NORGES BANK

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Inflation report

with monetary policy assessments

2
04

July

Norges Bank's Inflation Report

Norges Bank's *Inflation Report* is published three times a year, in February/March, June/July and October/November.Sections 1-4 of the report contain an analysis of developments in inflation, output and demand 3 years ahead. As from *Inflation Report* 2/04, the Executive Board's monetary policy strategy and interest rate setting will be published in Section 5 of the *Inflation Report*.

The *Inflation Report* is published three times a year, and together with *Financial Stability,* is part of Norges Bank's series of reports. The report is also available on Norges Bank's website: http://www.norges-bank.no.

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Norges Bank Subscription Service
PO Box 1179 Sentrum
N-0107 Oslo
Norway

Telephone: +47 22 31 63 83
Fax: + 47 22 41 31 05
E-mail: central.bank@norges-bank.no

Editor: Svein Gjedrem (Section 5 presents the Executive Board's assessments)
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Monetary policy in Norway

Objective

The Government has defined an inflation target for monetary policy in Norway. Norges Bank's operational conduct of monetary policy shall be oriented towards low and stable inflation. The operational target of monetary policy shall be annual consumer price inflation of approximately 2.5 per cent over time.

In general, direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be 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

Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment.

Monetary policy influences the economy with long and variable lags. Norges Bank sets the interest rate with a view to stabilising inflation at the target within a reasonable time horizon, normally 1-3 years. The more precise horizon will depend on disturbances to which the economy is exposed, and how they will affect the path for inflation and the real economy ahead.

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 Report*, 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 main features of the analysis in the *Inflation Report* are presented to the Executive Board for discussion at a meeting about two weeks before the *Report* is published. On the basis of the analysis and discussion, the Executive Board assesses the consequences for the monetary policy strategy and interest rate-setting in the period to the next *Inflation Report*. Their assessments are published in Section 5 of the *Inflation Report*.

Communication of the interest rate decision and reporting

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

Norges Bank reports on the conduct of monetary policy in the *Inflation Report* and the *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 Norges 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 Kredittmelding (Credit Report). The Governor of Norges Bank provides an assessment of monetary policy in an open hearing before the Standing Committee on Finance and Economic Affairs in connection with the Storting deliberation on the Credit Report.

Inflation Report 2/2004
with monetary policy assessments

The cut-off date for the Inflation Report was 1 July 2004

Sections 1 - 4 are based on information in the period to 24 June

Editorial

Continued need for low interest rates

Pursuant to §3 of the Norges Bank Act, Norges Bank shall inform the public about the assessments underlying decisions relating to the conduct of monetary policy. The transparency of the basis for monetary policy decisions has increased substantially in recent years.[1] Norges Bank is now further enhancing transparency by publishing the Executive Board's monetary policy strategy for the next four months (Strategy Document) as part of the Inflation Report at the beginning of the period. Since we for a period have also presented a more extensive account of the background for interest rates decisions, it will no longer be necessary to publish a separate statement with an assessment of the inflation outlook. The formulations as to the horizon for monetary policy have also been adjusted. The new wording reads as follows:

> Monetary policy influences the economy with long and variable lags. Norges Bank sets the interest rate with a view to stabilising inflation at the target within a reasonable time horizon, normally 1-3 years. The more precise horizon will depend on disturbances to which the economy is exposed and how they will affect the path for inflation and the real economy ahead.

The new formulations better express the conduct of monetary policy.

The point of departure for the monetary policy strategy ahead is the very low level of inflation. Inflation has been lower than the inflation target since autumn 2002. The aim of monetary policy is higher inflation. The monetary policy stance is therefore expansionary.

The projections in this report are based on the assumption that the interest rate and krone exchange rate move in line with market expectations. There is considerable uncertainty surrounding these assumptions, and hence price developments. In relation to the previous Inflation Report in March, where inflation was projected to return to target two years ahead, the projections are now based on the assumption that the krone exchange rate will be 3½% stronger through the projection period. This is the main reason why the projections in this report show a path for inflation where inflation does not reach target until summer 2007. The Executive Board's assessment is that monetary policy should be oriented towards achieving higher inflation at an earlier stage. A more expansionary monetary policy than in the baseline scenario in this report might contribute to this. The most appropriate alternative now seems to be that the interest rate should be kept unchanged for a longer period than indicated by market expectations. The prospect of continued low inflation in Norway also implies that Norway should not be the frontrunner when interest rates are increased in other countries.

The Executive Board’s assessment is that the economic projections imply a sight deposit rate in the interval 1¼ - 2¼% at the beginning of November 2004. If the krone appreciates substantially, this may provide a basis for considering an interest rate at the lower end of, or below, the interval. The unusually low interest rate and uncertainty concerning the effects of previous monetary policy easing imply that we should exercise caution with regard to further interest rate reductions. On the other hand, given the prospect of low inflation ahead, wide deviations from projected economic developments would be required before it would be appropriate to increase the interest rate within the strategy period.

Jarle Bergo
1 July 2004

[1] See box on page 21 in Norges Bank's Annual Report for 2003.

Summary of economic developments

Inflation is low. Since the March *Inflation Report*, inflation has moved in line with projections. Inflation is being restrained by the appreciation of the krone in 2002, the fall in prices for imported consumer goods, measured in foreign currency, and strong competition in many industries in Norway.

Low interest rates and the international upturn are stimulating activity in the Norwegian economy. According to preliminary national accounts figures, demand in the mainland economy was stronger than projected at the end of last year and early in 2004. The output gap is expected to close, but to remain marginally negative in 2004.

The cyclical upturn in the world economy has gained a firmer footing. The recovery is broadening, particularly reflecting a pick-up in growth in several euro-area countries in recent months. Growth among Norway's main trading partners has been somewhat stronger than previously assumed, and growth projections for 2004 have been revised upwards. Stronger economic growth has exerted upward pressure on commodity prices. Oil prices are high. Interest rate expectations have risen in many countries.

Monetary policy in Norway is oriented towards returning inflation to target. The sight deposit rate has been lowered to 1.75 %. The projections in this report are based on the assumption that the interest rate follows forward interest rates. The assumption implies a gradual rise through the projection period. The krone exchange rate is assumed to move in line with the forward exchange rate, which implies a fairly stable exchange rate ahead. Forward interest rates are now higher than in March and the krone has appreciated. Overall, forward interest rates and the forward exchange rate therefore point to a somewhat tighter monetary policy ahead than the assumptions underlying the projections in the March report. As a result, the projections for growth in the real economy and inflation in 2005 and 2006 are somewhat lower than in the previous report.

Growth in the Norwegian economy is nevertheless projected to pick up markedly this year and remain relatively high next year. The main growth impetus is private consumption, fuelled by low interest rates and high real wage growth. The global cyclical upturn will probably generate positive impulses to internationally exposed sectors in Norway. Petroleum investment will continue to expand strongly in the coming years. Mainland business investment is also expected to pick up in the period ahead.

In recent years, many enterprises have rationalised operations. As a result, they have been, and probably still are, able to increase production to a fairly large extent without any substantial increase in real capital and employment. There are prospects of solid growth in productivity in 2004. Against this background, the growth in potential output is assumed to be higher than normal this year. Capacity utilisation is expected to rise, but the output gap, as measured by Norges Bank, will remain marginally negative in 2004.

Productivity growth is projected to normalise after a period. Sustained high growth in demand will then lead to an increase in the use of resources. Business investment is projected to rise. Higher demand for labour will result in lower unemployment, with the prospect of somewhat higher wage growth. The output gap is projected to be marginally positive in the period 2005 to 2007.

Given the underlying assumptions, it will take time for inflation to return to target. CPI-ATE inflation is nevertheless projected to show a marked rise in the period to the end of the year, primarily reflecting the krone depreciation in 2003. Inflation is projected to continue to rise in the period 2005-2007, but at a slower pace. A continued low rise in prices for imported consumer goods in foreign currency, the price effects of stronger competition in the Norwegian economy and slower wage growth this year will probably exert downward pressure on inflation in the years ahead. In the March report, inflation was projected to reach the inflation target in the course of spring 2006. Under the assumptions of a stronger krone exchange rate and higher interest rates, the projections in this report show that inflation will pick up, but remain below target until summer 2007.

1 Recent developments

Inflation has remained low in line with projections

Inflation is low. The year-on-year rise in consumer prices adjusted for tax changes and excluding energy products (CPI-ATE) was 0.1% in May (see Chart 1.1). Developments in recent months have been broadly in line with the projections in the March *Inflation Report*. Changes in trade patterns and high productivity growth in the production of some goods are still contributing to a fall in prices for many of Norway's imported consumer goods. Sharper competition in a number of industries is also contributing to low inflation.

Since February, the monthly rise in the CPI-ATE has picked up. The depreciation of the krone from January 2003 to March 2004 is contributing to a higher rise in prices for Norway's imported consumer goods. At the same time, the fall in prices for these goods, measured in foreign currency, has begun to decelerate.

The rise in prices for domestically produced goods and services is still slowing, however. This is probably to a large extent ascribable to increased competition, although lower wage growth is also making a contribution. The rise in prices for services has fallen particularly sharply in the past year (see Chart 1.2). New entrants and stronger competition have contributed to lower air fares and prices for telecom services. A more detailed description of consumer price movements in recent months is presented in a box on page 14.

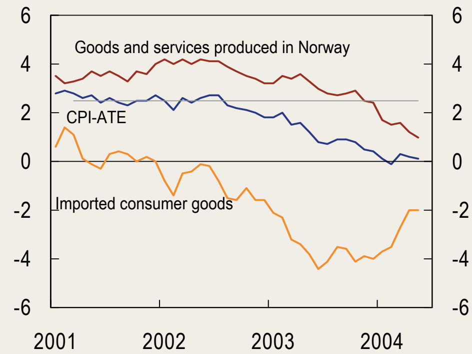
Continued excess capacity in the Norwegian economy, but higher growth

Total output is probably slightly lower than the level that is consistent with stable inflation over time. Growth in the Norwegian economy slowed in 2002 and was low in the first half of 2003, but has since picked up. The economy is being stimulated by low interest rates and the global upturn. Demand in the Norwegian economy appears to be growing somewhat more rapidly than projected in March.

Low interest rates are stimulating household demand. Growth in borrowing remains high, and housing investment has begun to rise again. At the same time, the low rise in prices has resulted in high real wage growth, despite relatively low nominal pay increases in this year's wage settlements. Private consumption is growing strongly.

There are signs that mainland business investment is picking up. The international recovery is contributing to increased optimism in the Norwegian business sector, as

Chart 1.1 CPI-ATE[1]. Total and by supplier sector[2]. 12-month rise. Per cent. Jan 01 – May 04

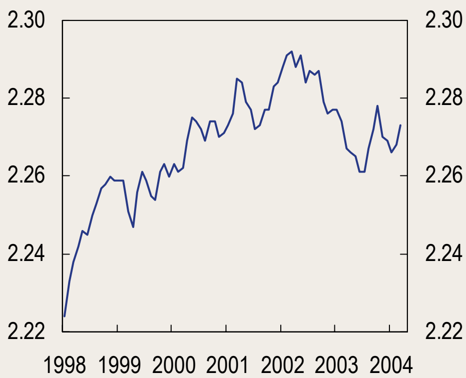


[1] CPI-ATE: CPI adjusted for tax changes and excluding energy products
[2] Norges Bank's estimates
Sources: Statistics Norway and Norges Bank

Chart 1.2 Prices for goods and services produced in Norway[1]. 12-month rise. Per cent. Jan 01 – May 04

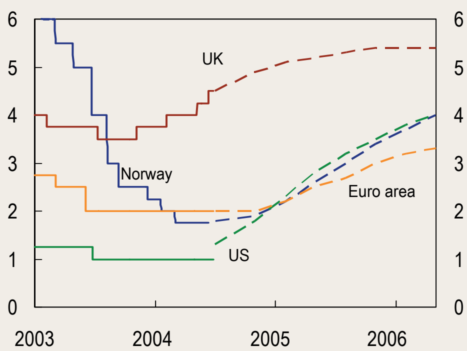
[1] Adjusted for tax changes and excluding energy products
Percentage share of CPI-ATE in brackets. Norges Bank's estimates
Sources: Statistics Norway and Norges Bank

Chart 1.3 Employed persons according to LFS. In millions. Seasonally adjusted. Monthly figures. Jan 98 – Mar 04



Source: Statistics Norway

Chart 1.4 Interest rate expectations. Actual developments and expected key rate[1)] at 24 Jun 04. 2 Jan 03 – 1 May 06



[1)] 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

confirmed by information from Norges Bank's regional network. Activity has increased in most industries, and the outlook ahead is described as favourable.

Unemployment appears to have levelled off, after having risen through 2002 and 2003. Despite growing activity and increasing demand, employment growth remains low (see Chart 1.3). Employment in the public sector has fallen. Many companies, both in the private and public sector, are rationalising. Low growth in employment, coupled with the increase in output, indicates that companies are still reaping benefits from these measures. Many companies in our regional network have previously reported that they can increase output to a fairly large extent without a substantial increase in employment. Growth in potential output therefore appears to be somewhat higher than normal. However, mainland GDP is probably growing somewhat more than potential output. The output gap, according to our assessment, is still negative, but is closing gradually.

Positive external growth and inflationary impulses

Global growth has picked up, spurred by strong growth in the US and parts of Asia. During spring, interest rate expectations increased in many countries, possibly reflecting expectations of stronger growth and higher inflation.

In the US, positive labour market figures and signs of higher inflation have contributed to higher interest rate expectations. Market participants are now expecting the key rate in the US to be raised in summer 2004 (see Chart 1.4). They expect interest rates to be raised by about 1¼ percentage points in the US and ½ percentage point in the UK by end-2004. Market expectations point to an interest rate increase of ¼ percentage point in the euro area towards the end of 2004.

Stronger international growth has pushed up commodity prices. Oil prices are high, and oil futures prices have risen substantially in recent months (see box on page 55). The rise in oil prices is contributing to higher inflation among many of our trading partners, but also to curbing the international upturn. For the Norwegian economy, however, expectations that oil prices will remain high for a long time may have a positive effect on the activity level and investment in the petroleum sector.

Prices for some metals rose substantially in late 2003 and early 2004, and have remained high thereafter. Some Norwegian manufacturing sectors are benefiting from increased demand and higher prices.

Owing to higher commodity prices, producer prices among our most important trading partners have edged up. Export prices are also showing signs of rising. Nevertheless, external impulses to Norwegian consumer prices remain low.

Expectations of a tighter monetary policy ahead

Interest rate expectations in Norway increased during spring. Market participants now seem be expecting an interest rate increase of ¼ percentage point towards the end of 2004. This implies a key rate of around 2% towards the end of the year.

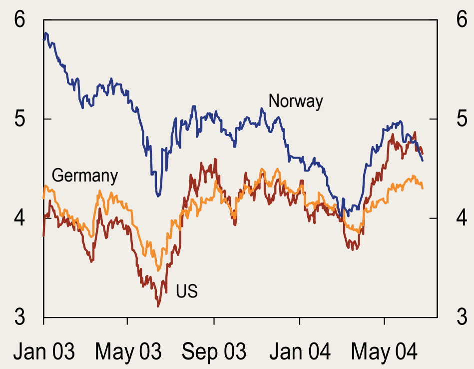
Norwegian 10-year government bond yields have increased by around 0.5 percentage point since March of this year (see Chart 1.5), bringing yields to around the level prevailing in December 2003. Bond yields in Norway have increased more or less in tandem with the rise in the US, and to a further extent than in other European countries. This may indicate expectations of a more rapid economic upturn in Norway and in the US. The interest rate differential between Norway and trading partners is expected to turn positive in the beginning of 2006.

Since *Inflation Report* 1/04 was finalised at the beginning of March, the Norwegian krone has appreciated by about 3%, measured by the import-weighted index I-44 (see Chart 1.6). The appreciation of the krone partly reflects expectations of higher interest rates in Norway. However, the rise in oil prices and expectations of a sustained high oil price may also have played a part.

Higher oil prices have resulted in higher current account surpluses which, in isolation, should contribute to strengthening the krone. However, higher surpluses are being offset by an increase in long-term capital outflows via the Government Petroleum Fund and external investment of petroleum revenues. Foreign trade figures indicate that mainland imports have increased sharply in recent months. This points to increased demand for foreign currency which, in isolation, may contribute to weakening the krone. However, portfolio investments may easily dominate movements in the krone exchange rate in the short term.

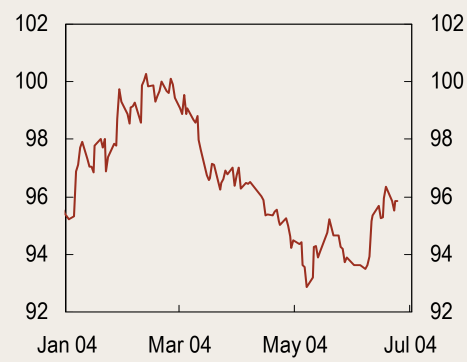
Our projections for economic developments ahead are based on technical assumptions concerning developments in the interest rate and krone exchange rate. Our assumptions are based on market expectations as implied by the forward interest rate and the forward exchange rate.

Chart 1.5 Yield on government bonds with 10 years' residual maturity. Daily figures. 1 Jan 03 – 24 Jun 04



Sources: Bloomberg and Norges Bank

Chart 1.6 Import-weighted exchange rate index, I-44[1]. Daily figures. 1 Jan 04 – 24 June 04



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

Source: Norges Bank

Developments in financial markets since the March report indicate that a less expansionary monetary policy is expected in the period ahead. Forward interest rates have risen for the years ahead. The increase is largest for the last years in the projection period.

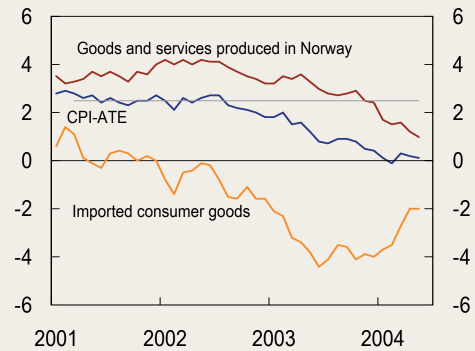
The forward exchange rate can be derived from the expected interest rate differential between Norway and trading partners. As in *Inflation Report* 1/04, the forward exchange rate points to expectations of a fairly stable krone exchange rate ahead. However, the krone has appreciated since March. The forward exchange rate therefore implies that the exchange rate is expected to remain at a stronger level in the period ahead than assumed in the March report.

Recent price developments

The year-on-year rise in consumer prices adjusted for tax changes and excluding energy products (CPI-ATE) was 0.1% in May (see Chart 1). Even though the year-on-year rise has remained low so far this year, the monthly rise in the CPI-ATE has edged up since February.

The rise in prices for imported consumer goods is being curbed by changes in trade patterns and high productivity growth for the production of some consumer goods. Intensified competition in Norway is also contributing to a subdued rise in prices for domestically produced goods and services.

