interest rate developments abroad have a considerable impact on developments in the krone. Interest rates in the US, Europe and Japan are low by historical standards. Market expectations point to continued low interest rates for a period ahead.

The projections in this report are based on the assumption that the interest rate moves in line with the forward interest rate. This implies that short-term money market rates will edge down in the period to summer. Thereafter, forward interest rates move up gradually, broadly in tandem with the rise in interest rates among our trading partners. The krone is assumed to follow the path of the forward exchange rate, which indicates expectations of a fairly stable exchange rate in the period ahead.

Activity in the Norwegian economy is projected to pick up over the years ahead, with a gradual increase in capacity utilisation in the Norwegian economy.

Despite rising activity, inflation is expected to remain low for a period ahead. Several of the factors that contributed to low inflation in 2003 may continue to dampen inflation this year. Many enterprises have rationalised. In the short term, this may provide room for an increase in production without a corresponding increase in employment. We assume that such efficiency gains will be realised in 2004. This implies that there is room for stronger growth in the economy without generating pressures on real resources. The output gap is estimated to remain slightly negative this year (see Chart 1), which is expected to curb wage and price inflation over the next year.

External inflationary pressures appear to have been weaker than previously assumed. Changes in trade patterns and a global fall in prices for some goods are pushing down consumer prices. The fall in prices for these goods is expected to exert downward pressure on inflation through the projection period.

Given these assumptions, inflation is projected to remain low this year, but to pick up thereafter. The krone depreciation since January 2003 is expected to push up prices for imported consumer goods (see Chart 2). At the same time, it is assumed that the global upturn will gradually contribute to less negative external price impulses.

In pace with output growth, the output gap is projected to be positive in 2005 and 2006. Stronger employment growth is expected to lead to lower unemployment. Combined with higher inflation, wage growth is expected to edge up in the years ahead. CPI-ATE inflation is projected to remain somewhat below the inflation target next year. Two years ahead, in the course of spring 2006, there are prospects that inflation will reach the inflation target of 2½%.

1 | Recent developments

1.1 The economic situation

Growth in the Norwegian economy has increased. The situation of recent years with low economic growth and falling capacity utilisation has come to a halt. The output gap, as measured here, is now marginally negative (see Chart 1.1). Wage growth has eased.

The underlying rise in prices is very low. The year-on-year rise in consumer prices adjusted for tax changes and excluding energy products (CPI-ATE) was 0.1% in January. It is primarily the fall in prices for imported consumer goods that is pushing inflation below the inflation target, but the rise in prices for domestically produced goods and services has also edged down.

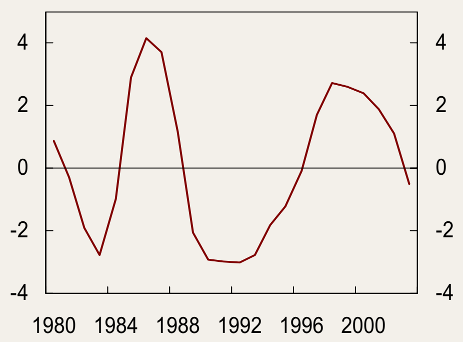
Wage growth has been high over several years. Business costs have risen sharply. In spite of this, the rise in prices for domestically produced goods and services has been fairly moderate. Intensified competition in many industries may have limited the scope for businesses to pass on higher costs to prices. It has been necessary to enhance production efficiency to maintain profitability. These conditions may have curbed the inflationary impulses from high wage inflation.

Last year, many of the enterprises included in our regional network reported that they were implementing extensive measures to reduce costs and enhance operational efficiency. Several enterprises now report that they can increase production to a fairly large extent without a considerable increase in their workforces. Higher productivity growth increases the output potential of the economy. The output gap is now estimated to be somewhat lower in 2003 and 2004 than projected earlier. A period of higher productivity growth implies that the economy can grow at a faster rate than normal without generating inflationary pressures.

Growth in the mainland economy is being stimulated by the expansionary monetary policy stance. The key interest rate has been lowered by 5.0 percentage points since December 2002. Short-term real interest rates have not fallen to the same extent because inflation has abated (see Chart 1.2). Nominal short-term interest rates are at about the same level as that of our trading partners. The interest rate cuts have contributed to a depreciation of the krone. As measured by the import-weighted index (I-44), the krone has returned to the level prevailing around the mid-1990s.

The budget compromise for 2004 implies that central government expenditure will increase somewhat more than estimated trend GDP growth for the mainland economy. For 2003 and 2004 combined, fiscal policy will contribute to stimulating economic activity.

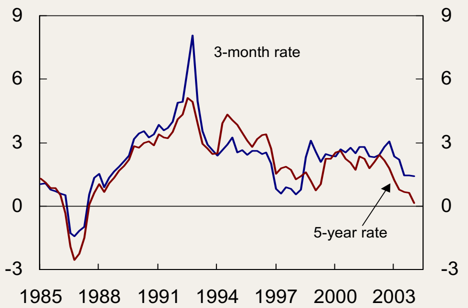
Chart 1.1 The output gap. Percentage deviation from trend mainland GDP. Annual figures. 1980-2003[1)]



[1)]GDP figures for 2003 are based on projections.

Sources: Statistics Norway and Norges Bank

Chart 1.2 Real interest rate after tax.[1)] Quarterly figures. 1985 Q1 - 2004 Q1[2)].

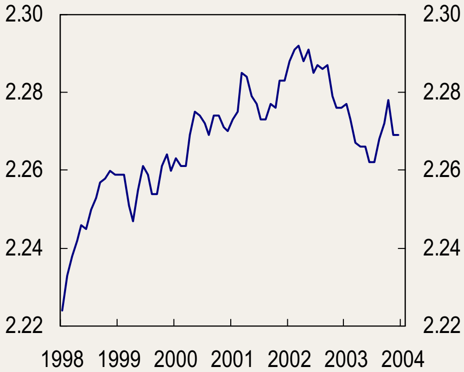


[1)] 3-month money market rates deflated by the CPI excluding energy products up to 1995, Norges Bank's estimates for the CPI adjusted for tax changes and excluding energy products from June 1995 to July 2000, then the CPI-ATE. The same deflator is used for 5-year government bond yields, but from 2001 Q2 the inflation target of 2.5 per cent is used.

[2)] The figure for 2004 Q1 is preliminary

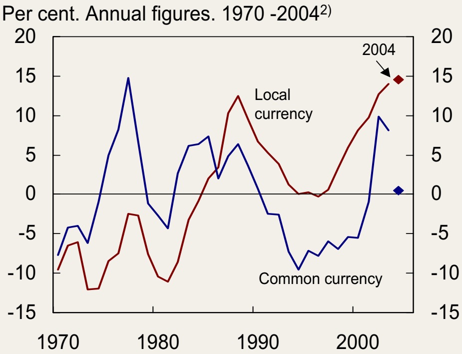
Sources: Statistics Norway and Norges Bank

Chart 1.3 Employed persons according to LFS. In millions. Monthly figures. Jan 1998 – Dec 2003. Seasonally adjusted.



Source: Statistics Norway

Chart 1.4 Relative labour costs[1)]: Norway and trading partners. Deviation from average 1970 -2003. Per cent. Annual figures. 1970 -2004[2)]

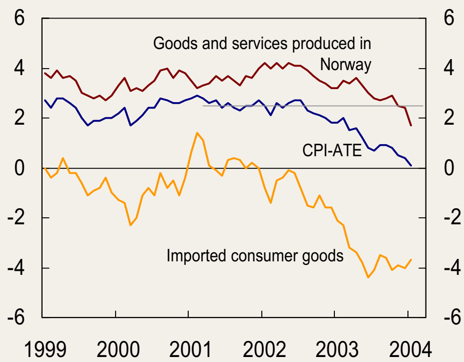


[1)] Hourly labour costs in manufacturing

[2)] Projections for wage growth in 2004. The projection for relative labour costs in common currency in 2004 is based on the assumption for the krone exchange rate in this report (TWI).

Sources: TRCIS, Ministry of Finance and Norges Bank

Chart 1.5 CPI-ATE. Total[1)] and by supplier sector[2)]. 12-month rise. Per cent. Jan 1999 - Jan 2004



[1)] Norges Bank's estimates up to and including July 2000, thereafter figures published by Statistics Norway

[2)] Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

Low inflation is boosting growth in household real income. There is brisk growth in household consumption, as expected. Low interest rates are stimulating demand in the housing market and will lead to higher housing investment. Business investment is sluggish, but there are signs of growing optimism. Equity prices are still on the rise. The increase in unemployment appears to have come to a halt. Employment has edged up since last summer (see Chart 1.3). Distributive trades accounted for most of the growth in employment. Information from our regional network indicates, however, that many businesses are still cautious about recruiting new employees and that the supply of qualified labour is still satisfactory in most industries.

The global economic recovery has gained a firmer footing. The recovery is primarily concentrated in the US, Asia and Eastern Europe. Growth has also picked up somewhat in the EU, but the recovery has been more moderate and uneven than in the other regions. Growth is relatively weak in Germany and France. In Sweden and Denmark, unemployment has increased. Growth is high in the UK.

There is only cautious optimism in export-oriented manufacturing in Norway. Prospects of renewed growth in manufacturing employment are being dampened by the high cost level that built up in the latter half of the 1990s. During the previous period of growth in output and employment in the manufacturing sector in the mid-1990s, competitiveness measured in terms of relative labour costs was considerably higher than at present (see Chart 1.4).

1.2 Consumer price inflation

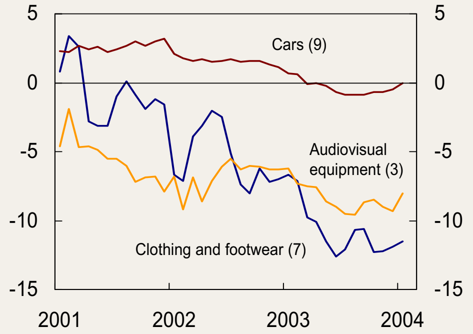
The underlying rise in prices is very low. Annual CPI-ATE inflation has edged down since summer 2002 and was 0.1% in January (see Chart 1.5), lower than projected in the previous *Inflation Report*. In November and January in particular, inflation declined more than expected. The rise in prices for both imported and domestically produced goods and services has been lower than expected. The fall in consumer prices must be seen in the light of structural changes and heightened competition both in Norway and among our trading partners.

Continued fall in prices for imported consumer goods

Prices for imported consumer goods in the CPI have fallen since the beginning of 2002. The rate of decline accelerated gradually up to summer 2003. The decline in prices stabilised through the autumn and winter. In January, prices for these goods were 3.7% lower than one year earlier. The depreciation of the krone since January 2003 has still not led to a pronounced increase in prices for imported consumer goods, as expected in the previous *Inflation Report*.

The decline in prices for imported consumer goods is not solely attributable to exchange rate developments. For several groups of goods, prices for our imports measured in foreign currency have declined in recent years (see box on page xx). The price decline reflects a shift in imports to low-cost countries, a rapid spread of new technology, strong international competition and low global inflation. In the Norwegian consumer price index, clothing, footwear and audiovisual prices have shown the sharpest decline (see Chart 1.6). In January, clothing prices were 12.3% lower than in the same month one year earlier, or close to 30% lower than 1995. In addition, lower tariffs for clothing have led to lower prices for consumers. In the audiovisual industry, technological advances and intensified international competition have pushed down prices. Since the mid-1990s, audiovisual equipment has become considerably cheaper. The same tendency can be observed in other countries. In January, prices for these goods were 8% lower than one year earlier.

Chart 1.6 Prices for some imported consumer goods.[1)] 12-month rise. Per cent. Jan 2001 - Jan 2004

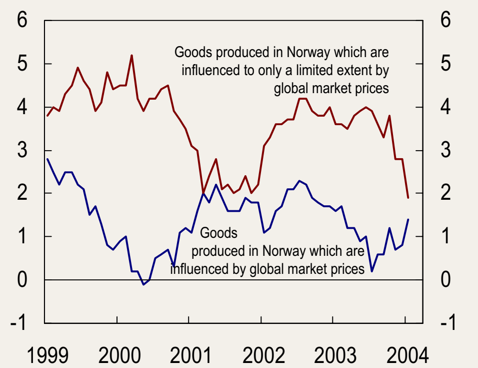


[1)] CPI adjusted for tax changes and excluding energy products. Percentage share of CPI-ATE in brackets

Sources: Statistics Norway and Norges Bank

Cars account for about 1/3 of imported consumer goods. The rate of increase in car prices slowed, but remained positive throughout the period when the krone appreciated. The decline in car prices did not start until spring. In January, car prices were unchanged compared with the same month one year earlier.

Chart 1.7 CPI-ATE. Domestically produced goods[1)]. 12-month rise. Per cent. Jan 1999 – Jan 2004



[1)] CPI adjusted for tax changes and excluding energy products. Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

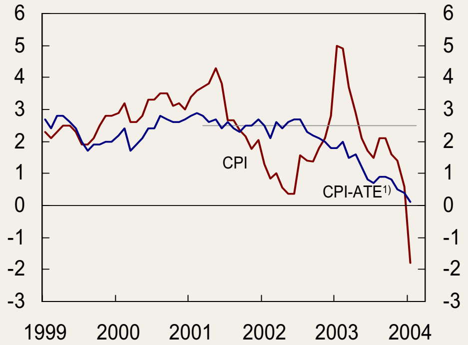
Low domestic inflation

There have been considerable differences in price developments for sheltered and exposed goods produced in Norway (see Chart 1.7). Goods that are influenced by world market prices, either as a result of strong foreign competition or a high import content, have exerted downward pressure on domestic inflation. The rise in prices for domestically produced goods that are sheltered against foreign competition has been relatively high in recent years. Recently, however, the rate of increase in prices for these goods has decelerated fairly markedly.

House rent inflation has edged down, but is still exerting upward pressure on domestic inflation. We have pointed out that the interest rate decline since December 2002 may push down house rent inflation this year and next.[1] In January this year, house rent inflation was lower than in recent years. Annual house rent inflation has decelerated by 1.7 percentage point since October 2002. Our estimates indicate that the fall in interest rates explains somewhat less than half of the deceleration. However, given the current low level of interest rates, it cannot be ruled out that interest rates have a stronger direct effect on house rents than implied by our calculations. The interest rate decline has increased the expected return on investing in rentals in relation to bank savings. This has increased the supply of rental homes and exerted downward pressure on house rents. At the same time, the interest rate decline has made it more attractive to

[1] See box in Inflation Report 3/2003: "Direct effects of interest rates on house rents"

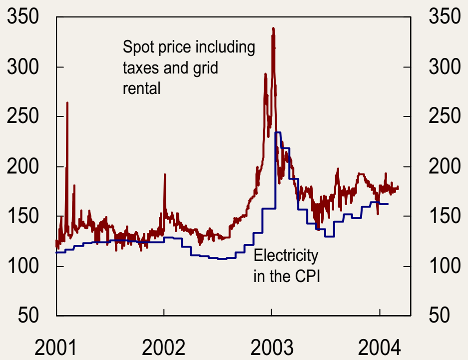
Chart 1.8 Consumer prices. Total and adjusted for tax changes and excluding energy products. 12-month rise. Per cent. Jan 1999 - Jan 2004.



1) Norges Bank's estimates up to and including July 2000, thereafter figures published by Statistics Norway

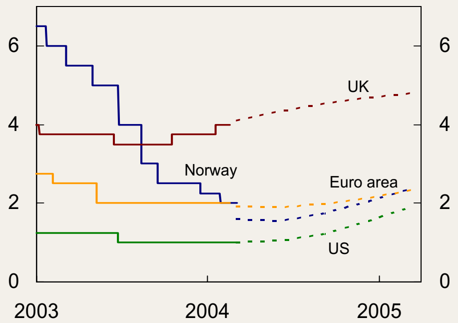
Sources: Statistics Norway and Norges Bank

Chart 1.9 Electricity prices. Index. 1 Jan 1998=100. Daily figures. 1 Jan 2001 – 4 Mar 2004.



Sources: Statistics Norway, Nordpool, the Norwegian Water Resources and Energy Directorate and Norges Bank

Chart 1.10. Interest rate expectations. Actual developments and expected key rate1) at 4 March 2004. Daily figures



1) Based on interest rates on FRA and futures contracts adjusted for the estimated difference between 3-month money market rates and the key rate.

Sources: Bloomberg, Reuters and Norges Bank

buy own homes. This has reduced demand for rentals and hence rental prices.

The rise in prices for services where cost factors other than wages are dominant has edged down since spring 2003. The annual rate of increase in prices for insurance services has decelerated by more than 4 percentage points over the past six months, and stood at 5.1% in January. Air fares have also declined, partly reflecting new entrants and stronger competition.

The rise in prices for services with wages as a dominant cost factor has been relatively high in recent months. The annual rise in prices for craftsmen services has remained stable at around 4%, but fell to 3.3% in January. The rise in prices for hair and beauty care has also edged down in recent months, while the rate of increase in prices for non-institutional health services has moved up to about 11%.

CPI inflation falls as a result of lower electricity prices

The sharp increase in electricity prices at the end of 2002 led to a marked rise in annual CPI inflation including taxes and energy products (see Chart 1.8). Electricity prices have since fallen again (see Chart 1.9). Electricity prices, as measured in the CPI, were 31% lower in January 2004 compared with the same month one year earlier. This has contributed to pushing CPI inflation below zero.

In spite of high and rising oil prices around the beginning of the year, petrol prices have edged down. In January, petrol prices were 1.2% lower than one year earlier.

CPI inflation fell by 1.8% in the 12 months to January 2004. Energy price developments imply that CPI inflation will be lower than CPI-ATE inflation in the months ahead.

1.3 Financial markets

Market confidence in a global economic recovery strengthened through the latter part of 2003 and into 2004. Equity prices are still on the rise. Short- and long-term interest rates have, however, been stable or falling in recent months. There are still wide exchange rate fluctuations.

Lowered interest rate expectations

In autumn 2003, market participants expected the global recovery to lead to higher official interest rates in a number of countries in the course of 2004. So far, the UK is the only major economy that has raised interest rates. In the UK, the official interest rate was increased by ¼ percentage point in November and by a further ¼ percentage point to 4% in February. Market participants expect a further increase in the course of the year (see Chart 1.10). Australia and New Zealand have also raised their official interests rate since last autumn.

In recent months, market interest rate expectations have been revised down in most countries and interest rates have edged down. In the US, there are still no signs of higher inflation. Statements issued by the Federal Reserve have been interpreted to mean that the official interest rate might be maintained at a historically low level for a period ahead. In the euro area, the appreciation of the euro has lowered interest rate expectations. Market participants now expect interest rates in the US to be raised well into the second half of this year and in the euro area in the beginning of 2005. In Sweden, the official interest rate was reduced by ¼ percentage point to 2½% in February as result of lower-than-projected price and cost inflation and weaker labour market developments than previously assumed. In Canada, the official interest rate was reduced by ¼ percentage point in January and by a further ¼ percentage point to 2¼% in March.

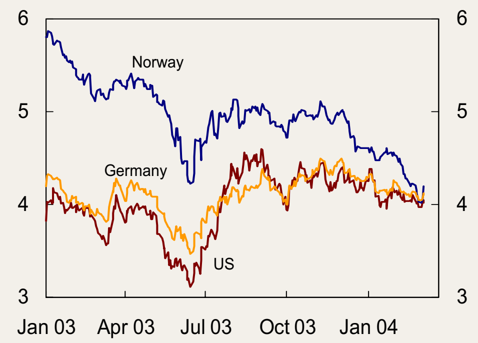
Market participants seem to expect an increase of ½ percentage point in the official interest rate in the US and a ¾ percentage point increase in the UK towards the end of 2004. Market expectations would also imply a probability of a ¼ percentage point increase in the euro area.

In Norway, interest rates fell markedly after inflation proved to be lower in November than most market observers had expected. Norges Bank lowered its key interest rate by a quarter percentage point both in December and January. The key interest rate in Norway is now 2%, or the same as in the euro area, and in line with the average for our trading partners. Low inflation in December and January resulted in a further fall in interest rate expectations in Norway. The market appears to expect a further cut in the key interest rate in Norway in the area of ¼-½ percentage point in the period to summer. Thereafter, market expectations imply a gradual increase in the key rate through autumn 2004, broadly in tandem with an increase in interest rates in the US. The key rate is expected to return to 2% by the end of 2004.

International bond yields reached historically low levels in the period preceding the summer of 2003, but rose in autumn in response to higher growth prospects. In spite of reduced uncertainty surrounding global economic developments, bond yields have edged down again this year (see Chart 1.11). In response to low US inflation figures, short- and medium-term interest rate expectations have been lowered. Purchases of US government bonds by central banks in China and Japan have also contributed to low US bond yields. European bond markets have moved broadly in tandem with developments in the US.

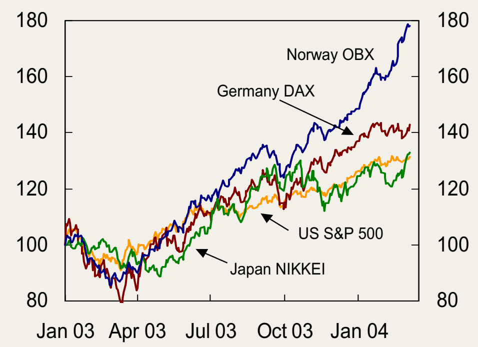
Norwegian bond yields largely shadowed international yields through the autumn of 2003, but have subsequently also been influenced by low inflation figures and the reductions in the sight deposit rate. The yield on Norwegian 10-year government bonds has declined by around ¾ percentage point since the beginning of November last year.

Chart 1.11 Yield on government bonds with 10 year residual maturity. Daily figures. 1 Jan 2003 - 4 Mar 2004.



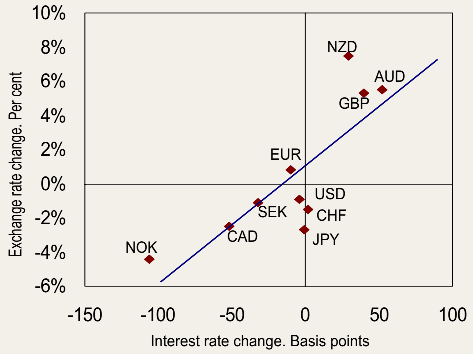
Source: Bloomberg

Chart 1.12 International equity indices. 1 Jan 2003 = 100 Daily figures. 1 Jan 2003 – 4 Mar 2004



Source: Bloomberg

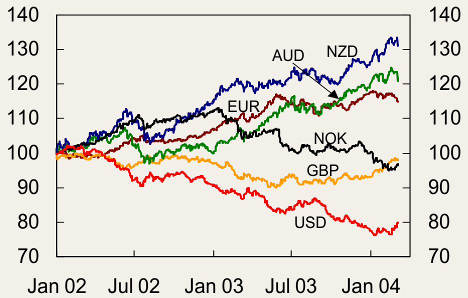
Chart 1.13. Change in 3-month money market rates and effective exchange rates[1]. 23 Oct 2003 – 4 Mar 2004.



1) A positive figure denotes a stronger exchange rate

Sources: Bank of England and Bloomberg

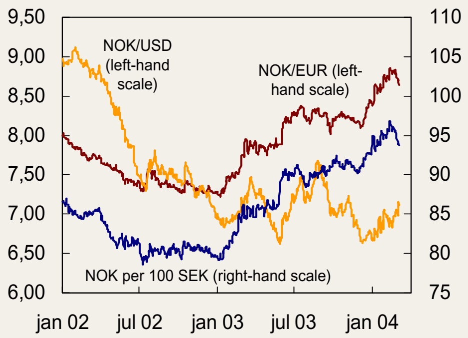
Chart 1.14. Individual exchange rate movements.[1] Effective rates. Index. 1 Jan 2002=100. Daily figures. Jan 2002 – 4 Mar 2004.



1)A rising curve denotes a stronger exchange rate

Source: Bank of England

Chart 1.15. Exchange rate for NOK against EUR, USD and SEK.[1] Daily figures. 1 Jan 2002 – 4 Mar 2004.



1)A rising curve denotes a weaker krone exchange rate

Source: Bloomberg

Higher equity prices

Equity markets continued to rebound in the last few months of 2003 and have also advanced so far in 2004. Output growth in the US and signs of growing optimism in the business sector have supported the upswing. Earnings for the 500 largest listed companies in the US increased by about 20% between 2002 and 2003 and analysts expect earnings growth to remain strong this year. Lower long-term interest rates have also stimulated equity markets. At the same time, low bank deposit rates have probably boosted demand for equities. In Japan, the appreciation of the yen has curbed the rise in equity prices. The Oslo Stock Exchange has recorded larger advances than international stock exchanges. Since the beginning of January 2003, stock prices have risen by a little less than 80% (see Chart 1.12). The price increase on the Oslo Stock Exchange is probably attributable to the beneficial effects for the business sector of a weaker exchange rate and persistent, high oil prices.

Exchange rates driven by interest rates

Interest rate differentials have been an important driving force behind exchange rate developments in recent months. There has been a positive correlation between exchange rates and actual and expected interest rates (see Chart 1.13). Currencies have appreciated in those countries that have increased their official interest rates. Among the major currencies, the New Zealand and Australian dollar appreciated by 7 and 5%, respectively, since the October *Inflation Report*. Sterling appreciated by around 5% in the same period.

The effective exchange rate for the US dollar has depreciated by about 22% since the beginning of 2002, but has been relatively stable so far this year (see Chart 1.14). The depreciation since 2002 probably reflects low US interest rates and the sizeable US trade deficit.

Since the October *Inflation Report*, the exchange rate for the krone, as measured by the import-weighted exchange rate index I-44, has depreciated by around 4%. The krone has weakened more against the euro than against the US dollar (see Chart 1.15).

After remaining fairly stable in the period from June to November last year, the krone has depreciated markedly since early December. The krone depreciation has been driven by falling inflation and lower domestic interest rate expectations. As measured by the import-weighted exchange rate index I-44, the krone is now at the level prevailing at the beginning of 2002.

1.4 Monetary policy

As a result of a change in the inflation outlook and low growth in output and employment, the key interest rate was reduced by a total of 5.0 percentage points from December

2002 to January 2004. Growth in output and employment has now picked up. For a period ahead, underlying inflation will nevertheless be considerably lower than the inflation target.

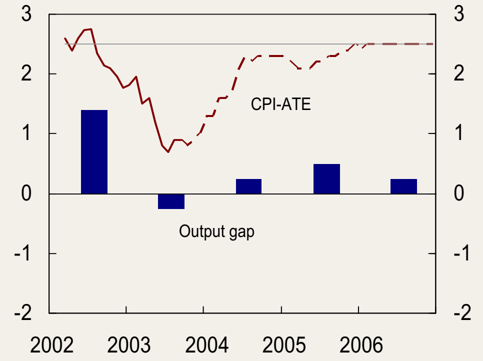
Norges Bank's key interest rate was left unchanged on 29 October when the previous *Inflation Report* was published. After the meeting of Executive Board, it was stated that "according to Norges Bank's assessment, with a sight deposit rate of 2.5 per cent, the probability that inflation two years ahead will be higher than 2½ per cent is the same as the probability that it will be lower".

Since the previous *Inflation Report*, Norges Bank has lowered the key interest rate on two occasions by a total of 0.5 percentage point. The sight deposit rate was reduced to 2% in January. The decisions to reduce the key rate were based on the analyses in *Inflation Report 3/2003*, which was published on 29 October, and assessments of subsequent economic developments. The analyses in the *Inflation Report* were based on the technical assumption that the interest rate would move in line with forward money market rates and that the exchange rate would depreciate somewhat. This implied that short-term money market rates would remain around 3% in the first half of 2004 and then edge up to 4½% in the period to end-2005. At the same time, the expected interest rate differential between Norway and other countries implied a weakening of the krone of close to 2% over the projection period. According to the analyses in the *Inflation Report*, higher activity growth in the Norwegian economy, combined with a further fall in the exchange rate, would lead to higher inflation through the spring and summer of 2004, with inflation stabilising around the inflation target from autumn 2005 (see Chart 1.16).