Chart 1 CPI-ATE[1]). Total and by supplier sector[2]). 12-month rise. Per cent. Jan 01 – May 04

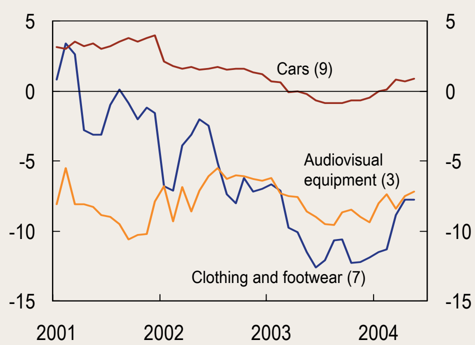


[1]) CPI-ATE: CPI adjusted for tax changes and excluding energy products
[2]) Norges Bank's estimates
Sources: Statistics Norway and Norges Bank

Decelerating fall in prices for imported consumer goods

In May, prices for imported consumer goods were 2.0% lower than in the same month one year earlier. The depreciation of the krone in 2003 has probably contributed to moderating the year-on-year decline in prices for these goods since the beginning of the year. Cars, clothing, footwear and audiovisual equipment account for a high share of imported consumer goods. The fall in prices for most of these groups has decelerated in recent months (see Chart 2). Car prices have risen by almost 1% since May 2003. In May, the year-on-year decline in prices for clothing and footwear was 7.7%, while it was as much as 12.2% in November last year. The fall in prices for audiovisual equipment has not moderated to the same extent, probably because technological improvements and stronger international competition are resulting in lower prices for these products. Prices for audiovisual equipment were 7.2% lower in May than one year earlier.

Chart 2 Prices for selected imported consumer goods[1]). 12-month rise. Per cent. Jan 2004 – May 2004



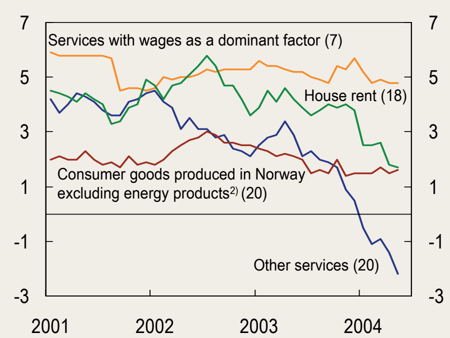
[1]) Percentage share of CPI-ATE in brackets
Sources: Statistics Norway and Norges Bank

Continued low rise in domestic prices

The year-on-year rise in prices for domestically produced goods and services decelerated from 1.7% in January to 1.0% in May (see Chart 1).

The year-on-year rise in prices for domestically produced goods that are influenced by world market prices was 1.5% in May. The effects of the strong krone in 2002, low external inflationary impulses and lower wage growth have probably resulted in a slower rise in input costs for Norwegian producers, thereby providing a basis for a slower rise in selling prices. For example, furniture prices rose by 0.7% between May 2003 and May 2004.

Chart 3 Prices for goods and services produced in Norway[1]). 12-month rise. Per cent. Jan 01 – May 04



[1]) Adjusted for tax changes and excluding energy products Percentage share of CPI-ATE in brackets. Norges Bank's estimates
[2]) Excluding agricultural and fish products
Sources: Statistics Norway and Norges Bank

The rise in prices for domestically produced consumer goods that are not directly influenced by world market prices has also slowed somewhat. The grocery industry is being influenced by new international low-price chains that are being established in Norway, which has exerted downward pressure on prices for some goods. Beer prices in particular have shown a sharp fall, declining by 9.4% over the past year.

The rise in house rents has been subdued over the past year, but is still contributing to holding up domestic inflation. The year-on-year rise in house rents decelerated from 4.2% in May 2003 to 1.7% in May 2004. The slower rise in house rents must partly been seen in connection with the decline in interest rates since December 2002.[1]

Prices for services with wages as a dominant cost factor have continued to rise at a brisk pace, showing a year-on-year rise of 4.8% in May 2004. The year-on-year rise in prices for craftsmen services has been about 3% since January. The year-on-year rise for hair and beauty care was 4.4% in May. The rise in prices for non-institutional health services has slowed somewhat, but is still very high at nearly 9%.

The rise in prices for services with important cost factors other than wages has decelerated since spring 2003. New entrants and increased competition have contributed to lower air fares. Air fares have fallen by 27% since May 2003 (see Chart 4). Prices for insurance services are still holding up overall service prices, but the year-on-year rise in these prices has decelerated considerably over the past six months. The rise in prices for these services was 4.2% in May.

Temporary disturbances

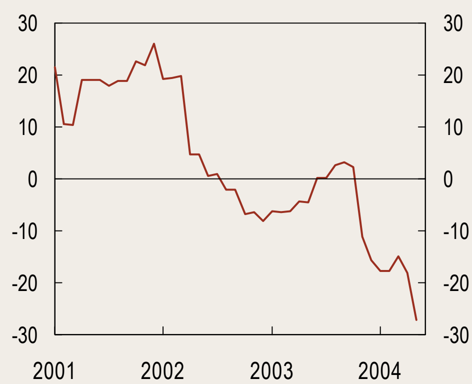
The rise in the CPI-ATE is being influenced by some extraordinary temporary disturbances and direct effects of changes in interest rates that Norges Bank does not take into account in its conduct of monetary policy.

The introduction of maximum rates for day-care centres in 2004 and 2005 has a one-off impact on consumer prices and may be regarded as an extraordinary temporary disturbance. The direct effects of interest rates on house rents may be looked upon as a direct effect of the interest rate on consumer prices. These two factors have pushed down overall consumer price inflation by an estimated 0.1-0.2 percentage point since January 2004. For the past twelve months, the contribution is probably somewhat higher. Adjusted for these effects, the year-on-year rise in the CPI-ATE was probably a little less than ½% in May.

Higher CPI inflation

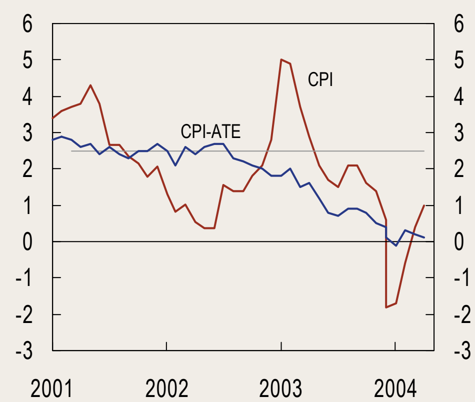
Consumer prices including tax changes and energy products (CPI) have been heavily influenced by wide fluctuations in energy prices since the beginning of 2003. The year-on-year rise in the CPI picked up after the effects of high electricity prices recorded at the beginning of 2003 were eliminated. In May, electricity prices were 2.6% lower than in May 2003. Petrol prices have edged up as a result of high and rising oil prices. In May, the year-on-year rise in petrol prices was 14.1%. The CPI showed a year-on-year rise of 1.0% in May 2004 (see Chart 5).

Chart 4 Air fares[1)]. 12-month rise. Per cent. Jan 04 – May 04



1) Adjusted for tax changes
Sources: Statistics Norway and Norges Bank

Chart 5 CPI and CPI-ATE. 12-month rise. Per cent. Jan 01 – May 04



Sources: Statistics Norway

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

2 International developments

The economic recovery is continuing (see Chart 2.1). The recovery has broadened, primarily because growth has also picked up in several euro area countries in recent months. Growth among our main trading partners is somewhat stronger than expected earlier and the growth projections for 2004 have been revised upwards.

Consumer price inflation has edged up in recent months, primarily reflecting a sharp rise in some commodity prices, particularly oil. The rise in prices is also attributable to higher inflation in China. Underlying inflationary pressures remain moderate. As a result of high commodity prices, the inflation projections have nevertheless been adjusted upwards. Interest rates are now expected to rise at a somewhat earlier stage in the US and the euro area than was assumed in the March *Inflation Report* (see Chart 2.2). Sustained high oil prices probably represent the main risk to developments ahead, both as regards general economic developments and inflation.

Continued high growth in the US

Economic activity in the US remains high, but the rate of growth has slowed appreciably since the third quarter of 2003. In the first quarter of 2004, GDP was about 5% higher than in the same quarter one year earlier. Private demand is still the main driving force, supported by low interest rates and tax reductions. Growth in private investment has slowed somewhat, but remains high. Growth in private consumption has remained firm.

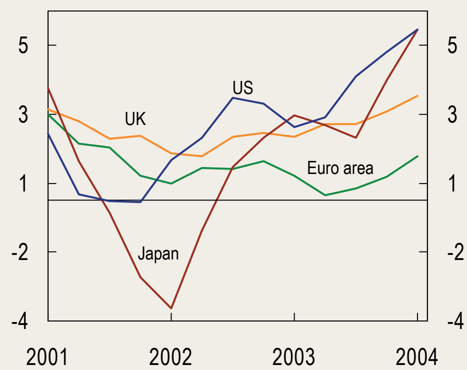
The labour market has improved considerably since the beginning of the year. Employment has picked up and the labour force has expanded in recent months. Inflation is quickening, primarily fuelled by higher commodity prices, but also higher prices for health services and higher import prices.

Economic growth is expected to moderate in the period ahead, primarily as a result of slower growth in private consumption. The US authorities are planning to tighten fiscal policy next year, as measured by the structural budget deficit (see Chart 2.3). In addition, monetary policy is expected to be somewhat tighter.

Faster growth in the euro area

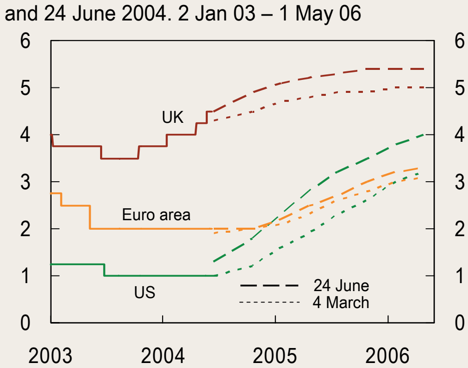
Economic activity in the euro area has picked up. GDP was 1.3% higher in the first quarter than in the same quarter one year earlier. Growth was particularly strong in France

Chart 2.1 GDP. 4-quarter growth. Per cent. 01 Q1 – 04 Q1



Sources: EcoWin, Statistics Japan, National Statistics (UK), EUR-OP/Eurostat and Bureau of Economic Analysis (US)

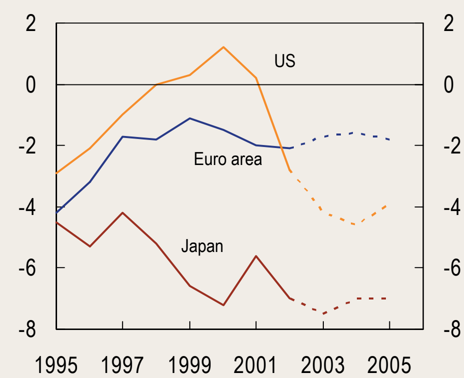
Chart 2.2 Interest rate expectations. Actual developments and expected key rate[1] at 4 March and 24 June 2004. 2 Jan 03 – 1 May 06



[1] 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

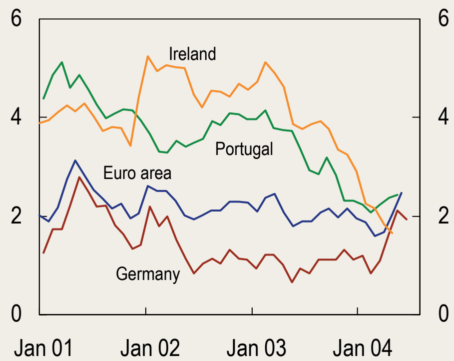
Chart 2.3 Structural budget balance. Per cent of nominal GDP. Annual figures. 1995 – 2005[1]



[1] Estimates for 2003 – 2005

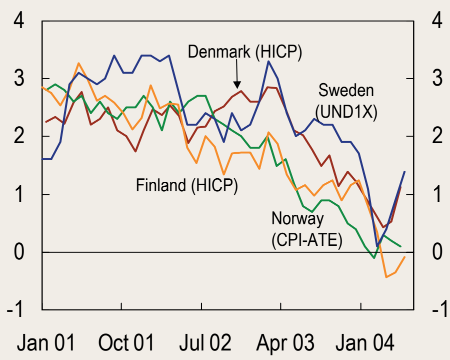
Source: OECD

Chart 2.4 Consumer prices. 12-month rise. Per cent. Jan 01 – Jun 04



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

Chart 2.5 Consumer prices. 12-month rise. Per cent. Jan 01 – May 04



Sources: EcoWin, Statistics Norway, Statistics Sweden, Statistics Finland and Statistics Denmark

Table 2.1 GDP estimates.
Percentage change from previous year

	2004	2005	2006	2007
US	4¼	3	3	3
Japan	4	1½	1½	1½
Germany	1½	1¾	2	2
France	2	2¼	2½	2½
UK	3	2½	2½	2½
Sweden	2¾	2¾	2¼	2¼
Norgway's trading partners[1)]	2½	2½	2½	2½
Euro area[2)]	1¾	2¼	2½	2½

[1)] Export weightings
[2)] Weights from Eurostat

Source: Norges Bank

and Spain, but Germany also showed a clear upswing. For the euro area as a whole, net exports represented the main driving force, but private consumption also made a positive contribution. However, investment fell again in the first quarter after exhibiting solid growth towards the end of last year.

Inflation has shown a marked rise in recent months (see Chart 2.4), primarily reflecting the sharp rise in oil prices. Higher prices for health services are also pushing up inflation. As a result, underlying inflation has also risen since the beginning of the year.

GDP growth is expected to continue at a moderate pace this year. Solid growth in the world economy is expected to boost net exports in spite of the substantial appreciation of the euro up to January this year. Euro-area exports consist of a large share of capital goods, which are generally more sensitive to changes in global demand than to changes in the exchange rate. In addition, euro-area investment is expected to pick up as a result of higher corporate profits. Private consumption is expected to make an increasing contribution to growth from 2005, primarily as a result of improved labour market conditions.

Stronger growth in Denmark, Sweden and the United Kingdom

In *Denmark*, domestic demand has picked up markedly over the past year, while export growth has slowed so far this year. GDP growth is expected to increase ahead, primarily supported by an expansionary fiscal policy. In the *UK*, the Bank of England has increased its key rate on three occasions so far this year in response to the continued global recovery, brisk growth in private and public consumption and investment, and high activity in the housing market. Industrial output has also picked up in recent months. Employment has shown a marked increase, and unemployment is at its lowest level in several decades. Moreover, wage growth has been moderate. The monetary policy tightening is expected to result in slower growth in private consumption. In *Sweden*, developments have been more mixed. Production has expanded, particularly in the export industry, with a rise in new orders. On the other hand, employment is not rising. Consumer price inflation has been low and falling, and was negative in February. In recent months, inflation, as measured by the Swedish central bank's target variable UND1X, has edged up again (see Chart 2.5). GDP growth is expected to be higher ahead, both as a result of higher global demand and domestic demand, supported by an expansionary monetary policy.

Continued growth in Asia

Growth in Japan has continued to be a positive surprise. In the first quarter, year-on-year growth in GDP was 5.0%, which is the strongest growth rate recorded since 1991. The main driving forces behind growth have been exports and investment in export industries. In recent quarters, private consumption has also made a positive contribution. The contribution from public demand has been marginally negative. Some improvement in labour market conditions is expected to provide further impetus to private consumption growth in the period ahead. Consumer prices are still declining, but producer prices are showing a moderate rise (see Chart 2.6). Higher global demand and rising growth in private consumption are expected to contribute to moderate growth during the projection period. In the somewhat longer term, however, Japan will still face considerable challenges, primarily associated with the volume of non-performing loans in the banking sector, sizeable budget deficits and high government debt.

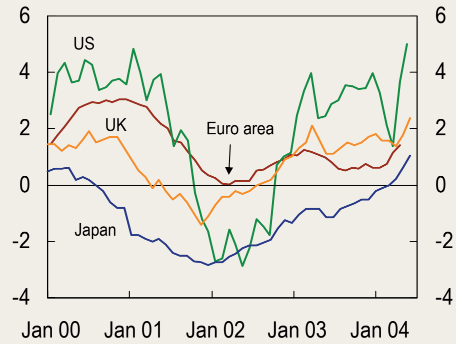
In China, year-on-year GDP growth was 9.8% in the first quarter (see Chart 2.7). Private consumption expanded at a brisk pace, but investment growth continued to be the main growth impetus. Investment is now estimated at between 40% and 50% of GDP. The Chinese government has implemented measures this year to restrain growth and prevent an overheating of the economy. Moreover, banks are vulnerable in the event of a sharp economic slowdown, partly as a result of the high share of bad loans to state enterprises. The rise in food and commodity prices has fuelled consumer price inflation in recent months. In May, the year-on-year rise in consumer prices was 4.4%. Excess capacity in manufacturing and substantial slack in the labour market may still generate downward pressures on prices in the longer term.

Growth in activity has also been high in other Asian countries, with year-on-year growth estimated at between 4% and 7.5% in the first quarter for many countries in South and Southeast Asia. The expansion in Asia has been fuelled by rising net exports, but domestic demand has also started to pick up. In India, ICT services in particular have shown strong growth in recent years.

High oil prices

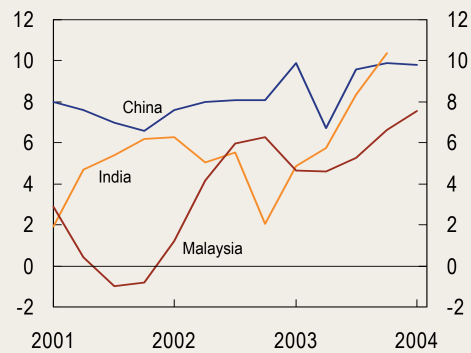
Oil prices have remained at a historically high level over a longer period and are now appreciably higher than expected in the March report. Since March, oil futures prices have shown a pronounced rise (see Chart 2.8 and box on page 55). The rise in spot prices primarily reflects a higher-than-expected increase in oil demand, while non-OPEC production growth has been lower than expected. Stocks are still low, particularly in the US. Refineries and

Chart 2.6 Producer prices. 12-month rise. Per cent. Jan 00 – May 04



Sources: EcoWin, EUR-OP/Eurostat, Bureau of Labor Statistics (US), Statistics Japan, Federal Statistical Office (DE) and National Statistics (UK)

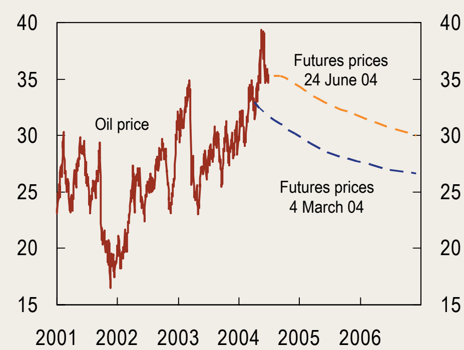
Chart 2.7 GDP. Change on same quarter previous year[1]. Per cent. 01 Q1 – 04 Q1



[1] GDP in India is measured at factor prices

Sources: EcoWin, National Bureau of Statistics (CH), Central Bank of Malaysia, Central Statistical Organisation (I) and Consensus Economics

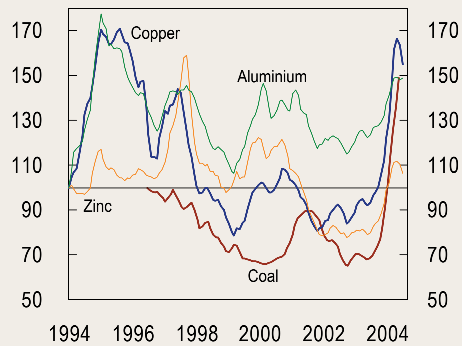
Chart 2.8 Oil price[1] in USD per barrel. Daily figures. 1 Jan 01 – 24 Jun 04. Futures prices at 4 Mar 04 and 24 Jun 04



[1] Brent Blend

Sources: International Petroleum Exchange and Norges Bank

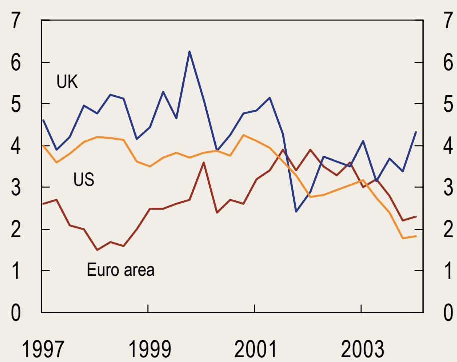
Chart 2.9 Commodity prices in USD. Index. Jan 1994=100. 3-month moving average. Monthly figures. Jan 94 – Jun 04[1)]



[1)] Average from 1 June – 24 June

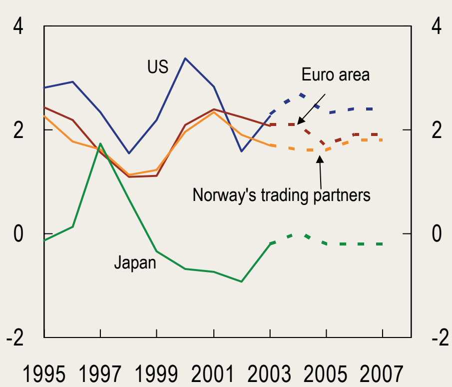
Sources: London Metal Exchange, HWWA and EcoWin

Chart 2.10 Wage growth. Change on same quarter previous year. Per cent. 97 Q1 – 04 Q1



Sources: Bureau of Labor Statistics (US), National Statistics (UK) and EUR-OP/Eurostat

Chart 2.11 Consumer price inflation. Year-on-year rise. Per cent. 1995 – 2007[1)]



[1)] Estimates for 2004 – 2007

Sources: OECD and Norges Bank

other infrastructure are nearing capacity limits. The current unrest in the Middle East has also placed a risk premium on oil. Oil prices are assumed to move in line with futures prices ahead.

Higher commodity prices generate added uncertainty

The sharp rise in commodity prices in the first quarter of 2004 has added to the uncertainty surrounding future developments in output and inflation. An economic recovery tends to be marked by rising commodity prices in pace with rising demand. This is in line with developments in 1994, for example (see Chart 2.9). In this cyclical upturn there are also special factors, especially relating to developments in China, that are pushing up prices. Heavy investment in production capacity in China has been one of the main driving forces behind lower consumer goods prices in recent years. The steep rise in demand for commodities has not, however, been matched by higher investment in extraction and production. This, combined with other bottlenecks in production in China, has exerted upward pressure on prices for finished goods. These factors are expected to continue to push up prices for export goods from China for a period ahead.

Oil price developments represent the main risk factor. High global growth is an important factor behind the rise in oil prices in recent months. However, the real oil price is not particularly high. OECD and IEA calculations show, however, that a rise in oil prices of about USD 10, in line with the increase over the past year, will reduce global GDP by 0.5 percentage point. The impact on the euro area will be somewhat more severe than on the US owing to higher oil imports.

Higher oil prices have already led to a rise in producer prices (see Chart 2.6). The OECD and the IEA have calculated that the effect of the oil price rise on the rise in consumer prices in the OECD area will be about 0.5 percentage point the first year. However, the effects over the next few years depend on the attendant effect on wage growth. Excess production capacity and productivity gains will contribute to curbing the effects of higher oil prices on wage growth (see Chart 2.10), and hence on inflation. However, there is a risk that the price impulses may be stronger than assumed.

3 | Domestic developments

Low interest rates and the global upturn are stimulating activity in the Norwegian economy. Demand appears to be growing somewhat more rapidly than projected in *Inflation Report* 1/04.

Many firms have enhanced efficiency over the past few years, which has provided them with the scope, which probably still exists, for increasing production fairly sharply without a marked increase in real capital or employment. We have assumed stronger growth in potential output than normal this year. This curbs the build-up of substantial pressures on economic resources, even though strong output growth is expected this year. The output gap is projected to approach zero, but will continue to be marginally negative in 2004. See box on Norges Bank's projections for the output gap on page 46.

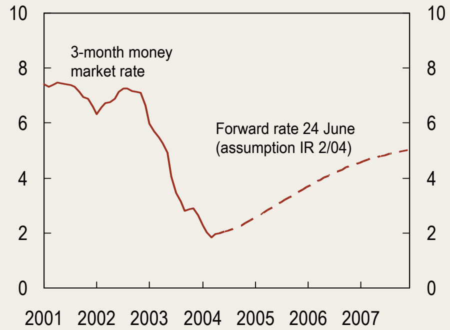
Monetary policy will stimulate activity in the Norwegian economy for a period ahead. The projections for the period up to 2007 are based on the technical assumption that the interest rate will move in line with the forward interest rate. This assumption implies a gradual increase in interest rates (see Chart 3.1). The krone is assumed to follow the path of the forward exchange rate, which implies a fairly stable exchange rate in the period ahead (see Chart 3.2).

Growth in mainland GDP is projected to be relatively high this year and next. Private consumption is the main driving force, fuelled by low interest rates and strong growth in real wages. Developments in consumption will contribute to solid growth in activity in retail trade enterprises and service industries supplying the household sector. The global upturn will probably provide a positive impetus to the internationally exposed sector. Petroleum investment will continue to show strong growth, providing a positive impetus to the Norwegian supplier industry. When demand rises in the Norwegian economy, the current excess capacity in many service industries will gradually be reduced. A normalisation of growth in potential output implies that both employment and investment will edge up. Employment is expected to be somewhat lower and the output gap to be marginally positive from 2005 to 2007 (see Chart 3.3).

Households

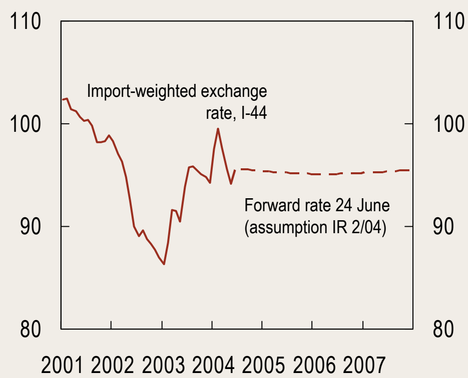
Despite reduced job security and rising unemployment, growth in household consumption held up last year, curbing the slowdown in the Norwegian economy. Growth in consumption was stimulated by the interest rate reductions through 2003. Interest rates are now at a low level. Labour

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



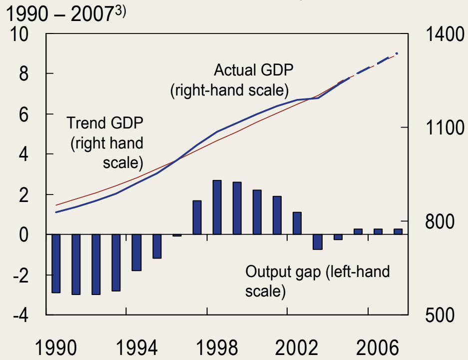
[1]) The money market rate is normally about ¼ percentage point higher than the sight deposit rate
[2]) 3-month money market rate up to May 2004. The 3-month forward rate is estimated using four money market rates and four government bond yields with different maturities as observed on 24 June
Source: Norges Bank

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



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

Chart 3.3 Projections for the output gap[1]), actual GDP[2]) and trend GDP[2]). Annual figures. 1990 – 2007[3])



[1]) The output gap is a measure of the difference between actual and trend mainland GDP. Difference in per cent
[2]) In billions of NOK. Constant 2001 prices
[3]) Estimates for 2004 – 2007
Sources: Statistics Norway and Norges Bank

Increase in number of working days in 2004

There are three additional working days in 2004 compared with 2003, or an increase of 1.2%. The increase in the number of working days will in isolation lead to an increase in output and the number of person-hours hours worked between 2003 and 2004, as registered in the national accounts.

However, the increase in the number of working days will not be fully reflected in the number of person-hours worked or in production. Some sectors such hospitals, some transport sectors and manufacturing sectors, the restaurant and hotel industry and electricity production operate almost continuously. These sectors will only be affected by the 2004 leap-year effect, which influences employment and production. For agriculture, there are factors other than working days that influence production. In some sectors, the effects on production may also be countered by a decrease in productivity or a decline in working hours.

Economic variables other than output and employment may also be influenced by a change in the number of working days. Many employees have a fixed monthly salary. This implies that hourly wages fall when the number of working days increases. If the increase in number of working days also leads to a decline in overtime, labour costs will fall further. The overall impact on unit labour costs will also depend on the attendant effect on productivity.

A change in the number of working hours from one year to next has little impact on underlying growth in the economy. Even if output rises, an increase in the number of working days implies an increase in resources, with little impact on the output gap. Temporary swings in unit labour costs as a result of a change in the number of working days will probably have a limited effect on enterprises' pricing.

Against this background, Norges Bank has taken account of working days in its projections. Our projections for GDP, employment and other variables should be perceived as underlying growth in the economy and can thus be looked upon as adjusted for calendar effects.

Table 3.1 Key aggregates for Norway 2004 - 2007. Percentage change from previous year

	2004	2005	2006	2007
Mainland demand	4¼	3¼	2¾	2½
Private consumption	5¼	4	2¾	2¾
Public consumption	2	1½	1½	1½
Fixed investments	3¾	4	4	3½
Petroleum investments	10	5	5	-5
Traditional exports	5¼	3½	3	3
Imports	7½	3¾	2¾	1½
Mainland GDP[1)]	3½	3	2½	2½
Employment	½	1¼	¾	¾
LFS unemployment[2)]	4¼	4	4	4

[1)] Percentage of labour force

Source: Norges Bank

market prospects have improved. Growth in consumption has shown a further increase and housing investment has begun to rise again.

Over the past couple of years, developments in household disposable income have been strongly influenced by wide fluctuations in dividend payments. Changes in tax rules contributed to dividends in 2002 that were abnormally high, which will probably also be the case in 2003. Dividend payments paid are very unevenly distributed among households. It also appears that most of the extraordinary payments have been reinvested in the companies. This implies that overall private consumption has been largely unaffected by changes in income growth as a result of dividend payments. This is also reflected in the saving ratio, as measured in the national accounts, which rose from about 4% in 2001 to 9.5% in 2002, and which was close to 8% last year. If the extraordinary dividend payments are excluded, the saving ratio over the past two years may be estimated at 5-6%. The projections for real household income growth exclude the effect of a fairly sharp decline in dividend payments expected in the years ahead.

Growth in real disposable income will be fairly high this year, even with a moderate wage settlement (see Chart 3.4). This is mainly due to falling interest expenses and an expected low rise in prices. Later in the projection period, it is expected that employment will increase, with a somewhat tighter labour market. Wage income will then probably increase somewhat more, but growth in real income will be dampened by higher inflation and rising net interest expenses. Real income growth is projected at 3% in both 2005 and 2006.

Buoyant activity in the housing market and high house prices have contributed to strong growth in credit to households. The debt burden has increased, particularly in low- and middle-income groups. In these groups, changes in interest rates and hence disposable income probably have a fairly strong impact on consumption. As the interest rate level normalises, growth in private consumption is expected to slow, even if there are prospects of an increase in employment and some decrease in unemployment.

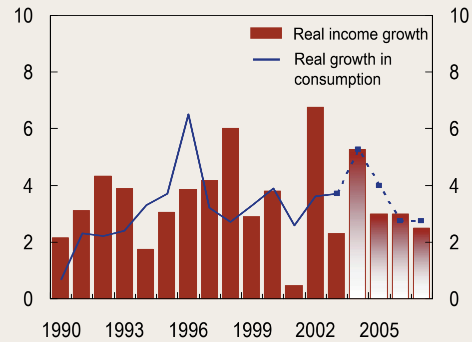
Growth in private consumption is projected at 5¼% between 2003 and 2004, in pace with real income. In 2005, real income growth is expected to be lower. However, consumption growth is projected to remain relatively high and the saving ratio to edge down. In 2004 and 2005, the saving ratio will be marked by this year's particularly strong growth in real income, and we assume that households prefer to smooth consumption over time. In 2006 and 2007, consumption is projected to grow more closely in line with growth real income.

Information from Norges Bank's regional network suggests that activity in the housing market is high. House prices seem to have risen fairly sharply from 2003 to 2004 (see Chart 3.5). See Norges Bank's report *Financial Stability* 1/04 for further discussion on the factors affecting house price developments. Preliminary national accounts figures indicate that housing investment, after falling in the first half of last year, was already edging up towards the end of the year. Developments suggest that housing investment may increase somewhat more this year than previously assumed.

Gradual increase in business investment

High growth in labour costs over a number of years and increased competition have resulted in deteriorating profitability in many companies. Due to the need for consolidation, both employment and investment have

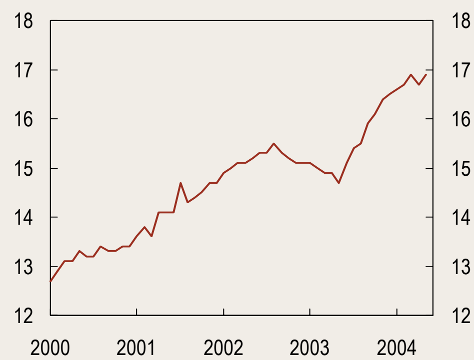
Chart 3.4 Real growth in household disposable income and consumption. Annual figures. Per cent. 1990 – 2007[1)]



[1)] Estimates for 2004 – 2007

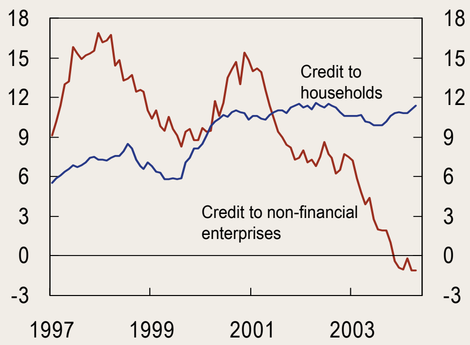
Sources: Statistics Norway and Norges Bank

Chart 3.5 Seasonally adjusted house prices. NOK 1000 per square metre. Monthly figures. Jan 00 – May 04



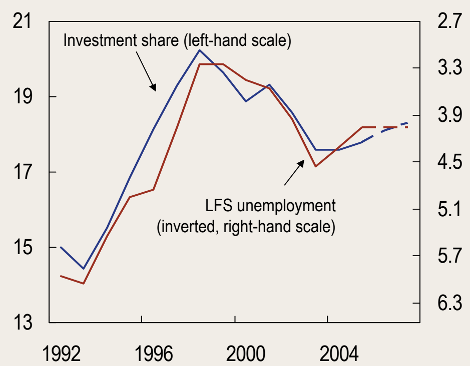
Sources: Norwegian Association of Real Estate Agents and Association of Real Estate Agency Firms

Chart 3.6 Growth in credit[1] to households and enterprises. 12-month growth. Per cent. Jan 97 – Apr 04



[1] From domestic sources (C2)
Source: Norges Bank

Chart 3.7 Investment in mainland Norway as a share of mainland GDP and LFS unemployment. Per cent. Annual figures. 1992 – 2007[1]



[1] Estimates for 2004 – 2007

Source: Statistics Norway

declined. Mainland enterprises reduced their investment by over 8% from 2002 to 2003. While household debt growth has been high, companies have reduced their debt (see Chart 3.6). Twelve-month growth in credit to non-financial enterprises has been negative since November 2003.

Many firms have implemented efficiency measures. Some of the companies in our regional network now report that profitability has improved. The rise in unit labour costs has slowed, reflecting both lower wage growth and more efficient production in many enterprises than previously.

Improved profitability and prospects of solid growth in foreign and household demand suggest that business investment will increase in the period ahead. Since the beginning of the 1990s, investment as a share of GDP has evolved in line with cyclical developments, as reflected in movements in unemployment (see Chart 3.7). During the current upturn, investment as a share of GDP is projected to rise in line with that observed in previous upturns.

In retail trade and some service sectors, activity has been held up by solid growth in household demand. Private consumption will probably continue to rise sharply over the coming years. Housing investment also appears to be rising. These factors imply that activity in retail trade and some service enterprises will continue to increase. Preliminary national accounts figures show that investment in these sectors is edging up. Imports of capital goods such as office machines and computer equipment have increased recently, and the number of vehicles imported for the business sector is high.

Investment in service industries will probably be restrained by a continued high vacancy rate for office premises. The need for investment in new buildings is thus limited. As a result of this excess capacity, investment in services and retail trade are expected to constitute a somewhat smaller share of value added than has been the case on average over the past ten years. Nonetheless, retail trade and the service sector are expected to make the strongest contribution to growth in mainland business investment in the period ahead.

There are also signs of an improved situation in manufacturing, although the picture is more mixed. Some parts of this sector are experiencing increased foreign demand. Strong growth in the US and in a number of Asian and Eastern European countries is boosting demand and pushing up prices for some commodities. The business tendency survey and Norges Bank's regional network both indicate rising optimism among producers of intermediate goods. The situation is not as favourable in other manufacturing industries. Even though competitiveness has strengthened recently, high labour costs are still restraining activity. Developments in the production of capital goods and consumer goods are still fairly weak (see Chart 3.8). Overall, although manufacturing output is no longer falling, growth is still sluggish. Increased optimism and somewhat higher capacity utilisation nonetheless suggest that investment in manufacturing may rise at a moderate pace in the years ahead.

Investment in petroleum extraction, including pipeline transport, was very high in 2003, increasing by 16% since 2002 to NOK 63.3bn last year. The rise was mainly due to higher investment in on-shore facilities, while investment in exploration activities was at its lowest for many years. Investment in extraction and pipeline transport are expected to continue to rise both this year and next. Important contributors here are the Snøhvit and Ormen Lange projects. When these two major development projects have been completed, total petroleum investment is likely to decline. In our projections, it is assumed that oil prices will remain fairly high in the years ahead, which might curb the fall in investment.