On the basis of the analyses in *Inflation Report 3/2003*, the Executive Board judged that a sight deposit rate in the interval 2-3% would be appropriate at the end of March 2004 (see Chart 1.18). The Executive Board indicated, however, that after a period of very low inflation, it would be appropriate to be particularly vigilant in monetary policy if inflation did not move up in line with the analyses in *Inflation Report* 3/2003 (see Strategy Document 3/2003 in Annex II).

In the period to the monetary policy meeting on 17 December, the krone had been stronger and inflation considerably lower than assumed at the monetary policy meeting in October. Annual CPI-ATE inflation had fallen to 0.5% in November. The import-weighted exchange rate had strengthened by around 1½% since the previous monetary policy meeting. The Executive Board decided to reduce the sight deposit rate by 0.25 percentage point to 2.25% and stated that "with a sight deposit rate of 2.25%, the

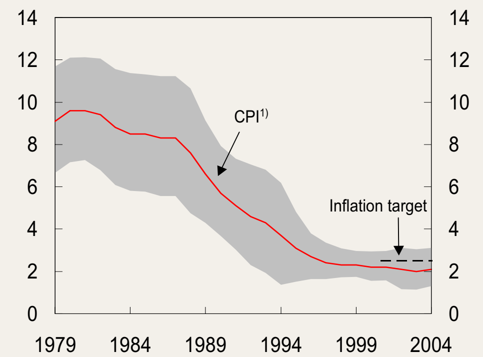
Chart 1.16 Projections for CPI-ATE and the output gap[1)] in IR 3/03. Per cent



[1)] The output gap is a measure of the difference between actual and trend output. See box in IR 1/03

Sources: Statistics Norway and Norges Bank

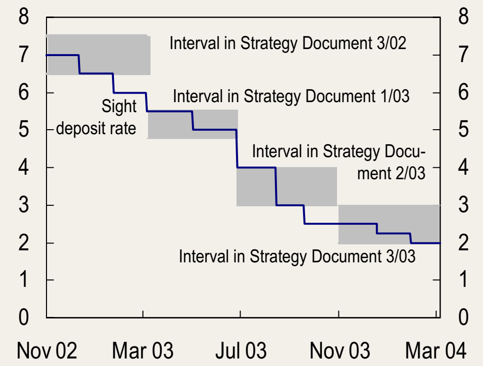
Chart 1.17 CPI. Moving 10-year average (7 years back, current year and 2 years ahead). Per cent.



[1)] The band around the CPI is the variation in the period, measured by +/- one standard deviation

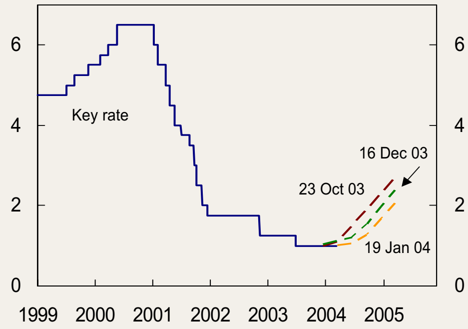
Sources: Statistics Norway and Norges Bank

Chart 1.18 Strategy intervals for the sight deposit rate and actual developments. Nov. 2002 - Mar 2004.



Source: Norges Bank

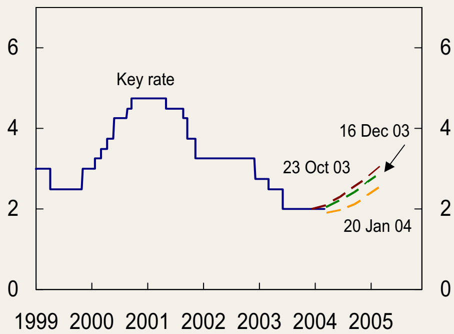
Chart 1.19 Interest rate expectations in the US
Actual developments and expected key rate[1].
Daily figures



[1] Based on Fed Funds futures and Eurodollar futures adjusted for the estimated spread between the 3-month Libor and Fed Funds rates

Sources: Bloomberg, Reuters and Norges Bank

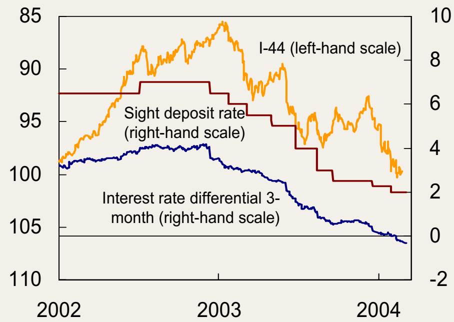
Chart 1.20 Interest rate expectations in the euro area. Actual developments and expected key rate[1].
Daily figures



[1] Based on Euribor futures adjusted for the estimated spread between the 3-month Euribor and Refi rates

Sources: Bloomberg, Reuters and Norges Bank

Chart 1.21 Import-weighted krone exchange rate[1], sight deposit rate and 3-month interest rate differential against trading partners. Daily figures.
1 Jan 2002 – 4 Mar 2004



[1] A rising curve denotes a stronger krone exchange rate

Source: Norges Bank

probability that inflation two years ahead would be lower than 2½% was greater than the probability that it would be higher".

Global economic activity had picked up from the very low level prevailing in winter 2003, fuelled by high growth in the US and a number of Asian countries, including Japan. However, there was uncertainty as to the sustainability of the global recovery. There were still prospects that interest rates would remain low for a long period. Market expectations of key interest rates had been lowered in several countries since the monetary policy meeting in October (see Chart 1.19 and 1.20).

Underlying the interest rate reduction was the objective of returning inflation to target and stabilising inflation expectations, weighed against the risk that output growth might eventually be too high.

Mainland output had picked up in the autumn. Preliminary national accounts figures indicated fairly high growth in mainland GDP in the third quarter. Overall, employment had increased somewhat more than projected. Unemployment remained virtually unchanged towards the end of the year, and was lower than estimated. House prices had risen since summer, and household debt accumulation had increased. On the other hand, there was still considerable excess capacity in the commercial property market, and credit demand in the enterprise sector remained very low.

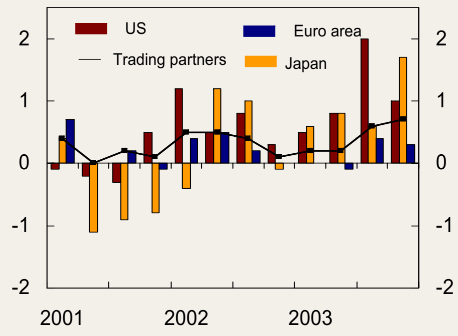
The krone weakened immediately following the interest rate cut in December (see Chart 1.21). Analysts and money market participants expected a further cut in interest rates. Annual CPI-ATE inflation fell to 0.4% in December. Imported price inflation remained very low. At the monetary policy meeting on 28 January, the Executive Board decided to reduce the sight deposit rate by a further 0.25 percentage point to 2%. Norges Bank's assessment remained unchanged, i.e. the probability that inflation two years ahead would be lower than 2½% was greater than the probability that it would be higher. Towards the end of January, the krone was about 4% weaker than in mid-December. CPI inflation in January, which was published on 10 February, was unexpectedly low and contributed to weakening the krone. At the same time, interest rate expectations fell markedly.

The aim of monetary policy ahead is higher inflation. With the interest rate reduction in January, the interest rate reached the floor of the interest rate interval set out in Strategy Document 3/2003. This must be seen against the background that inflation had not increased in line with the analyses in *Inflation Report 3/2003*.

2 | International developments

The global economic recovery has gained a firmer footing in recent months (see Chart 2.1). The recovery continues to be mainly concentrated in the US, Asia and Eastern Europe. Growth has also picked up somewhat in the EU, but the recovery is far more moderate and uneven than in other regions. We expect that growth for Norway's trading partners as a whole will gather further momentum and that the recovery will broaden out (see Table 2.1). For our trading partners combined, output is not expected to be higher than trend growth until the end of 2005, with excess production capacity throughout the projection period. This will contribute to keeping inflation low among Norway's trading partners over the next few years. With moderate growth and low inflation, there are prospects that key rates may remain low for a relatively long period ahead.

Chart 2.1 GDP growth in the US, Japan, the euro area and among Norway's trading partners combined. Quarterly growth. Per cent. 01 Q1 - 04 Q3. Seasonally adjusted



Sources: EcoWin/US Department of Commerce, ESRI (JP) EURO-OP/Eurostat and Norges Bank

Strong growth in the US, but continued weak labour market conditions

GDP in the US grew by 3.1 % in 2003. Private demand is still the most important driving force, although public sector demand also contributed to growth. Towards the end of the year, private investment showed very strong growth, buttressed by improved corporate profitability, low long-term interest rates and various tax incentives. The rate of growth in private consumption slowed somewhat. Manufacturing output has picked up since summer 2003 and business confidence indicators suggest that the upturn will continue. Strong productivity growth is reducing labour demand in the business sector. So far, the upturn has resulted in considerably weaker employment growth than has been the case in previous upturns (see Chart 2.2). Unemployment has edged down, but this primarily reflects an increase in labour market outflows.

Table 2.1 GDP estimates. Percentage change from previous year

	2003	2004	2005	2006
US	3	4	3	3¼
Japan	2¾	2¾	1½	1½
Germany	0	1½	2	2
France	¼	1½	2	2½
UK	2	2¾	2½	2½
Sweden	1½	2½	2½	2¼
Norway's trading partners[1]	1¼	2½	2½	2½
Euro area[2]	½	1½	2¼	2½

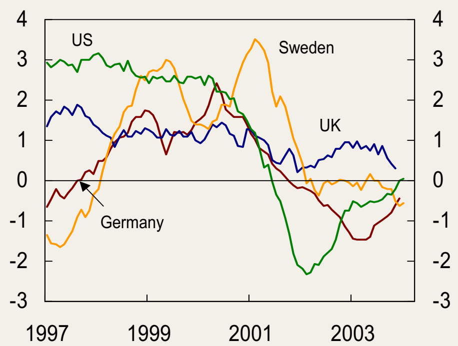
1) Export weightings

2) Weights from Eurostat

Source: Norges Bank

Consumer confidence has nonetheless increased. Private consumption is still being stimulated by a highly expansionary fiscal and monetary policy. From 2000 to 2003, the structural budget balance was reversed from a surplus of 0.9 % of GDP to a deficit of 4.5 % of GDP, primarily as a result of substantial tax cuts and an increase in defence expenditure (se Chart 2.3). The key rate in the US is now very low. At the same time, the sharp depreciation of the US dollar has boosted competitiveness, and long-term interest rates are low. Inflation is low and falling. Inflation excluding food and energy prices is at its lowest for over 40 years.

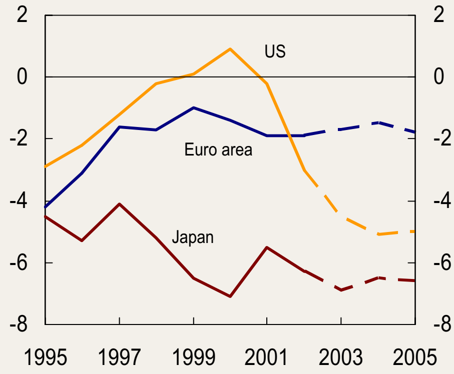
Chart 2.2 Employment. 12-month growth. Per cent. Jan 1997 - Jan 2004.



Sources: EcoWin, Bureau of Labor Statistics (US), Federal Statistical Office (DE), Office of National Statistics (UK) and SCB (SE)

GDP growth is projected to increase further this year, underpinned by additional tax cuts in the first half of the year and improved competitiveness. An expansionary monetary policy and higher equity prices will also make a positive contribution. Improved corporate finances point towards continued growth in investment. We expect, however, that

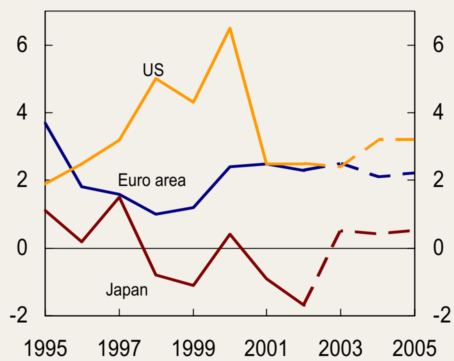
Chart 2.3 Structural budget balance. Per cent of GDP. Annual figures. 1995 - 2005[1].



1) Projections for period 2003-2005

Source: OECD

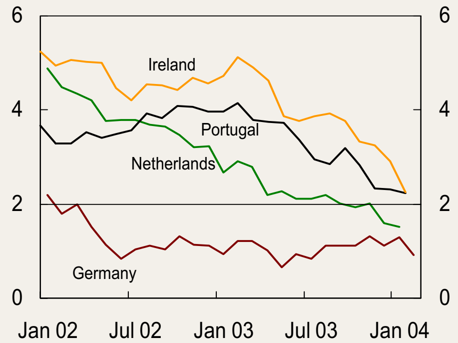
Chart 2.4 Annual wage growth[1]. Per cent. 1995 – 2005[2].



1) Wage growth excluding public sector
2) Projections for period 2003-2005

Source: OECD

Chart 2.5 12-month rise in CPI. Per cent. Jan 2002 - Feb 2004



Sources: EcoWin, EUR-OP/Eurostat, Federal Statistical Office (DE), Central Statistics Office (IRL) and Central Bureau of Statistics (NL)

the rate of growth will gradually moderate. Low real wage growth as a result of the weak labour market may curb growth in private consumption. There are prospects that the monetary and fiscal policy stimulus will weaken later in the projection period.

Stronger euro curbs growth in the euro area

Euro-area GDP growth was 0.4 % in 2003. Growth picked up somewhat in the second half of the year, driven by stronger domestic and international demand. Investment moved up marginally in the fourth quarter. Growth is still moderate, and the appreciation of the euro has contributed to weaker net exports.

In recent months, developments in the business and household sectors have diverged. Manufacturing output has increased. Various business confidence indicators suggest that growth will continue. Corporate profitability has improved. Private consumption is showing little growth. Low consumer confidence in the household sector suggests that it may take time for household demand to move up again. Weak developments in private consumption must be seen in the context of labour market developments. In the third quarter of 2003, employment fell for the first time since 1994. Unemployment has stabilised for the area as a whole, although this is to some extent due to lower labour force participation. Wage growth is low (see Chart 2.4).

Consumer price inflation in the euro area varied around 2% through most of 2003, in spite of several years of low capacity utilisation and a substantial euro appreciation. In recent months, however, inflation has moderated. Inflation has declined particularly in the smaller countries (see Chart 2.5). For the area as a whole, underlying inflation has been somewhat lower than the increase in the Harmonised Index of Consumer Prices. There are prospects that inflation will slow in the period ahead as a result of lower wage growth, idle capacity, the appreciation of the euro and increased competition.

The rate of GDP growth is expected to pick up further through the year, driven by increased exports to the UK, Eastern Europe, Asia and other countries. Stronger growth in private consumption is also expected, as a result of tax reductions and higher real income growth, as inflation declines. Improvements in corporate profitability will probably boost investment towards the end of 2004.

Economic developments in non-euro area EU countries have varied. In the UK, an expansionary monetary and fiscal stance in recent years has contributed to growth. GDP growth in the fourth quarter of 2003 was the highest since the first quarter of 2000. Private consumption has moved up again after a shorter period of low growth. House prices are still rising steeply. Efforts to renew the health and education sectors are contributing to continued growth in public expenditure. Inflation is low. Private and public consumption are expected to be the most important driving forces in the period ahead. In Denmark, GDP showed zero growth in 2003, for the first time since 1993. Unemployment has risen by 1.5 percentage points over the past two years, to 6.5% in January. The rise in prices has slowed markedly over the past year. In Sweden, growth recovered somewhat in the third quarter, as a result of higher domestic and international demand. Unemployment, however, has continued to edge up. Inflation has slowed through the year, and the year-on-year rise in the UND1X, Sveriges Riksbank's target variable, was 1.1% in January 2004.

Asia an important driving force in the global economy

Asia has accounted for over one third of global growth in recent years. Imports, especially of commodities, but also other goods, contribute to keeping up demand in other regions. Global commodity prices have increased (see Chart 2.6). The shipping industry has experienced solid growth, driven by developments in Asia. Trade between the Asian countries is expanding rapidly.

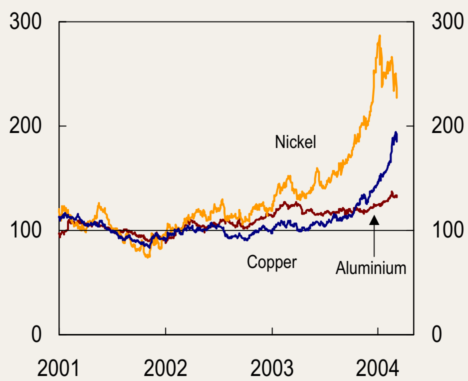
In Japan, manufacturing output has increased sharply, primarily fuelled by higher demand from other Asian countries and the US. Household confidence indicators have shown a positive tendency over the past 6 months, and there are signs of a pickup in private consumption. Consumer prices are continuing to fall, although at a slower pace. Unemployment is lower, partly as a result of a reduction in the labour force, although there are also indications of somewhat higher employment growth.

In China, GDP growth in 2003 was as high as 9.1% (see Chart 2.7). There was strong growth both in investment and private consumption. Exports to China have been an important factor underlying growth in a number of the other Asian countries. Several Asian central banks are still intervening heavily in the exchange market to prevent their currencies from appreciating. The interventions have only been partly sterilised and have therefore contributed to a sharp increase in the money supply in several Asian countries, particularly in China, which in turn is leading to sharp credit growth. The risk of accelerating inflation and overinvestment has increased. The Chinese authorities have implemented measures to restrain credit growth, but the situation in the domestic banking industry remains uncertain.

Oil prices

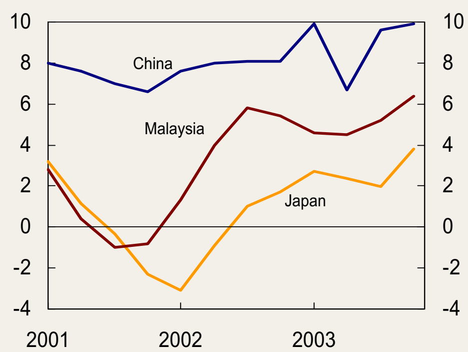
Since the October *Inflation Report*, the price of oil has stood close to or above USD 28 a barrel, which is at the upper end of the OPEC target range. The average oil price for the whole of 2003 was USD 28.90, the highest in 20

Chart 2.6 Prices for aluminium, nickel and copper in USD. Index. 2001=100. Daily prices. 1 Jan 2001 – 4 Mar 2004



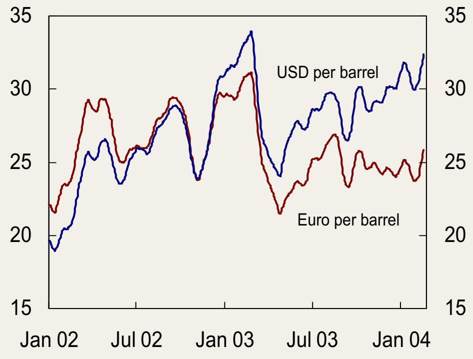
Sources: London Metal Exchange and EcoWin

Chart 2.7 GDP in China, Japan and Malaysia. Change on same quarter previous year. Per cent. 2001 Q1 - 2004 Q3



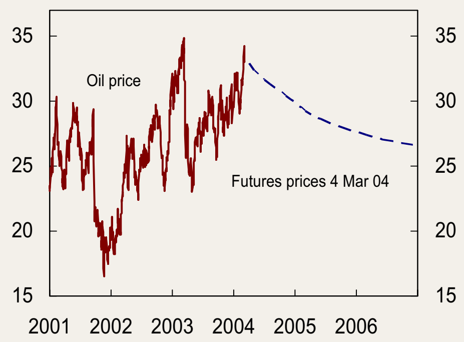
Sources: EcoWin, Statistics Japan, National Bureau of Statistics (CH) og Central Bank of Malaysia

Chart 2.8 Oil price measured in USD and EUR per barrel. 14-day moving average. Daily prices. 18 Jan 2002 – 4 Mar 2004



Sources: EcoWin and Norges Bank

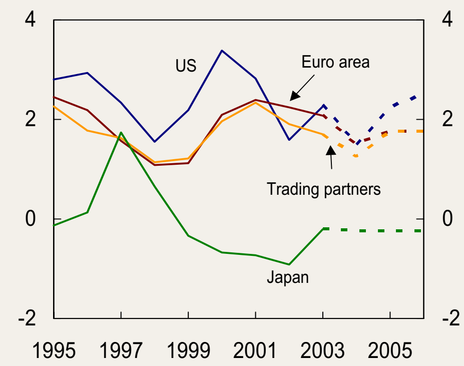
Chart 2.9 Oil price[1)] in USD per barrel. Daily figures. 1 Jan 2001 – 4 Mar 2004. Futures prices from 4 Mar 2004



1) Brent Blend

Sources: International Petroleum Exchange and Norges Bank

Chart 2.10 Consumer price inflation in the US, the euro area, Japan and among Norway's trading partners. Annual rise. 1995 - 2006[1)]



1) Projections for period 2004-2006

Sources: OECD, EU Commission and Norges Bank

years. Uncertainty in relation to the war in Iraq, relatively good quota discipline in OPEC and accelerating economic growth contributed to maintaining the high oil price through the year. A number of non-OPEC countries are set to increase their oil production when seasonal demand for oil falls during the spring. This applies primarily to Russia and the countries around the Caspian Sea, but also a number of African countries, Canada and Mexico. Output growth in Iraq has stalled, but may reach the level prevailing before the war in the course of the first half of the year. OPEC has decided to lower production as from 1 April to keep oil prices from falling when seasonal demand for oil declines.

As a result of substantial exchange rate fluctuations, oil prices have varied widely measured in various currencies (see Chart 2.8). Empirical studies indicate that there is little correlation between developments in oil prices and the dollar exchange rate. OPEC member countries have indicated, however, that because of the depreciation of the dollar, the oil price must be at the upper end of the target range in order to counteract a deterioration in their terms of trade. In the near term, low oil stocks, the global economic recovery and little idle production capacity suggest that oil prices will remain high (see Chart 2.9).

Risk factors

In the near term, uncertainty with regard to developments ahead seem to be somewhat more balanced than in the October *Inflation Report*. The positive wealth effects of the rise in stock markets and housing markets may be stronger than we have assumed. On the other hand, there is still a risk of a marked slowdown in consumption in the US, particularly related to weak developments in the labour market. After several years of relatively stable inflation worldwide (see Chart 2.10), there is a risk that inflation will be lower than projected, even though this risk may appear to be somewhat smaller than was the case last autumn. In particular, low capacity utilisation and the effects of structural changes may have more of a dampening impact on inflation than we have assumed. EU enlargement and the implementation of previously negotiated WTO agreements on textiles and clothing, for example, will intensify competition in the US and the euro area in the period ahead. Stronger competition may pave the way for higher growth, but in the short term the restructuring costs associated with a new global division of labour may hold back economic growth among our trading partners. On balance, these factors may result in a rate of inflation that is lower than projected.

In the somewhat longer term, considerable uncertainty still surrounds the sustainability of the recovery. Estimates for the US budget deficit have been revised upwards, and the trade deficit is still substantial. A sharper fall in the US dollar against the euro may result in a new downturn in the euro area.

3 | Domestic developments

Growth in the Norwegian economy has picked up. Lower interest rates have contributed to sustaining growth in private consumption. The depreciation of krone, combined with moderate wage growth last year, has improved business conditions. Employment increased somewhat in the latter half of 2003. Inflation remains very low, however.

The projections for the period up to 2006 are based on the technical assumption that the interest rate will move in line with the forward interest rate. The assumption implies that the interest rate will be somewhat lower in the near term, but that it will rise gradually from summer (see Chart 3.1). We assume that the exchange rate for the krone will move in line with the forward exchange rate, which indicate expectations of a fairly stable exchange rate ahead (see Chart 3.2).

Under these assumptions, monetary policy will stimulate growth in demand this year, primarily via private consumption. Growth in the Norwegian economy will probably be somewhat higher than projected last autumn. Moreover, there are signs of fairly high productivity growth so that companies can produce more with the same workforce. The high cost level in Norway and strong competition will probably induce many industries to continue reducing costs and rationalising. Against this background, the output potential of the Norwegian economy is assumed to increase more than normal in 2004. As demand edges up, enterprises' profitability will improve. At the same time, they may meet capacity constraints. There are thus prospects that investment will pick up gradually and become a more important driving force behind the upturn.

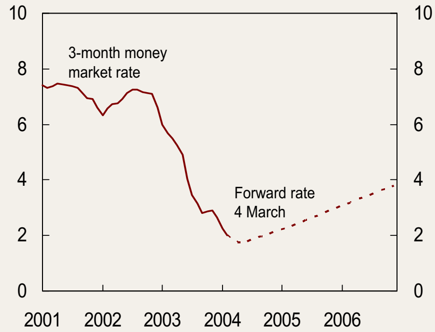
Overall, mainland GDP growth is projected to pick up markedly this year and remain relatively high in 2005 and 2006. With this path for total output, the output gap, as measured here, will shift to slightly positive in 2005 and 2006 from slightly negative this year.

High growth in household consumption

Private consumption was stimulated by the fall in interest rates through 2003. Consumption growth remained robust in spite of the fall in employment and the rise in unemployment.

The impact of the interest rate decline on private consumption is likely to be stronger this year than in 2003. It takes time for changes in Norges Bank's key rate to feed through fully to interest rates for households. The feed-through from Norges Bank's key rate to household income is further discussed in a box on page 43.

Chart 3.1 Assumption for the money market rate. Forward rate[1) 2)]. Per cent



[1)] 3-month money market rates up to February 2004. 3-month forward rates are estimated using four money market rates and four government bond yields with different maturities as observed on 4 March.
[2)] The money market rate is normally about ¼ percentage point higher than the sight deposit rate.
Source: Norges Bank

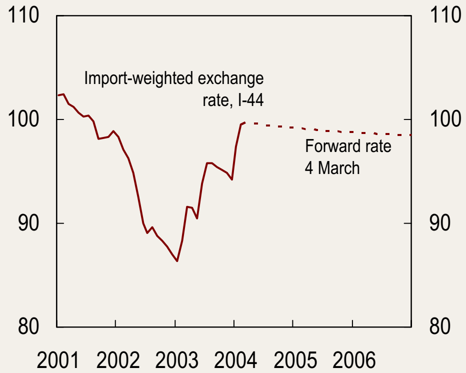
Table 3.1 Key aggregates for Norway 2003 - 2006. Percentage change from previous year

	2003	2004	2005	2006
Mainland Demand	1¼	4	3½	3
Private consumtion	3¼	5¼	4	2¾
Public consumtion	1¼	2¼	1½	1½
Fixed investments	-6¼	1¾	6	6
Petroleum investments	18	8	3	-5
Traditional exports	1	3	3½	3½
Imports	1½	5½	3¼	1¾
Mainland GDP[1)]	¾	3¼	3¼	2¾
Employment	-0,7	½	1¼	¾
LFS unemployment[2)]	4,5	4½	4¼	4

[1)] We have excluded flucturations in electricity productions. In 2003, lower electricity production contributed to pushing down GDP growth by an estimated ¼ percentage point
[2)]Percentage of labour force

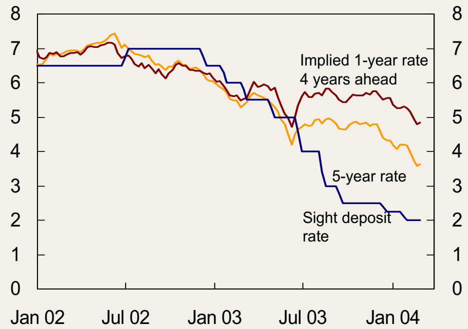
Source: Norges Bank

Chart 3.2 Assumption for the krone exchange rate (I-44). Forward rates. Index[1)]



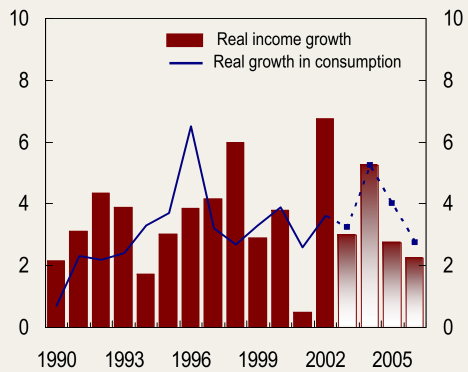
[1)]A rising curve denotes a weaker krone exchange rate
Source: Norges Bank

Chart 3.3 Sight deposit rate, 5-year swap rate and implied one-year swap rate 4 years ahead[1]. Weekly figures. 7 Jan 2002 - 4 Mar 2004.



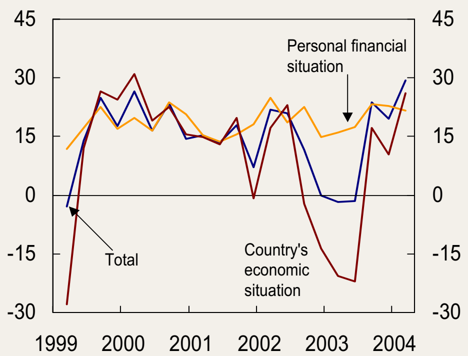
[1] Implied 1-year rate 4 years ahead is estimated using 4- and 5-year swap rates. Since 2002, the 5-year swap rate has been ½ percentage point higher than government bond yields on average.
Sources: Norges Bank and EcoWin

Chart 3.4 Real growth in household disposable income and consumption. Annual figures. Per cent. 1990 - 2006.



Sources: Statistics Norway and Norges Bank

Chart 3.5 Consumer confidence indicator.[1] 1999 Q1 - 2004 Q1. Unadjusted figures.



[1] Provides an indication of the share with a positive assessment of the current situation and outlook for the future less the share with a negative assessment.

Source: TNS Gallup

The impact of the interest rate decline is also conditioned by the expected duration of the low interest rate level. When the sight deposit rate was reduced last autumn, longer interest rates showed relatively little change. The two most recent interest rate reductions in December and January, in conjunction with the decline in inflation, have had a stronger impact on long-term interest rates (see Chart 3.3). This reflects expectations that interest rates will remain low for a longer period.

Real disposable household income appears to be high this year (see Chart 3.4). Income growth was even higher in 2002, but primarily reflected changes in the taxation of share dividends. In 2004, low inflation and reduced interest expenses will support strong growth in household real income. Even with a moderate wage settlement, real income growth may reach about 5%. In addition, improved labour market conditions will strengthen job security and lead to expectations of higher income growth ahead. According to the household confidence indicator, households view the current situation and the outlook as highly favourable (see Chart 3.5).

Against the background of high real income growth, improved job security and expectations of continued low interest rates ahead, household consumption is expected to exhibit strong growth. Growth in private consumption is projected at 5¼% between 2003 and 2004. Given this path, consumption will grow at a pace that is broadly in line with real income, with little change in the saving ratio. In 2005, real income growth is expected to be lower. However, consumption growth is projected to remain relatively high and the saving ratio to edge down. In 2004 and 2005, the saving ratio will be marked by the particularly strong growth in real income this year, and we assume that households prefer to smooth consumption over time. In 2006, consumption is projected to grow more in line with real income.

After falling last year, house prices edged up in autumn. At the end of 2003, house price inflation was high. There are prospects that house prices may show a fairly sharp rise between 2003 and 2004. Information from our regional network indicates that sales of new homes are high. Home improvement is also on the rise. Low interest rates and house prices inflation imply higher housing investment in the period ahead.

Buoyant activity in the housing market and high house prices are contributing to strong growth in credit to households. The household debt burden has shown a considerable increase and is estimated to rise further in the period ahead. A high debt burden means that an increase in interest rates to a more normal level may have a relatively pronounced impact on household income and hence consumption growth.

Gradual increase in business investment

Mainland enterprises have reduced costs to a considerable extent. In 2003, both employment and investment declined. In manufacturing industry, several years of high wage growth and deteriorating competitiveness have reduced profitability. In several service sectors, new entrants and deregulation have intensified competition. Stronger competition has made it more difficult to pass on costs to prices. It has thus been necessary to increase production efficiency to improve profitability. We expect that efficiency-enhancing measures will continue to mark developments in the business sector this year. This will curb labour demand and investment growth this year. Higher household demand and foreign demand are then expected to boost labour demand and business fixed investment.

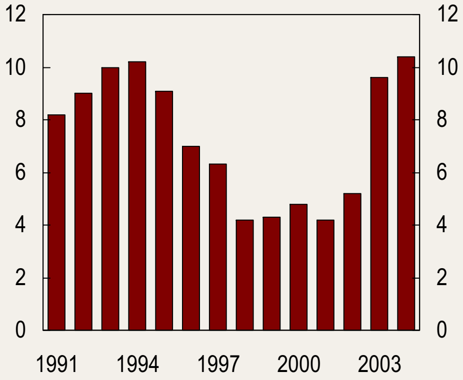
Distributive trades and enterprises supplying services to households are expanding as a result of high growth in private consumption. These industries have benefited from relatively solid growth in private consumption during the cyclical downturn. One of the few sectors where employment increased in 2003 was distributive trades. Production for the business market fell through 2003. Demand for services in this market segment will pick up in pace with a rise in manufacturing output and other industries.

In recent year, non-residential investment has accounted for more than a third of total investment in services and distributive trades. The large investments in this sector in the latter half of the 1990s has led to a high non-residential vacancy rate (see Chart 3.6). This situation is likely to curb overall investment growth in the years ahead.

Strong competition, particularly in industries such as distributive trades, airline and telecommunications industries, has led to extensive restructuring. In the postal and telecommunications industry and airline industry, employment has declined and efficiency has increased. There appears to have been high productivity growth in the business service sector in recent years, even if output growth has edged down (see Chart 3.7).

Overall, the investment level in distributive trades and service industries remains low. In the short term, an increase in demand can probably be accommodated without a substantial increase in capital. In 2004, many companies will probably realise the gains provided by the efficiency measures that have been implemented. Continued brisk growth in household demand is expected to boost investment activity in 2005 and 2006.

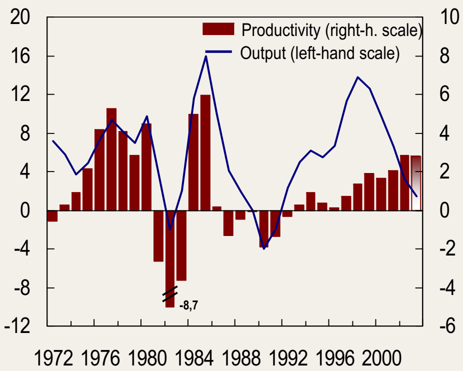
Chart 3.6 Vacant office premises in Oslo, Asker and Bærum. Share of total real estate stock. 1991-2004[1)]



[1)] As at February

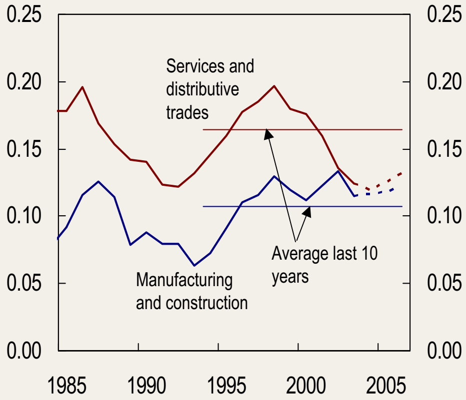
Source: Eiendomsspar AS

Chart 3.7 Productivity growth and real growth in value added in commercial services. 2-year moving average. Annual figures. Per cent. 1972-2003.



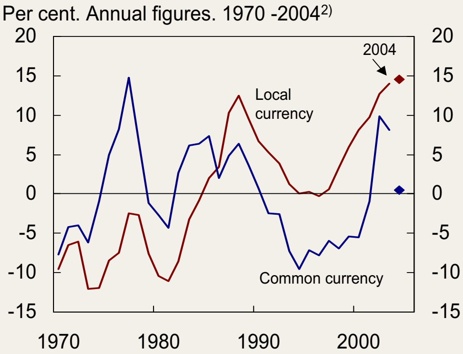
Sources: Statistics Norway and Norges Bank

Chart 3.8 Gross investment as a share of value added. Annual figures. 1985 -2006.



Sources: Statistics Norway and Norges Bank

Chart 3.9 Relative labour costs[1]: Norway and trading partners. Deviation from average 1970 -2003. Per cent. Annual figures. 1970 -2004[2]



[1] Hourly labour costs in manufacturing
[2] Projections for wage growth in 2004. The projection for relative labour costs in common currency in 2004 is based on the assumption for the krone exchange rate in this report (TWI).

Sources: TRCIS, Ministry of Finance and Norges Bank

EU enlargement, with 10 new members from 1 May, may increase competition in some industries, particularly in the service sector. Public procurement is subject to EU-wide tendering. This may imply heightened competition for the service sector in Norway and lead to further efficiency measures. The average wage level in the new EU member countries is about 17% of the average wage level in the EU.

Manufacturing output remained fairly stable in 2003, after falling markedly the previous year. Employment fell by about 11 000 between 2002 and 2003. The number of bankruptcy petitions in the manufacturing sector rose by 12% between 2002 and 2003. Investment is falling. Measured as a percentage of value added, the investment level is close to the average for the past 10 years (see Chart 3.8). The past period of weak developments must be seen in the light of low global economic growth, high wage inflation over several years and the krone appreciation through 2002.

Manufacturing output is expected to grow at a somewhat faster pace ahead than projected in the previous report. The krone depreciation is having a positive impact. Wage growth appears to have eased to a more sustainable level, but is still higher than among our trading partners. Competitiveness, measured in terms of relative labour costs in a common currency, has nevertheless improved (see Chart 3.10). Our regional network reports an increase in exports to Europe. Lower interest rates and higher equity prices have reduced capital costs.

According to our regional network and Statistics Norway's business tendency survey, Norwegian manufacturing leaders are increasingly optimistic about the future. Manufacturing investment is expected to edge up this year, after falling markedly in 2003. However, there are signs that foreign competition has intensified in recent years. According to our regional network, profitability pressures necessitate restructuring and rationalisation in the food industry and other industries. Manufacturing production is being moved both from Norway and other countries to lower-cost countries, particularly to Asia. For some industries, such as the shipbuilding industry, this tendency is likely to continue. This would then have a dampening impact on overall investment activity.

Petroleum investment exhibited brisk growth in 2003, primarily fuelled by investments in onshore installations. Exploration activity was low, however. There seem to be continued growth in petroleum investment in 2004, but probably at a slower rate than in 2003. The Orme Lange project was approved by the Storting (Norwegian parliament) at the end of 2003, and the bulk of the investment will be made in 2005 and 2006. This will contribute to pushing up petroleum investment towards the end of the projection period. These investments will have positive spillover effects on the Norwegian supplier industry.

Investment in onshore industries in Western Norway and Northern Norway has generated a positive impetus to the construction industry. In the other regions, activity in 2003 was primarily sustained by public investment projects, such as road projects and hospital building. In the years ahead, higher housing and business investment are also expected to make a contribution. Information from our regional network indicates that construction activity has picked up markedly in most regions.

Fiscal policy stimulates activity

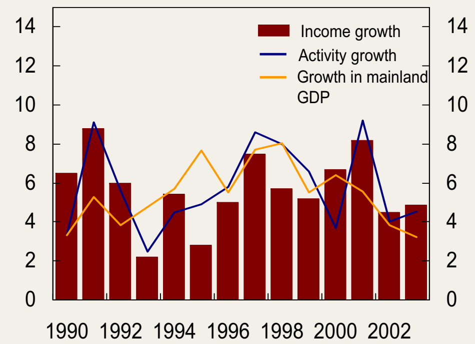
The fiscal guidelines imply that the use of petroleum revenues over the central government budget shall over time correspond to the expected real return on the Petroleum Fund. At the same, fiscal policy shall contribute to stabilising output and employment. In the National Budget for 2004, the Government called for spending NOK 16½bn more in 2004 than implied by the mechanical application of the fiscal rule.

In the final central government budget bill for 2003, underlying growth in central government expenditure is estimated at 4.2% between 2002 and 2003. This is 0.3 percentage point higher than estimated in the National Budget for 2004. The increase is attributable to higher social security spending and activity-based funding of the regional health authorities.

In the budget agreement for 2004 between the government coalition parties and the Labour Party, about NOK 5bn were re-allocated. Even if the budget balance is not weakened, the composition of the income and expenditure changes indicate that the changes combined will stimulate demand for goods and services in the Norwegian economy.

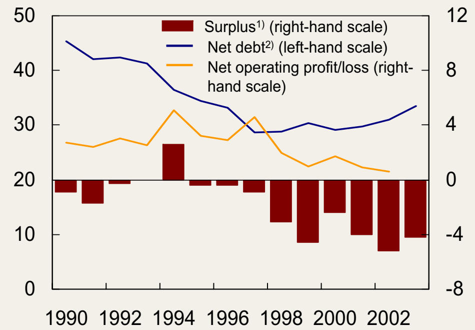
The budget agreement strengthens local government finances. Local government income that is not earmarked was increased by NOK 2.2bn in relation to the Government's initial proposal. Growth in overall local government income is thus expected to be high between 2003 and 2004, which may lead to higher activity. Local government income generally fluctuates somewhat more than activity, however (see Chart 3.10). Growth in local government spending on wages and purchases of goods and services has generally been somewhat higher than the value of mainland GDP since 1996. Because of relatively high wage growth, and thus high price inflation for local government expenditure, real growth in activity has on average been somewhat lower than real growth in the mainland economy.

Chart 3.10 Growth in local government income and activity and nominal growth in mainland GDP. Annual figures. Per cent. 1990-2003.



Sources: The Technical Reporting Committee on Local Government Finance and Statistics Norway

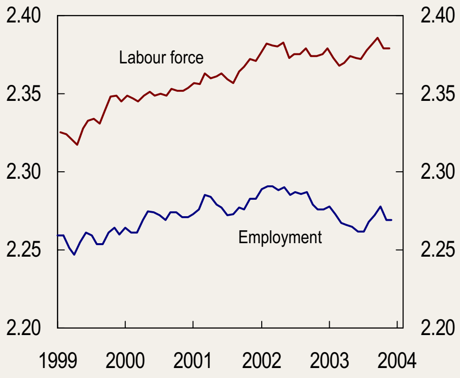
Chart 3.11 Local government surplus before loan transactions, net debt and net operating profit/ loss. Percentage of operating income. 1990-2003.



[1] Surplus before loan transactions
[2] Excluding claims on local government enterprises

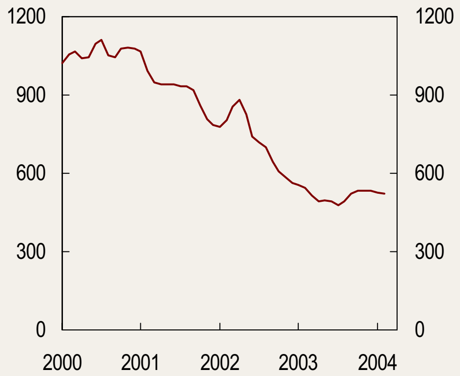
Sources: The Technical Reporting Committee on Local Government Finance

Chart 3.12 Employment and labour force. In millions. Monthly figures. Jan 1999 - Dec 2003. Seasonally adjusted.



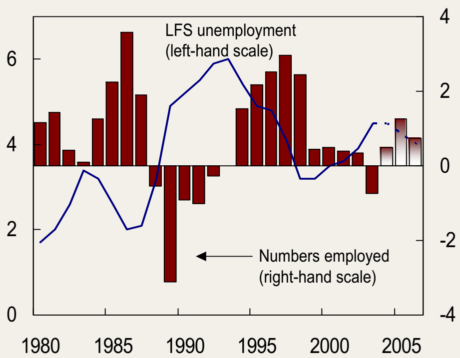
Source: Statistics Norway

Chart 3.13 Number of new vacancies advertised, per business day. Monthly figures. Jan 2000 - Feb 2004. Seasonally adjusted.



Source: Directorate of Labour

Chart 3.14 Change in employment on previous year. Per cent. Unemployment[1)] as a percentage of the labour force. Annual figures. 1980-2006.



[1)] LFS unemployment:

Sources: Statistics Norway and Norges Bank

Local government net operating profits as a percentage of income have fallen steadily since 1997, and is now at a low level (see Chart 3.11). Local government budget deficits have increased net debt in the sector in recent years. However, the debt level measured as a percentage of income is lower than at the beginning of the 1990s.

Improvement in the labour market

Employment showed signs of rising in the latter half of 2003. The sharp fall in employment in the period to summer 2003 appears to have come to halt (see Chart 3.12). Employment in distributive trades has increased. There are also signs that employment is rising in service sectors such as education, the public sector and health and social services, from the weak levels recorded in the first six months of last year. Manufacturing employment remained well below the level one year earlier in the fourth quarter of 2003, but is falling at a slower pace.

Since the summer of 2003, the labour force has increased broadly in line with employment. Unemployment has been fairly stable. Adjusted for seasonal variations, LFS unemployment stood at 4.6% of the labour force in the fourth quarter of 2003.

The number of new vacancies is still low. In February, the number of new vacancies was 5% lower than in February 2003. Developments in the latter half of 2003 may suggest a levelling-off (see Chart 3.13). Reports from our regional network provide a similar impression. There are still only a fairly limited number of firms that are planning a considerable increase in their workforces in the near term.

Growth in household demand and output growth in the business sector are paving the way for a rise in employment in the period ahead. On the other hand, intensified competition and continued rationalisation in the business sector may have a dampening impact on labour demand. Employment growth is projected to be fairly moderate this year in relation to growth in demand and output. Employment growth is projected at ½% in 2004, after falling by 0.7% in 2003 (see Chart 3.14). The labour force is assumed to expand further when the labour market improves, and unemployment is projected to show only a small decline through the year. LFS unemployment is projected to average 4½% in 2004, or the same as in 2003.

Demand for labour is expected to increase gradually as a result of high consumption and increased activity in the business sector. Employment is expected to show fairly high growth in 2005. Unemployment is projected to edge down in 2005 and 2006.

4 | Inflation projections

Underlying inflation declined through 2003 and is now very low. Monetary policy is oriented towards pushing up inflation. Low inflation is primarily the result of a fall in prices for imported consumer goods. The fall in prices is related to the appreciation of the krone up to the beginning of 2003, although the decline in prices measured in foreign currency for many of the goods we import has also contributed.

At the same time, the rise in prices for some domestically produced goods and services has slowed, even though wage growth has been high for several years. Increased competition has contributed to lower prices for air travel, telecommunications and some groceries. Increased competition has also resulted in higher productivity in many enterprises. This has probably dampened the effects of high wage growth on inflation.

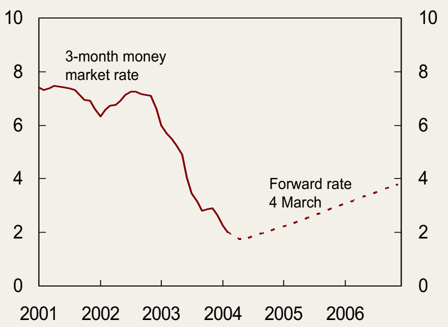
Several of the conditions that resulted in low inflation in 2003 will probably continue to have an impact this year. Ongoing rationalisation in the business sector is enabling companies to increase output without strong growth in employment. Higher productivity growth is allowing the economy to expand without generating pressures on real economic resources, and is expected to dampen wage and price inflation over the coming year.

External price impulses appear to have been negative in recent years, and weaker than previously assumed (see box on page 40). A shift in trade patterns have resulted in lower prices for our clothing imports measured in foreign currency. At the same time, prices for some internationally traded consumer goods, particularly audiovisual equipment, seem to be showing a persistent decline. The fall in prices for these imported goods, measured in foreign currency, is expected to continue.

Weaker-than-projected external price impulses imply that foreign prices may explain a larger share of the fall in prices for imported goods in the CPI. The corollary to this is that developments in the krone exchange rate probably explain a smaller share. Preliminary analyses indicate that the pass-through from the krone exchange rate to prices for imported consumer goods may be somewhat weaker and occur somewhat later than indicated by our previous calculations (see box on page 42). It may therefore take longer than has been assumed for the depreciation of the krone since the beginning of 2003 to pass through to prices. The krone exchange rate, however, continues to be the most important factor underlying the fall in prices for imported consumer goods.

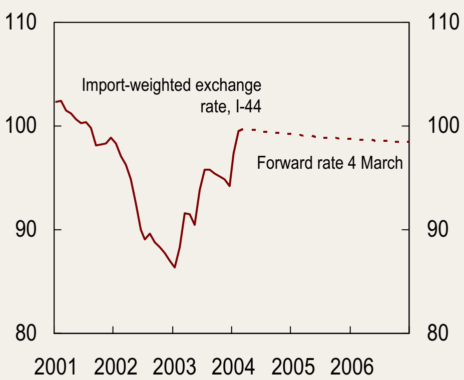
In order to bring inflation up to the target, Norges Bank reduced the interest rate by a total of 5 percentage points, to

Chart 4.1 Assumption for the money market rate. Forward rate[1) 2)]. Per cent.



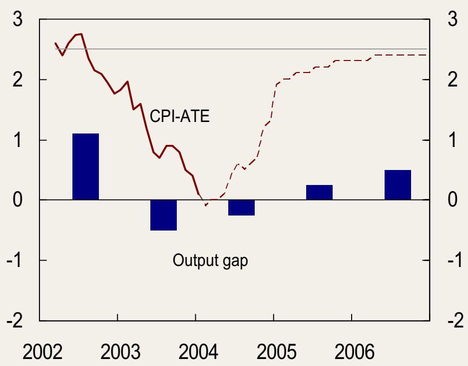
[1)] 3-month money market rates up to and including February 2004. 3-month forward rates are estimated using four money market rates and four government bond yields with different maturities as observed on 4 March.
[2)] The money market rate is normally about ¼ percentage point higher than the sight deposit rate.
Source: Norges Bank

Chart 4.2 Assumption for the krone exchange rate (I-44). Forward rates. Index[1)].



[1)]A rising curve denotes a weaker krone exchange rate
Source: Norges Bank

Chart 4.3 Projections for CPI-ATE and the output gap[1)]. Per cent.



[1)] The output gap is a measure of the difference between actual and trend output. See box in IR 1/03

Sources: Statistics Norway and Norges Bank

2%, in just over a year. The krone exchange rate, as measured by the import-weighted index I-44, has depreciated by 12% since December 2002. The krone has reverted to the level prevailing in the mid-1990s.

Projections for economic developments up to 2006 are based on the technical assumption that the interest rate will move in line with forward rates. The assumption implies that the interest rate will be somewhat lower in the near term, but that it will rise gradually from the summer (see Chart 4.1). The krone is assumed to follow the path of the forward exchange rate, which indicates expectations of a fairly stable exchange rate in the period ahead (see Chart 4.2).

Inflation is expected to pick up from summer 2004. The appreciation of the krone in 2002 has now fully reversed. In isolation, this will contribute to a renewed rise in inflation. The rise in prices for imported consumer goods will, however, be restrained by a continued fall in prices for these goods measured in foreign currency. Domestic inflation, which normally accelerates when output and employment growth pick up, will be curbed by increased competition and high productivity growth in a number of industries. On the basis of our assumptions for the interest rates and the exchange rate, the projections indicate that inflation will move up to the target of 2½% in spring 2006. It appears that the output gap will also be negative this year, but the projections indicate fairly high growth in the real economy this year. The output gap is expected to be positive from next year (see Chart 4.3).

4.1 Price impulses

Impulses from the global economy

Externally generated price impulses to the Norwegian economy appear to have been negative in recent years, and weaker than previously assumed. Prices for consumer goods imported to Norway measured in foreign currency fell by an estimated 1½% last year.

Even though there are signs that global growth is picking up, it will take time before excess capacity is reduced. There are prospects of low wage growth among our trading partners in the next few years. Combined with strong international competition, this is expected to push down producer prices somewhat this year. As the recovery in the global economy gains a firmer footing, the rise in producer prices abroad is projected to pick up to a more normal level of around ¾% in 2006.

In the past few years, the effects of imported price inflation on Norwegian consumer prices have been weaker than the rise in foreign producer prices would indicate. This trend is expected to continue. Prices for some of the goods we import do not seem to be keeping pace with developments in foreign producer prices. Clothing and audiovisual equipment combined account for close to 30% of imported consumer goods. As measured by Norges Bank, prices in foreign currency for these goods have been falling for several years (see Chart 4.4). Footwear prices have also fallen recently. An important factor behind this is probably changes in the international division of labour. An increasing number of consumer goods are imported from countries with very low cost levels. Imports from China to Norway, for example, increased considerably after 2001, when China became a member of the WTO (see Chart 4.5). The proportion of Norway's imports that come from China will probably continue to increase in the period ahead. The share of imports from low-cost countries in central Europe is also increasing. These changes are contributing to reducing costs for importers, resulting in lower consumer prices. Moreover, inflation in Norway is being restrained because the rise in prices for imports from trading partners other than China and central European countries is also slowing.

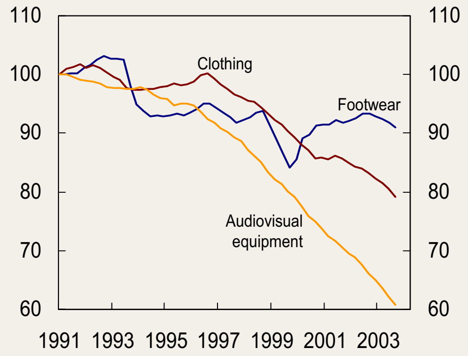
Another reason for the negative external price impulses to the Norwegian economy is high productivity growth and strong international competition, which have contributed to a persistent fall in prices for goods in the IT and telecommunications sectors and the audiovisual industry. Prices for audiovisual equipment in the Norwegian Consumer Price Index (CPI) have dropped by 8% over the past year. Since the mid-1990s, prices for these goods have fallen by an average 5.5% per year. Similar developments are evident in other countries (see Chart 4.6). The decline in prices appears to have occurred independently of developments in exchange rates.

The decline in prices for clothing, footwear and audiovisual equipment is projected to continue throughout the projection period (see box on page 40). The rise in prices for other imported consumer goods is projected to edge up as global capacity utilisation increases. Prices for imported consumer goods overall, measured in foreign currency, are projected to fall by 1½% this year and at a somewhat slower pace next year (see Chart 4.7). About half of this decline is assumed to feed through to consumer prices for imported goods in Norway.

Exchange rate developments will push up inflation

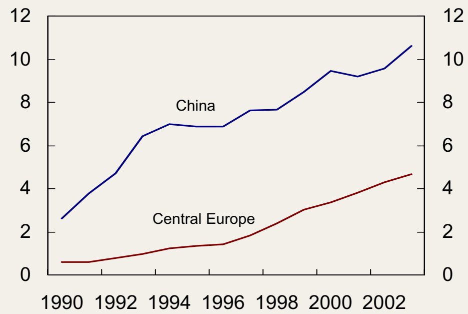
The krone has depreciated markedly since January last year. As measured by the import-weighted index I-44, the krone has reverted to the level prevailing in the mid-1990s. Inflation is nevertheless being restrained by the krone appreciation from 2000 to 2002.