Stronger fiscal stimulus

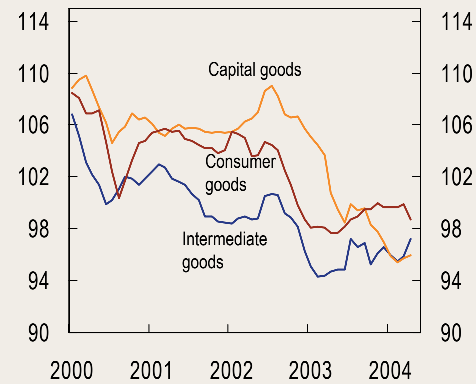
The fiscal guidelines imply that the use of petroleum revenues over the central government budget shall over time correspond to the expected real return on the Petroleum Fund. At the same, fiscal policy shall contribute to stabilising output and employment.

Central government accounts for 2003 show a substantially larger structural, non-oil deficit than estimated in the National Budget for 2004 (see Chart 3.9). This year's deficit is also likely to be larger than previously projected. In the approved budget for 2004, the use of petroleum revenues is estimated to be NOK 22bn higher than a mechanical application of the fiscal rule would imply. It appears that the fiscal stimulus in the period 2002 to 2004 as a whole will be stronger than called for in the National Budget for 2004.

Underlying growth in central government expenditure, in value terms, is estimated at around 5% in both 2003 and 2004. This is higher than mainland GDP growth, in value terms, in the same period (see Chart 3.10), but on a par with trend growth.

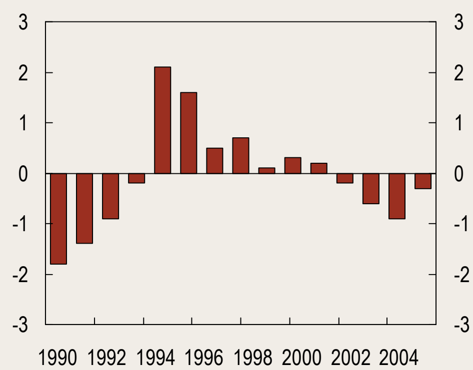
Our projections for growth in public sector expenditure as from 2005 are based on the assumption that the structural, non-oil deficit will remain unchanged, and that public sector expenditure will grow in pace with trend growth in mainland GDP in value terms. Based on this assumption, we project public sector real expenditure growth at about 1½% as from 2005.

Chart 3.8 Manufacturing output index. Volume. 3-month moving average. Jan 00 – Apr 04



Source: Statistics Norway

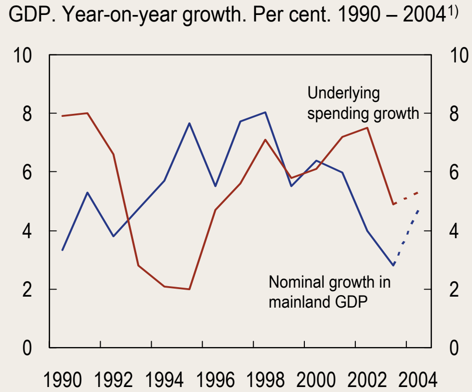
Chart 3.9 Change in structural non-oil budget balance[1]. Annual figures.1990 – 2004



[1] The budget balance as a percentage of trend GDP for mainland Norway, change on previous year

Source: Revised National Budget 2004

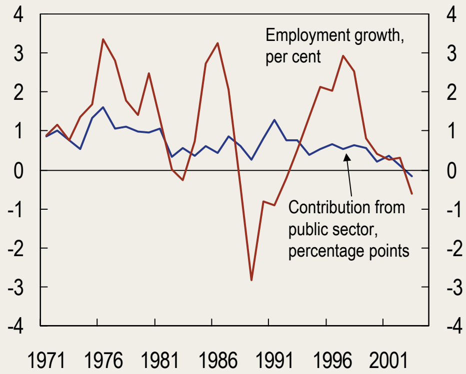
Chart 3.10 Underlying spending growth in the government budget and nominal growth in mainland GDP. Year-on-year growth. Per cent. 1990 – 2004[1]



[1] Estimates for 2004

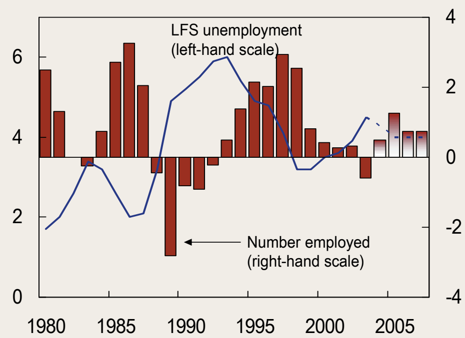
Sources: Ministry of Finance and Statistics Norway

Chart 3.11 Growth in number employed and contributions from the public sector. Annual figures. 1971 – 2003



Source: Statistics Norway

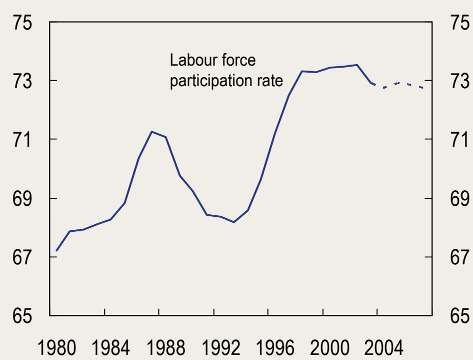
Chart 3.12 Change in employment on previous year, per cent. Unemployment[1)] as a percentage of the labour force. Annual figures. 1980 – 2007[2)]



[1)] LFS unemployment
[2)] Estimates for 2004 – 2007

Sources: Statistics Norway and Norges Bank

Chart 3.13 Labour force as a percentage of population aged 16–74 (labour force participation rate). Per cent. Annual figures. 1980 – 2007[1)]



[1)] Estimates for 2004 – 2007

Sources: Statistics Norway and Norges Bank

Public sector employment fell by ½% from 2002 to 2003 and has not provided the same stable contribution to employment growth in the past couple of years as previously (see Chart 3.11). This may be due to the deterioration in local government finances as a result of strong growth in labour costs over several years. Employment has also been reduced as a result of rationalisation and outsourcing of public services to private operators.

In value terms, the rise in overall local government revenues is estimated at close to 7% from 2003 to 2004, after an increase of 4% last year. Real growth in total local government revenues from 2003 and 2004 is estimated at around 3¾%. This is the highest growth in real revenues since 1997.

High revenue growth may provide the basis for an increase in activity this year after virtually no change in activity in 2002 and 2003. This also implies that employment in the local government sector may increase in the period ahead. On the other hand, local government budget deficits are substantial and debt is rising. We assume that about half of this year's revenue growth will be used to reduce the deficits. Local government consumption is estimated to increase by 1¼%.

Improvement in the labour market

Employment has shown little increase since last summer, even though output growth has been high. According to the quarterly national accounts, employment in the first quarter of this year was 0.3% lower than in the first quarter of last year. Manufacturing employment has declined, while employment has risen in education, health and social services and retail trade.

Reports from our regional network suggest moderate growth in employment in the period ahead. The number of new vacancies advertised in the media is still low. According to our contacts, however, prospects are somewhat brighter than at the beginning of the year, particularly in the private service sector. Employment is expected to increase by ½% from 2003 to 2004 (see Chart 3.12), i.e. and increase of 13 000 in the number employed, implying that employment growth will be fairly moderate in relation to demand and output. In the years ahead, the difference between output growth and the rise in the number employed is expected to be somewhat smaller. Employment is projected to increase by 1¼% next year, and ¾% in 2006 and 2007.

Growth in the labour supply has been weak in the past year after several years of growth on a par with, or stronger than, population growth (see Chart 3.13). The labour force participation rate fell by 0.6 percentage point last year, to 72.9 per cent. The decline must be seen in the light of weaker economic developments. When labour market conditions deteriorate, there tends to be an outflow from the labour force, for example into education. Increased economic activity in the period ahead will push up the labour supply.

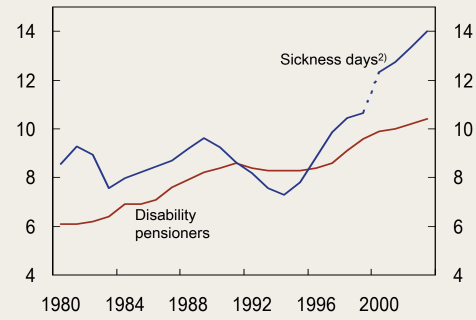
Structural changes also affect the labour supply. From 1980 to 2003, the supply of labour increased on average somewhat more than the population in the age group 16 to 74. This difference is partly due to an increase in the labour force participation rate among women. In addition, the age composition of the population has also made a positive contribution to the labour supply. The increase in the number of disability pensioners has had the opposite effect. On average, the rise in the number of disability pensioners has reduced growth in the labour supply by 0.2 percentage point per year from 1980 to 2003 (see Chart 3.14).

The increase in the number of disability pensioners will probably continue to curb growth in the labour force in the years ahead. The age composition of the population will also over time contribute to reducing the labour supply somewhat. In addition, much of the potential for an increase in the participation rate among women has been exhausted.

Overall, the labour force is projected to expand by 1% next year. In 2006 and 2007, the labour force is expected to grow somewhat less than the working age population. With these developments in the labour supply and in employment, unemployment will edge down this year and next. Measured by the LFS, unemployment is estimated at 4% in the years from 2005 to 2007.

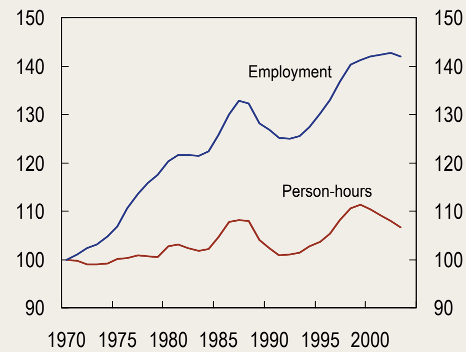
The rise in the number of person-hours worked has been substantially lower than the rise in the number of employed (see Chart 3.15). These developments may to some extent be explained by the increase in part-time employment, although a marked rise in sickness absence has also contributed. Over the past ten years, sickness absence has on average increased by around ¼% per year. Our projections are based on the assumption that increased sickness absence and more extensive use of part-time employment will continue to limit the rise in person-hours, although to a lesser extent than has been the case over the past ten years.

Chart 3.14 Number of disability pensioners as a percentage of the population (aged 18 – 67) and number of sickness days per employee[1]. Annual figures. 1980 – 2003



[1] Paid by the National Insurance
[2] Since 2000 the sick pay scheme has also applied to all central government employees. This results in a break in the series between 1999 and 2000
Source: National Insurance Administration

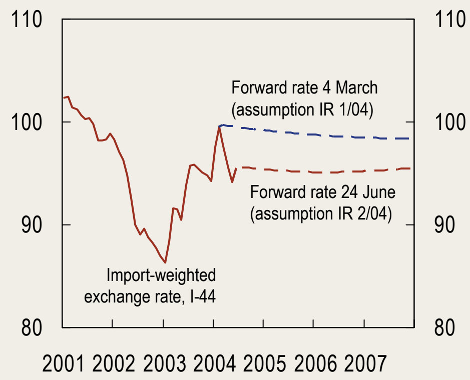
Chart 3.15 Developments in number of person-hours worked and the number of employed persons in mainland Norway. Annual figures. Index. 1970=100. 1970 – 2003



Sources: Statistics Norway and Norges Bank

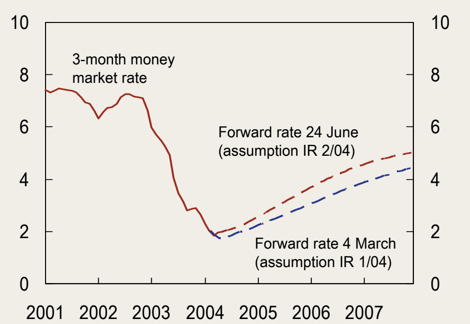
4 | Inflation projections

Chart 4.1 Assumption for the krone exchange rate (I-44)[1]. Forward exchange rates. Monthly figures



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

Chart 4.2 Assumption for the money market rate[1]. Forward interest rate[2]. Monthly figures. Per cent



[1] The money market rate is normally about ¼ percentage point higher than the sight deposit rate
[2] 3-month money market rate up to May 2004. The 3-month forward rate is estimated using four money market rates and four government bond yields with different maturities as observed on 4 March and 24 June
Source: Norges Bank

Chart 4.3 CPI-ATE. Seasonally adjusted monthly rise. 3-month moving average, annualised. Oct 03 – Dec 04[1]

[1] Estimates from Jun 04 – Dec 04
Sources: Statistics Norway and Norges Bank

4.1 Inflation outlook

Inflation is still very low, but has edged up in the last few months. Norges Bank's sight deposit rate has been reduced to 1.75%. The krone exchange rate, measured by the import-weighted index I-44, has depreciated by about 10% since the beginning of 2003.

In Inflation Report 1/04, published in March, inflation was projected to reach the inflation target of 2½% in the course of spring 2006. Since the beginning of March 2004, the krone has appreciated by about 3%. The forward exchange rate now reflects expectations of a krone exchange rate at approximately the current level in the years ahead (see Chart 4.1). Market participants have also revised upwards their interest rate expectations (see Chart 4.2). If the interest rate and exchange rate move in line with assumptions, inflation may remain below the inflation target up to summer 2007.

Inflation in Norway is being restrained by low and in part negative external price impulses. The rise in prices for internationally traded goods measured by other countries' export prices has picked up, but is still low. In addition, a steadily growing share of Norway's imported consumer goods comes from low-cost countries in Asia and Central Europe. This is dampening the effects on inflation of a weaker krone over the past 18 months.

The rise in prices for domestically produced goods and services is being curbed by strong competition. This has exerted pressures on profit margins. Many enterprises have cut costs, with an attendant increase in productivity. Wage growth has moderated. There are signs that the Norwegian economy can sustain high growth in the near term without a substantial rise in price and wage inflation.

Nevertheless, inflation is projected to edge up in the period ahead. The depreciation of the krone through 2003 will result in higher prices for imported consumer goods. Adjusted for seasonal variations, monthly CPI-ATE inflation is projected to be positive in the coming months (see Chart 4.3). The year-on-year rise in consumer prices will pick up fairly rapidly towards the end of the year (see Chart 4.4).

According to the projections, inflation will continue to rise in the period from 2005 to 2007, but at a slower pace. Driving forces other than the exchange rate will push up inflation. Demand in the Norwegian economy is projected to remain high, which is expected to lead to an increase in the use of resources. Increased demand for labour will result in lower unemployment, with the prospect of somewhat higher wage growth. The output gap will gradually turn slightly positive.

Higher commodity prices point to higher external price impulses ahead. The prospects for international wage growth, on the other hand, point to persistently moderate inflation. The shift in imports towards low-cost countries is pushing down prices for imported consumer goods. This trend is expected to continue in the next few years. It is assumed that external price impulses will normalise towards the end of the projection period.

The appreciation of the krone since March 2004 will gradually dampen the rise in prices for imported consumer goods. Given the underlying exchange rate assumption, prices for these goods are projected to remain virtually unchanged in 2005 and 2006 (see Chart 4.4). The effect of the krone appreciation since March will gradually unwind. Higher external price impulses are then projected to lead to a higher rise in prices for imported consumer goods.

Oil prices have been high over a longer period. Since the beginning of the year, oil prices have risen by about 15%. The direct effect of oil prices on inflation is not measured in the CPI-ATE, which excludes energy products. Indirect effects, such as increased fuel costs in the transport industry, will nevertheless exert some upward pressure on inflation.

Given the interest rate and exchange rate assumptions, CPI-ATE inflation is projected to edge up fairly slowly in the period 2005 to 2007. Inflation is not likely to reach target until the end of the projection period.

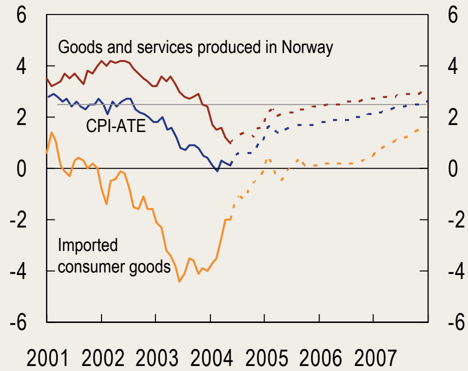
Developments in the consumer price index including tax changes and energy products (CPI) have been marked by substantial fluctuations in electricity prices since the beginning of 2003 (see Chart 4.5). The effect of these fluctuations has now largely been eliminated and CPI inflation has edged up. Higher oil prices have contributed to higher petrol prices recently. As a result, the CPI is likely to increase somewhat more rapidly than the CPI-ATE in the near term. Later in the projection period, the two indices are expected to rise at the same pace.

4.2 Price impulses

Low, but increasing external price impulses

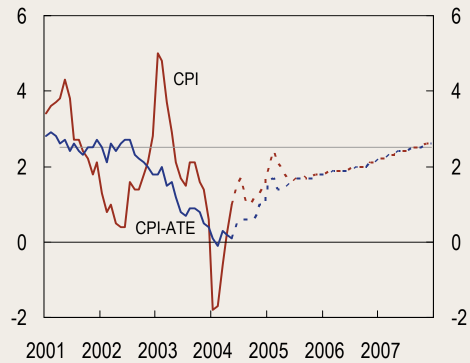
The rise in prices for imported consumer goods has been low since the mid-1990s. During this period, the rise in prices for these goods has been considerably lower than the rise in the overall CPI (see Chart 4.6), primarily reflecting low external price impulses. Slow growth in costs for the distribution and sale of goods in Norway has probably also made a contribution. In the last two years, the appreciation of the krone in 2002 has further dampened inflation.