Chart 4.4 Projected external price movements for some imported consumer goods. Measured in trading partners' currencies. Quarterly figures. Index. 1991 Q1= 100. 1991 Q1 – 2003 Q3



Sources: EcoWin and Norges Bank

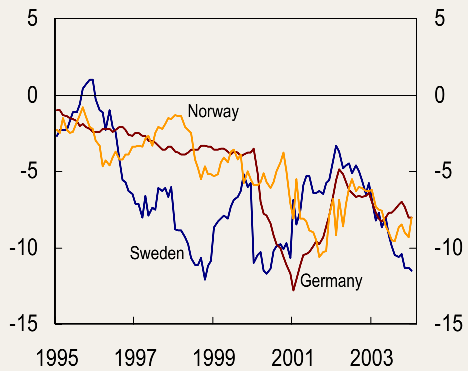
Chart 4.5 Consumer goods imports from central Europe[1)] and China as a share of total consumer goods imports. Per cent. Annual figures. 1990-2003[2)].



[1)] Central Europe: Slovenia, Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Slovakia, Poland and Hungary
[2)] Figures for 2003 from January to November

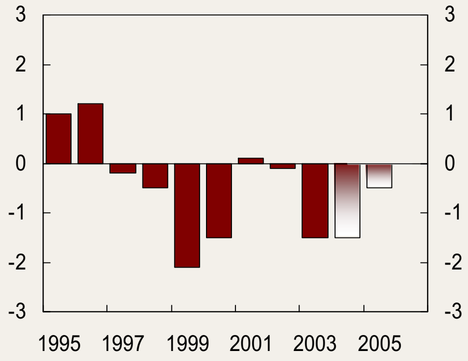
Source: Statistics Norway

Chart 4.6 Consumer prices for audiovisual equipment in Norway and other countries. 12-month rise. Per cent. Jan 1995 - Jan 2004.



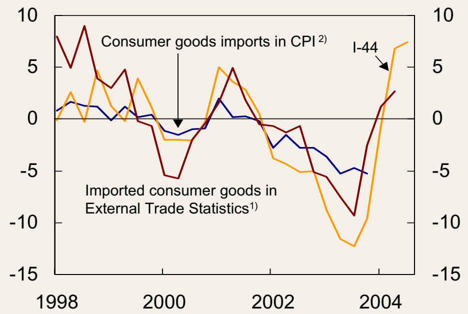
Sources: EcoWin and Statistics Norway

Chart 4.7 Indicator of external price impulses to consumer goods measured in foreign currency. Historical developments and projections. Annual figures. 1995-2006



Source: Norges Bank

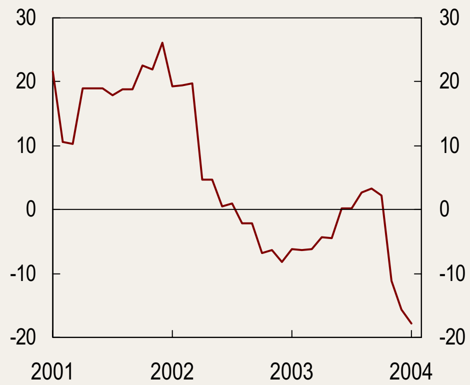
Chart 4.8 Prices for consumer goods imports in the CPI and in External Trade Statistics projected two quarters ahead, and I-44 projected three quarters ahead. 4-quarter rise. Per cent. 98 Q1 - 04 Q3



1) Our estimates: Clothing and accessories, footwear, furniture, food and beverages
2) Excluding audiovisual equipment and cars

Sources: Statistics Norway and Norges Bank

Chart 4.9 Prices for air travel. Adjusted for taxes. 12-month rise. Jan 2001 - Jan 2004.



Sources: Statistics Norway and Norges Bank

Changes in the krone exchange rate affect consumer price inflation with a lag. The length of the lag is uncertain. The strength of the pass-through from the krone exchange rate to consumer prices is also uncertain. Externally generated price impulses appear to have been more subdued than previously assumed. This suggests that foreign prices may explain a larger share of the fall in prices for imported goods in the CPI than has been assumed. The corollary to this is that developments in the krone exchange rate probably explain a smaller share. Preliminary empirical studies that include weaker external price impulses than previously assumed indicate that the pass-through from the krone exchange rate to consumer prices in Norway is then somewhat smaller and occurs somewhat later than previously assumed (see box on page 42).

Although the pass-through from the krone exchange rate to consumer prices is highly uncertain, it is expected that prices for imported consumer goods in the CPI will gradually rise. The krone has depreciated substantially over the past year. The krone depreciation is reflected in import prices as measured in the External Trade Statistics (see Chart 4.8). These prices, which are recorded when imported goods enter the country, but before they reach the consumer, have increased since mid-2003. Past experience suggests that changes in the exchange rate feed through to these import prices about 6 months before consumer prices are affected. Our assessment nonetheless suggests that substantial positive price contributions from the exchange rate will not occur until the end of 2004.

Our calculations of the pass-through from the krone exchange rate to inflation are uncertain. If prices for imported consumer goods rise more sharply through the spring than projected, this may be a sign that the exchange rate pass-through is stronger, or is occurring more rapidly, than is now assumed.

Increased competition may curb inflation in the period ahead

Capacity utilisation in the economy has fallen from the high levels prevailing around the beginning of 2000. This is probably contributing to the present low level of inflation. When demand picks up and idle capacity is put to use, costs normally rise again. Competition has, however, intensified in a number of industries as a result of new entrants and changes in operating conditions. These changes have pushed down prices in several industries. Increased competition is making it more difficult for enterprises to pass on costs to prices. Air travel, grocery trade and telecommunications are examples of sectors where new operators have set up business or are in the process of doing so. This will have a dampening effect on inflation. Air fares have fallen by close to 20% over the twelve months to January this year (see Chart 4.9).

The adjustment to a new competitive situation seems to be continuing. It is assumed that the high output growth projected for this year will translate into relatively moderate price impulses. The rise in prices for domestically produced goods and services this year is expected to be restrained by increased competition and rationalisation. However, we do not have sufficient evidence to suggest that business sector efficiency can be expected to increase more rapidly for many years. For 2005 and 2006, we assume a normalisation will occur, with demand growth gradually contributing to higher inflation by generating pressures in the economy.

Low inflation holds back wage growth this year

After several years of high wage growth, pay increases in last year's settlement were more moderate. Annual wage growth was nonetheless 4½% as substantial increases with effect from 2003 were awarded in the 2002 main wage settlement. Rising unemployment and a reduced ability to pay in many enterprises in the private and public sectors probably contributed to dampening wage growth last year. We have assumed that general labour market tightness will be the primary factor influencing wage developments ahead.

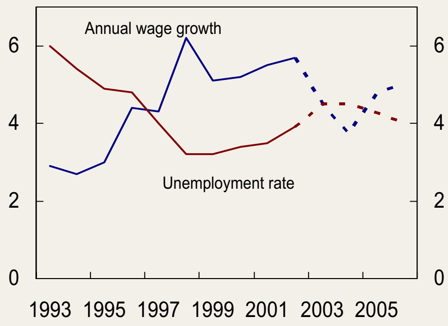
Output growth in the Norwegian economy is projected to be higher than normal in the years ahead. This year, productivity is expected to increase more than usual, with moderate growth in employment. Next year, we expect fairly strong growth in employment and lower unemployment. In 2006, LFS unemployment is projected to fall further, to 4%.

The rise in consumer prices is projected to be considerably lower in 2004 than implied by earlier projections. CPI inflation is projected to remain unchanged from 2003 to 2004. CPI-ATE inflation will also be very low. As a result, real wage growth is expected to be high even with moderate nominal pay increases this year. This applies in particular to manufacturing, where the wage carry-over is fairly high. In 2005 and 2006, inflation is expected to be considerably closer to the inflation target of 2½%.

Wage growth is projected to decline to 3¾% this year (see Chart 4.10). The labour market appears to be improving somewhat more rapidly than expected last autumn. In isolation, this may contribute to pushing up wage growth relative to previous projections. The effect is, however, expected to be more than offset by the prospects of very low inflation this year.

In 2005 and 2006, wage growth is projected to increase in pace with a tighter labour market and higher inflation. In these years, unemployment is projected to be somewhat lower than the average for the 1990s. This may suggest that wage growth will be somewhat higher than it was at that time.

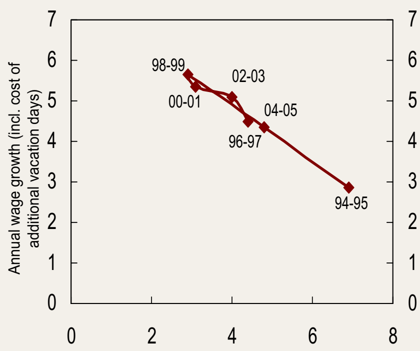
Chart 4.10 Annual wage growth[1)] and unemployment rate[2)]. Per cent. Annual figures. 1993 -2006.



[1)] Average for all groups. Including cost of additional vacation days
[2)] LFS

Sources: Technical Reporting Committee on Income Settlements, Statistics Norway and Norges Bank

Chart 4.11 Annual wage growth and unemployment. 2-year average

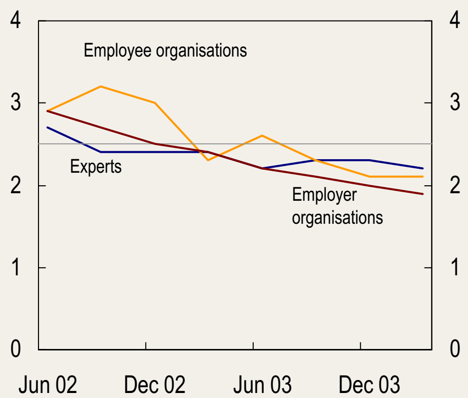


Sources: Technical Reporting Committee on Income Settlements, Directorate of Labour and Norges Bank

Chart 4.12 Expected consumer price inflation in 5 years. Per cent. Quarterly figures. 02 Q2 - 04 Q1

Source: TNS Gallup

Chart 4.13 Expected consumer price inflation in 2 years. Per cent. Quarterly figures. 02 Q2 - 04 Q1



Source: TNS Gallup

There has been a tendency in recent years for a larger portion of pay increases to be agreed in the first year of the two-year period covered by the main agreement. If these two-year periods are considered together, the estimated relationship between wage growth and developments in the labour market are approximately in line with that observed since the mid-1990s (see Chart 4.11).

Long-term inflation expectations do not deviate substantially from the inflation target

Recently, inflation in Norway has been moving steadily further from the target. With the continued effects of the krone appreciation in 2002 and weak domestic and externally generated price impulses, there are prospects that inflation will remain low for a period ahead. If inflation expectations become entrenched at a level that is too low, it will be more demanding to bring inflation back to target.

Inflation expectations may be measured using the expectations survey TNS Gallup, where various participants are interviewed about their inflation expectations 1, 2 and 5 years ahead. The latest survey suggests that inflation expectations continue to be firmly anchored around the inflation target in the long term (see Chart 4.12). In the shorter term, however, there are signs that economic agents expect inflation to be somewhat lower than the inflation target of 2½%. In the first quarter of this year, both the expert panel and the social partners participating in the survey expected consumer price inflation to be below 2% one year ahead. Two years ahead, consumer price inflation is expected to increase somewhat, although it will not reach the inflation target (see Chart 4.13).

Developments in long-term interest rates can also provide information about inflation expectations. The forward rate differential between Norway and Germany in the long term should reflect the expected inflation differential between Norway and the euro area. This forward rate differential has been somewhat lower in recent months than the level that is consistent with the monetary policy objectives in Norway and the euro area. Forward rates may, however, be affected in periods by extraordinary supply and demand conditions in the bond market.

4.2 The inflation outlook

Based on assumptions concerning the forward interest rate and the forward exchange rate, inflation is projected to remain considerably below the inflation target in the near term. However, the deviation from the inflation target is expected to be reduced substantially in the course of 2004. Annual CPI-ATE inflation is expected to be close to 2% at the beginning of 2005. On the basis of our assumptions, inflation two years ahead is projected at 2½%.

The path inflation will take this year is largely determined by past exchange rate developments. Even if we assume a somewhat weaker pass-through from the exchange rate than previously, the depreciation of the krone is expected to lead to a gradual, fairly marked deceleration in the fall in prices for imported consumer goods (see Chart 4.14). The effects of exchange rate changes on domestically produced goods and services occur with a longer lag than is the case for imported consumer goods. All in all, changes in the exchange rate will contribute to keeping CPI-ATE inflation low in 2004.

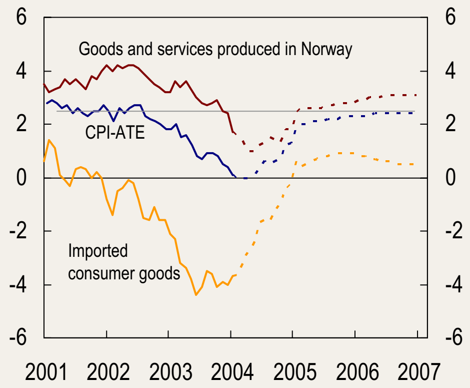
Negative external price impulses, high productivity growth in the Norwegian economy and lower wage growth will also contribute to low inflation this year. The CPI-ATE has recently declined on a monthly basis. We expect a higher monthly rise in the period ahead. This will gradually push up the year-on-year rise in the CPI-ATE (see Chart 4.15). Annual CPI-ATE inflation is projected at ½% in 2004.

In 2005, higher capacity utilisation in the Norwegian economy is expected to contribute to pushing up inflation. Strong employment growth will contribute to somewhat higher wage growth. Exchange rate developments are also expected to exert upward pressure on inflation. Imported price inflation is expected to remain low next year. As a result of the global economic recovery, however, the fall in prices for imported consumer goods measured in foreign currency is expected to slow somewhat. Annual CPI-ATE inflation is projected at 2¼% in 2005.

There are prospects that inflation will reach 2½% in spring 2006. Domestic price impulses are expected to increase further from 2005 to 2006. Output growth will probably remain relatively high, and the output gap will widen. With a somewhat tighter labour market, we expect wage growth to accelerate in 2006. The global upturn will contribute to stronger external price impulses.

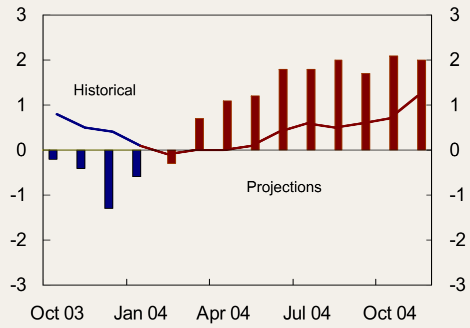
Certain factors, such as lower rates for day-care places and a slower rise in house rents as a direct result of the interest rate cuts since December 2002, may result in lower-than-projected consumer price inflation. The reduction in rates for day-care places has a one-off effect on consumer prices, and may be regarded as an extraordinary temporary disturbance that Norges Bank should disregard in its conduct of monetary policy. Norges Bank should also disregard direct effects of interest rate changes on consumer prices. The isolated effects of the interest rate on house rents may be regarded as a direct effect (see box in *Inflation Report* 3/03.) Lower rates for day-care places might push down CPI-ATE inflation this year by around 0.1 percentage point. The interest rate reductions might reduce CPI-ATE inflation by 0.1-0.2 percentage point as a result of the direct effect of interest rates on house rents. We have disregarded these effects in our projections for inflation ahead.

Chart 4.14 CPI-ATE. Total and by supplier sector. Historical developments and projections. 12-month rise. Per cent. Jan 2001 - Dec 2006



Sources: Statistics Norway and Norges Bank

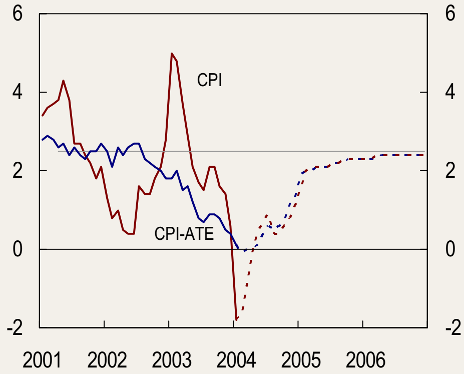
Chart 4.15 CPI-ATE. Historical developments and projections[1]). Seasonally adjusted 3-month moving average, annualised, and 12-month rise. Oct 2003 - Nov 2004



[1]) The columns show 3-month moving average. The curves show the 12-month rise.

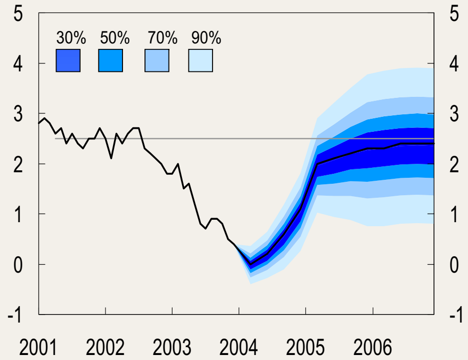
Sources: Statistics Norway and Norges Bank

Chart 4.16 CPI and CPI-ATE. Historical developments and projections. 12-month rise. Per cent. Jan 2001 - Dec 2006



Sources: Statistics Norway and Norges Bank

Chart 4.17 Projections and uncertainty for CPI-ATE. 12-month rise. Per cent. Jan 2001 - Dec 2006



The bands in the fan indicate different probabilities for developments in the CPI-ATE.

Sources: Statistics Norway and Norges Bank

The Consumer Price Index including tax changes and energy products fell by 1.8% from January last year to January this year (see Chart 4.16), reflecting the sharp rise in electricity prices at the beginning of 2003. So far this year, electricity prices have declined. As the effect of the substantial fluctuations in electricity prices subsides, CPI inflation will move up. From 2003 to 2004, however, CPI inflation is expected to remain unchanged.

4.3 Risks to the inflation outlook

The projections for developments in the CPI-ATE are subject to uncertainty. Chart 4.17 shows the uncertainty in the projections, calculated on the basis of historical deviations between projected and actual inflation.

Domestic price impulses may differ from our projections for a number of reasons. The monetary policy easing that has been implemented is generating a fairly strong stimulus to the Norwegian economy. We project a rapid increase in economic activity. We have little experience, however, of such considerable and rapid monetary policy easing. It is possible that we underestimate the effect of the stimulus on overall demand. At the same time, the impact on inflation is uncertain, even if demand should rise as projected. We have assumed that increased competition in many industries will enable the Norwegian economy to sustain strong growth without generating substantial inflationary pressures. Projections for productivity and potential growth are, however, particularly uncertain. Labour shortages may arise sooner than we expect. Wage growth may then increase more than has been assumed.

On the other hand, several years of high wage growth and loss of competitiveness has resulted in reduced profitability in Norwegian manufacturing. If developments in manufacturing are given more emphasis in the wage settlement than assumed, wage growth may be lower than projected. The same applies if the unusually low inflation rate this year is given greater emphasis in wage negotiations than assumed.

In the service sector, the enlargement of the EU by 10 new countries from 1 May 2004 may have an impact on the level of activity and on profitability. Many companies will probably encounter increased competition from companies in new member countries with far lower cost levels. This may dampen the projected upswing in output. It may also put pressure on companies to introduce further rationalisation measures, which will curb inflation more than expected.

If competition continues to increase and higher productivity growth is sustained in 2005 and 2006, the output gap may be narrower than projected. In that case, this would have a dampening impact on inflation.

The estimated pass-through from the krone exchange rate to prices for imported consumer goods is uncertain. Our experience of how inflation and pricing mechanisms function when monetary policy is based on inflation targeting is still fairly limited.

Externally generated price impulses may also differ from our projections. Shifts in trading patterns from high-cost to low-cost countries have contributed to the decline in import prices in recent years. In particular, higher imports from China have contributed to reducing clothing prices. We have assumed that this will continue in the years ahead, but that the decline will moderate somewhat. The effects of trade shifts may, however, be beginning to unwind. Norges Bank's regional network reported earlier that the potential for a further fall in clothing prices as a result of trade shifts has been reduced. On the other hand, trade shifts may increase for goods other than clothing.

Inflation among our trading partners may remain lower than projected in the period ahead. The sustainability of the global recovery is still uncertain. There are still considerable imbalances in the US economy, for example. The strengthening of the euro against the US dollar may dampen the nascent upturn in the euro area to a further extent than expected.

On the other hand, particularly strong growth in some Asian countries has led to a sharp rise in international prices for some metals and other commodities. This may contribute to stronger externally generated price impulses to the Norwegian economy than assumed.

Boxes

Overview of boxes in Inflation Reports 2000-2004

1 / 2004
Low external price impulses to the Norwegian economy
The pass-through from the krone exchange rate to prices for imported consumer goods (*)
The effects of the reduction in interest rates on household income
The exchange rate for the krone and exchange rate expectations
Evaluation of Norges Bank's projections for 2003

3 / 2003:
Direct effects of interest rates on house rents (*)
Imbalances in the US
Assumptions concerning the exchange rate
Flexible inflation targeting and indicators of pressures in the real economy

2 / 2003:
Low consumer price inflation
Evaluation of inflation reports in inflation-targeting countries
Why does household debt growth remain high?
Levels of real capital in enterprises still too high?

1 / 2003:
Factors behind developments in the exchange rate (*)
The output gap
Imported price inflation and the exchange rate – the UK experience
Evaluation of Norges Bank's projections for 2001 and 2002

3 / 2002:
The Scandinavia model of inflation – revisited

2 / 2002:
Why has the krone exchange rate appreciated
New expectations survey
Why have clothing prices fallen?
The impact of higher oil prices
How does the krone exchange rate influence the CPI? (*)

1 / 2002:
Evaluation of Norges Bank's projections for 2000.
Wage growth (*)
Have Norges Bank's interest rate decisions been anticipated?

3 / 2001:
Consumer price inflation adjusted for changes in real taxes and energy prices
Why has the rise in prices for imported consumer goods been low?
Uncertain oil prices and pressure on OPEC
Growth potential of the Norwegian economy

2 / 2001:
New regulation on monetary policy
Underlying inflation
Assessment of risks to the inflation projection
Effects of a sharper slowdown in the global economy

1 / 2001:
What are the effects on Europe of a cyclical down-turn in the US?
The impact of interest rates on private consumption (*)

4 / 2000:
Price developments in Norway, Sweden and the euro area
Effects of a change in interest rates (*)
Uncertainty associated with the inflation projections
Evaluation of Norges Bank's projections for 1999

3 / 2000:
Low price inflation for imported consumer goods
Which factors influence the krone exchange rate?
Interest rates and expectations

2 / 2000:
Consumer confidence indicator
Underlying consumer price inflation
Continued low price and cost inflation in the euro area
Household net investments in financial assets (net lending)

1 / 2000:
New aspects of economic developments
Output gap in the years ahead

(*) = Boxes with special discussion of the effects of monetary policy and the functioning of the economy

Low external price impulses to the Norwegian economy

Inflation is low in Norway, primarily reflecting the low rise in prices for imported consumer goods. These goods have a weight of 28% in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE). In Norway, prices for imported goods are largely influenced by exchange rate movements and external inflation.

Norges Bank has traditionally estimated these externally generated price impulses in the light of developments in commodity prices and aggregate indices for trading partners' consumer prices, export prices and producer prices for manufactured goods. These indices will not necessarily capture the external rise in prices for consumer goods imported by Norway. This is because Norway's imports of consumer goods have a different composition than the aggregate indices for foreign prices. Moreover, these indices do not capture the effects of shifts in imports from high-cost to low-cost countries. Such shifts have contributed to lower prices for some groups of goods, particularly in the last couple of years. Indices for foreign consumer and producer prices also include deliveries to the domestic market. Foreign consumer price indices are strongly influenced by goods and services that are not traded internationally and for which price movements differ from Norwegian imports of consumer goods.

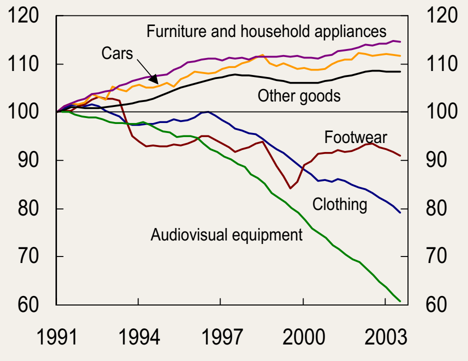
External trade statistics show developments in Norwegian import prices. Import prices are measured in NOK and therefore do not directly reflect the externally generated price impulses to the Norwegian economy. In principle, the series could be adjusted for exchange rate changes. However, the pass-through from exchange rates to import prices is uncertain, partly because foreign exporters may set prices on the basis of the economic and competitive situation in Norway.

As a result, there is considerable uncertainty associated with external price impulses in the Norwegian economy. We have attempted to measure these impulses by constructing a quarterly index that more directly measures developments in external price impulses to imported goods in the CPI and CPI-ATE[1]. This index will capture important factors that have influenced external price impulses in the past decade:

- shift in imports towards China and other low-cost countries
- high productivity growth in the production of some types of goods

The index is composed of foreign prices for clothing, footwear, cars, audiovisual equipment, furniture and domestic appliances and other goods. The weights in the index reflect these groups' share of imported consumer goods in the CPI-ATE. Consumer prices for the goods among trading partners have been used for audiovisual equipment, furniture, domestic appliances, clothing and footwear. The effects of the shift towards increased imports from low-cost countries are also estimated for clothing and footwear. These estimates also take into account that the price levels among some countries from which we import goods are substantially lower than among other trading partners[2]. Trading partners' producer prices are used for cars. Prices for other goods are assumed to move in line with overall export prices among trading partners.

Chart 1 Projected external price developments for some imported consumer goods. Measured in trading partners' currencies. Quarterly figures. Index. 91 Q1= 100. 91 Q1 - 03 Q3



Source: Norges Bank

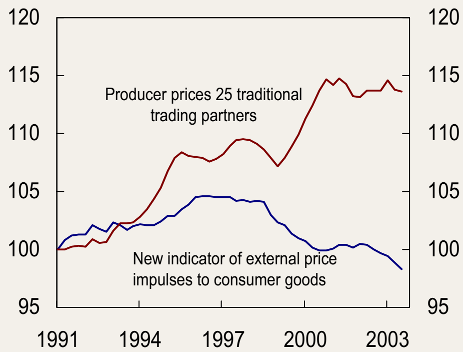
[1] This index will be documented in more detail in *Economic Bulletin* 2/2004.

[2] See IR 3/01: "Why has the rise in prices for imported consumer goods been low?" and IR 2/02: "Why have clothing prices fallen?" See also the article: "The effects of trade liberalisation on clothing prices and on overall consumer price inflation" in *Economic Bulletin* 4/2002.

Chart 1 shows developments in the various subgroups in the index. Foreign prices for audiovisual equipment have fallen since the early 1990s. Prices for clothing and footwear have also declined appreciably in recent years. Prices for cars, furniture, domestic appliances and other goods have edged up.

Chart 2 compares developments in average producer prices for our 25 most important trading partners with the new indicator for external price impulses. Since 1994, producer prices have risen by almost 15% more than the prices measured by the new indicator. In the period 1993-2002, producer prices rose by an average 1.2% annually, while the new indicator showed zero increase.

Chart 2 Foreign producer prices and a new indicator of external price impulses to consumer goods
Measured in trading partners' currencies. Quarterly figures. Index. 1991 Q1=100. 1991 Q1 - 2003 Q3



Source: Norges Bank

External price impulses, measured by the new indicator, eased in the period 1997 to 2001. In general, inflation was low among trading partners during this period, and the Asian crisis resulted in a decline in prices for some of our imported goods. Inflation was also influenced by an accelerating decline in prices for audiovisual equipment, reflecting strong productivity growth in the production of these goods. Clothing prices also fell as a result of increased imports from low-cost countries. However, the decline in external price impulses moderated in 2001, reflecting higher oil prices and somewhat higher wage growth among trading partners. The shift towards clothing imports from low-cost countries was also modest in 2001. The global downturn led to a sharper fall in foreign prices from 2002.