Chart 4.4 CPI-ATE. Total and by supplier sector[1]. 12-month rise. Per cent. Jan 01 – Dec 07[2]



[1] Norges Bank's estimates
[2] Estimates from Jun 04 – Dec 07
Sources: Statistics Norway and Norges Bank

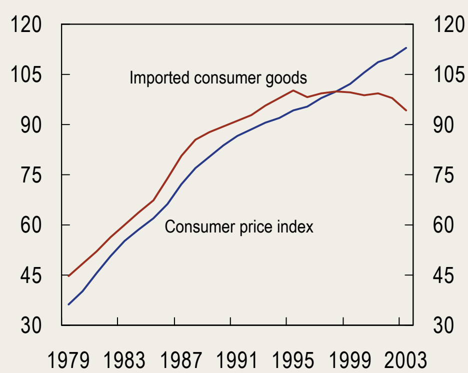
Chart 4.5 CPI and CPI-ATE. 12-month rise. Per cent. Jan 01 – Dec 07[1]



[1] Estimates from Jun 04 – Dec 07

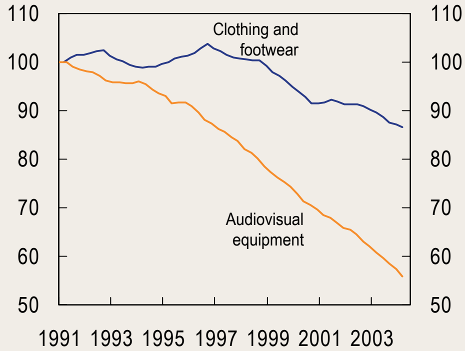
Sources: Statistics Norway and Norges Bank

Chart 4.6 CPI and prices for imported consumer goods. Annual figures. Index. 1998=100. 1979 – 2003



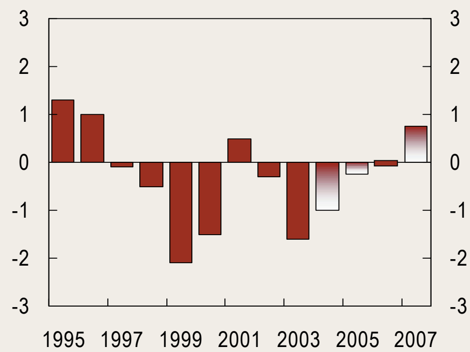
Source: Statistics Norway

Chart 4.7 Projected price movements for some imported consumer goods, measured in foreign currency. Quarterly figures. Index. 91 Q1=100. 91 Q1 – 04 Q1



Sources: EcoWin and Norges Bank

Chart 4.8 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual figures. 1995 – 2007[1)]



[1)] Estimates for 2004 – 2007

Source: Norges Bank

External price impulses to the Norwegian economy, as measured here, have been negative in recent years. Prices for imported consumer goods, measured in foreign currency, fell by roughly 1½% last year.

External price impulses to the Norwegian economy are expected to increase gradually in the years ahead. The projections are based on a higher rise in export prices among our trading partners. International producer prices have started to rise, largely as a result of higher prices for oil and other commodities. Somewhat higher capacity utilisation is also expected to push up inflation in other countries. As the shift in imports towards low-cost countries is expected to continue, the impact on Norway's import prices will be curbed. There is probably a potential for further growth in the share of imports from China and Central Europe where cost levels are low. This shift has reduced consumer prices for clothing and footwear in recent years (see Chart 4.7).

The international fall in prices for IT, telecommunications and audiovisual equipment is expected to continue in the next couple of years. Since the mid-1990s, prices for audiovisual equipment have dropped by an average 5.5% annually in Norway. Consumer prices for these goods have also fallen in other countries probably due to high productivity growth and strong international competition.

The projections are based on the assumption that the fall in prices for clothing, footwear and audiovisual equipment will continue over the next two years. However, there is little evidence to suggest that this trend will persist in the long term. Prices for these goods are therefore projected to increase more in pace with prices for other imported consumer goods towards the end of the projection period. Overall, external price impulses are expected to edge up to ¾% in 2007 (see Chart 4.8).

Prices for imported consumer goods in the CPI-ATE are also affected by domestic conditions. On average, the cost of goods accounts for approximately half of the price for imported consumer goods. The remaining portion of the price paid by the consumer consists primarily of selling and distribution costs in Norway. The increase in these costs has probably been modest in recent years, due in part to strong productivity growth in the wholesale and retail sector. In many industries, mergers and chain store cooperation have resulted in lower purchasing costs and improved economies of scale for logistics and inventories.

The projections are based on the assumption that domestic cost inflation will gradually normalise. More normal productivity growth in the wholesale and retail sector will contribute to pushing up selling prices for Norway's imported consumer goods.

Exchange rate developments will push up inflation

In the period to spring 2005, the year-on-year rise in prices for imported consumer goods is expected to move up rapidly as a result of the depreciation of the krone in 2003. Changes in the krone exchange rate are reflected fairly quickly in import prices as they are measured in External Trade Statistics (see Chart 4.9). These prices have increased since last summer as a result of the depreciation of the krone through 2003. Experience shows that changes in the exchange rate are reflected in import prices approximately six months earlier than in consumer prices. Therefore, the fall in prices for imported consumer goods was expected to slow gradually from the beginning of 2004. Developments in the exchange rate through 2003 indicate that prices for imported consumer goods will continue to rise through 2004.

With the exchange rate assumptions underlying the analyses in Inflation Report 1/04, the exchange rate was projected to make a significant positive contribution to consumer price inflation in 2005 and 2006. Measured by the import-weighted index I-44, the krone is approximately 3% stronger than at the beginning of March 2004. The forward exchange rate implies that the krone will remain virtually constant at the current level in the years ahead. The change in the krone exchange rate implies in isolation that prices for imported consumer goods will increase less in the years ahead than projected in March (see Chart 4.10).

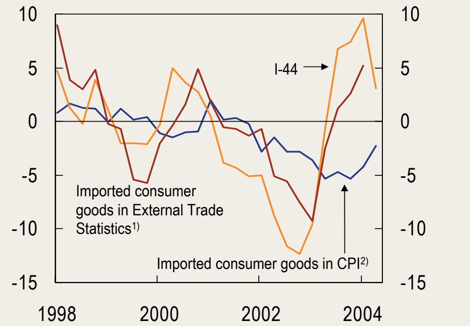
Increased competition curbs inflation

Growth in the Norwegian economy has increased. The output gap is projected to be slightly negative this year but to close in the period to 2005. Normally, costs will increase again when excess capacity is reduced. However, competition has intensified in a number of industries as a result of new entrants and changes in operating conditions. Growth in unit labour costs has fallen in the last year (see Chart 4.11), exerting downward pressure on prices for domestically produced goods and services. It is assumed that increased competition and rationalisation will result in stronger-than-normal growth in potential output in 2004. This scenario will contribute to continued subdued pressures on prices for domestically produced goods and services for a period ahead. From 2005, we assume that potential output will grow more in line with a historical trend.

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

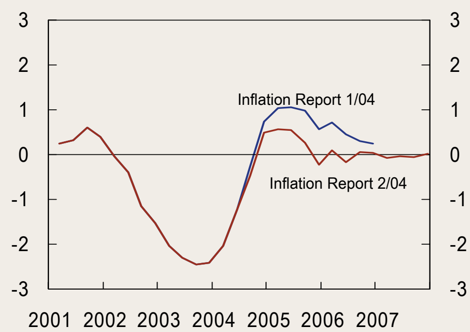
Consumer price inflation has been below the inflation target since summer 2002. Inflation is now very low. Given the assumptions underlying the projections in this report, it will

Chart 4.9 Prices for imported consumer goods in the CPI and in External Trade Statistics, and I-44. 4-quarter rise. Per cent. 98 Q1 – 04 Q2



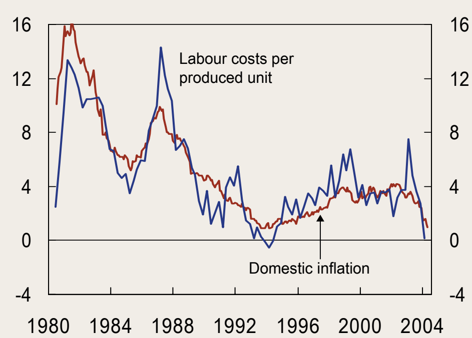
[1)] Norges Bank's estimates: Clothing and accessories, footwear, furniture, food and beverages
[2)] Excluding audiovisual equipment and cars. Observations in April and May 2004 are used as the basis for the second quarter
Sources: Statistics Norway and Norges Bank

Chart 4.10 Contribution of the exchange rate to rise in prices for imported consumer goods. Based on historical exchange rates and the forward exchange rate in *Inflation Report* 1/04 and 2/04. Percentage points. Quarterly figures. 01 Q1 – 07 Q4



Source: Norges Bank

Chart 4.11 Labour costs per produced unit[1)] and domestic price inflation[2)]. Rise on same period previous year. Per cent. Jun 80 – May 04



[1)] Labour costs in relation to gross product. Mainland Norway excl. the energy sector. 4-quarter moving average
[2)] Adjusted for tax changes and excluding energy products. Monthly figures
Sources: Statistics Norway and Norges Bank

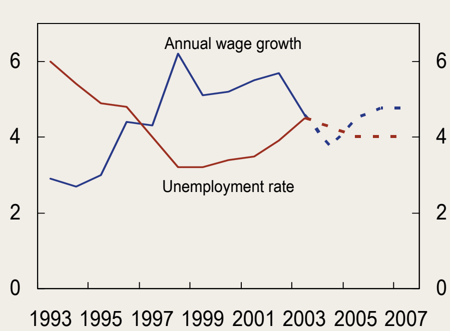
Chart 4.12 Expected consumer price inflation in 5 years. Per cent. Quarterly figures. 02 Q2 – 04 Q2

Source: TNS Gallup

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

Source: TNS Gallup

Chart 4.14 Annual wage growth[1)] and unemployment rate[2)]. Per cent. Annual figures. 1993 – 2007[3)]



1) Average for all groups. Including cost of additional vacation days
2) LFS
3) Projections for 2004 – 2007
Source: Technical Reporting Committee on Income Settlements, Statistics Norway and Norges Bank

take some time before inflation reaches target. If inflation remains below target for a longer period, there is a risk that inflation expectations will become entrenched at too low a level. This may in itself make it more demanding to bring inflation back to target.

Inflation expectations can be measured in various ways. In the TNS Gallup expectations survey, various participants are interviewed about their inflation expectations 1, 2 and 5 years ahead. The surveys suggest that inflation expectations remain firmly anchored around the inflation target in the long term (see Chart 4.12). In the shorter term, economic agents expect inflation to be somewhat lower than the inflation target of 2½%. In the second quarter of 2004, both the expert panel and the social partners participating in the survey expected consumer price inflation to be below 2% one year ahead. At the two-year horizon, consumer price inflation is expected to increase somewhat, but still not reach target (see Chart 4.13). See box on page 49 for a more detailed discussion of inflation expectations in Norway and in other countries.

Low inflation curbs wage growth

Wage growth has declined from the high level prevailing for a number of years. Results from groups that have completed wage negotiations in this year's wage settlement suggest that average annual wage growth in 2004 will be approximately 3¾% for all groups.

Higher growth in the Norwegian economy implies a somewhat tighter labour market in the period ahead. This normally translates into higher wage demands. Expectations of continued low inflation may have the opposite effect. In this year's wage settlements, the social partners probably assumed that consumer price inflation from 2003 to 2004 would be lower than the inflation target. Prior to the wage settlement, the Technical Reporting Committee on Income Settlements estimated CPI inflation at 1% in 2004, which probably contributed to curbing nominal pay increases. Given the interest rate and exchange rate assumptions underlying the projections in this report, inflation is likely to be below target in both 2005 and 2006. This scenario will probably result in lower wage increases than if inflation were expected to be close to 2½%.

Unemployment as measured by the Labour Force Survey (LFS) is projected to fall to 4% in 2005. Annual wage growth is projected at 4½% (see Chart 4.14). Unemployment is expected to remain stable at 4% in 2006 and 2007. Nevertheless, wage growth is projected to be somewhat higher in these years due to expectations of higher inflation.

The projections imply that real wages will show a fairly sharp rise (see Chart 4.15). The low rise in prices for imported consumer goods will restrain CPI inflation, providing scope for a sharp rise in real wages while corporate profitability is maintained. Prices for goods and services sold in Norway are projected to increase more than the overall CPI. Compared with the rise in prices for Norwegian companies' products, wage growth is significantly lower and more in line with projected growth in productivity.

In connection with the 2004 wage settlement, the Government has indicated that it will table proposals concerning compulsory occupational pensions this year, including proposals for certain minimum standards that will apply to all employees that do not already benefit from more favourable schemes. The impact on companies' costs is uncertain. An introduction of occupational pensions that is not matched by lower wage increases may result in higher-than-projected labour cost growth.

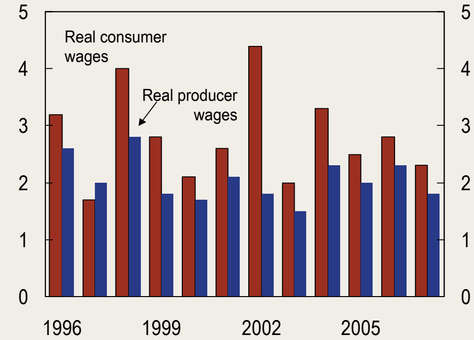
4.3 Risks to the inflation outlook

The inflation projections are based on assumptions concerning forward interest and exchange rates, projections for domestic price and cost developments and external price impulses. There is considerable uncertainty surrounding these factors. There is also uncertainty associated with our analyses of economic relationships. On the whole, the upside and downside risks to the inflation projections are considered to be balanced. Chart 4.16 shows the uncertainty surrounding the inflation projections, calculated on the basis of historical deviations between projected and actual CPI-ATE inflation.

The krone exchange rate has fluctuated considerably in recent years and has contributed to fluctuations in inflation and the inflation projections. The appreciation of the krone exchange rate since the March report is the main reason that inflation is projected to be lower in the period ahead. In the period since the beginning of March, the krone exchange rate has changed considerably (see Chart 4.17). Exchange rate expectations ahead, as implied by the forward exchange rate, have also varied substantially. These fluctuations may be related to changes in the expected interest rate differential between Norway and its trading partners, but other factors, such as changes in oil prices, have probably also had an effect.

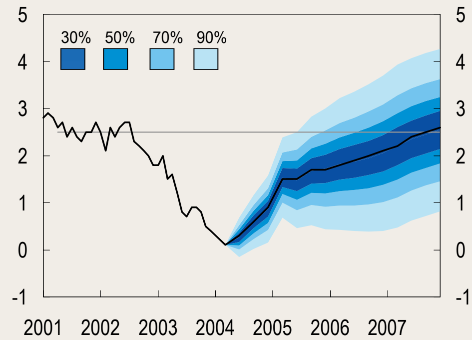
The inflation projections are sensitive to changes in the krone exchange rate. If developments in the krone exchange rate differ from the assumptions in this report, the inflation outlook will be affected. If the krone depreciates to the level prevailing at the beginning of March, inflation is likely to return to target more quickly than projected in this

Chart 4.15 Growth in real consumer wages and real producer wages[1]. Per cent. Annual figures. 1996 –2007[2]



[1] Consumer price inflation for goods and services produced in Norway is used as a deflator for real producer wages. The CPI is the deflator for real consumer wages
[2] Projections for 2004 – 2007
Source: Norges Bank

Chart 4.16 Projections and uncertainty for the CPI-ATE[1]. 12-month rise. Per cent. Jan 01 – Dec 07



[1] The bands in the fan indicate different probabilities for developments in the CPI-ATE. Probabilities are based on the difference between projected and actual developments in underlying inflation in the period 1997 – 2004
Sources: Statistics Norway and Norges Bank

Chart 4.17 Changes in I-44. Daily figures. 1 Mar 04 – 24 Jun 04

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

report. Similarly, a further appreciation of the krone would imply lower-than-projected inflation through the projection period.

The pass-through from the krone exchange rate to consumer prices is also uncertain. Our experience of how market participants set prices when monetary policy is based on inflation targeting is still fairly limited.

Monetary policy has been eased considerably since December 2002. Our experience of such considerable and rapid monetary policy easing and such a low nominal interest rate is limited. If the projections underestimate the effect of the stimulus on overall demand, capacity utilisation may increase more rapidly. A shortage of labour may then arise earlier than assumed and wage growth may be higher than projected.

On the other hand, manufacturing competitiveness and low inflation may be given greater emphasis in the wage negotiations than assumed. Wage growth may then be lower than projected.

Projections for developments in potential output are uncertain. If potential output increases less than assumed, inflation may rise more than projected. On the other hand, sharp growth in potential output may continue for several years. This will provide the basis for higher output without a rise in wage and price inflation.

The global upturn seems to have taken hold and may result in higher-than-expected inflation in other countries. This may lead to higher price impulses from our trading partners. A stronger global upturn may also boost demand for Norwegian export goods, resulting in higher-than-projected output growth.

The sharp increase in oil prices and other commodity prices partly reflects special factors such as unrest in the Middle East, but also higher demand. External price impulses may be stronger than assumed if the increase in oil prices and other commodity prices persists.

In 2004, the Chinese authorities have introduced measures to curb economic growth and prevent an overheating of the economy. If growth in China slows markedly, demand and commodity prices may fall. This may contribute to lower inflation in Norway as well. It is also possible that the shift towards imports from low-cost countries will be more substantial than assumed, so that import prices do not increase in line with our projections.

5 Monetary policy assessments and strategy

Norges Bank's operational conduct of monetary policy is oriented towards low and stable inflation. The operational target for monetary policy is annual consumer price inflation of approximately 2.5% over time.

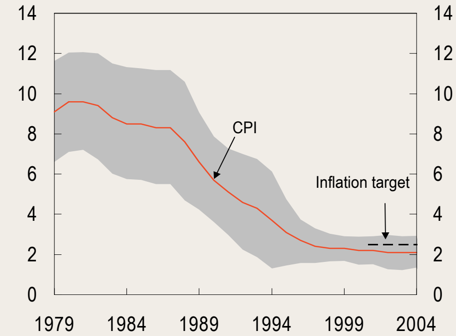
Monetary policy influences the economy with long and variable lags. Norges Bank sets the interest rate with a view to stabilising inflation at the target within a reasonable time horizon, normally 1-3 years. The more precise horizon will depend on disturbances to which the economy is exposed and how they will affect the path for inflation and the real economy ahead.

Norges Bank operates a flexible inflation targeting regime, so that both variability in output and employment and variability in inflation are given weight. Chart 5.1 shows that the average inflation rate, measured by the consumer price index (CPI), fell through the 1980s and 1990s. Over time, movements in the CPI will coincide with movements in underlying inflation (CPI-ATE). The grey area in the chart illustrates inflation variability, primarily based on the degree of variation in previous years. The chart shows that inflation has varied less over the past decade than previously. When monetary policy is oriented towards stabilising inflation around the target, inflation variability may also be low in the period ahead. Developments in the output gap[1] provide a basis for assessing output stability. Chart 5.2 illustrates that output variability has been moderate over the past decade compared with variability at the end of the 1980s and beginning of the 1990s. Flexible inflation targeting may contribute to continued low variability in the output gap, but variability in both inflation and output also depends on the magnitude of the disturbances to which the economy is exposed.