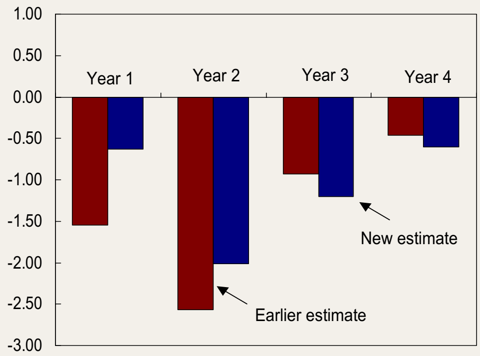
There is substantial uncertainty associated with the new indicator. A number of the estimates rely on our judgement. Among other things, it is difficult to estimate the exact effect of a shift in imports towards low-cost countries. It is possible that the new indicator also overestimates external price impulses, particularly as consumer prices among trading partners are used for many of the goods. Consumer prices also include a mark-up for wages and other domestic costs. These costs will generally rise at a faster pace than the purchase prices for the goods traded. On the whole, however, it would seem that the index provides a better picture of externally generated impulses to developments in prices for consumer goods in Norway.

The pass-through from the krone exhange rate to prices for imported consumer goods

Prices for imported goods in the CPI-ATE have declined in recent years. This is largely due to the appreciation of the krone through 2001 and 2002, but also reflects changes in trading patterns and a global fall in prices for some products, particularly audiovisual equipment. New estimates indicate that changes in import prices, measured in foreign currency, have been weaker than previously assumed (see box on page 40). This implies that foreign prices may explain a larger share of the fall in prices for imported goods in the CPI-ATE than previously assumed. If this is the case, then developments in the krone exchange rate may explain a smaller share, and the pass-through from the exchange rate to Norwegian consumer prices is weaker and/or more sluggish than previously assumed.

We have investigated this by modelling prices for imported consumer goods in the CPI-ATE based on the new estimates for external price impulses. Preliminary analyses indicate that the rise in prices for imported consumer goods will slow by ½ percentage point in the first year and by 2 percentage points the following year if the krone appreciates permanently by 10%.[1] A stronger and more rapid effect was assumed previously (see Chart 1). The calculations imply, however, that inflation will slow somewhat more in the third and fourth year than previously projected.

Chart 1 Estimated effects on price inflation for imported consumer goods in the CPI-ATE of a 10 per cent sustained strengthening of the import-weighted krone exchange rate. Percentage points

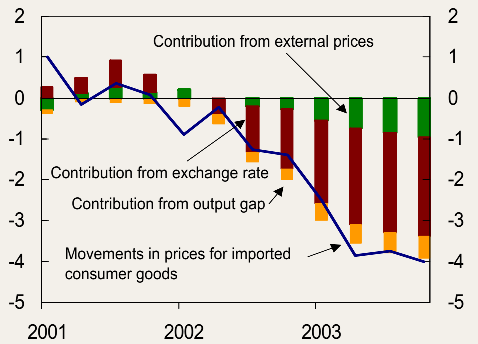


Source: Norges Bank

The analyses also indicate that changes in foreign prices affect import prices more rapidly than changes in the exchange rate. This may be because changes in the krone exchange rate are perceived as more temporary than changes in foreign prices and costs.[2]

Chart 2 breaks down the rise in prices for imported consumer goods in the CPI-ATE in line with the new analyses. The breakdown shows that developments in the krone exchange rate represent the most important factor underlying the fall in prices for imported consumer goods in recent years, but that the price fall is also clearly related to negative external price impulses and a narrowing output gap in Norway. A narrower output gap has contributed to reducing prices for imported goods in the CPI-ATE since dealers have cut prices, for example, by increased sales activity, due to weaker demand. Our previous calculations indicated that developments in the krone exchange rate could explain a larger share of the fall in prices for imported goods.

Chart 2 Historical movements in prices for imported consumer goods and estimated effects of external prices, exchange rate movements and the output gap. Contribution in percentage points to 4-quarter rise. 2001 Q1 – 2003 Q4



Sources: Statistics Norway and Norges Bank

These calculations are uncertain, partly because they are based on uncertain figures for external price impulses. They are also uncertain because we have limited experience of how inflation and pricing mechanisms function under a monetary policy regime based on inflation targeting.

[1] It is assumed that other explanatory factors remain unchanged.

[2] This reflects that for some product groups, we have measured external price impulses on the basis of foreign consumer prices.

The effects of the reduction in interest rates on household income

Interest rate changes influence household consumption and investment through a number of channels. Below, we will discuss the effects of the fall in interest rates since 2002 on household disposable income. At the end of 2003, household net debt to banks, government lending institutions, mortgage companies, and finance and insurance companies amounted to approximately NOK 600bn. Household net interest expenses in 2003 were nearly NOK 47bn or 6% of disposable income.

Since December 2002, Norges Bank has reduced the sight deposit rate from 7.0% to 2.0%. The impact on household net interest expenses depends on a number of factors:

- the pass-through from the sight deposit rate to household borrowing rates
- the size of household net interest-bearing debt
- the degree to which household behaviour changes in the credit market

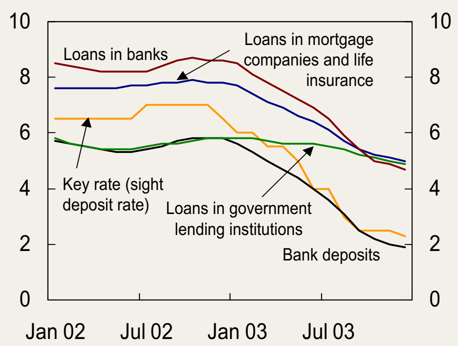
So far, household borrowing rates have declined less than Norges Bank's interest rates (see Chart 1). The average interest rate for loans from the financial sector was reduced from 7.8% in the fourth quarter of 2002 to 4.6% in the fourth quarter of 2003. In the same period, deposit rates fell from 5.8% to 1.9%.

Chart 1 shows that it takes time for changes in Norges Bank's sight deposit rate to pass through fully to household borrowing rates. Money market rates have responded to the fall in the sight deposit rate. Market rates on loans with longer maturities are more dependent on interest rate expectations. When the sight deposit rate was reduced last autumn, many market operators may have assumed that the drop in interest rates was temporary. Since financial institutions are also reliant on long-term funding, financing costs fell less than the change in the sight deposit rate in isolation might imply. This may have contributed to dampening the fall in lending rates.

Borrowing rates in government lending institutions in particular have fallen less than borrowing rates in other financial institutions. This is partly because a large portion of the borrowers had fixed interest contracts in 2003.

When bank deposit rates are close to zero, further reductions in lending rates will imply a decline in banks' interest margins. When the sight deposit rate is very low, there may be reason to expect that further reductions will have less impact on interest rates for households.

Chart 1 Interest rates on deposits and loans to households and non-profit institutions in domestic financial institutions. Estimated monthly series. Per cent. Jan 2002 - Dec 2003



Source: Norges Bank

The fall in lending rates from December 2002 reduced household interest expenses from 2002 to 2003 by NOK 14.9bn (see Table 1) or about 2% of household disposable income. At the same time, interest income fell by NOK 8.1bn. The net effect of the interest rate changes – the price effect – was a NOK 6.8bn reduction in household expenses or just under 1% of household disposable income.

This price effect on net interest expenses was offset by an increase in household borrowing – volume effect (see Table 1), reflecting an increase in household borrowing to finance consumption and investment.

Average figures for 2003 conceal to some degree that the pass-through from the sight deposit rate to financial institutions' lending and deposit rates occurred mainly in the second half of 2003. As the sight deposit rate has been further reduced in 2004, financial institutions' interest rates will probably continue to fall somewhat in 2004. However, as interest rates on several types of bank deposits are now zero or close to zero, the pass-through to banks' interest rates may be weaker than normal. Table 1 shows projections for 2004 based on the interest rate assumptions in this report. In addition, some lag in financial institutions' response to the reduction in the sight deposit rate has been taken into account. The fall in interest rates in isolation is projected to increase household disposable income by just under NOK 9bn or slightly more 1% of household disposable income in 2004. Thus, if we look at 2003 and 2004 as a whole, it appears that the impact of interest rate changes will result in an overall reduction of about NOK 15bn in household net interest expenses before tax. However, due to the increase in household net debt, net interest expenses will fall much less than this.

Table 1 Households and non-profit institutions. Interest income and expenses relating to domestic financial institutions. Changes in net interest expenses broken down by changes in interest rate and stock. Annual and quarterly figures. In millions of NOK

	Interest income (A)	Interest expenses (B)	Net interest expenses (A-B)
2002	25 056	74 020	48 964
2003	18 583	65 265	46 681
2004[1)]	8 816	52 146	43 329
Change from 2002 to 2003	-6 473	-8 755	-2 283
change in interest rate (price)	-8 095	-14 888	-6 793
change in stock (volume)	1 622	6 132	4 510
Change from 2003 to 2004[1)]	-9 767	-13 119	-3 352
change in interest rate (price)	-10 157	-18 733	-8 576
change in stock (volume)	390	5 614	5 224

[1)] Projections.

Source: Norges Bank

The exchange rate for the krone and exchange rate expectations

The krone appreciated markedly from May 2000 until January 2003 and has subsequently depreciated considerably. A comparison shows that the krone exchange rate does not fluctuate more than exchange rates in other countries. Exchange rate expectations for the krone have been considerably more stable than the actual exchange rate in the last couple of years.

The nominal exchange rate

Norway is part of a global capital market. Therefore, the krone may be expected to fluctuate considerably at times. The global economy is frequently exposed to different types of disturbances, and the krone exchange rate may be affected by oil prices and conditions in international capital and financial markets.[1]

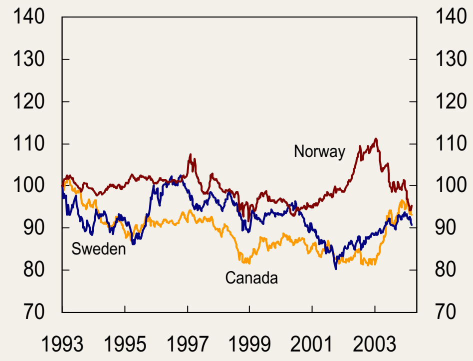
Chart 1 and 2 show the effective exchange rate for Norway and a number of other small countries with inflation targeting. Exchanges rate fluctuations are approximately the same for Norway, Sweden and Canada, whereas the krone exchange rate fluctuates less than the exchange rate for Australia and New Zealand. Therefore, the krone exchange rate does not stand out as particularly unstable compared with other countries' currencies.

The real exchange rate

It is developments in the real exchange rate, however, that are important for the competitiveness of the Norwegian business sector. Chart 3 shows developments in two measures of the real exchange rate, relative consumer prices and relative labour costs, measured in a common currency. When the curves in the chart are above zero, the real exchange rate is stronger and competitiveness weaker than the average level since 1970. The real exchange rate has fluctuated considerably over time and has deviated substantially from the average level over longer

[1] Norges Bank's analyses indicate that the appreciation of the krone from May 2000 to January 2003 may be partly explained by the widening interest rate differential between Norway and other countries (40%), the stock market decline and falling variability between major currencies (55%) and higher oil prices (5%). See Naug (2003): "Factors behind developments in the krone exchange rate – an empirical analysis", in Norges Bank's *Occasional Papers*, no. 32/2003 and *Inflation Report* 1/2003 for more details.

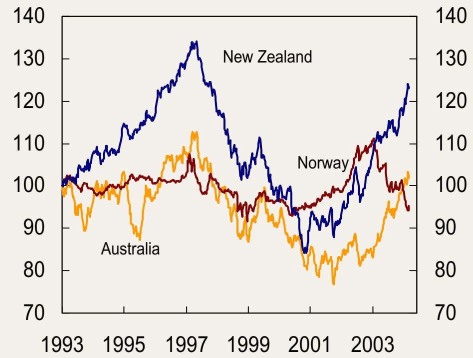
Chart 1 Effective exchange rates for Norway, Canada and Sweden[1)]. Index. Week 1 1993 = 100. Week 1 1993 - Week 10 2004



1)A rising curve denotes a stronger exchange rate

Sources: Bank of England and EcoWin

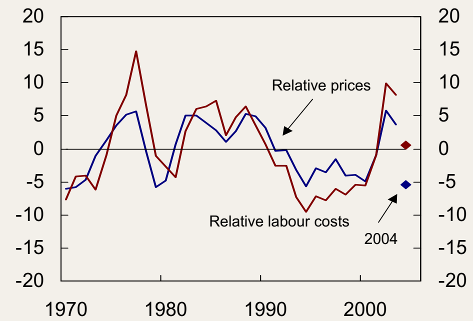
Chart 2 Effective exchange rates for Norway, Australia and New Zealand[1)]. Index. Week 11993 = 100. Week 1 1993 - Week 10 2004



1)A rising curve denotes a stronger exchange rate

Sources: Bank of England and EcoWin

Chart 3 Real exchange rates. Deviation from average 1970 -2003. Per cent. Annual figures. 1970 -2004[1)]



1) Based on projections for wage and price inflation for 2004. The krone exchange rate in 2004 is based on the assumptions in IR 1/04 (TWI)

Sources: TRCIS, the Ministry of Finance, Statistics Norway and Norges Bank periods. Nevertheless, there has been a tendency for the real exchange rate to revert to this level. The points for 2004 show the real exchange rate with wage and inflation projections for 2004 from this report. In relative prices, the real exchange rate is now about 5% weaker than the average since 1970, whereas it is around its historic average measured in terms of relative labour costs.[2]

Data from both the IMF and JPMorgan show that the real exchange rate for Norway is not particularly volatile compared with the real exchange rate for other countries.

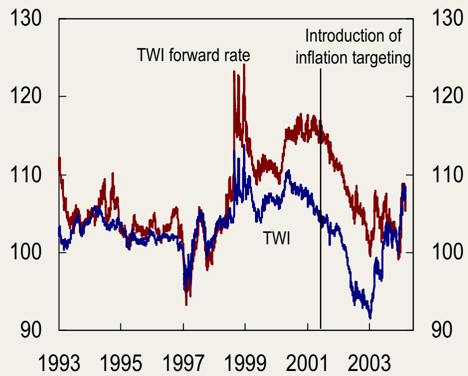
Exchange rate expectations

Although economic disturbances and the monetary policy response may result in wide fluctuations in the exchange rate for the krone and short-term exchange rate expectations, monetary policy may also contribute to stabilising exchange rate expectations in the long term. Assume, for example, that the economy is exposed to a disturbance that increases pressures in the real economy and pushes up inflation. Under an inflation targeting regime, this would normally result in expectations of higher interest rates, an appreciation of the krone and expectations of a strong krone for as long as pressures in the economy are expected to persist. In the longer term, the effects of the disturbance are expected to wane so that long-term interest rate and exchange rate expectations will be more stable.[3] Such a response pattern presupposes monetary policy credibility, i.e. that economic agents are confident that the central bank will achieve the inflation target in the long term. Long-term exchange rate expectations may then be expected to be more stable than the spot rate.

Exchange rate expectations may be measured by uncovered interest parity, where a positive difference between interest rates in Norway and in other countries is offset by expectations of a depreciation of the krone. This implies that investments in domestic and foreign currency generate the same expected return. If, for example, domestic interest rates are one percentage point higher than interest rates abroad, investments in domestic and foreign currency will yield the same expected return if the krone is expected to depreciate by 1% per year.[4]

Chart 4 shows developments in the exchange rate measured in terms of the trade-weighted exchange rate index (TWI) and 5-year forward rates for TWI from the end of 1992.[5] Until the end of 1996, both the krone exchange rate and exchange rate expectations were relatively stable. Since 1997, the krone exchange rate and exchange rate expectations have fluctuated considerably more and the deviation between them has been considerable.

Chart 4 TWI and 5-year forward rate[1)]. Daily figures. 1 Jan 93 – 4 Mar 04.



[1)]A rising curve denotes a weaker krone exchange rate

Source: Norges Bank

When inflation targeting was introduced in March 2001, exchange rate expectations were substantially lower than the actual exchange rate. Following the introduction of inflation targeting, the krone exchange rate continued to appreciate as exchange rate expectations began to rise. The krone appreciated sharply from mid-January 2002 to year-end, and then depreciated substantially through 2003. In this period, however, exchange

[2] Akram (2002) shows that historically, Norway has maintained purchasing power parity in the medium term. See "PPP in the medium run despite oil shocks: The case of Norway", Working Paper 2002/4, Norges Bank.

[3] An alternative argument which is more linked to the theory of purchasing power parity is that if there is monetary policy credibility so that inflation over time stabilises at a level that is approximately on a par with inflation among trading partners, the need for future changes in the krone exchange rate will be reduced.

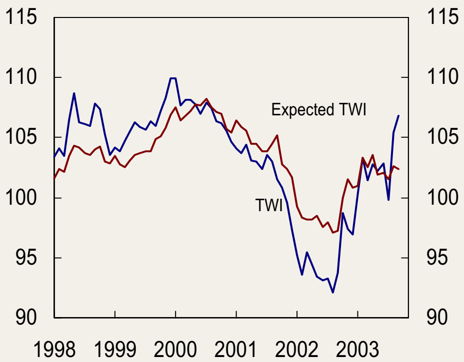
[4] This assumes the absence of risk premia, and this may not necessarily be the case. Uncovered interest parity may, nevertheless, provide an indication of developments in exchange rate expectations and is used extensively in both theoretical and empirical literature.

[5] The forward rate for TWI is calculated on the basis of interest parity and yields on synthetic 5-year government bonds for Norway and for the first four countries in the TWI (euro area, Sweden, the UK and the US). By investing in the Norwegian krone over a five year period, the return is expressed by $(1+kr_5)^5$, where kr_5 is the 5-year yield on domestic government bonds. Alternatively, by converting to foreign currency, (at exchange rate E krone per foreign unit), and investing the amount at the foreign interest rate ur_5 and selling the amount at the forward rate T, the return on an investment in foreign currency is expressed by $T/E(1+ur_5)^5$ (measured in NOK). By requiring the same return on the two investment alternatives (interest parity), the forward rate is expressed by: $T=E\,(1+kr_5)^5/(1+ur_5)^5$. According to uncovered interest parity, this is a measure of the expected exchange rate five years ahead.

rate expectations (measured by forward rates) were relatively stable.[6]

Exchange rate expectations may also be measured by Consensus Forecasts, which is a survey among macroanalysts (see Chart 5). The chart shows the actual and expected exchange rate one year ahead, from 1998 (earlier expectations data from Consensus Forecasts are not available). When the krone is weak, exchange rate expectations one year ahead tend to be stronger than the actual rate. Similarly, when the krone is strong, exchange rate expectations one year ahead tend to be weaker than the actual exchange rate. In the period 2002-2003, the krone exchange rate varied considerably. Movements in exchange rate expectations, however, were less volatile. When the krone was strongest in the second half of 2002, the expected exchange rate one year ahead was 4-5% weaker. Data from Consensus Forecasts indicate that exchange rate expectations have been more stable than the actual exchange rate the last couple of years.

Chart 5 TWI and expected TWI one year ahead[1)]. Monthly figures. June 1998 - Feb 2004



[1)]A rising curve denotes a weaker krone exchange rate. Expected TWI is based on Consensus Forecasts.

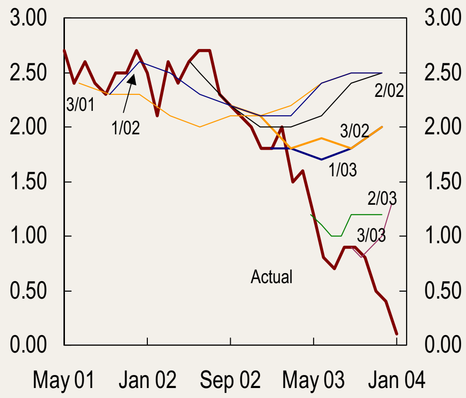
Sources: Consensus Forecasts and Norges Bank

[6] We have also calculated the 2-year and 12-month forward rates. The 2-year forward rate shows approximately the same picture as the 5-year forward rate, although the 5-year forward rate is somewhat more stable than the 2-year forward rate for the last couple of years. The correlation between the 12-month forward rate and the actual rate, on the other hand, is considerably higher. This is because the 12-month forward rate is more heavily influenced by the cyclical situation.

Evaluation of Norges Bank's projections for 2003[1]

Consumer price inflation adjusted for taxes and excluding energy products was 1.1% in 2003. This was substantially lower than projected two years earlier. Chart 1 shows changes in Norges Bank's inflation projections for 2003 and actual inflation. The projections were gradually revised downwards from autumn 2001. Other institutions lowered their projections for inflation in 2003 to approximately the same extent as Norges Bank.

Chart 1 CPI-ATE projections made at different times. 4-quarter rise



Sources: Statistics Norway and Norges Bank

The projections in the *Inflation Report* are based on technical assumptions concerning the interest rate and the exchange rate. These assumptions do not necessarily reflect the most probable outcome. The purpose of the projections is not to be as accurate as possible, but to provide an optimal decision-making basis for monetary policy. Monetary policy will normally be adjusted if the projections are not on target two years ahead.

Forecast errors may be due incorrect technical assumptions or flaws in other important assumptions underlying the analysis. Another source of forecast errors is the possibility that the economy may have been exposed to unexpected events that could not have been foreseen when the projections were made. A third possible source of forecast errors is shortcomings in the analytical tools or the judgement exercised. Projections will also depend on the economic situation when the projections are drawn up. If current statistics or our interpretation of them does not provide a correct picture of economic developments, our projections may also be inaccurate.

In order to assess the difference between actual and projected price inflation in 2003, we must look at developments in the economic variables that influence inflation. The different variables influence price inflation with different time lags. Inflation is primarily determined by movements in the exchange rate, external price impulses, wage growth in Norway and the competitive situation in

Table 1 Assumptions and projections for some key macroeconomic variables for the Norwegian economy in 2002 and 2003 and actual developments. Percentage change from previous year unless otherwise specified.

	2002			2003[3)]		
	Projection IR 3/01	Actual	Difference[1)]	Projection IR 3/01	Actual	Difference[1)]
Interest rate (%)	7	6.7	-¼	7	4.2	-2¾
Exchange rate (level, I-44)	98.9	91.6	-8[2)]	98.9	92.8	-6½[2)]
GDP, trading partners	1¼	1.3	0	2½	1¼	-1¼
Producer prices, trading partners	0	-0.5	-½	¾	0.3	-½
Mainland GDP	1½	1.3	-¼	1¾	¾[4)]	-1
Annual Wages	5	5.7	¾	5	4½	-½
CPI-ATE	2	2.3	¼	2½	1.1	-1½

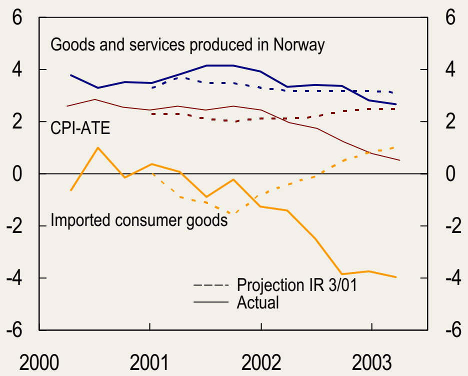
1) Negative figures indicate that projections are too high. Percentage points.
2) Deviation, Per cent. Negative figures denote a stronger sxchange rate.
3) No final figures are available for 2003, except consumer price inflation. The projections from Inflation Report 1/2004 have been used for the other variables.
4) Adjusted for changes in electricity production.

Source: Norges Bank

[1] A more detailed discussion of the evaluation of Norges Bank's projections for 2003 is provided in *Economic Bulletin* 1/04. Norges Bank also provides an account of consumer price inflation in 2003 and the background for the deviation from the inflation target in the *Annual Report for 2003* (April 2004)

the Norwegian economy. Developments in these variables are closely related to economic growth internationally and in Norway. Table 1 shows projected and actual developments in a number of variables that affect inflation.

Chart 2 CPI-ATE. Projections and actual developments. Total and by supplier sector. 4-quarter rise. Per cent



Sources: Statistics Norway and Norges Bank

The difference between actual and projected inflation in 2003 can be mainly explained by the sharp fall in prices for imported consumer goods (see Chart 2). These developments must be seen in the light of the appreciation of the krone in 2002 and low prices - measured in foreign currency - for imported goods:

- The exchange rate was considerably stronger than expected in 2002 (see Table 1). Weak global developments are an important factor underlying the appreciation of the Norwegian krone in 2002. In 2003, growth was markedly weaker than the IMF, the OECD, other analysts and observers and Norges Bank expected in 2001 and 2002. Sluggish developments reflected considerable global political uncertainty associated with terrorism and the war in Iraq, SARS, the decline in investment following the bubble in the late 1990s and the fall in equity prices in response to a downward revision of growth prospects and financial scandals. The downturn led to a series of interest rate cuts and lower interest rate expectations internationally. Interest rates in Norway remained high as a result of strong pressures in the Norwegian economy and the surprisingly high pay increases in spring 2002. A widening interest rate differential against other countries contributed to a marked appreciation of the krone. Other special factors in the global economy also led to a stronger krone than might have been expected from the higher interest rate differential alone[2].

- Externally generated price impulses, measured by producer prices, were lower than projected in 2002 and 2003, reflecting weak global growth. However, the rise in prices for imported consumer goods, measured in foreign currency, has been even lower in recent years than implied by producer prices. The shift in trade from high-cost to low-cost countries has led to a fall in clothing prices. Prices for audiovisual equipment have fallen in most countries, including Norway, as a result of strong productivity growth for production of these goods. New estimates that take account of these factors show that externally generated price impulses fell by 1½% in 2003[3].

The rise in prices for domestically produced goods and services was also somewhat lower in 2003 than projected (see Chart 2). Increased competition and rationalisation in a number of industries, combined with more sluggish growth in the Norwegian economy, may have contributed to this:

- Competition has intensified in recent years in telecommunications and the airline industry as a result of deregulation and new entrants. Many market participants have cut costs by means of workforce reductions and restructuring. Higher productivity has probably provided room for lower prices. Prices for telecommunications services and air travel have fallen. Grocery prices have been reduced in response to the establishment of the international low-price chain Lidl in Norway.

[2] See Naug (2003): "Factors behind developments in the krone exchange rate – an empirical analysis" in Norges Bank's *Occasional Papers* no. 32/2003.

[3] See box on "Low external price impulses to the Norwegian economy" in this report.

- Growth in the Norwegian economy was slower than projected in 2003. Many service industries were affected by the situation in the international economy. The high rise in costs contributed to low growth in public sector output and employment. Developments in manufacturing were weak due to low international demand for manufactured goods and weak competitiveness following several years of high wage growth and the strong krone in 2002. High electricity prices through winter 2003 reduced household purchasing power. This may have curbed demand for some goods. Parts of the clothing and audiovisual industries experienced a decline in demand in early 2003, with increased sales activity.

- Weaker economic growth contributed to lower-than-expected wage growth in 2003. This had a limited effect on prices, however, because higher-than-expected wage growth in 2002 had a positive effect on prices in 2003 as well.

In Table 2 we have attempted to break down the contribution of the various explanatory variables to the deviation between actual and projected inflation. We have used new estimates of external price impulses and new estimates of the pass-through from the exchange rate in the analysis.[4]

Table 2 Decomposition of the difference between actual and projected CPI-ATE in 2003. Contribution to annual price inflation. Percentage points.

Difference between actual and projected rise in CPI-ATE	-1½
Decomposition of difference	
Stronger exchange rate in 2002	-(½-¾)
Weaker external price impulses	-(¼-½)
Higher wages in 2002, lower wages in 2003	0
Stronger competition	-¼
Unexplained/other factors[1)]	-¼

[1)] Other factors include the introduction of a maximum rate for day-care places, which may explain up to 0.1 percentage point of the difference between actual and projected inflation.

Source: Norges Bank

[4] See boxes in this report: "Low external price impulses to the Norwegian economy" and "The pass-through from the krone exchange rate to prices for imported consumer goods"

One objective of evaluating the projections is to improve the basis for projections in the future. There are three points in particular where we believe we have made progress in our forecasting work over the past year:

- We will now try to capture changes in foreign prices for imported consumer goods in Norway more directly instead of looking at aggregate international indices for producer and export prices. This will probably improve the basis for making projections for external price impulses in the future.
- New estimates may indicate that the impact of the appreciation of the krone on consumer prices is somewhat weaker and comes somewhat later than implied by our models. Estimates for the exchange rate pass-through are uncertain, however, as we have little experience of how inflation and pricing mechanisms function under a monetary policy regime based on inflation targeting.
- The effects of changes in competition on prices may be considerable, but they are difficult to quantify. However, our experience from 2003 has increased our awareness of this type of factor. We are now using our regional network actively to capture changes in competitive pressures and the effects these changes may have on prices in various industries.

Annex I
Regional network

Norges Bank's regional network

Norges Bank's regional network was established in autumn 2002 and consists of enterprises, organisations and local authorities throughout Norway. In five rounds of talks each year, we engage in discussions with business and community leaders on financial developments in their enterprises and industries, with about 250 visits in each round. The contacts reflect the production side of the economy, both in terms of industry sector and geographic area. Approximately 1000 individuals in the network are contacted one to two times a year.

The regional network is primarily intended to serve as a source of up-to-date information on the state of the Norwegian economy. Regular communication with local contacts in Norway's business and community life provide us with information earlier and more frequently than available government statistics. It also provides us with supplementary information about areas not covered by other statistical sources, and we learn which issues are of particular concern to enterprises. In addition, the regional network will provide us with insight into the effects of specific events and enable us to study relevant issues. Official statistics will continue to form the basis for our perception of the state of the economy, but the time lags and revisions associated with these statistics make supplementary sources such as our regional network useful.

The information obtained from the regional network, along with other available information on economic developments, will form a basis for Norges Bank's projections as presented in the *Inflation Report* and other published material.

We have divided Norway into seven regions, and have engaged regional research institutions/ companies to be responsible for the network in their respective regions and to have meetings with contacts on behalf of Norges Bank. The following institutions have been selected:

Region North (Nordland, Troms and Finnmark)	Kunnskapsparken Bodø
Region Central Norway (Nord-and Sør-Trøndelag)	Senter for Økonomisk Forskning ved NTNU
Region North-West (Møre og Romsdal, Sogn og Fjordane)	Møreforskning Molde
Region South-West (Rogaland and Hordaland)	Rogalandsforskning
Region South (Aust- and Vest-Agder, Telemark and Vestfold)	Agderforskning
Region Inland (Hedmark and Oppland)	Østlandsforskning
Region East (Buskerud, Akershus, Oslo and Østfold)	Asplan Viak

Summary of the two contact rounds since Inflation Report 2003/3

In the two contact rounds since the October *Inflation Report*, discussions have been held with a total of approximately 540 contacts in the regional network. A national summary and summaries for each region from the first of these contact rounds were presented on Norges Bank's website following the monetary policy meeting of 17 December. Summaries from the last round of contacts will be available on our website on 12 March (English version on 15 March). The main points below are based on the regional reports from the institutions responsible for the various regions and do not necessarily reflect Norges Bank's view of economic developments:

- Activity levels are increasing in most industries and market prospects for the next six months are reported to be favourable.
- Developments in output and employment are positive for export-oriented manufacturing. Companies supplying equipment to ships and offshore installations as well as the process and metals industry report solid growth. The shipbuilding industry is still struggling, however, and competitiveness is perceived to be low.
- Domestically-oriented manufacturing reports rising growth which is largely driven by stronger household purchasing power. For example, developments in the furniture and woodworking industry are reported to be positive.
- The offshore industry reports moderate growth in demand and output. The market outlook is auspicious. There are signs that exploration activity is also picking up.
- The building and construction sector reports solid developments in recent months with growth in most regions of the country. Future prospects are also positive. Increased activity is primarily being driven by higher public demand and increased residential construction in addition to oil-related developments in some regions of the country. Demand from mainland business is still low.
- Business sector demand for services is increasing and the market outlook has improved. Signals are positive in the financial sector, the hotel and restaurant sector, transport and communication and commercial services.
- There is solid growth in activity in retail trade and household services, and this growth is expected to continue. Low interest rates are cited as an important driving force behind the growth in demand.
- Despite the improved cyclical situation, few private sector enterprises have plans to increase investment. The retail and public sectors are the only sectors that are planning moderate increases in investment in 2004.
- Employment does not appear to be rising in pace with the increase in demand and activity. The decline in manufacturing employment appears to have come to a halt, however, and employment is increasing slightly in building and construction and in the retail sector. There is still an ample supply of labour.
- Wage growth is projected to be lower in 2004 than in 2003.
- Retail prices are reported to be stable or slightly rising. Due to intense competition and customer power, the possibility of adjusting prices is perceived to be very limited.
- Profitability is improving in most business sectors. Cost reductions last year and increasing volumes through the autumn and winter have improved profitability.

Enterprises and organisations that have been contacted in the work on this Inflation Report

A.B Jürgensen
ABB FlexibleAutomation
ABB Offshore Systems AS
AC Nielsen Norge AS
Adresseavisen ASA
Advanced Production and Loading AS
Aetat Bergen
Aetat Kongsvinger
Aetat Molde
Aetat Sogn og Fjordane
Aetat Sør-Trøndelag
Aetat Vest-Agder
Aetat Vestfold
Air Products AS
Airlift AS
Aker Aukra AS
Aker Brattvåg AS
Aker Kværner
All Rek AS
Alphatron AS
Alta Kommune
Alvdal Og Tynset Sport As
Alvdal Skurlag Al
Amek AS
Amfi Drift AS
Amfi Namsos
Amfi Narvik
Apotekene Vest HF
Apropos Internett AS
APS Norway (Flowtite Norway AS)
Arendal Auto AS
Arendal kommune
Arkitektfirma Brandsberg-Dahl
Arne Rustand AS
Asko Agder AS
Asko Kjeldsberg AS
Atlantic Auto AS
Aust-Agder sykehus HF
Auster Frisør ANS
Autokarosseri
Autostrada AS
Avinor AS, Region Sørvest
Avisa Glåmdalen
Bakelittfabrikken AS
Baker Hughes Inteq
Bakers AS
Ballstad Slip AS
Banetele AS
Bautas AS
BB Servicesystem Sogn og Fjordane AS
Beitostølen Resort
Berg-Hansen Nor
Berg-Hansen Reisebyrå Vestfold AS
Bernhard Olsen
Bertel O. Steen
Betong Øst AS
Bilalliansen AS
Bilsenteret Namsos AS
Bjørn Bygg AS
BKK
Bloch Bygg og Material
Block Berge Bygg AS
Bodø Energi AS
Bohus
Bomøbler AS
Borg Regnskap AS
Bouvet AS
Br. Reme AS
Bravida
Brevik Construction AS
Brunvoll AS
Brødrene Dahl AS
Brødrene Pedersen AS
Brødrene Røsand AS
Buer Entreprenør AS
Busengdal Transport AS
Buskerud Kraftnett AS
Bussbygg
Bussen Trafikkselskap AS
Byggcon AS
Byggkjøp Farsund Bygg
Byggmester Fritzøe
Byggservice Nord-Østerdal AS
Byhaven kjøpesenter
Byåsen Bakeri AS
Bø kommune
Bøhmer Entreprenør AS
Børstad Hotel & Gjestiveri
Børstad Transport AS
Båtsfjordbruket AS
Cad Net Øst
Central Drift Hotel AS
Chriship
Christensen Yngvar AS
City Syd AS
Clarion Hotel Ernst AS
Color Line AS
Connex Vest AS
Conoco Phillips Norway
Conseptor ASA
ConsultIT
Coop Nordfjord og Sunnmøre BA
Coop Vestfold og Telemark BA
Corrocean AS
CSC Solutions
Dagligvareleverandørenes Forening
Dale Bruk AS
Dale of Norway
Dark Arkitekter
De 3 Stuer Konsern AS
Den Norske Bank, Kongsvinger
Den Norske Høyttalerfabrikk AS
DFDS Seaways AS
DI Systemer AS
Diplom-is
E. A. Smith Bodø AS
E. Flasnes Transport AS
Egersund Trål AS
Egroup Online AS
Eiendomsmegler 1
Eiendomsspar AS
Einar Valde AS
Elektro AS
Elkem Aluminium ANS
Elkjøp Giganten Forus
Eltek Energy AS
ELTEL Networks
Engen O L & Co AS
Engum Elkjøp AS
Entra Eiendom AS
Ernst&Young
Eurospar Sogndal
Evensen & Evensen AS
Ewos AS
Exact Eiendomsmeglere AS
Expert Norge AS
Fabelaktiv AS
Fagbokforlaget
Fatland AS
Felleskjøpet Trondheim
Fesil ASA
Finnøy Gear & Propeller AS
Finsbråten AS
Firda Avishuset
First Securities ASA
Fjeldseth AS
Fjordline
Flora Hamn
Flora kommune
Fokus Bank Florø
Follum fabrikker
Forestia AS
Fosen Trafikklag ASA
Fotosentralen AS
Franzefoss Pukk AS
Friele kaffehus
Fru Haugans Hotell AS
Fundator AS
Fundia Armeringsstål AS
Fylkesmannen i Vest-Agder
Fædrelandsvennen AS
Gilberg Engros Menypartner AS
Gilde Bøndernes Salgslag BA
Gilde Vest BA
Gitek
Gjensidige Nor Forsikring Region Oppland
Gjensidige Nor Forsikring Trondheim
Gjestal Spinneri ASA
Glåma Bygg AS
Grunnarbeid AS
Gudbrandsdalens Uldvarefabrikk
Gunnar Hippe AS
Gunnar Klo AS
H&M Hennes& Mauritz AS
H2 Frisører
Hafslund Sikkerhet Sør
Hagen og Godager
Hagen Treindustri A/S
Halden kommune
Hammerfest Kommune
Hamworthy KSE AS
Handicare Produksjon AS
Hatteland Group
Havsølv AS
Hebos Interiør AS
Helgeland Holding AS
Helkama Grepa AS
Helse Bergen HF
Helse Midt-Norge
Helse Stavanger
Helse Sunnmøre HF
Herlige Stavanger AS
Hilmers Company AS
Hobbelstad og Rønning AS
Hoff Norske Potetindustrier BA
Holmen Fjordhotell
Horns Slakteri AS
Hotel Augustin AS
HSD Buss AS
H-vinduet Vatne AS
Hydraulikk Finnmark AS
Hydro Aluminium AS
Hydro Polymers AS
Høgskolen i Bodø
Høgskolen i Nord-Trøndelag
Høie AS
Håg ASA
ICA Norge AS
Imaas Bil AS
InMedia AS
Innvik Sellgren Industrier AS
Interconsult Group ASA
Invenia AS
ISS Norge AS
Itet AS
Ivar Mjåland AS
J. M. Johansen AS
Jan Andreassen Malermester AS
Jangaard Export AS
Joar Ryttervoll Tømmermester AS
John Galten AS
Jotun AS
Jotunheimen Og Valdresruten Bilselskap
K. Lund AS
Kaffebrenneriet AS
Kai Karstensen Kuldeteknikk AS
Kanal 24 Norge AS
Karmsund Maritime Service AS
Kid interiør AS
Kitron Microelectronics AS
Kontorleverandøren Hamar AS
KPMG AS
Kraft Foods Norge AS
Kragerø kommune
Kremmertorget Kjøpesenter
Kristiansand Jernstøperi AS
Kristiansand Kommune
Kristiseter M Entreprenør AS
Kronos Titan AS
Kruse Smith AS
Kvadrat Steen & Strøm
Kvalitet & Ledelse AS
Kverneland Group
Kynningsrud AS
Laerdal medical AS
Lamit AS
Landbruksbygg AS
Langmorkje almenning
Langset AS
Leaonhard Nilssen og sønner
Leiv Eriksson Nyfotek AS
Lenvik kommune
Lerum Fabrikker
Lillesand reisebyrå
Lindesnes kommune
Linjegods AS
Litra AS
Lofotprodukter AS
Lom Møbelindustri AS
Lom og Skjåk Sparebank
Luxo Industrier AS
Lyse Energi AS
Lørenskog kommune
Løvenskiold-Fossum
M. Peterson & Søn A/S
Mackzymal AS
Mandal Industrier AS
Mandal Sykehus
Manpower AS
Marine Harvest
Maritime Hotell Flekkefjord
Maritime Hydraulics AS
Maritime Pusnes AS
Meglerhuset Nylander AS
Melby Snekkerverksted AS
Mesna Bruk
Mesta AS - Distrikt Molde
Midt-Norge Regnskap AS
Min Boutique Gruppen AS
Moelven Van Severen AS
Moelven Våler AS
Moi Rør AS
Molab AS

Molde Kommune sentraladministrasjon
Mosjøen Kulde og Klimaservice AS
Mosjøen Ressurs- og Kompetansesenter
Moss Drift og Anlegg KF
Moxy Engineering AS
MTU Telecom AS
Multimaskin AS
Møre og Romsdal Kornsilo ANS
Mørenot AS
Namsos kommune
Naper Informasjonsindustri AS
Narom AS
Narvesen Norge AS
NCC Construction AS
Nedre Eiker kommune
Neptun Apartment Hotell AS
Nera Networks AS
Nesje AS
Nestlé Norge AS
Netcom AS
Nexans Norway AS
Nogva Svolvær AS
NorCargo AS
Norconsult AS
Nord Norsk Dekkimport AS
NorDan AS
Nord-Aurdal Kommune
Nordea Bank Norge ASA
Nordfjord Hotell
Nordfjord og Sunnmøre Billag AS
Nordlaks AS
Nordland Betongindustri
Nordlandbuss
Nordlandsbanken ASA
Nordlandsforskning
Nordlandssykehuset
Nordlys hotell AS
NORDOX AS
Norfolier AS
Norges råfisklag
Norgesbuss ASA
NorgesGruppen AS
Norgesmøllene DA
Norisol Norge AS
Norpapp AS
Norplasta AS
NorSea AS
Norsk Sjømat AS
Norsk Stål
Norsk Tipping AS
Nortelco Teledialog AS
Notar Eiendom Ålesund AS
Notar Tromsø AS
Nycomed Pharma AS
Nye Møre Tre AS
Nygårds trevarefabrikk AS
Nymo AS
Nysted AS
Næringsforeningen i Trondheim
O. Antonsen kontormaskiner AS
Oasen
Oddstøl Elektronikk AS
Olympic Shipping AS
ORAS AS
Orkideekspressen Østredal
Reisebyrå AS
OSK Elektrotilbehør AS
Oslo Kommune
Ottadalen Mølle AL
Otto Koch AS
Overhalla Cementvare AS
P4 Radio Hele Norge ASA
Partner Mote AS
Paulsen Eiendom AS
Pedersen Birger AS
Per Solem
Per Aaland AS
Peterson Linerboard AS
Petrolia Drilling ASA
PipeLife Norge AS
Plasto
Poseidon Simulations AS
Powel ASA
Prepan Norge AS
PriceWaterhouseCoopers DA
Primahus AS
Proffice AS
Prosafe
Q-Free ASA
Quality Fagernes Hotell AS
Quality Hotel Røros AS
Radio 1 AS
Ragasco AS
Rainbow Hotels AS
Rapp Bomek AS
Rauma kommune
Remøy Shipping AS
Reslab reservoir laboratiores AS
Rica Hotel Norge AS
Rica Maritim Hotel
Rica Park Hotel
Rieber & Søn ASA
Rikshospitalet
Ringen Rehabiliteringssenter AS
Rockwool AS
Rogaland Fylkeskommune
Rogne Bygg AS
Rolls-Royce Marine AS
Rostein AS
Rotanor Bokproduksjon AS
Rød Tråd AS
Røros kommune
Røros Tweed AS
Saga Fjordbase AS
Saga Solreiser AS
Saint Gobain Ceramic Materials AS
Sanacoustic Byggmontering AS
Sandefjords Blad AS
Sandnes kommune
SAS Royal Garden Hotel AS
Scandic Hotel Arendal AS
Scandic Hotell Tromsø
Schlumberger
Securitas - Regionkontor Bergen
Sig.Halvorsen AS
Sigdal Kjøkken AS
Sikkerehetssenteret Aukra
Sisoflor AS
Sivesind Ki AS
Skagen Brygge Hotell
Skagen hotell AS
Skagerak Energi AS
Skanska Norge AS
Skarvik mekaniske verksted AS
Skeidar AS
Skipsteknisk AS
Skjalg A. Pettersen
Skretting AS
SND Invest AS
Sogn og Fjordane Energi AS
Solstrand Fjord Hotell
Sortland Kommune
Sortland Reisebyrå AS
Sparebank 1 Midt-Norge
Sparebank1 Nord-Norge
Sparebanken Pluss
Sparebanken Sogn og Fjordane
Sparebanken Sør
Sparebanken Vestfold
Sparebanken Volda Ørsta
Spis Norge AS
SR Bank
Statens Vegvesen
Statoil ASA
Stavanger Aftenblad
Stavanger kommune
Stavanger Rørhandel AS
Stavangerske AS
Steenstrup Stordrange Advokater
Stiftelsen Barnehageforbundet
Stiftelsen Betanien Bergen
Stjørdal kommune
Stoa Storkjøp AS
Stordal Møbler AS
Storebrand ASA
Stor-Elvdal Kommune
Stormyra Bilistsenter
Strand Hotel AS
Studentsamskipsnaden i Bodø
Subsea7 AS
Sulland Gruppen
Sundvolden Hotel AS
Sunnmørsposten AS
Surnadal Kommune
Surnadal Transport AS
Surnadal Utvikling
Sykehusene Asker og Bærum HF
Sørco AS
Sørensen Maskin AS
T Belsvik AS
T.Stangeland Maskin AS
Tandberg data ASA
Technor ASA
Teknisk Bureau AS
Terra Skadeforsikring AS
Tibe Reklamebyrå AS
Tine Meierier Sør
TNS Gallup
Toyota Hell Bil AS
Toyota Nordvik AS
Trelleborg viking AS
Trondheim Aktivum AS
Trondheim kommune
Trondheim Torg
TV 2 Gruppen AS
Tyrholm & Farstad AS
Tysvær kommune
Tønsberg kommune
Umoe Mandal AS
Umoe Ryvingen AS
Universitet i Bergen
Valdres Auto AS
Valdres Last
Varner-Gruppen
Veidekke ASA
Vesterålsrevisjon AS
Veøy billag
Vikenco AS
Vik-Sandvik Group
Vinmonopolet AS
Visma Services Norge AS
Voice ASA
Volmax AS
Volvat Medisinske senter AS
Vågå Kommune
Vågå Rekneskapslag AL
Våler Kommune
Wartsila Norway
West Contractors AS
Widerøe flyveselskap AS
Wiersholm Mellbye & Bech Adv. AS
Windy Boats AS
WM Data Consulting AS
YIT Building Systems AS
Yngve Steiro AS
Ø.M Fjeld AS
Økonor Tromsø AS
Øksfjord Slip og Mek AS
Øksnes Entreprenør AS
Østereng & Benestad AS
Ålesund Storsenter AS
Aas Mek. Verksted AS
Aasen Bygg AS

Annex II
Strategy Document 3/03

Strategy Document 3/03

Implementation of monetary policy in the period to 10 March 2004.

Discussed by the Executive Board at its meeting of 8 October. Approved by the Executive Board at its meeting of 28 October 2003.

1. Introduction

Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent. Monetary policy influences the economy with long and variable lags, and the Bank must be forward-looking in interest rate setting. The key rate (the sight deposit rate) is set on the basis of an overall assessment of the inflation outlook, normally two years ahead. This time horizon also means that emphasis is placed on dampening fluctuations in the real economy. The key rate will normally be changed gradually so that we can assess the effects of an interest rate change and other new information about economic developments. However, in situations where there is a risk that inflation may deviate from the target over a longer period or when there is considerable turbulence in financial markets or a wage-driven cost shock indicates that monetary policy credibility is in jeopardy, a rapid and pronounced change in the key rate may be appropriate. Short-term interest rates in other countries have been very low for a long period. This influences the degree of uncertainty in our inflation targeting.

In the discussion on monetary policy strategy of 25 June, the Executive Board deemed that a sight deposit rate in the interval 3-4 per cent would be appropriate at the end of October 2003. The interval was conditional on developments in the krone and economic projections. In addition, it was argued that economic developments after the first round of deliberations by the Executive Board on 4 June, with a reduction in key policy rates in other countries and low inflation, could imply an even lower interest rate. The sight deposit rate was reduced by 1 percentage point at the monetary policy meeting of 25 June, by a further 1 percentage point at the meeting of 13 August and by ½ percentage point at the meeting of 17 September. The press release issued in connection with the monetary policy meeting of 17 September stated: "With an interest rate of 2.5 per cent, Norges Bank's assessment is that the probability that inflation two years ahead will be higher than 2½ per cent is the same as the probability that it will be lower."

2. Economic developments and the prospects ahead

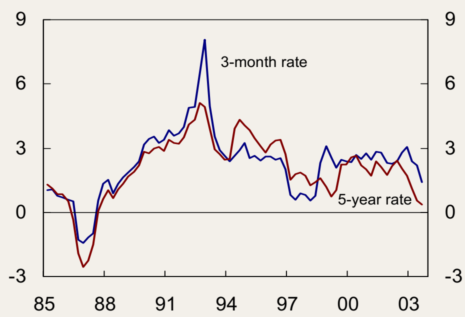
2.1 Economic developments

Interest rates in Norway have fallen considerably in recent months (see Chart 1). The real interest rate is now very low from a historical perspective. The interest rate reductions and expectations of a narrower interest rate differential against other countries have led to a weakening of the krone. Towards the end of October the value of the krone, as measured by the I-44, was about 10 per cent weaker than the peak level in January. The real exchange rate measured in terms of relative labour costs is still high in a historical context, however, and is about 15 per cent stronger than in the period 1994-1997.

Underlying inflation is subdued in Norway. As measured by the CPI-ATE, inflation was 0.9 per cent in September. It is particularly the rise in prices for imported consumer goods that is pushing down inflation below the inflation target. The rise in prices for domestically produced goods influenced by world market prices and services influenced by the exchange rate has also edged down.

GDP and employment growth have been sluggish so far this year. Mainland GDP growth was zero in the first six months of 2003. Employment fell by 0.8 per cent in the first six months of 2003,

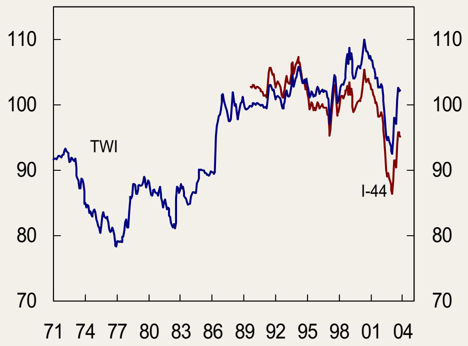
Chart 1a Real interest rates after tax[1]. 1985 Q1 - 2003 Q3



[1] 3-month rate deflated by CPI excluding energy products up to 1995. Norges Bank's estimates for the CPI adjusted for tax changes and excluding energy products from 1995 to July 2000, then CPI-ATE. The same deflator is used for 5-year government bond yields, but from 2001 Q2 the inflation target of 2.5 per cent is used.

Sources: Statistics Norway and Norges Bank

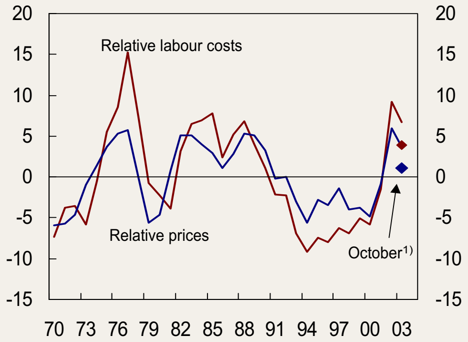
Chart 1b Import-weighted exchange rate (I-44) and trade-weighted exchange rate index[1]. Monthly figures. Jan 1971 - Oct 2003



[1]A rising curve denotes a weaker krone exchange rate

Source: Norges Bank

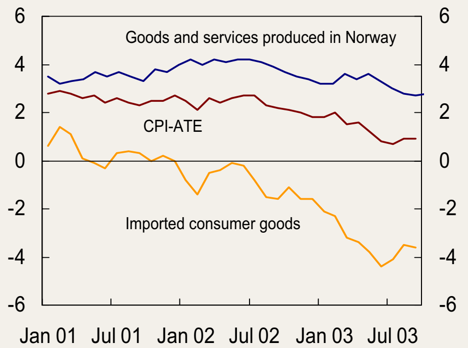
Chart 1c Real exchange rate. Deviation from average 1970-2002. Annual figures. 1970 - 2003. Per cent



[1] Average exchange rate at 23 Oct 2003

Sources: TRCIS, Ministry of Finance, Statistics Norway and Norges Bank

Chart 1d CPI-ATE. Total and distributed by imported and domestically produced goods and services[1]. 12-month rise. Per cent



[1] Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

compared with the same period one year earlier. Developments have been somewhat weaker than projected, but there have been signs of a levelling off recently. Developments in unemployment (Labour Force Survey, LFS) have been broadly in line with projections, however. Unemployment is now approximately at the level prevailing around 1996-1997, before cost inflation started to accelerate in Norway. Output gap estimates indicate that the output gap is near zero (see Table 1).

Manufacturing output has fallen over the past year. Manufacturing investment was high last year owing to major projects in the aluminium industry, but is now rapidly contracting. Investment growth in other industries is also weak. Non-residential vacancy rates are high, particularly in the central east region of the country. Activity in the construction industry is being buoyed by rehabilitation projects in the school sector and growth in building investment.

Weak developments in manufacturing have aggravated the problems facing industries that supply business services. For example, the hotel occupancy rate for business customers has fallen, and revenues from business air travel have fallen over the past two years.

Growth in credit to enterprises is still contracting, and stood at an annualised 1.9 per cent in August. The debt/income ratio (debt burden) has fallen, but remains at a historically high level. Credit to the commercial property sector is considered to be vulnerable. The interest rate reductions since December have eased the situation for enterprises. Prospects for many companies have also improved as a result of a weaker krone and sharp advances in equity prices in Norway.

In spite of weak developments in the first six months of the year, recent developments suggest that growth in the Norwegian economy may be picking up:

- Mainland GDP growth expanded by 0.3 per cent from the first quarter to the second quarter of this year after falling in the two preceding quarters.
- Growth in private consumption increased in the second quarter, and goods consumption figures indicate high growth also in the third quarter. Household confidence in the country's economy seems to have rebounded, and household expectations concerning their own financial situation next year are more optimistic.

- The fall in house prices has come to a halt, and prices showed a rise from the second to the third quarter. Information from Norges Bank's regional network indicates that sales of new dwellings had picked up after summer and that maintenance and rehabilitation activity is strong. Growth in household borrowing seems to have stabilised at a high level.
- Information from Norges Bank's regional network also indicates that cost reductions in many service sectors are now yielding results in the form of improved profitability. Another positive factor is the sharp rebound in the Norwegian stock market.
- The impression provided by the regional network is that the business sector may now have a more positive attitude to investing than earlier this year. The focus may have shifted to some extent away from cost reduction towards income-generating strategies.
- Seasonally adjusted employment increased by 3000 from May to July, after falling consistently from October 2002 to May (LFS figures). There is uncertainty attached to the seasonally adjusted monthly LFS figures, but they indicate that the fall in employment may have come to halt. Information from the regional network indicates that the decline in employment has abated. At the same time, there are signs that unemployment is rising at a slower pace.
- The number of bankruptcies in the business sector fell from the second to the third quarter.

Growth in the global economy has picked up, fuelled by high growth in the US and some Asian countries, including Japan. In the euro area, growth has been considerably weaker.

During the summer, international stock markets advanced. US and German bond yields have shown pronounced movements in recent months. Long-term interest rates fell markedly from April to mid-June, down to historically low levels. From end-June to end-August, long-term rates rose again. The optimism prevailing in the summer was followed by renewed uncertainty and a fall in US and German long-term interest rates. Long-term rates have edged up so far in October. There have also been marked fluctuations between major currencies. Both the Japanese yen and the euro have appreciated considerably against the US dollar since the beginning of September. The fluctuations between major currencies and movements in long-term interest rates internationally probably reflect to some extent growing concern about the imbalances in the US economy, both in the private and public sectors.