The projections for developments in inflation and output have changed somewhat since the March *Inflation Report* (see Chart 5.3). In both reports the projections are based on a technical assumption of an interest rate in line with forward interest rates and a krone exchange rate in line with the forward exchange rate (see Charts 5.4 and 5.5). Financial market participants expect a less expansionary monetary policy in the period ahead than four months ago. This is reflected in changes in the forward interest rate curve and forward exchange rate since March. The projections for wage growth have been revised downwards somewhat. Combined with the assumption of a stronger krone exchange rate, this has contributed to a downward revision of the inflation projections for 2005 and 2006 compared with the last *Inflation Report*. Overall, the

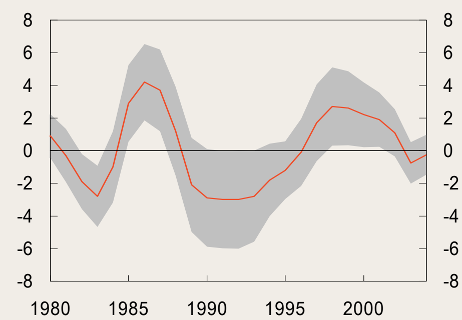
[1] See box on page 46 for a further discussion of the calculation method and interpretation of the concept.

Chart 5.1 CPI. Moving 10-year average[1)] and variation[2)]. 1979 – 2004[3)]. Per cent



[1)] The moving average is estimated 7 years back, current year and 2 years ahead
[2)] The band around the CPI is the variation in the period, measured as +/- one standard deviation
[3)] Figures for 2002 – 2004 are based on projections
Sources: Statistics Norway and Norges Bank

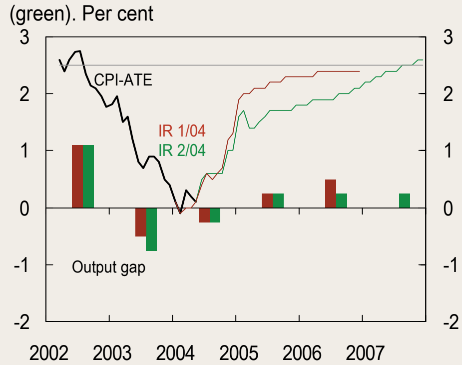
Chart 5.2 Projections for the output gap, level[1)] and variation[2)]. 1979 – 2004. Per cent



[1)] The output gap measures the difference between actual and trend mainland GDP
[2)] The band shows the variation in the output gap measured as ± one standard deviation. The variation is estimated as average standard deviation in a 10-year period, 7 years back, current year and 2 years ahead

Sources: Statistics Norway and Norges Bank

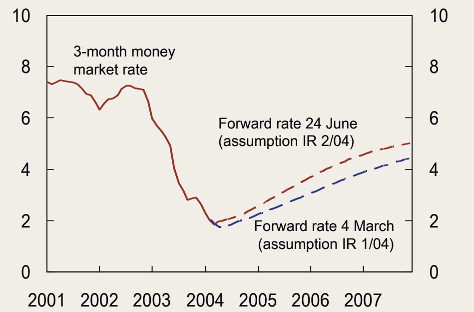
Chart 5.3 Projections for the CPI-ATE[1)] and the output gap[2)] in *Inflation Report* 1/04 (red) and 2/04 (green). Per cent



[1)] CPI-ATE: CPI adjusted for tax changes and excl. energy products
[2)] The output gap measures the difference between actual and trend mainland GDP

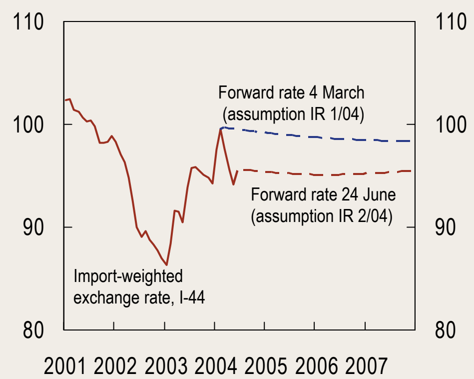
Sources: Statistics Norway and Norges Bank

Chart 5.4 Assumption for the money market rate[1]. Forward interest rate[2]. Monthly figures. Per cent



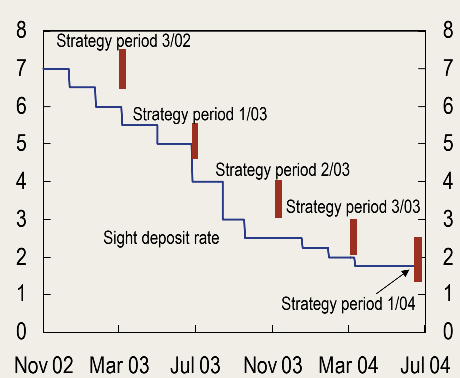
[1] The money market rate is normally about ¼ percentage point higher than the sight deposit rate
[2] 3-month money market rate up to May 2004. The 3-month forward rate is estimated using four money market rates and four government bond yields with different maturities as observed on 4 March and 24 June
Source: Norges Bank

Chart 5.5 Assumption for the krone exchange rate (I-44)[1]. Forward exchange rates. Monthly figures



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

Chart 5.6 Interval for the sight deposit rate at the end of each strategy period and actual developments. Daily figures. 1 Nov 02 – 1 July 04



Source: Norges Bank

projections for the output gap for the period ahead have not been changed to any considerable extent. See box on page 51 of this report for a further discussion of changes in the projections.

If interest rates and the exchange rate move in line with forward interest rates and the forward exchange rate, inflation may pick up through the projection period, but will be below target throughout the period up to summer 2007 according to the projections. The output gap, as measured here, will be marginally positive in 2005-2007. If the sight deposit rate is kept unchanged for a longer period than indicated by forward interest rates, inflation may reach the target earlier.

5.1 Monetary policy since 11 March

As a result of the prospect of low inflation and moderate growth in output and employment, the key rate (the sight deposit rate) was reduced by a total of 5.25 percentage points between December 2002 and March 2004. Inflation has been substantially lower than the inflation target for a long period. The year-on-year rise in the CPI-ATE gradually slowed from summer 2002 to February 2004, when it reached its lowest level at -0.1%, but has since risen to 0.1% in May. The key rate has been 1.75% since March. Monetary policy is aimed at higher inflation.

Strategy Document 1/04 and monetary policy meeting on 11 March

On the basis of analyses in *Strategy Document* 1/04, the Executive Board judged in March that a sight deposit rate in the interval 1¼-2½% would be appropriate at the end of June 2004 (see Chart 5.6). The interval was conditional on projections for economic developments in *Inflation Report* 1/04.

The projections in *Inflation Report* 1/04 were based on a technical assumption that the interest rate would move in line with forward interest rates observed at the beginning of March (see Chart 5.4). This implied a fall in the key rate towards 1½% by the summer and thereafter a gradual increase. The krone was assumed to shadow the forward exchange rate, indicating a virtually unchanged exchange rate in the years to 2006 (see Chart 5.5). A path in line with forward interest and exchange rates implied that inflation would increase in the period ahead and reach 2½% in spring 2006. The projections entailed pronounced economic growth, with the output gap turning marginally positive from 2005.

Such economic developments would not be contrary to the requirements as to a sound monetary policy. It would provide a reasonable balance between the objective of reaching the inflation target and stable developments in the real economy. It was also emphasised that interest rate developments abroad might have a considerable impact on the krone and that the inflation outlook in Norway implied that Norges Bank would not be the frontrunner when other countries raised interest rates.

In keeping with the analysis in *Strategy Document* 1/04, Norges Bank reduced the key rate by 0.25 percentage point to 1.75% on 11 March. It was also stated that "with a sight deposit rate of 1.75 per cent at present, the probability that inflation two years ahead will be lower than 2½ per cent is greater than the probability that it will be higher". As an alternative, the Executive Board considered leaving the interest rate unchanged and the possibility of keeping the interest rate low for a longer period than otherwise. However, the Executive Board concluded that it would not be appropriate – in the light of the decline in inflation in previous months – to deviate markedly from expectations in money and foreign exchange markets.

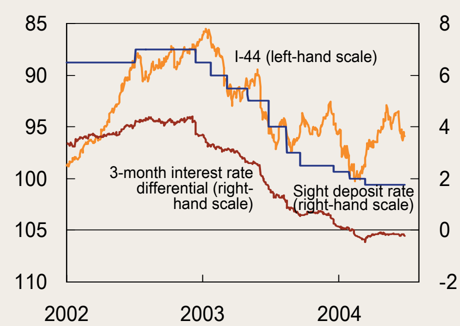
Monetary policy meeting on 21 April

Measured by the import-weighted index I-44, the krone appreciated by about 3½% between the monetary policy meeting on 11 March and the monetary policy meeting on 21 April (see Chart 5.7). In March, the year-on-year rise in the CPI-ATE was 0.3%. According to preliminary figures from Statistics Norway, mainland GDP growth in the fourth quarter of 2003 was in line with the projections in *Inflation Report* 1/04.

At the monetary policy meeting on 21 April, the Executive Board considered as alternatives either reducing the interest rate by 0.25 percentage point or keeping the interest rate unchanged and await additional information before any further reduction of the interest rate. In *Strategy Document* 1/04, it was noted that subdued price impulses both in Norway and internationally, coupled with the appreciation of the krone since the previous monetary policy meeting, were factors that supported a further easing of monetary policy. However, themes in the foreign exchange market shift, and Norges Bank does not have instruments to fine-tune the exchange rate. Nevertheless, a reduction in the key rate might partly have offset the tightening which a stronger exchange rate represented.

However, a number of factors indicated that we should await additional information before any further reduction of the interest rate. New information since the previous monetary policy meeting confirmed that activity in both the Norwegian and global economy was picking up. Inflation had stabilised and in March was slightly higher than projected in *Inflation Report* 1/04.

Chart 5.7 Import-weighted krone exchange rate[1)], sight deposit rate and 3-month interest rate differential against trading partners. Daily figures. 1 Jan 02 – 24 Jun 04



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

Source: Norges Bank

The Executive Board concluded that it was appropriate to keep the key rate unchanged at its meeting on 21 April. At the same time, it was stated that "with a sight deposit rate of 1.75 per cent at present, the probability that inflation two years ahead will be lower than 2½ per cent is greater than the probability that it will be higher". The Executive Board weighed the objective of bringing inflation back to target and stabilising inflation expectations against the risk that output growth might eventually be too high.

Monetary policy meeting on 26 May

The krone appreciated further in the period prior to the monetary policy meeting on 26 May. Expectations of persistently high oil prices were an important factor behind the krone appreciation through the spring. The appreciation was probably also influenced by expectations in financial markets that interest rates would increase to a greater extent in Norway in 2005 and 2006 than in other countries. The rise in prices in April confirmed the projections in *Inflation Report* 1/04.

At the monetary policy meeting on 26 May, the Executive Board concluded that it was appropriate to keep the key interest rate unchanged. Moreover, it was stated that "with a sight deposit rate of 1.75 per cent at present, the probability that inflation two years ahead will be lower than 2½ per cent is greater than the probability that it will be higher". As an alternative, the Executive Board considered reducing the key rate by 0.25 percentage point.

As was the case with the monetary policy meeting in April, developments in the krone exchange rate supported a further easing of monetary policy (see *Strategy Document* 1/04). On the other hand, monetary policy was already generating a strong stimulus to the Norwegian economy. There were signs that demand and output were picking up at a somewhat faster pace than projected in *Inflation Report* 1/04. Monetary policy influences the economy with long and variable lags. We have limited experience of the effects of such a low nominal interest rate level abroad and in Norway.

In the press release it was also stated that when inflation gradually increases from a very low level, this might provide a basis for gradually moving towards a more normal short-term interest rate level in Norway. This might counter excessive credit growth and excessive pressures on domestic resources in the medium term. In line with *Strategy Document* 1/04, it was also stated that interest rate developments abroad might have a considerable influence on movements in the krone exchange rate and that the inflation outlook in Norway implied that Norges Bank would not be the frontrunner when interest rates are increased in other countries.

5.2 Monetary policy assessments and strategy ahead

Sections 1-4 provide projections for inflation and the real economy in the period to end-2007 based on forward interest rates. Against the background of the analyses in Sections 1- 4, the Executive Board of Norges Bank approved a monetary policy strategy for the period from 1 July to the beginning of November at its meetings on 8 and 9 June and 1 July. This section presents the Executive Board's assessments and monetary policy strategy.

Forward interest rates have increased since the March *Inflation Report* and *Strategy Document* (see Chart 5.4). They are in line with market expectations that the sight deposit rate will rise to 2% towards the end of the year and further to 2¼% in the first quarter of 2005. Forward interest rates indicate expectations that the key rate will rise to around 5% towards the end of 2007.

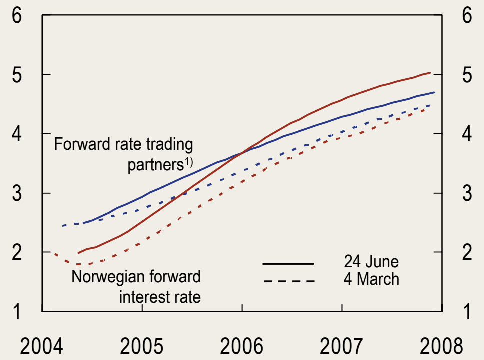
Since the March *Inflation Report* was published, the krone, as measured by the import-weighted index I-44, has appreciated by around 3%. The forward exchange rate is 3-4% stronger through the projection period than in the last *Strategy Document* and *Inflation Report* (see Chart 5.5). The forward exchange rate is approximately unchanged up to the end of 2007.

Chart 5.8 shows that the forward interest rates of our trading partners have also increased since March, but not as much as Norwegian rates. Forward interest rates indicate that the market expects short-term interest rates in Norway to be higher than the average of our main trading partners from 2006.

Inflation is very low. It has been lower than the inflation target since autumn 2002. The aim of monetary policy is higher inflation. The monetary policy stance is therefore expansionary. With the low level of inflation, it is appropriate to be particularly vigilant with regard to developments in consumer prices. However, consumer prices may show erratic variations from one month to the next. Several monthly observations show that inflation so far is consistent with the projections in *Inflation Report* 1/04. This summer and autumn, we will receive further confirmation of whether consumer prices are rising as expected. Monetary policy also places emphasis on avoiding imbalances in the real economy.

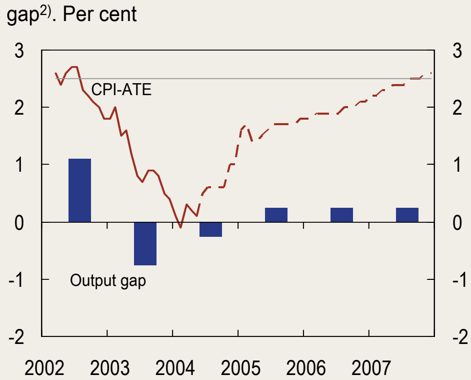
If interest rates and the exchange rate move in line with forward interest rates and the forward exchange rate, inflation may pick up through the projection period, but will be below target throughout the period up to summer 2007 according to the projections (see Chart 5.9). The output gap, as estimated here, will be marginally positive in 2005-2007.

Chart 5.8 Forward interest rates. Monthly figures. Per cent. Jan 04 – Dec 07



1) Estimated as a weighted average of the forward rates for the euro area, the US, Sweden and the UK
Source: Norges Bank

Chart 5.9 Projections for CPI-ATE1) and the output gap2). Per cent



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products
2) The output gap measures the difference between actual and trend mainland GDP
Sources: Statistics Norway and Norges Bank

Credit developments are still providing ambiguous signals for interest rate setting. Growth in household borrowing is strong, while enterprises are reducing debt. All in all, the financial stability outlook is satisfactory. However, high debt growth makes households more vulnerable to economic disturbances (see box on page 43).

Given the assumptions underlying the projections in this report, inflation will be somewhat lower than the inflation target in the period to autumn 2006. Capacity utilisation in the economy is rising, but the output gap, as estimated here, will only be marginally positive during the period.

Monetary policy should be aimed at increasing inflation at a somewhat faster pace than projected in this report. A more expansionary monetary policy ahead than that indicated by forward interest rates and the forward exchange rate may contribute to this. A more expansionary monetary policy can be implemented either by reducing the interest rate in the strategy period or by keeping the interest rate at its current level for a longer period than indicated by forward rates.

The monetary policy easing in the period December 2002-March 2004 is generating a fairly strong stimulus to the Norwegian economy. Monetary policy influences the economy with long and variable lags. There is considerable uncertainty as to how strong growth in the Norwegian economy will be and the inflationary impulses associated with demand growth. Moreover, with very high oil prices, the effect of a given interest rate reduction on the krone exchange rate may be less than normal.

Instead of reducing the interest rate further, the key rate should therefore be kept unchanged for a longer period than indicated by forward rates. This will contribute to higher inflation through the latter part of 2005 and in 2006, allowing inflation to return to target more quickly than projected in this report. The output gap in the next two years may then be somewhat more positive than projected in this report.

Such an interest rate path may provide a better balance between the objective of reaching the inflation target and stability in the real economy than a path based on forward interest rates and the forward exchange rate.

Interest rate setting should take into account that international interest rate developments will have an impact on inflation in Norway via the exchange rate. If interest rates in Norway are increased at an earlier stage than other countries, the krone might appreciate and have a dampening impact on inflation. A rise in international interest rates during the strategy period, coupled with unchanged Norwegian rates, may contribute to a weaker krone. This will make it easier to achieve the inflation target.

Exchange market interventions, either by buying or selling foreign currency, are not suitable as an instrument for influencing the krone exchange rate over a longer period. If exchange market interventions took place instead of changing the interest rate, foreign exchange market participants may be given ambiguous signals, and a game situation may arise. However, interventions may be appropriate if the krone exchange rate differs substantially from what is reasonable on the basis of fundamentals, and exchange rate movements also reduce the prospect of achieving the inflation target.

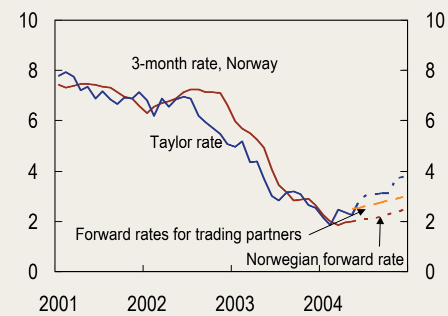
High oil prices have resulted in higher transfers to the Petroleum Fund than estimated earlier. This has given rise to a need to resume purchases of foreign currency to cover higher transfers to the Petroleum Fund. At the same time, this will smooth the effect of higher payments of petroleum taxes on the foreign exchange market.

According to the Taylor rule, the interest rate is set with a view to keeping inflation around a specific target over time, at the same time that the interest rate shall contribute to stabilising output. The rule can be used as a cross-check for interest rate setting. Chart 5.10 shows the interest rate that follows from the Taylor rule given our projections for inflation and the output gap. The chart also shows Norwegian forward interest rates and forward interest rates for our main trading partners. The Taylor interest rate is now about 1 percentage point above the current rate and higher than forward rates throughout the projection period.

According to this rule, the interest rate should be increased this summer. The increase is ascribable to an expected pick-up in both inflation and output growth over the year. According to the rule, the nominal interest rate should increase so that the real interest rate also increases gradually when inflation rises. However, the Taylor rule does not take into account that inflation is influenced via the interest rate differential against other countries and the exchange rate, and therefore has limitations as a reference for a small, open economy. An interest rate path in line with the Taylor rule would have increased the likelihood of a substantial appreciation of the krone and hence persistently low inflation.

The interest rate should be assessed regularly on the basis of new information emerging during the strategy period that is of significant importance for the outlook for inflation and output. With the low level of inflation, it is appropriate to be particularly vigilant with regard to developments in consumer prices. The following factors that may delay a rise in inflation should be given particular weight:

Chart 5.10 3-month money-market rate[1)], Taylor rate, forward interest rates for trading partners and Norway at 24 June. Monthly figures. Jan 01 – Dec 04



[1)] The money market rate is normally about ¼ percentage point higher than the sight deposit rate

Sources: Statistics Norway and Norges Bank

- An *appreciation of the krone* may bring inflation further below target at the one to three year horizon. Any interest rate reactions must be based on an analysis of the background for exchange rate movements and an assessment of the duration of the exchange rate change.
- *Lower-than-expected inflation* in the strategy period may indicate that inflation may also be lower than projected in the longer term. Any interest rate reactions must be based on an analysis of the background for low inflation and an assessment of the duration.
- A pronounced fall in *long-term inflation expectations* will increase the risk of persistently low inflation.
- *Lower global inflation and growth*, and hence a lower-than-expected rise in interest rates abroad, may lead to a stronger krone and lower imported inflation.

On the other hand, uncertainty concerning the effects of earlier monetary policy easing and the unusually low interest rate imply that we should exercise caution with regard to further interest rate reductions. The possible effects on expectations concerning future interest rate developments must also be carefully assessed.

Other factors may imply that the inflation target can be achieved earlier than projected:

- A *depreciation of the krone exchange rate* will contribute to higher inflation. With the current low level of inflation, Norges Bank will exercise caution with regard to increasing the interest rate in this situation.
- Substantially *higher-than-projected inflation* through the strategy period may indicate that inflation will also be higher than projected ahead. Monetary policy has had an expansionary effect over a longer period and growth in the Norwegian economy may be stronger than assumed. This may result in higher-than-projected inflation.
- *Stronger-than-expected global inflation and growth*, and hence a swifter rise in interest rates abroad may contribute to a weaker krone and higher imported inflation.

However, with the prospect of continued low inflation for a period ahead, wide deviations from projected economic developments would be required before the interest rate should be increased.

There is nevertheless considerable uncertainty surrounding economic developments over the next months. The interval for the sight deposit rate at the end of the strategy period should reflect this. Norges Bank's projections for economic developments imply a sight deposit rate in the interval 1¼-2¼% at the beginning of November 2004.

The Executive Board's approved strategy

- Norges Bank's operational conduct of monetary policy is oriented towards low and stable inflation. The operational target for monetary policy is annual consumer price inflation of approximately 2.5% over time.
- Monetary policy influences the economy with long and variable lags. Norges Bank sets the interest rate with a view to stabilising inflation at the target within a reasonable time horizon, normally 1-3 years. The more precise horizon will depend on disturbances to which the economy is exposed and how they will affect the path for inflation and the real economy ahead.
- The interest rate will normally be changed gradually so that we can assess the effects 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 an anchor for wage formation.
- With the current low level of inflation, Norges Bank will be particularly vigilant with regard to developments in consumer prices.
- There is considerable uncertainty concerning economic developments over the next months. Norges Bank's projections for economic developments imply a sight deposit rate in the interval 1¼ - 2¼ % at the beginning of November 2004.
- Developments in the krone exchange rate have an influence on inflation. Any interest rate reactions must be based on an analysis of the background for exchange rate movements and an assessment of the duration of the exchange rate change. If the krone appreciates substantially, this may provide a basis for considering an interest rate at the lower end of, or below, the interval. Uncertainty concerning the effects of previous monetary policy easing and the unusually low interest rate imply, on the other hand, that we should exercise caution with regard to further interest rate reductions. Similarly, there is a basis for considering an interest rate at the upper end of the interval, or higher, if the krone were to depreciate substantially. However, with the prospect of continued low inflation for a period ahead, wide deviations from projected developments would be required before the interest rate should be increased.

Financial stability

Financial stability implies that the financial system is robust to disturbances in the economy and can channel capital, execute payments and redistribute risk in a satisfactory manner. Financial instability will often have consequences for economic developments and inflation. Analyses of the financial stability outlook are therefore included in the basis for interest rate decisions.

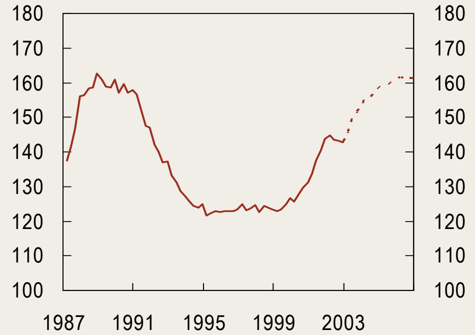
Growth in total credit (C3) has declined in recent months, and is now approximately in line with growth in the Norwegian economy. Enterprises are still reducing their debt, while household debt is growing rapidly and far more rapidly than their income (see Chart 1). This increases the vulnerability of households to economic disturbances and is an element of uncertainty with respect to economic developments. At the same time, the shift to a flexible inflation targeting monetary policy regime has reduced the risk of a sharp, simultaneous increase in interest rates and unemployment. The sharp rise in the value of dwellings in recent years is one of the main factors behind growth in household debt. After falling in the spring of 2003, house prices rose sharply in the latter half of the year. However, the rise in house prices has decelerated this year.

The fall in interest rates and stronger economic growth have increased enterprises' debt servicing capacity. Corporate profitability improved between 2002 and 2003 as a result of increased turnover, rationalisation, lower interest expenses and a weaker krone exchange rate. Enterprises that rent out office premises have been vulnerable in recent years as a result of falling rental income and property values. Other types of property enterprises have recorded higher earnings. The number of bankruptcies has fallen from the peak in the second quarter of 2003. Measured in terms of market value, the bankruptcy peak was reached in the latter half of 2002 (see Chart 2).

Bank profits improved somewhat from 2002 to 2003, with a further improvement in the first quarter of this year. Banks' securities earnings have increased, and loan losses and operating expenses have declined. On the other hand, the fall in interest rates has reduced banks' net interest income.

On the whole, the short-term outlook for financial stability is satisfactory, and somewhat better than six months ago. The low interest rate level has made it easier for households and enterprises to service debt. However, it is important that long-term investments are not based on the assumption that interest rates will remain low over the life of the loan. For a more detailed analysis of the financial stability outlook, see *Financial Stability* 1/2004 and the *Annual Report on Payment Systems 2003*.

Chart 1 Household debt burden[1]. Quarterly figures. 87 Q1 – 06 Q4[2]

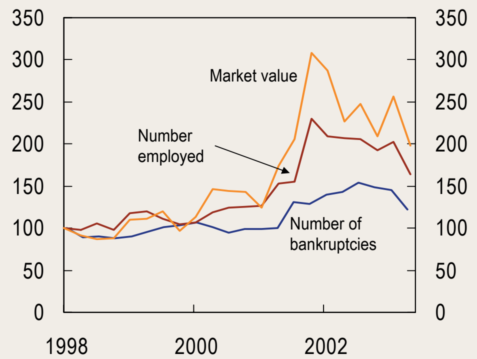


[1] Loan debt as a percentage of disposable income less the return on insurance claims. In the projection it is assumed that debt growth gradually slows and is in line with growth in disposable income in 2006

[2] Projections for 2003 – 2006

Source: Norges Bank

Chart 2 Number of bankruptcies, number of employees in bankrupt entities and total market value. Seasonally adjusted index. 98 Q4 = 100. 98 Q4 – 04 Q1



Sources: Statistics Norway and Norges Bank

Boxes

Overview of boxes in Inflation Reports 2000-2004

2 / 2004
Recent price developments
Increase in number of working days in 2004
Financial stability
Norges Bank's estimate of the output gap
A change in inflation expectations?
Preliminary evaluation of the projections in Inflation Report 1/04
What are the factors behind the rise in oil futures prices?

1 / 2004:
Low external price impulses to the Norwegian economy
The pass-though 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

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 growth in consumer prices
Evaluation of inflation reports in inflation-targeting countries
Why is household debt growth remaining 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 Scandinavian 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 downturn 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

Norges Bank's estimate of the output gap

The output gap is a measure of the difference between actual output and the level of output that over time is consistent with stable inflation. The level of output that is consistent with stable inflation is often called potential output.[1] Potential output – and hence the output gap – cannot be observed and must be estimated.

Potential output will over time rise in pace with productivity growth, labour force developments and other conditions affecting production capacity in the economy. In principle, potential output can change abruptly, for example as a result of shifts in the labour supply or in productivity. Some shifts are easily identifiable, such as shorter working hours introduced in 1987 and the additional vacation days in 2001 and 2002, but most changes in potential output are difficult to estimate. In practice, trend output growth is often estimated, which involves a certain "smoothing" of potential output.

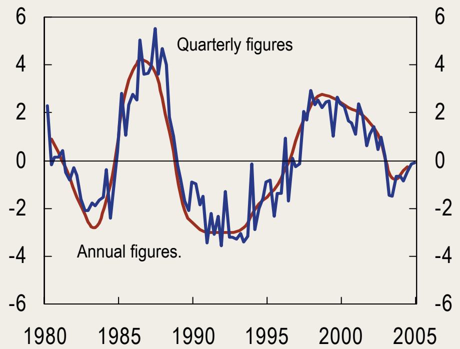
The output gap referred to in Norges Bank's *Inflation Report* represents the Bank's overall assessment of resource utilisation in the Norwegian economy. The basis for the assessment is a technical calculation of trend GDP for mainland Norway based on annual figures. The trend can be calculated in a number of ways. Norges Bank uses a Hodrick-Prescott (HP) filter (see box in *Inflation Report* 1/03). The HP method assumes that it is possible to decompose a time series into a trend component and a cyclical component. When using the HP method, a parameter must be chosen to measure the degree of variabilty in trend output, i.e. how smooth the trend should be. Norges Bank's application of the method allows gradual changes in trend output. Short-term fluctuations are assumed to reflect cyclical variations in demand and do not affect estimated trend growth.

The technical calculations only provide a basis for Norges Bank's estimate of the output gap. We adjust the HP calculations in the light of information about conditions that affect the supply side in the Norwegian economy. We have, for example, adjusted for additional vacation days and changes in estimated underlying productivity growth. These conditions are immediately reflected in potential output, but only gradually affect the estimate for potential output when the HP filter is applied mechanically. For 2004, we have revised trend growth upwards from 2½% to 3% because underlying productivity growth seems to be stronger than normal.

Calculations based on quarterly figures may in principle provide better information about cyclical turnarounds than calculations based on annual figures. Quarterly GDP figures are, however, more variable also when adjusted for seasonal variations. Chart 1 shows Norges Bank's estimates of the output gap along with a calculation based on the HP filter and seasonally adjusted quarterly figures.[2] The cyclical movements and effects are relatively similar, but the quarterly figures fluctuate considerably from one quarter to the next.

We assess developments in the estimated output gap against other indicators of resource utilisation

Chart 1 Estimates of the output gap[1)]. Annual and quarterly figures. 1980 – 2004. Per cent



1) The output gap measures the difference between actual and trend mainland GDP

Sources: Statistics Norway and Norges Bank

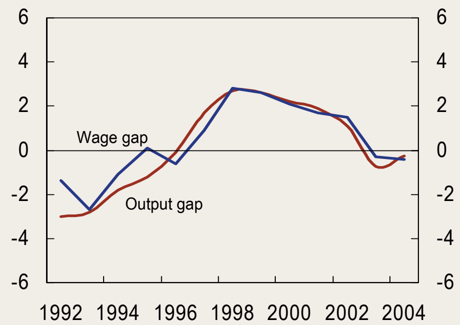
[1] Theoretical studies often define potential output as the output level as it would have been if prices and wages had been completely flexible (see for example Gali (2002)). Since most prices and wages are rigid in the short term, the output gap will widen if demand increases more than assumed when price contracts and wage agreements were signed. Prices and wages will, however, increase over time as new contracts and agreements take the increased demand into account. The output gap will then be reduced. In the long run, prices and wages will adjust and actual output will be the same as potential output.

[2] We set the "smoothing parameter" at 100 for annual figures. For quarterly figures, we use set the "smoothing parameter" at 20000. The GDP series have been extended using estimates to reduce the problem of uncertainty with regard to the trend towards the end of the calculation period, cf. box in *Inflation Report* 1/03. Both HP-calculations have been adjusted in line with the discussion above.

in the economy (see box in *Inflation Report* 3/03). These key indicators include wage growth, labour force participation rate, employment rate and unemployment. Wage growth can be an indicator of the social partners' perception of employment and labour shortages. Chart 2 shows the output gap and a wage gap. The wage gap is calculated as the difference between the rise in hourly labour costs in manufacturing in Norway and among trading partners up to and including 2000. The wage gap is thereafter defined as the deviation in wage growth from 4.5%. There is a strong correlation between the wage gap and the output gap. Chart 3 shows an employment gap based on the employment rate.[3] There is also a strong correlation between this gap and the output gap.

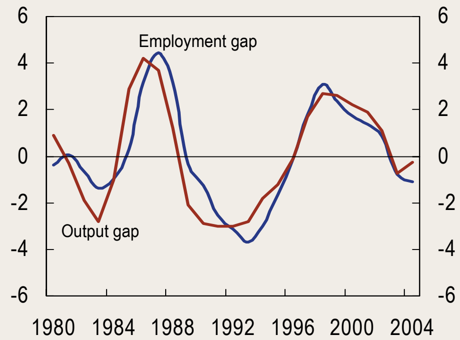
Overall, the calculations show that resource utilisation in the Norwegian economy has declined from a high level. It is now on a par with or slightly lower than the level in the years 1995-1997, before cost inflation accelerated. Norges Bank now estimates the output gap at -¾% in 2003 and -¼% in 2004.

Chart 2 Estimates of the output gap[1)] and the wage gap[2)]. Annual figures. 1992 – 2004



1) Mainland Norway. Per cent
2) Difference between rise in hourly labour costs in manufacturing in Norway and among trading partners up to and including 2000. Thereafter wage growth in manufacturing as a deviation from 4.5 per cent
Sources: Statistics Norway and Norges Bank

Chart 3 Estimates of the output gap[1)] and the employment gap. Annual figures. 1980 – 2004. Per cent.



1) Mainland Norway

Sources: Statistics Norway and Norges Bank

There are many technical methods other than the HP filter for calculating the output gap. Norges Bank uses several of these methods in its work.[4] Charts 4 and 5 show Norges Bank's estimates for the output gap and calculations based on the following methods:

- *Band-pass filter*[5] This filter assumes that an economic time series can be decomposed into long-term movements (trend growth), medium-term movements (business cycles) and short-term fluctuations such as seasonal variations and random movements. The filter removes the long and very short movements in a data series to isolate the cyclical movements.

- *Unobserved components method* (UC)[6] This method is based on a statistical model for the trend component, the cyclical component, the seasonal component (if using quarterly figures) and random movements. The components are estimated using the Kalman-filter. The model thus determines how smooth the trend should be. The HP filter may be regarded as a special form of this method.

- *Production function method*[7]. This method is used to calculate trend output as a function of trend levels for labour, capital and total factor productivity. Chart 4 shows OECD estimates of the output gap based on this method.

The various calculations show the same main movements in the business cycle as Norges Bank's estimates of the output gap.[8] There is some difference in the impact on the business cycle, however. The calculations based on the UC method and the Band-pass filter suggest that

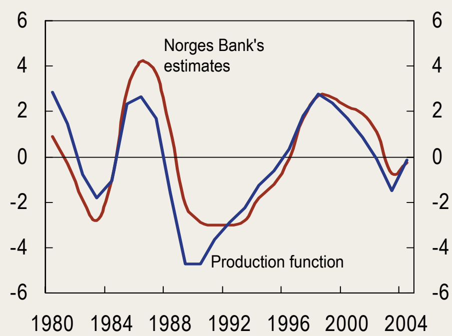
[3] The employment rate measures the number employed as a percentage of the population aged 16-74. The employment gap has been estimated using an HP filter on annual figures.
[4] See Bernhardsen, Eitrheim, Jore and Røisland (2004).
[5] See for example Baxter and King (1999).
[6] See for example Harvey and Jaeger (1993), Bjørnland (2002, section 2.5) and Bjørnland (2002, section 4).
[7] See Frøyland and Nymoen (2000) and Giorno, Richardson, Roseveara and Nord (1995).

resource utilisation in the Norwegian economy was lower in 2003 than at the beginning of the 1990s. This is not supported by other indicators of resource utilisation.

Norges Bank is working to enhance its estimates of the output gap. We are, for example, developing more comprehensive models where information about output is supplemented by information concerning inflation and employment. This may provide a better basis for the estimated output gap in relation to other indicators of resource utilisation. This may be particularly useful towards the end of the period, when uncertainty in relation to the HP-based calculations is at its highest. These methods will also make it easier to distinguish between supply-side and demand shocks.

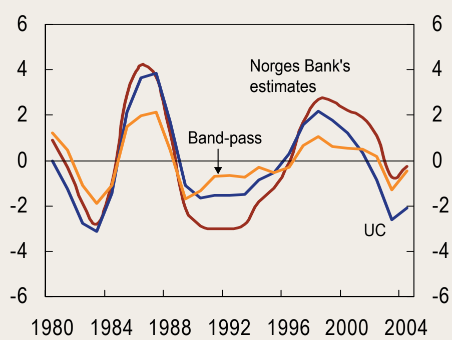
Estimates of the output gap in the economy will always be uncertain, and must be based on a considerable degree of professional judgement even if the methodology is improved. Norges Bank places emphasis on providing information about the methods used and the professional judgement exercised.

Chart 4 The output gap[1]. Norges Bank's estimates and estimates based on the production function method. Annual figures. 1980 – 2004. Per cent



[1] Mainland Norway
Sources: Statistics Norway, OECD *Economic Outlook* no. 75 and Norges Bank

Chart 5 The output gap[1]. Norges Bank's estimates and estimates based on the UC method and the band-pass filter. Annual figures. 1980 – 2004. Per cent



[1] Mainland Norway
Sources: Statistics Norway and Norges Bank

[8] We have not adjusted the alternative technical calculations. The actual GDP series, however, have been extended using estimates calculated using the UC method and the band-pass filter, cf. footnote 2.

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Economic Bulletin no. 2/2000, p. 46-52.

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A change in inflation expectations?

Inflation expectations reflect developments in inflation, the cyclical situation and monetary policy, where the inflation target itself may form an anchor for inflation expectations. If there is confidence that the inflation target will be achieved over time, short-term deviations in inflation from the target will have little impact on more long-term inflation expectations.