2.2 *Prospects ahead*

In the June *Inflation Report*, growth in the Norwegian economy was projected to pick up in the course of autumn 2003 and winter 2003/2004, based on the assumption of a fall in interest rates to 3 per cent this year and a gradual depreciation of the krone, as measured by the I-44, of around 3 per cent to the end of 2005. The recovery would primarily be driven by an upswing in private consumption and an expected improvement in the global economic environment. Developments since the previous *Inflation Report* essentially support this picture.

We expect global growth to pick up to a more normal level during the projection period. For our trading partners as a whole, growth appears to be in line with that expected in the June *Inflation Report*, although with some adjustments to the distribution of growth across countries.

Uncertainty surrounding developments ahead is considerable, and the world economy seems to be very vulnerable to new disturbances. The main risk is associated with the considerable imbalances in the US economy. The recovery is primarily being driven by fiscal and monetary easing and growth in domestic demand in the US. It is uncertain if and when growth will be self-sustainable. The balance of risks and prospects of low inflation may imply low key policy rates in the US and Europe for an extended period ahead. If the euro continues to appreciate against the US dollar, there may be prospects of even lower inflation and growth in Europe, which may result in further interest rate reductions in Europe.

Oil prices have picked up somewhat since June. Our projections are based on the technical assumption that oil prices will reach a level of USD 20 three years ahead.

There are some signs that growth in the Norwegian economy is picking up (see Section 2.1). However, growth has not yet gained a firm footing. On the whole, demand components are not generating balanced growth impulses. There are prospects of strong growth in private consumption, but it may take some time before investment and employment show growth. Over the past year, productivity growth in the Norwegian economy has probably been somewhat lower than normal. In the first round, a rise in demand may thus be accompanied by higher production within existing production capacity. Information from the regional network indicates that few, if no sectors, are seeking to increase employment in the short run. Moreover, lower activity in manufacturing industry is likely to act as a drag on growth in the Norwegian economy for several years ahead. Cost competitiveness is weak, even though the situation has improved considerably as a result of the krone depreciation since the beginning of the year.

Petroleum investment is expected to expand by about 15 per cent in 2003 and 2004. In 2005 and 2006, petroleum investment is projected to decline by 5 per cent and 20 per cent, respectively. Even though the import share for many of these investments is high, growth will contribute to holding up activity in oil-related industries in the short term. Subsequently, the impetus to growth in the mainland economy will turn negative.

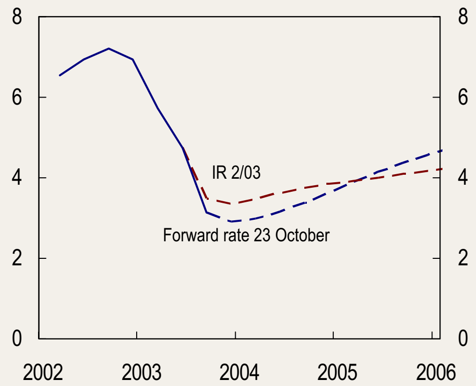
The structural deficit, measured as a percentage of trend mainland GDP growth, has increased since 2001, reflecting an expansionary fiscal stance. In the National Budget for 2004, the Government calls for a further increase in the deficit measured in this way. At the same time, growth in public consumption has been revised upwards. For 2003 and 2004 as a whole, fiscal policy will provide some stimulus to the Norwegian economy. For 2004, underlying, nominal growth in central government expenditure is estimated at 5.4 per cent. Deflated by the expected rise in prices for government expenditure, real, underlying expenditure growth is 2.1 per cent. Deflated by the expected rise in prices for mainland GDP, real, underlying expenditure growth comes to 3½ per cent.

With an expected improvement in cyclical conditions, the structural deficit is not expected to increase in 2005 and 2006. This seems to be in line with the application of the fiscal rule as presented by the Ministry of Finance in the National Budget for 2004. We have assumed that government expenditure growth in value terms will be broadly in line with value growth in revenues.

Developments in wage growth in the period 1998-2003 indicate that the scale of labour shortages in the labour market as a whole plays an important role in wage determination. Profitability in traditional, internationally exposed manufacturing sectors appears to have less influence on the overall outcome of wage settlements, both in manufacturing and other industries. Our projections are based on the assumption that developments in the overall labour market still play an important role in wage determination. Should wage growth in manufacturing regain a more prominent role, wage growth may be lower than we have assumed and suggest a lower interest rate path.

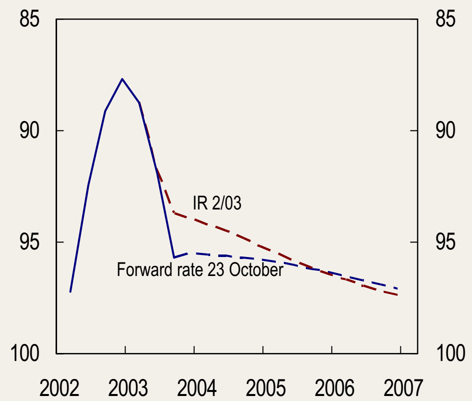
The projections for economic developments for the next few years are based on technical assumptions concerning the interest rate and the exchange rate. We have applied the forward interest rate and the forward exchange rate as a basis for our projections.

Chart 2a Assumption for money market rates. Quarterly figures. 2002 Q1 - 2006 Q4



Source: Norges Bank

Chart 2b Assumption for the krone exchange rate (I-44). Quarterly figures. 2002 Q1 - 2006 Q4



Source: Norges Bank

Forward interest rates reflect expectations that the sight deposit rate will be held at 2½ per cent this autumn. The forward interest rate edges up from spring 2004. The sight deposit rate is expected to be about 3½ per cent one year ahead (see Chart 2). Interest rates in Norway and abroad move broadly in tandem. As a result, the interest rate increase will be accompanied by some depreciation of the krone. The forward exchange rate shows an exchange rate depreciation of a little less than 2 per cent from the current level to end-2006.

Low interest rates will contribute to high growth in private consumption. Lower interest rates reduce interest expenses and push up household real disposable income. Moreover, experience indicates that lower interest rates lead to a lower saving ratio. Against this background, we expect that a temporary fall in the saving ratio will boost consumption growth. In conjunction with improved profitability and higher demand abroad, consumption growth will gradually push up investment and employment in the service sector. However, we expect that it will take some time before overall employment shows growth. Unemployment is expected to edge up through autumn and remain fairly stable through next year. Furthermore, excess capacity in the non-residential market, particularly in the larger cities, indicates that it will take time for investment to pick up. Overall, GDP growth is projected to pick up to a little more than trend growth next year, primarily fuelled by higher private consumption. In 2005, unemployment is expected to edge down. The output gap is estimated to be positive as from next year (see Table 1 and Chart 3).

This scenario will lead to higher inflation. Within a horizon of 4-6 quarters, however, the path for inflation will to a large extent be influenced by exchange rate developments. The impact on inflation of the appreciation of the krone through last year is estimated to have been strongest around the second-third quarter of this year. The nominal exchange rate (I-44) has depreciated by about 9 per cent since the beginning of the year. The unwinding of the effects of the earlier appreciation and the effects of the depreciation since the beginning of the year will gradually push up inflation. We anticipate a more neutral contribution from the krone exchange rate as from 2004. Inflation will reach the inflation target in the fourth quarter of 2005, and then stand slightly above target (see Chart 3).

Table 1. Projections based on forward interest rates and the forward excange rate

	2003	2004	2005	2006
Mainland demand	1¼	3¾	3¼	2¼
Private consumption	3¼	5	3½	2
Public consumption	1	2	1½	1½
Total gross investmt.	-5	1	4½	5
Export	1	2	3¼	3¼
Imports	2	5¼	2½	0
Mainland Norway GDP	¾	3	2¾	2¼
Output gap	-¼	¼	½	¼
Employment	-1	¼	1	½
LFS unemployment	4½	4¾	4½	4½
Annual wages	4½	4¼	4¾	4¾
Wage gap	0	-¼	¼	¼
CPI-ATE	1¼	2	2¼	2½
Note:				
Petroleum investments	15	15	-5	-20

Source: Norges Bank

3. Monetary policy assessments and strategy

Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent. The key rate is set on the basis of an overall assessment of the inflation outlook, normally two years ahead. The key rate will normally be changed gradually so that we can assess the effect of interest rate changes and other new information about economic developments. With financial market confidence in the inflation target, Norges Bank has greater scope for promoting stability in the real economy than would otherwise be the case. This scope will increase as the inflation target is incorporated as the anchor for wage formation.

With a flexible inflation target, developments in output and employment are also taken into consideration. An assessment of output and employment stability must take into account the long-term output potential of the economy. The output potential depends on productivity, capital stock and the labour supply. The share of labour that can be absorbed without an attendant acceleration in wage growth depends on wage formation.

The output gap measures the extent to which actual output deviates from trend. Although the output gap is not directly observable, rough output gap estimates provide a concise basis for monetary policy assessments and for considering trade-offs.

The choice of horizon for monetary policy implicitly provides some information about the trade-offs in monetary policy. A central bank that places considerable emphasis on inflation and little emphasis on the real economy will choose a short horizon. A central bank that places considerable emphasis on developments in the real economy will choose a long horizon.

The possibility of smoothing fluctuations in the economy largely depends on how firmly the inflation target is anchored among economic agents. The more confidence there is that the inflation target will be achieved, the wider the scope for stabilising the real economy.

Normally, the interest rate is set with a view to attaining an inflation rate of 2½ per cent two years ahead. However, it is generally possible to achieve the inflation target in the shorter run through more rapid and pronounced interest rate changes. The conduct of monetary policy is based on a flexible inflation target, whereby both variability in output and inflation are given weight. A time horizon for monetary policy of two years will normally reflect how the inflation target can be attained with reasonable weight assigned to stability in output and employment.

In line with this approach, interest rate setting must take into account the outlook for inflation and goods and services production. A monetary policy stance that results in an inflation rate that is below target and a negative output gap will normally be too tight. Likewise, a monetary policy stance that results in an inflation rate that is above target and a positive output gap will normally be too expansionary.

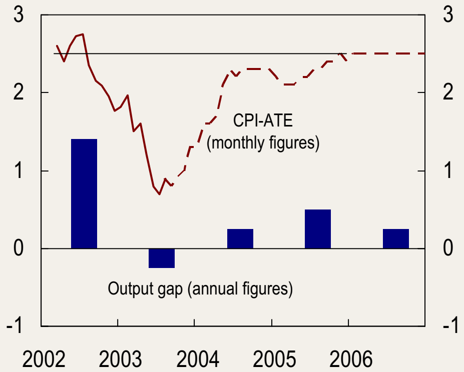
In a situation where our projections imply that considerable imbalances in the real economy would emerge if the interest rate were set so that the two-year-ahead inflation projection was on target, it may be appropriate to apply a somewhat longer time horizon. This is in line with Norges Bank's previous declarations, stating that the path for inflation and the real economy ahead will be taken into account in our assessments. If such a situation should arise, Norges Bank will also place considerable emphasis on avoiding a loss of confidence in the inflation target.

A monetary policy strategy in the period to the next strategy period should be seen in the light of the assessment of the economic outlook for the coming years.

3.1 Assessment of developments in inflation and the output gap over the coming years

Chart 3 shows that inflation will run considerably below the inflation target over the next year. With an interest rate ahead in line with the forward interest rate, inflation is projected to reach target two years ahead. Wage growth is projected to edge up to 4¾ per cent in 2005 and 2006. Growth in mainland output is projected to be slightly higher than trend growth in 2004 and 2005, declining to somewhat below trend in 2006. According to our estimates, the output gap will be slightly positive from 2004.

Chart 3 Projected CPI-ATE and output gap with forward interest rate and forward exchange rate. Per cent



Sources: Statistics Norway and Norges Bank

According to the one-year-ahead projections, the inflation gap will be negative while the output gap will be slightly positive. In isolation, the low one-year-ahead inflation projection might suggest a somewhat lower interest rate in the short run than implied by the forward interest rate path. However, monetary policy will have little impact on consumer price inflation in the next months. The negative inflation gap and output gap is primarily attributable to weaker-than-expected developments in the world economy over the past year and the effects of low import prices. If the objective of monetary policy were to rapidly return inflation to target, e.g. in the course of six months, the interest rate would probably have to be set at a level that would lead to a marked change in the exchange rate. Such a monetary policy approach might also entail a pronounced impact on demand for and production of goods and services and employment. The output gap would then be wider in 2005 and 2006. In addition, wage growth would probably higher than projected so that the inflation gap would widen three years ahead.

A markedly lower interest rate than the forward interest rate in the short term might necessitate a higher interest rate later in order to attain the inflation target. It is likely that this would be reflected in market expectations fairly rapidly, and it would be less likely that an interest rate reduction would lead to a weaker krone. It may thus prove difficult to achieve higher inflation in the short term through an interest rate reduction. Such a policy might, however, lead to higher inflation two years ahead.

3.2 Monetary policy in the period to 10 March 2004

In the press release issued following the monetary policy meeting of 17 September, where the sight deposit rate was reduced to 2.5 per cent, Norges Bank stated that the probability that inflation two years ahead would be higher than 2½ was the same as the probability that it would lower.

With an interest rate path ahead in line with the forward interest rate and a weaker krone in line with the forward exchange rate, there are now prospects that inflation will move up and reach 2½ per cent two years ahead. Growth in goods and services production is also expected to pick up. The analysis is based on an upturn in the world economy with rising interest rates, an oil price that gradually falls from today's level to about USD 20 per barrel and a fiscal policy in line with Government's budget programme as described in the National Budget for 2004.

In this context, the rise in interest rates internationally is a critical precondition for Norwegian interest rates to rise gradually with an attendant depreciation of the krone. Forward interest rates imply an interest rate at approximately today's level over the next four months. Under these assumptions, and with a normal level of uncertainty, our analysis implies an interest rate in the interval 2-3 per cent at the end of the strategy period.

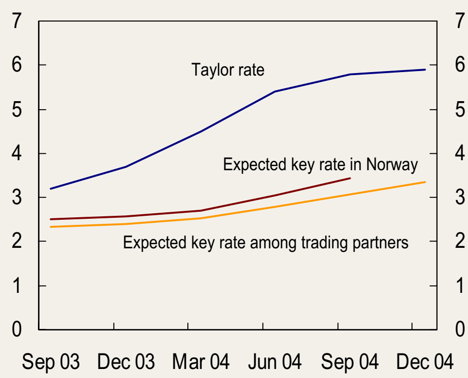
The *Taylor rule* is a simple interest rate rule that is not based on a model for the economy. As such, the interest rate rule is not forward-looking. Nevertheless, the rule has still yielded sound policy results in various types of models.[1] The rule may therefore be a robust cross-check for the Bank's interest rate assessments.

Chart 4 shows the estimates for the Taylor rate based on our projections for the inflation and output gap. The Taylor rate is estimated to increase from the current level of about 3½ per cent to 4½ per cent in February. The increase is attributable to an upward movement in both inflation and output over the next months. According to the rule, the nominal interest rate should increase so that the real interest rate also increases when inflation rises. The main reason for the relatively wide difference between the Taylor rate and the recommended interest rate interval is that the Taylor rule does not take account of exchange rate changes or developments in the global economy. With an interest rate path for the next four months that is consistent with the Taylor rate, the probability of an appreciation of the krone will increase.

Implications of new information

The interest rate interval for the period ahead, as proposed here, should be assessed regularly on the basis of new information emerging during the strategy period that is of significant importance for the outlook for the real economy and inflation.

Chart 4 Taylor rate and expected key rates[1)]. Quarterly figures. 2003 Q3 - 2004 Q4



1) The expected key rate is estimated on the basis of 3-month FRA rates in Norway and among trading partners on 23 October 03.

Source: Norges Bank

1 See, for example, the articles in Taylor, J. (red.), *Monetary Policy Rules*. NBER – Business Cycles Series, Volume 31, 1999.

If developments deviate markedly from our projections and the assumptions underlying our analysis, this may in isolation suggest a deviation from the recommended interval for the sight deposit rate.

A stronger *krone exchange rate* will make it more demanding to attain the inflation target. Our model-based calculations indicate that an appreciation of close to 3 per cent or more could bring the inflation projection well below target two years ahead. Consequently, a pronounced appreciation of the krone may in isolation suggest that the interest rate should be set in the lower end of, or below, the recommended interval. A depreciation of the krone might result in a faster rise in prices. The krone appreciated somewhat after the monetary policy meeting in September. Because inflation is already at a low level, a more pronounced depreciation of the krone must occur before it would be appropriate to consider an interest rate that is higher than the recommended interval in the strategy period.

Any interest rate reactions must, however, be based on an analysis of the background for exchange rate movements and an assessment of the duration of the change in the exchange rate. A change in the exchange rate tends to be long-lasting if the change is driven by economic fundamentals, and not by sentiment and portfolio shifts in the foreign exchange market.

In the baseline scenario, the *year-on-year rise in the CPI-ATE* moves up from 0.9 per cent in September to 1.3 per cent in January 2004. The last inflation figures to be published in this strategy period are the inflation figures for January. Wide deviations from the projections in the coming months may suggest that the interest rate should be set outside the interval. After a fairly long period of low inflation, it is appropriate to be particularly vigilant in monetary policy if inflation does not increase as expected. In that case, it will be appropriate to reduce the interest rate or alternatively keep the interest rate unchanged at the low level even when interest rates start to rise abroad.

With lower *inflation expectations* in the longer term, it may be more demanding to push up inflation. There is no indication that inflation expectations are now deviating from the inflation target in the long term. Table 2 shows that economic agents expect inflation to be around target 5 years ahead. The next survey will be published at the beginning of December.

Table 2 Expected consumer price inflation 2 and 5 years ahead

	2 years ahead	5 years ahead
Experts	2.3 (2.2)	2.4 (2.5)
Employees' organisations	2.3 (2.6)	2.6 (3.0[1])
Employers' organisations	2.1 (2.2)	2.4 (2.4)
Business leaders	2.8 (3.0)	

[1] The figure is significantly infuenced by an extreme value. Expected inflation excluding this extreme value is 2.6 per cent.

Source: TNS Gallup

If the expectations survey or other indicators such as Consensus Forecasts or the forward 10-year interest rate differential against other countries indicate a pronounced change in inflation expectations, this would in isolation suggest that we should consider more pronounced monetary policy measures. The risk of a fall in inflation expectations is assessed as being greater than the risk of an increase.

The Government's national and central government budget proposal for 2004 was presented on 8 October. The recommendation of the Standing Committee on Finance and Economic Affairs will be issued no later than 20 November. Higher growth in *public employment and consumption* than that proposed in the budget may, in isolation, suggest another interest rate path.

The projections in the baseline scenario imply sharp *growth in consumption* in the period ahead. Growth in private consumption this quarter is projected at 1¾ per cent in the baseline scenario. In the first quarter of next year, growth is projected at 1½ per cent. The goods consumption index, Quarterly National Accounts (QNA) figures and other indicators will provide new information about consumption in the period ahead. If growth in private consumption does not materialise, it would in isolation be appropriate to consider an interest rate below or in the lower end of the interval.

Credit growth and house price inflation provide an indication of the sustainability of the rate of increase in these two variables over time. With the pronounced easing of monetary policy through 2003, there is a risk that credit growth will accelerate. It may then be appropriate to set the interest rate higher than the recommended interval. However, growth in credit to the household sector and the rise in house prices must be considered in relation to growth in credit to the enterprise sector and the rise in non-residential rental prices.

The international economic situation may have passed a trough. It is particularly difficult to project economic developments around a turnaround. Over the next 4 months, we will receive current data indicating whether our assumptions are consistent with actual developments.

Growing focus on the imbalances in the US economy is the likely cause behind the fluctuations between major currencies in recent weeks. The euro has appreciated. Should this lead to a change in the prospects for European economies, interest rates may be further reduced in Europe. In such a situation, the krone may appreciate. Interest rate cuts in other countries mean that it will be appropriate to consider an interest rate in the lower end of, or below, the recommended interval.

Labour market developments will influence price and wage inflation ahead. LFS unemployment is projected at 4¾ per cent at the end of the strategy period. Wide deviations from this level imply in isolation that it will be appropriate to set the interest rate outside the recommended interval.

3.3 Monetary policy in response to particularly adverse developments

Some central risk factors have been listed above, and we will receive more information about these factors during the strategy period. It is relatively unlikely that many of these factors will take a severely negative turn at the same time. Monetary policy strategy should be robust to such particularly adverse developments, which in the short run are characteristic of a serious conflict between the objective of attaining the inflation target and stability in the real economy.

A serious conflict will occur if the global economy experiences a new downturn without a fall in oil prices, and at the same time domestic consumption growth proves to be higher than projected. This could result in expectations of a wide interest rate differential against other countries and a marked appreciation of the krone. If such a combination of disturbances should occur, it may prove particularly difficult to bring inflation up to target while ensuring stability in the real economy over the next two to three years.

A scenario of this type involves a difficult trade-off. A possible strategy might be to keep the interest rate at a very low level to counter a marked appreciation of the krone, even though this may aggravate the imbalances in the real economy. Global developments may, however, improve again so that the krone returns to a more normal level. If there are strong pressures on domestic real economic resources at the same time, inflation might accelerate.

An alternative strategy might be to raise the interest rate to curb pressures in the real economy, even though this may lead to a further appreciation of the krone. However, it cannot be ruled out that it may take a long time for world economic growth to pick up so that inflation becomes entrenched at a very low level.

If the above scenario should occur, we will place considerable emphasis on ensuring that the inflation target is a credible anchor for inflation expectations. If inflation runs well below target for a longer period, inflation expectations may become entrenched at a level that is too low. If the credibility of the inflation target is impaired, bringing inflation up towards target will be associated with greater real economic costs.

A somewhat more likely scenario than that described above is that global economic developments ahead are less auspicious than projected and that the Norwegian economy is also affected, with low oil prices, weak growth in output and employment and low inflation. Such a scenario does not, however, involve the same difficult trade-offs in interest-rate setting as that outlined above.

Conclusion

- Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent.
- The key rate is set on the basis of an overall assessment of the inflation outlook, normally two years ahead. The key rate will normally be changed gradually so that we can assess the effects of an interest rate change and other new information about economic developments.
- With financial market confidence in the inflation target, Norges Bank has greater scope for promoting stability in the real economy than would otherwise be the case. This scope will increase as the inflation target is incorporated as the anchor for wage formation.

- Economic developments broadly in line with projections and the current balance of risks suggest a sight deposit rate in the interval 2-3 per cent at the beginning of March 2004.
- Exchange rate developments and the effects of a stronger krone on inflation and output are uncertain. If the krone remains strong, it may be appropriate to consider an interest rate in the lower end of, or below, the interval. Likewise, it would be appropriate to consider an interest rate in the upper end of, or above, the interval if the krone should depreciate markedly. Any interest rate reactions must, however, be based on an analysis of the background for exchange rate movements and an assessment of the duration of the change in the exchange rate.
- After a fairly long period of low inflation, it is appropriate to be particularly vigilant in monetary policy if inflation does not increase as expected. In that case, it will be appropriate to reduce the interest rate or alternatively keep the interest rate unchanged at the low level even when interest rates start to rise abroad.
- The interest rate interval for the period ahead should be assessed regularly on the basis of new information emerging during the strategy period and information that is of significant importance for the outlook for the real economy and inflation.

Monetary policy meetings in Norges Bank

with changes in the sight deposit rate and a statement regarding the inflation outlook

Date	Sight deposit rate[1]	Change	Bias[2]
Future meetings			
22 September 2004			
11 August 2004			
1 July 2004			
26 May 2004			
21 April 2004			
11 March 2004			
Previous monetary policy meetings			
28 January 2004	2	-¼	Downside bias
17 December 2003	2,25	-¼	Downside bias
29 October 2003	2,5	0	Neutral bias
17 September 2003	2.5	-½	Neutral bias
13 August 2003	3	-1	Downside bias
25 June 2003	4	-1	Downside bias
30 April 2003	5	-½	Downside bias
05 March 2003	5.5	-½	Downside bias
22 January 2003	6	-½	Downside bias
11 December 2002	6.5	-½	Downside bias
30 October 2002	7	0	Neutral bias
18 September 2002	7	0	Neutral bias
07 August 2002	7	0	Upside bias
03 July 2002	7	+½	Upside bias
22 May 2002	6.5	0	Upside bias
10 April 2002	6.5	0	Neutral bias
27 February 2002	6.5	0	Neutral bias
23 January 2002	6.5	0	Downside bias
12 December 2001	6.5	-½	Downside bias
31 October 2001	7	0	Downside bias
19 September 2001	7	0	Neutral bias
07 August 2001	7	0	Neutral bias
20 June 2001	7	0	Neutral bias

[1]The sight deposit rate is Norges Bank's key rate. The sight deposit rate is the interest rate on banks' deposits in Norges Bank. The sight deposit rate forms a floor for money market rates. By managing banks' access to liquidity, the central bank ensures that short-term money market rates are normally a little higher than the sight deposit rate.

[2] A *neutral bias* indicates that according to Norges Bank's assessment, with an unchanged interest rate (at the level after the change approved the same day), the probability that inflation two years ahead will be higher than 2½% is the same as the probability that it will be lower. A *downside bias* indicates that according to Norges Bank's assessment, with an unchanged interest rate (at the level after the change approved the same day), the probability that inflation two years ahead will be lower than 2½% is greater than the probability that it will be higher. An *upside bias* indicates that that according to Norges Bank's assessment, with an unchanged interest rate (at the level after the change approved the same day), the probability that inflation two years ahead will be higher than 2½% is greater than the probability that it will be lower.

Annex III
Statistics

Table 1 Main macroeconomic aggregates

Percentage change from previous year/quarter		GDP	Mainland GDP	Privat cons-umption	Public spending on goods and services	Mainland fixed investment	Petroleum investment[1]	Exports trad. goods	Imports
1997		5.2	4.9	3.2	2.5	11.8	24.9	8.6	12.4
1998		2.6	4.1	2.7	3.3	8.6	22.2	3.5	8.5
1999		2.1	2.7	3.3	3.2	-0.1	-13.1	4.0	-1.8
2000		2.8	2.5	3.9	1.3	-1.2	-23.0	2.5	2.7
2001		1.9	1.7	2.6	2.7	0.7	-1.0	3.7	0.9
2002		1.0	1.3	3.6	3.2	-4.6	-4.6	1.3	1,7
2002[2]	Q1	-0.6	0.9	1.4	3.1	-3.8	-13.0	-0.4	-1.4
	Q2	1.8	-0.4	0.7	-3.3	1.2	-4.2	-2.1	5.3
	Q3	-1.2	0.3	0.7	2.6	-3.0	2.2	2.4	-3.0
	Q4	-0.4	-0.6	1.3	-0.3	2.5	6.0	-4.3	2.1
2003	Q1	-0.1	-0.1	-0.0	0.6	-3.9	6.5	-0.0	1.6
	Q2	-0.2	0.5	1.2	1.1	-0.3	6.0	4.3	-1.2
	Q3	0.8	0.8	1.0	0.1	-1.0	4.3	0.6	-1.5
Level 2002, In billions of NOK		1521	1207	685	332	194	53	200	415

1) Extraction and pipeline transport
2) Seasonally adjusted quarterly figures

Table 2 Consumer prices

Twelve-month rise. Per cent		CPI	CPI-ATE[1]	CPI-AT[2]	CPI-AE[3]	HICP [4]
1997		2.6			2.3	2.6
1998		2.3			2.9	2.0
1999		2.3			2.3	2.1
2000		3.1			2.3	3.0
2001		3.0	2.6	3.2	2.4	2.7
2002		1.3	2.3	2.2	1.6	0.8
2003		2.5	1.1	2.5	1.0	2.0
2003	Jan	5.0	1.8	5.4	1.6	4.2
	Feb	4.8	2.0	5.2	1.7	4.1
	Mar	3.7	1.5	3.9	1.3	3.2
	Apr	2.9	1.6	3.0	1.7	2.5
	May	2.1	1.2	2.0	1.2	1.8
	Jun	1.7	0.8	1.6	0.9	1.5
	Jul	1.5	0.7	1.4	0.7	1.2
	Aug	2.1	0.9	2.1	0.9	1.8
	Sep	2.1	0.9	1.9	1.0	1.5
	Oct	1.6	0.8	1.6	0.9	1.3
	Nov	1.4	0.5	1.3	0.6	1.0
	Dec	0.6	0.4	0.5	0.5	0.1
2004	Jan	-1.8	0.1	-2.4	0.5	-1.4

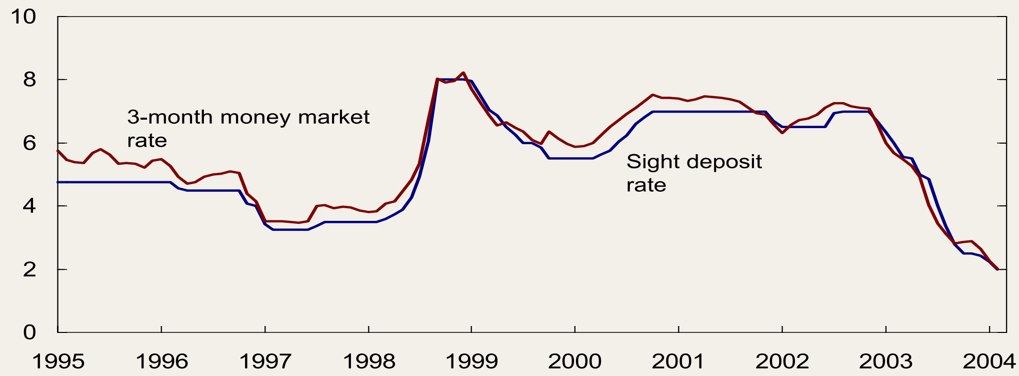
1) CPI-ATE: CPI adjusted for tax changes and excluding energy products
2) CPI-AT: CPI adjusted for tax changes
3) CPI-AE: CPI excluding energy products
4) HICP: The Harmonised Index of Consumer Prices. The index is based on international criteria drawn up by Eurostat.

Table 3 Interest rates

Per cent		Norges Bank's key rate (average)	Money market rates NIBOR[1]			Yield on government bonds[2]
		Sight deposit rate	1-week	3-month	12-month	10-year
1997		3.4	3.6	3.7	4.2	5.9
1998		5.5	5.9	5.8	5.7	5.4
1999		6.3	6.9	6.5	6.0	5.5
2000		6.2	6.6	6.8	7.1	6.2
2001		7.0	7.2	7.2	7.1	6.2
2002		6.7	6.9	6.9	6.9	6.4
2003		4.2	4.4	4.1	4.0	5.0
2002	Jul	6.9	7.1	7.3	7.4	6.6
	Aug	7.0	7.1	7.3	7.3	6.3
	Sep	7.0	7.1	7.1	7.0	6.1
	Oct	7.0	7.1	7.1	6.8	6.2
	Nov	7.0	7.1	7.1	6.7	6.1
	Dec	6.7	6.9	6.6	6.1	5.9
2003	Jan	6.3	6.4	6.0	5.6	5.7
	Feb	6.0	6.1	5.7	5.3	5.3
	Mar	5.6	5.6	5.5	5.2	5.2
	Apr	5.5	5.6	5.3	5.0	5.3
	May	5.0	5.2	4.9	4.5	5.0
	Jun	4.8	4.8	4.0	3.6	4.5
	Jul	4.0	4.2	3.5	3.2	4.9
	Aug	3.4	3.5	3.1	3.2	5.0
	Sep	2.8	3.0	2.8	3.0	4.9
	Oct	2.5	2.9	2.9	3.1	4.9
	Nov	2.5	2.8	2.9	3.1	5.0
	Dec	2.4	2.7	2.6	2.8	4.8
2004	Jan	2.2	2.4	2.3	2.3	4.5
	Feb	2.0	2.2	2.0	2.1	4.3
2004	13 Feb	2.0	2.3	2.0	2.1	4.3
	20 Feb	2.0	2.2	1.9	1.9	4.2
	27 Feb	2.0	2.2	1.9	1.9	4.1
	4 Mar[3]	2.0	2.1	1.8	1.9	4.1

[1] NIBOR= Norwegian interbank offered rate.
[2] Yield on representative 10-year government bond. The yield is calculated by weighting one or two government bonds with the residual maturity.
[3] Average 1-4 March.

3-month money-market rate and sight deposit rate. Monthly figures. Jan 1995 - Feb 2004



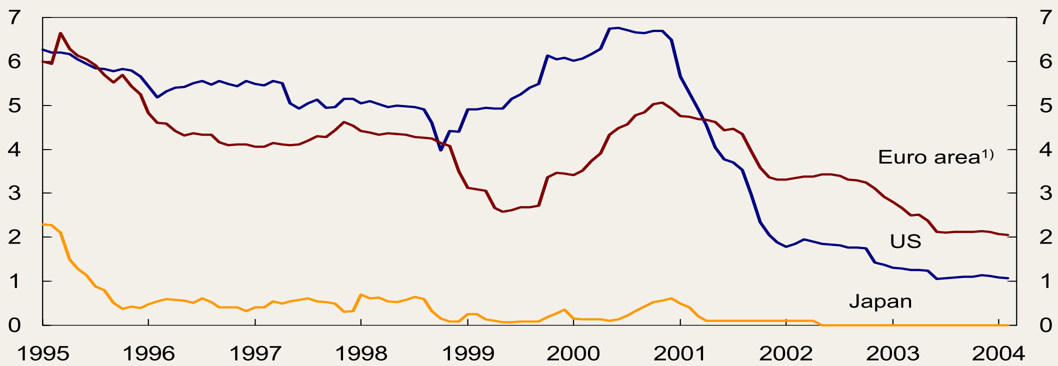
Source: Norges Bank

Table 4 International interest rates

		Short term interest rates[1] for key currencies in the Euromarket						Interest rate differential	Yield on government bonds[3]	
		USD	JPY	EUR	GBP	SEK	Trading partners[2].	NOK/trading partners	US	Germany
1997		5.2	0.5		6.8	4.2	4.1	-0.5	6.4	5.7
1998		4.8	0.5		7.3	4.2	4.2	1.5	5.3	4.6
1999		5.4	0.2	2.9	5.5	3.3	3.3	3.0	5.8	4.6
2000		6.5	0.3	4.4	6.1	4.0	4.4	2.2	6.1	5.3
2001		3.7	0.1	4.2	5.0	4.0	4.0	3.2	5.2	4.9
2002		1.8	0.0	3.3	4.0	4.2	3.2	3.6	4.6	4.9
2002	Jul	1.8	0.0	3.4	4.0	4.4	3.3	3.9	4.6	4.9
	Aug	1.8	0.0	3.3	3.9	4.3	3.2	4.0	4.2	4.7
	Sep	1.8	0.0	3.3	3.9	4.3	3.2	3.9	3.9	4.5
	Oct	1.7	0.0	3.2	3.9	4.3	3.1	3.9	3.9	4.6
	Nov	1.4	0.0	3.1	3.9	4.1	3.0	4.0	4.1	4.6
	Dec	1.4	0.0	2.9	4.0	3.8	2.9	3.6	4.1	4.4
2003	Jan	1.3	0.0	2.8	3.9	3.8	2.8	3.1	4.0	4.2
	Feb	1.3	0.0	2.7	3.7	3.7	2.7	2.9	3.9	4.0
	Mar	1.3	0.0	2.5	3.6	3.5	2.5	2.9	3.8	4.1
	Apr	1.3	0.0	2.5	3.6	3.5	2.5	2.6	4.0	4.2
	May	1.2	0.0	2.4	3.6	3.3	2.4	2.4	3.5	3.9
	Jun	1.1	0.0	2.1	3.6	2.9	2.2	1.7	3.3	3.7
	Jul	1.1	0.0	2.1	3.4	2.8	2.1	1.2	4.0	4.1
	Aug	1.1	0.0	2.1	3.5	2.8	2.2	0.9	4.4	4.2
	Sep	1.1	0.0	2.1	3.6	2.8	2.2	0.5	4.3	4.3
	Oct	1.1	0.0	2.1	3.8	2.8	2.2	0.5	4.2	4.3
	Nov	1.1	0.0	2.1	3.9	2.8	2.2	0.5	4.3	4.5
	Dec	1.1	0.0	2.1	4.0	2.8	2.2	0.3	4.3	4.4
2004	Jan	1.1	0.0	2.1	4.0	2.7	2.2	0.0	4.1	4.3
	Feb	1.1	0.0	2.1	4.1	2.5	2.2	-0.3	4.1	4.2
2004	13 Feb	1.1	0.0	2.1	4.1	2.5	2.1	-0.2	4.0	4.1
	20 Feb	1.1	0.0	2.0	4.1	2.5	2.1	-0.3	4.0	4.1
	27 Feb	1.1	0.0	2.0	4.1	2.5	2.1	-0.4	4.0	4.1
	4 Mar[4]	1.1	0.0	2.0	4.2	2.5	2.1	-0.4	4.0	4.1

1) 3-month rates. Per cent
2) 3-month interest rates in Norway's 25 most important trading partners (geometrical average weighted with the OECD's current trade weights). Per cent
3) Yield on government bonds with a residual maturity of 10 years. Per cent
4) Average 1-4 March

3-month rates in the US, the euro area and Japan. Per cent. Monthly figures. Jan 1995 - Feb 2004



1)Theoretical ECU rate up to December 1998

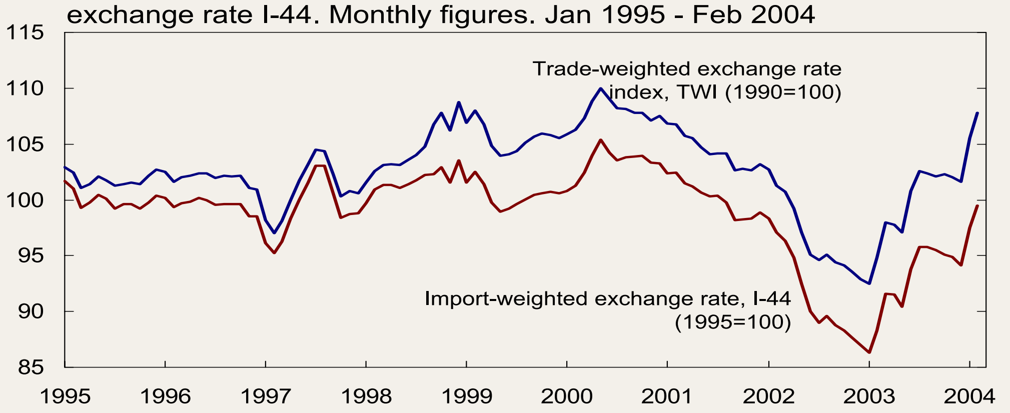
Source: Norges Bank

Table 5 Exchange rates

		Effective exchange rates		Bilateral exchange rates		
		Import-weighted exchange rate[1]	Trade-weighted exchange rate index[2]	NOK/EUR	NOK/USD	NOK/SEK
1997		99.2	101.0		7.1	92.7
1998		101.7	104.7		7.5	94.9
1999		100.4	105.6	8.3	7.8	94.4
2000		103.3	107.8	8.1	8.8	96.0
2001		100.2	104.4	8.0	9.0	87.0
2002		91.6	96.7	7.5	8.0	82.0
2002	Jul	89.0	94.6	7.4	7.5	79.9
	Aug	89.6	95.1	7.4	7.6	80.3
	Sep	88.8	94.4	7.4	7.5	80.3
	Oct	88.3	94.1	7.3	7.5	80.6
	Nov	87.7	93.6	7.3	7.3	80.6
	Dec	87.0	92.9	7.3	7.2	80.2
2003	Jan	86.3	92.5	7.3	6.9	79.9
	Feb	88.3	94.8	7.5	7.0	82.5
	Mar	91.6	98.0	7.8	7.3	85.0
	Apr	91.5	97.8	7.8	7.2	85.6
	May	90.4	97.1	7.9	6.8	86.0
	Jun	93.8	100.8	8.2	7.0	89.5
	Jul	95.8	102.6	8.3	7.3	90.2
	Aug	95.8	102.4	8.3	7.4	89.4
	Sep	95.5	102.1	8.2	7.3	90.4
	Oct	95.1	102.3	8.2	7.0	91.3
	Nov	94.8	101.9	8.2	7.0	91.1
	Dec	94.1	101.6	8.2	6.7	91.3
2004	Jan	97.5	105.5	8.6	6.8	94.0
	Feb	99.5	107.8	8.8	6.9	95.6
2004	13 Feb	99.7	108.1	8.8	6.9	96.4
	20 Feb	99.7	108.1	8.8	6.9	95.8
	27 Feb	99.7	107.9	8.8	7.0	95.3
	4 Mar[3]	99.1	107.0	8.7	7.1	94.0

1) Weights are calculated on the basis of imports from 44 countries which cover 97% of total imports. Current weights based on annual import shares.
2) Nominal effective krone exchange rate calculated on the basis of exchange rates for NOK against the currencies of Norway's 25 most important trading partners (geometrical average weighted with the OECD's current trade weights)
3) Average 1-4 March.

Trade-weighted exchange rate index and import-weighted exchange rate I-44. Monthly figures. Jan 1995 - Feb 2004

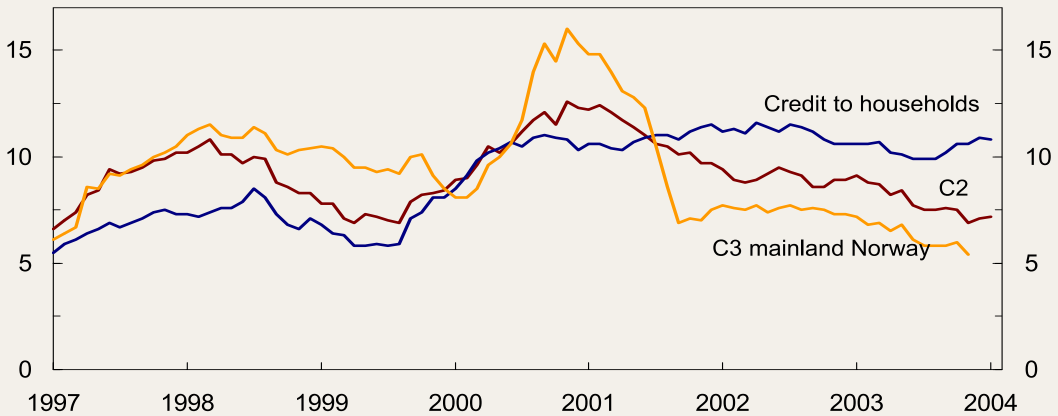


Source: Norges Bank

Table 6 Monetary aggregates

Annual growth / twelve-month rise in per cent		Money supply M2	Domestic credit (C2) Total	To house-holds	To non-financial enterprises	Total credit (C3) Total	To mainland Norway
1997		2.2	8.8	6.7	13.8	8.9	8.7
1998		4.9	9.6	7.5	13.9	11.3	10.9
1999		6.5	7.6	6.6	9.6	10.5	9.6
2000		9.9	10.9	10.3	12.3	9.4	11.8
2001		9.2	11.0	10.9	10.5	8.3	10.8
2002		8.4	9.0	11.2	7.4	7.3	7.5
2003		4.4	7.9	10.4	2.9		
2002	Jul	9.0	9.3	11.5	7.7	7.4	7.7
	Aug	7.6	9.1	11.4	7.4	7.8	7.5
	Sep	6.3	8.6	11.2	6.2	7.6	7.6
	Oct	8.6	8.6	10.9	6.5	7.1	7.5
	Nov	7.7	8.9	10.6	7.7	7.0	7.3
	Dec	8.3	8.9	10.6	7.5	6.9	7.3
2003	Jan	6.3	9.1	10.6	7.2	6.9	7.2
	Feb	6.2	8.8	10.6	5.9	6.8	6.8
	Mar	5.5	8.7	10.7	4.8	6.5	6.9
	Apr	5.9	8.1	10.2	3.9	6.0	6.5
	May	5.8	8.3	10.1	4.4	6.3	6.8
	Jun	2.9	7.6	9.9	2.8	5.7	6.1
	Jul	3.9	7.5	9.9	2.0	5.5	5.8
	Aug	4.6	7.5	9.9	1.9	5.5	5.8
	Sep	4.1	7.6	10.2	1.9	5.3	5.8
	Oct	2.8	7.5	10.6	1.0	5.4	6.0
	Nov	3.3	6.9	10.6	-0.4	5.1	5.4
	Dec	1.9	7.1	10.9	-0.9		
2004	jan	1.3	7.2	10.8	-0.7		
Level last month. In billions of NOK		880	1868	1112	606	2277	2062

The credit indicator (C2), credit to households and total credit to the non-financial private sector and municipalities, mainland Norway (C3). 12-month rise. Per cent. Monthly figures. Jan 1997 - Jan 2004



Source: Norges Bank

Annex IV
Detailed projections and assumptions

Table 7 GDP growth in other countries

Percentage change from previous year

	US	Japan	Germany	France	UK	Sweden	Trading partners[1)]	Euro area[2)]
1995	2.7	1.9	1.8	1.8	2.8	4.0	2.9	2.3
1996	3.6	3.4	0.8	1.0	2.7	1.3	2.3	1.4
1997	4.4	1.8	1.5	1.9	3.3	2.4	3.1	2.4
1998	4.3	-1.1	1.7	3.6	3.1	3.6	2.8	2.8
1999	4.1	0.1	1.9	3.2	2.8	4.6	3.4	2.8
2000	3.8	2.8	3.1	4.2	3.8	4.4	4.0	3.7
2001	0.3	0.4	1.0	2.1	2.1	1.1	1.4	1.7
2002	2.4	0.2	0.2	1.3	1.7	1.9	1.4	0.9
Projections								
2003	3	2¾	0	¼	2	1½	1¼	½
2004	4	2¾	1½	1½	2¾	2½	2½	1½
2005	3	1½	2	2	2½	2½	2½	2¼
2006	3¼	1½	2	2½	2½	2¼	2½	2½

1) Export weights, Norway's 24 most important trading partners
2) Eurostat weights

Sources: OECD and Norges Bank

Table 8 Consumer prices in other countries

Percentage change from previous year

	US	Japan	Germany[1)]	France[1)]	UK[1)]	Sweden	Trading partners[2)]	Euro area[3)]
1995	2.8	-01	1.7	1.8	2.6	2.9	2.3	2.4
1996	2.9	0.1	1.2	2.1	2.5	0.8	1.8	2.2
1997	2.3	1.7	1.5	1.3	1.8	0.9	1.6	1.6
1998	1.5	0.7	0.6	0.7	1.6	0.4	1.1	1.1
1999	22	-03	0.6	0.6	1.3	0.3	1.2	1.1
2000	34	-07	1.4	1.8	0.8	1.3	2.0	2.1
2001	28	-07	1.9	1.8	1.2	2.6	2.3	2.4
2002	16	-09	1.3	1.9	1.3	2.4	1.9	2.3
2003	23	-02	1.0	2.2	1.4	1.9	1.7	2.1
Projections								
2004	1½	-¼	¾	1½	2	¾	1¼	1½
2005	2¼	-¼	1½	1½	2	2	1¾	1¾
2006	2½	-¼	1¾	1¾	2	2	1¾	1¾

1) HICP, Harmonised Indices of Consumer Prices
2) Import weights, Norways 25 most important trading partners
3) HICP. Eurostat weights (each country's share of total euro-area consumption)

Sources: OECD, EU Commision and Norges Bank

The fiscal rule and Norges Bank's assumptions

The fiscal rule

In March 2001, a new guideline for fiscal policy (the fiscal rule) was introduced (Report no. 29 (2000-2001) to the Storting). According to the fiscal rule, the structural, non-oil budget deficit shall be approximately equivalent over time to the expected real return on the Petroleum Fund. The expected real return on the Petroleum Fund is estimated at 4%.

The guidelines for the use of the expected real return on the Fund's capital are based on a normal cyclical situation. The guidelines state that in a situation with high activity in the economy, the fiscal stance should be tightened accordingly, while a downturn may necessitate an increase in the use of petroleum revenues. It is also emphasised that in the event of extraordinary, substantial changes in the Fund's capital or in the structural, non-oil deficit from one year to the next, the change in the use of petroleum revenues must be distributed over several years based on an estimate of the size of the real return on the Fund a few years ahead.

The National Budget and the approved budget for 2004 were based on a structural, non-oil budget deficit of NOK 50.7bn in 2004. This is NOK 16.4bn higher than the expected real return on the capital in the Government Petroleum Fund at the beginning of 2004. The final central government budget bill for 2003 estimates the structural, non-oil budget deficit at NOK 44.4bn. This is more than NOK 4bn higher than estimated in the National Budget for 2004.

The assumptions in the Inflation Report

Norges Bank's projections are based on the adopted central government budget for 2004 and the estimates in the National Budget for 2004. In the approved budget for 2004, local government income that is not earmarked was increased by NOK 2.2bn in relation to the Government's original proposal. Real growth in total local government revenues between 2003 and 2004 can be estimated at around 3%. It is assumed that about half of this year's income growth will be used for consumption. We apply the technical assumption that annual growth in public spending on goods and services will be about 2¼% in 2004 and 1½% in 2005 and 2006. The assumption implies that, in value terms, growth in public expenditure for 2005 and 2006 will be approximately in line with growth in revenues.

Table: Change in the structural, non-oil deficit and in the Government Petroleum Fund in the medium term. In billions of NOK (unless otherwise stated). 2004-prices.

	Government Petroleum Fund, at the beginning of the year[1]	Expected return, 4 per cent rule	Structural, non-oil deficit	Structural, non-oil deficit, percentage of trend GDP for mainland Norway
2001	386,6	-	30,2	2,4
2002	619,3	26,6	38,1	3,0
2003	604,6	25,0	41,7	3,3
2004	856,6	34,3	50,7	3,9
2005	995,7	38,4	50,7	3,9
2006	1133,1	42,1	50,7	3,8
2007	1267,7	45,3	50,7	3,8
2008	1396,3	48,1	50,7	3,7
2009	1526,9	50,7	50,7	3,7
2010	1664,8	53,2	53,2	3,9

1) Current prices.

Source: National Budget 2004

Table 9 Technical assumptions

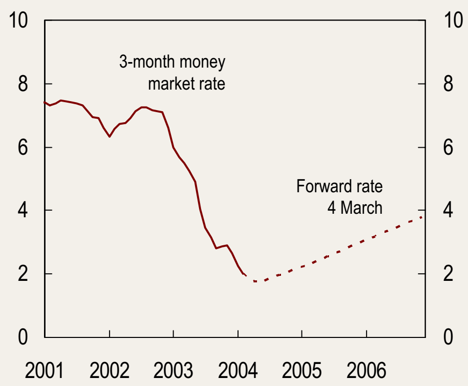
Historical developments		I-44[1]	Sight deposit rate
1996		99.6	4.5
1997		99.2	3.4
1998		101.7	5.5
1999		100.4	6.3
2000		103.3	6.2
2001		100.2	7.0
2002		91.6	6.7
2002	Q1	97.3	6.5
	Q2	92.5	6.5
	Q3	89.1	7.0
	Q4	87.7	6.9
2003	Q1	88.7	6.0
	Q2	91.9	5.1
	Q3	95.7	3.4
	Q4	94.7	2.5
Technical assumptions		Forward exchange rate	Based on forward interest rates[2]
2004	Q1	98.9	1.9
	Q2	99.6	1.5
	Q3	99.4	1.7
	Q4	99.3	1.9
2005	Q1	99.1	2.0
	Q2	99.0	2.2
	Q3	98.9	2.4
	Q4	98.8	2.7
2006	Q1	98.7	2.9
	Q2	98.6	3.1
	Q3	98.6	3.3
	Q4	98.5	3.5

1) Import-weighted exchange rate, 44 countries. Weights are calculated on the basis of imports from 44 countries which cover 97% of total imports. Current weights based on annual import shares.

2) Three-month forward rates are estimated using four money market rates and four government bond yields with different maturities as observed on 20 February. We have deducted 0.25 percentage points from the forward interest rates to provide an expression of the expected sight deposit rate.

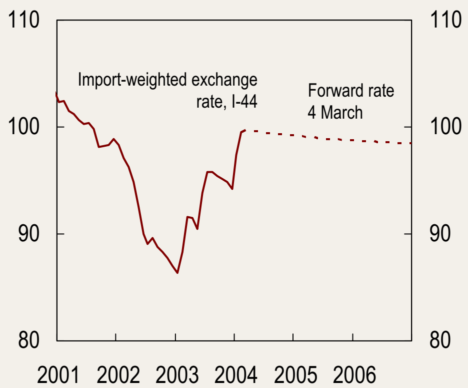
Source: Norges Bank

Assumption for money market rate. Forward rate. Per cent



Source: Norges Bank

Assumptions for the krone exchange rate (I-44). Forward rates. Index



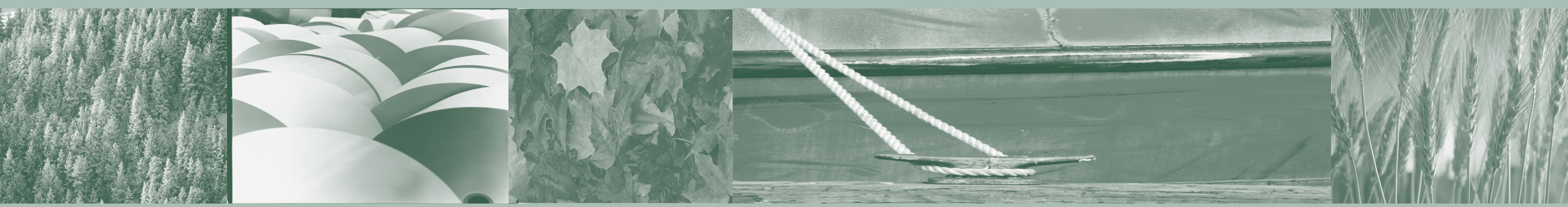
Source: Norges Bank

Table 10 Main macroeconomic aggregates with forward interest rate and forward krone exchange rate

	In billions of NOK	Percentage change (unless otherwise stated)				
			Projections			
	2002	2002	2003	2004	2005	2006
Real economy						
Mainland demand[1]	1211	2.1	1¼	4	3½	3
- Private consumption	685	3.6	3¼	5¼	4	2¾
- Public consumption	332	3.2	1¼	2¼	1½	1½
- Fixed investment	194	-4.6	-6¼	1¾	6	6
Petroleum investment[2]	53	-4.6	18	8	3	-5
Traditional exports	200	1.3	1	3	3½	3½
Imports	415	1.7	1½	5½	3¼	1¾
Mainland GDP[3]	1207	1.3	¾	3¼	3¼	2¾
GDP	1521	1.0	-	-	-	-
Labour market						
Employment		0.2	-0.7	½	1¼	¾
Labour force, LFS		0.7	-0.1	½	1	½
Registered unemployment (rate)		3.2	3.9	4	3¾	3½
LFS-unemployment (rate)		3.9	4.5	4½	4¼	4
Prices and wages						
CPI[4]		1.3	2.5	0	2¼	2½
CPI-ATE[5]		2.3	1.1	½	2¼	2½
Annual wages[6]		5.7	4½	3¾	4¾	5

1) Private and public consumption and mainland gross fixed investment
2) Extraction and pipeline transport
3) We have excluded fluctuations in electricity production. In 2003, lower electricity production contributed to pushing down GDP growth by an estimated ¼ percentage point
4) Not adjusted for the introduction of maximum prices for day-care places.
5) CPI-ATE: CPI adjusted for tax changes and excluding energy products. Not adjusted for the introduction of maximum prices for day-care places.
6) Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations.

Sources: Statistics Norway, the Technical Reporting Committee on Income Settlements, Directorate of Labour and Norges Bank



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