The risk of persistently low inflation was reflected in international capital markets through 2002 and 2003. The risk has subsided and market-implied inflation expectations have increased. In Norway, short-term inflation expectations have also continued to fall. Both in Norway and abroad, long-term inflation expectations still remain near monetary policy objectives, however.

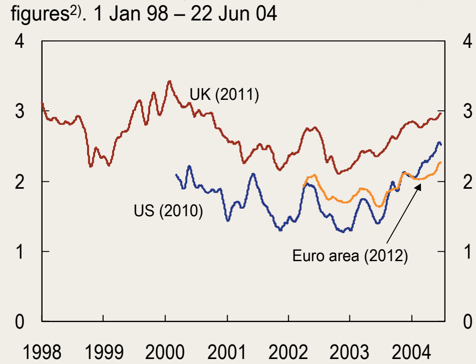
Survey-based inflation expectations
Consensus Forecasts is a monthly survey where macroeconomic analysts are interviewed about their inflation expectations.[1] Short-term inflation expectations were lowered for most countries through 2002 and 2003. In the spring of 2004, inflation expectations for 2004 and 2005 increased for the US and remained stable for the euro area and Japan. For Norway, inflation expectations for 2004 and 2005 have continued to fall in pace with the observed low rate of inflation so far this year. According to Consensus Forecasts, CPI inflation in Norway will be 0.6% in 2004 and 2.0% in 2005.

Long-term inflation expectations, measured as average annual inflation 6-10 years ahead, have been stable for most countries, in line with the monetary policy objectives for the respective countries. For Norway, long-term inflation expectations have been very close to 2.5% since Norges Bank switched to inflation targeting in the spring of 2001.

Market-based indicators of inflation expectations
In some countries, the authorities have issued real return bonds in addition to nominal bonds. The yield differential between these two bond instruments contains information as to average inflation expectations over the term to maturity for these bonds. However, owing to various factors such as changes in market liquidity, different taxation of these products and time-varying risk premiums, long-term inflation expectations cannot be measured as precisely.[2]

As a result of the uncertainty surrounding the global growth outlook and fears of deflation in some countries, inflation expectations fell during 2002 and up to the summer of 2003 (see Chart 1). Improved growth prospects and a reduced risk of persistently low inflation have led to higher implied inflation expectations. While implied inflation expectations for the US have continued to rise in 2004, expectations have remained virtually unchanged for the UK and the euro area.[3] This is because inflation expectations for the first years in the US have been revised up more than for the other countries, as Consensus Forecasts also indicate.

Chart 1 Implied long-term inflation rates[1)]. Daily figures[2)]. 1 Jan 98 – 22 Jun 04



1) The chart shows expected average annual inflation rates up to the year in question, derived from the yield spread between nominal bonds and inflation-linked bonds. Figures for the euro area are based on French bonds
2) 20-day moving average
Sources: Bloomberg and Norges Bank

1 For the first years, there may be some differences between CPI inflation for which Consensus Forecasts provides projections and underlying inflation. Inflation expectations further ahead than the coming year are only published every six months in April and in October.

2 For a further discussion, see *On market-based measures of inflation expectations.* Cedric Scholtes: Bank of England Quarterly Bulletin, 2002 and *Inflation expectations and Real Return Bonds,* Bank of Canada Review, Summer 1996.

3 In the UK, real return bonds are RPI-indexed, but the Bank of England's inflation target of 2.0% is linked to the Harmonised Index of Consumer Prices. Up to 10 December 2003, the inflation target was 2.5% as measured by the RPIX.

In Norway, the government does not issue real return bonds. Long-term forward interest rates, i.e. the short rate expected many years ahead, can also be used as an indicator of long-term inflation expectations. Long-term forward interest rates can be interpreted as the sum of the expected real interest rate, expected inflation and risk premiums. Assuming constant risk premiums, changes in the forward rate will reflect changes in long-term inflation expectations and real interest rates.

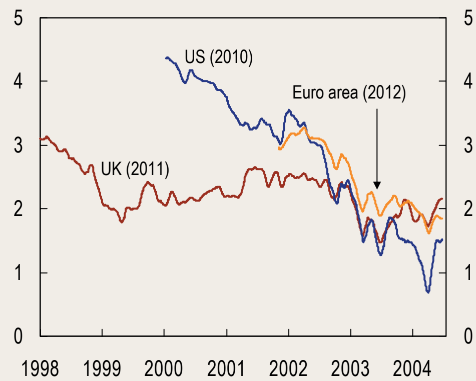
The long-term real required return in Norway is influenced by the real required return in global capital markets. The yield on real return bonds fell markedly through 2002 and 2003, particularly in the US and the euro area (see Chart 2), primarily reflecting falling real interest rates in many countries, including Norway, in this period. Norwegian forward rates fell to a further extent than interest rates in major financial markets so that the long-term forward rate differential against many countries narrowed (see Chart 3).

Market information implies that this is attributable to time-varying risk premiums in the Norwegian market as a result of limited size and liquidity in the market. As a result of the interest rate cuts since December 2002 and lowered interest rate expectations in 2003, many investors sought to increase the share of long-term bonds in their portfolios, for example life and pension insurance companies with a required return minimum. The introduction of an inflation target may also have contributed to reducing the risk premium for inflation uncertainty, contributing to lower long-term forward interest rates in Norway in this period.

Since April, international real interest rates and long-term forward interest rates have edged up, but are still at a historically low level. Norwegian long-term forward interest rates are now ¾ percentage point higher than corresponding rates in the euro area, and about ¼ percentage point lower than in the US.

Norwegian long-term forward rates have probably been influenced by changes in international real interest rates and changes in risk premiums. If we take this into account, there seems to have been little change in long-term inflation expectations in Norway in recent years.

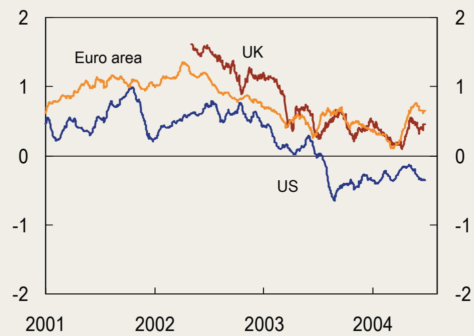
Chart 2 Long-term real interest rates. Daily figures[1]. 1 Jan 98 – 22 Jun 04



[1] 20-day moving average

Source: Bloomberg

Chart 3 Long-term forward interest rate differential against selected countries[1]. Daily figures[2]. 1. Jan 01 – 21. June 04



1) The chart shows the difference between implied 1-year interest rates 9 years ahead in Norway and in seleced countries on the basis of interest rates in the swap market
[2] 20-day moving average
Source: EcoWin

Preliminary evaluation of the projections in Inflation Report 1/04

Projections for inflation and economic developments ahead provide a basis for Norges Bank's monetary policy decisions. Norges Bank places emphasis on the importance of evaluating the projections in the *Inflation Report* and on transparency regarding the basis for our forecasts. An evaluation of the projections made in the past 1-3 years is published annually in *Economic Bulletin*. The projections are also discussed in the *Annual Report*. Norges Bank will now present a preliminary evaluation of the projections in the previous report in every *Inflation Report*. To the extent that the necessary information is available, the projections will be evaluated against actual developments. We will also analyse changes in the projections and compare Norges Bank's projections with those of other institutions. This may provide a basis for improving our projections and deepening our understanding of the disturbances to which the economy has been exposed.

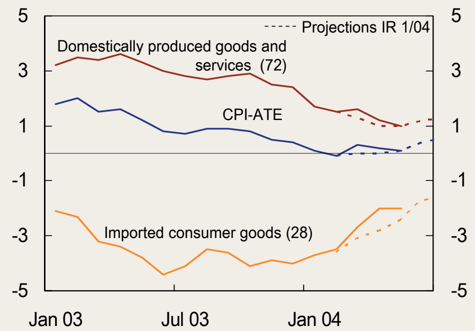
How accurate have the projections in Inflation Report 1/04 proved to be?

In *Inflation Report* 1/04, we projected that an upturn in the Norwegian economy was under way. We projected that mainland GDP growth would be stronger than growth in potential output in 2004, driven by an expansionary monetary policy and the international upturn. The output gap was expected to be marginally positive as from 2005. Inflation was nonetheless expected to remain low for a period, edging up to 2% towards the end of 2004 and reaching target in spring 2006.

Since *Inflation Report* 1/04 was published in March, the real economy in Norway has largely moved in line with our projections. Labour market developments have been broadly in line with the projections in the March report. Inflation developments have also been approximately in line with our projections. Prices rose somewhat more than expected in March, but somewhat less than expected in April and May. The rise in prices for imported consumer goods was somewhat higher than expected, while domestic price inflation has approximately matched our projections (see Chart 1). In our projections, we did not take into account extraordinary temporary disturbances such as lower rates for day-care places and the direct effects of the interest rate reductions on house rents. These two factors have pushed down overall consumer price inflation by an estimated 0.1-0.2 percentage point in the period.

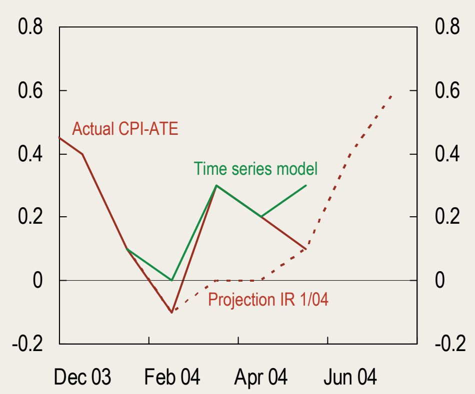
Chart 2 compares the inflation projections in *Inflation Report* 1/04 with predictions from a simple time series model that captures trend growth and seasonal variations in the CPI-ATE. This comparison may provide a basis for evaluating the projections. The simple time series model predicted actual inflation most accurately in the beginning of the period, while the projections in *Inflation Report* 1/04 proved to be most accurate at the end of the period.

Chart 1 CPI-ATE[1]. Total and by supplier sector[2]. Actual price movements and projections IR 1/04. 12-month rise. Per cent. Jan 01 – Jul 04



[1] CPI-ATE: CPI adjusted for tax changes and excluding energy products
[2] Norges Bank's estimates. Percentage share of CPI-ATE in brackets
Sources: Statistics Norway and Norges Bank

Chart 2 CPI-ATE. Projection IR 1/04, projection from time series model and actual price movements. 12-month rise. Per cent. Dec 03 – Jul 04



Sources: Statistics Norway and Norges Bank

Changes in projections from Inflation Report 1/04 to 2/04

The projections in *Inflation Report* 1/04 and *Inflation Report* 2/04 are based on the assumption that interest rates shadow forward interest rates and that the krone exchange rate moves in line with the forward exchange rate. Forward rates have risen in the period from March to June and the krone has appreciated compared with the path projected for the forward exchange rate in *Inflation Report* 1/04 (see Charts 3 and 4). Overall, forward interest rates and forward exchange rates now imply a tighter monetary policy in the period ahead than assumed in *Inflation Report* 1/04.

The projections in the *Inflation Report* are also based on other important assumptions concerning factors such as global economic developments. Global growth has been somewhat stronger than expected since *Inflation Report* 1/04. Stronger growth has contributed to a rise in commodity prices and the prospect of a somewhat sharper rise in prices for imported consumer goods measured in foreign currency. Oil prices have increased and are expected to remain high for a longer period than assumed in the previous *Inflation Report*.

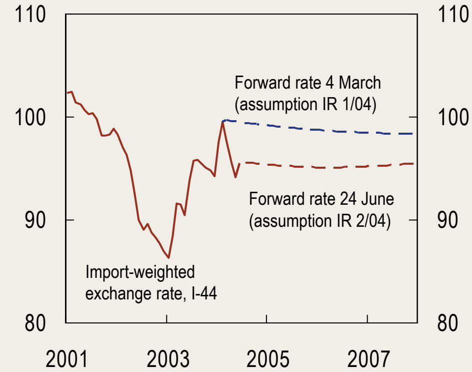
The projections in *Inflation Report* 2/04 do not differ substantially from the projections in *Inflation Report* 1/04. The changes in the projections are mainly due to new statistics and changes in the assumptions for interest rates, exchange rates and global developments. The most important changes in the projections from *Inflation Report* 1/04 to *Inflation Report* 2/04 are as follows:

- The output gap in 2003 is now considered to have been somewhat more negative.
- Projected mainland GDP growth in 2004 has been revised upwards somewhat. The projections for 2005-2006 have been revised downwards.
- Inflation projections have been revised downwards for 2005-2007.

<u>More negative output gap in 2003</u>

The projection for the output gap in 2003 has been revised downwards by ¼ percentage point (see Chart 5). The size of the output gap is surrounded by considerable uncertainty. Different methods for calculating the output gap produce different results. Our projections for the output gap are based on a

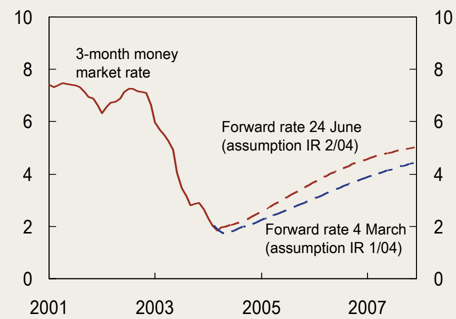
Chart 3 Assumption for the krone exchange rate (I-44)[1]. Forward exchange rates. Monthly figures



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

Source: Norges Bank

Chart 4 Assumption for the money market rate[1]. Forward interest rate[2]. Monthly figures. Per cent

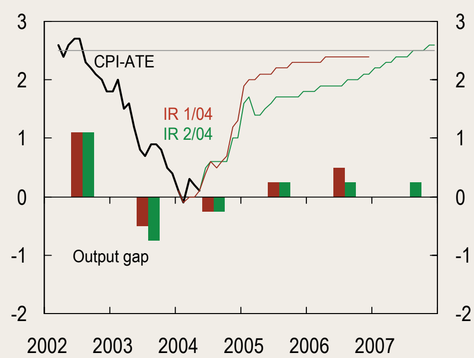


[1] The money market rate is normally about ¼ percentage point higher than the sight deposit rate

[2] 3-month money market rate up to May 2004. The 3-month forward rate is estimated using four money market rates and four government bond yields with different maturities as observed on 4 March and 24 June

Source: Norges Bank

Chart 5 Projections for the CPI-ATE and the output gap[1] in *Inflation Report* 1/04 (red) and 2/04 (green). Per cent



[1] The output gap measures the difference between actual and trend mainland GDP

Sources: Statistics Norway and Norges Bank

technical calculation, but discretionary adjustments are also made based on other information.[1] The downward revision of the estimate of the output gap in 2003 reflects strong productivity growth in the second half of 2003. We have assumed that this did not only reflect a normal cyclical increase in productivity. The potential growth in the economy may therefore have increased somewhat more than previously estimated.

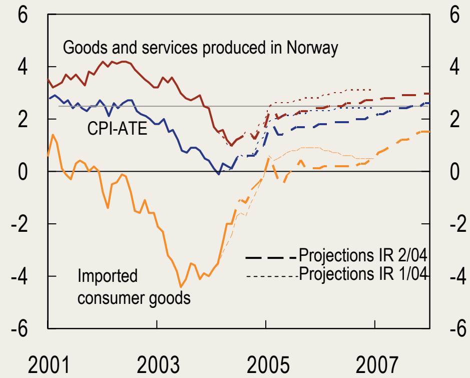
<u>Higher growth in mainland GDP in 2004, but lower growth in 2005 and 2006</u>

- Projected mainland GDP growth in 2004 has been revised upwards somewhat. Current statistics have provided a basis for increasing the projection for growth in private investment in 2004. Stronger growth internationally will result in increased exports.
- A stronger krone and higher interest rate expectations push down projected growth in 2005 and 2006 compared with the projections in *Inflation Report* 1/04.

<u>Lower rise in the CPI-ATE in 2005 and 2006</u>

- Projections for the rise in prices for imported consumer goods in 2005 and 2006 have been revised downwards, largely as a result of a stronger krone exchange rate (see Chart 6). Upward revisions of the rise in prices for these goods measured in foreign currency have the opposite effect, but do not fully offset the effect of the krone appreciation.
- Projections for the rise in prices for domestically produced goods and services have also been revised downwards (see Chart 6). A less expansionary monetary policy and lower price inflation have led to a slight downward revision of wage growth projections for both 2005 and 2006. This pushes down the projection for domestic inflation compared with *Inflation Report* 1/04. The indirect effects of a stronger krone exchange rate also contribute to pushing down price inflation in 2005 and 2006, while in isolation the indirect effects of a higher oil price contribute to pushing up inflation somewhat in 2005.

Chart 6 CPI-ATE. Total and by supplier sector[1]. 12-month rise. Per cent. Jan 01 – Dec 07



[1] Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

[1] See box on page 46 in this *Inflation Report* and the box in Inflation Report 3/03 for further details.

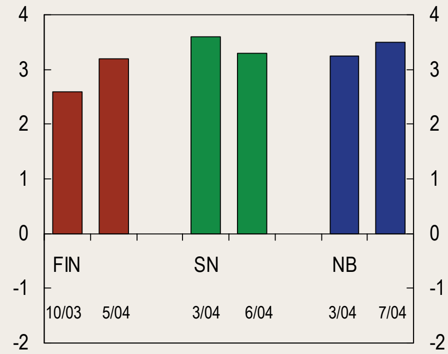
Projections from other institutions

The projections in *Inflation Report* 1/04 can also be evaluated by comparing them with projections from other institutions.

Charts 7 and 8 show the two most recently published projections for the rise in the CPI-ATE and mainland GDP from the Ministry of Finance, Statistics Norway and Norges Bank. The Ministry of Finance's projections are from 3 October 2003 and 11 May 2004, while both Statistics Norway and Norges Bank published projections on 11 March 2004[2]. Statistics Norway published new forecasts on 17 June. As the three institutions publish projections at different times, the information on which the projections are based may differ. This means that such a simple comparison must be interpreted with caution.

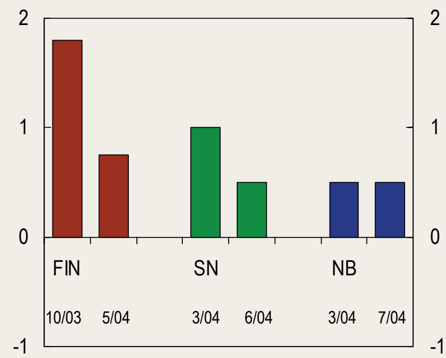
There are relatively small differences in the projections for mainland GDP growth. All the institutions have gradually revised downwards their projections for the rise in the CPI-ATE in 2004.

Chart 7 Mainland GDP. The last two projections published for 2004. Percentage growth



Sources: Ministry of Finance (FIN): National Budget 2004, Revised National Budget 2004. Statistics Norway (SN): *Economic Survey* 1/2004 and 3/2004. Norges Bank (NB): *Inflation Report* 1/2004 and 2/2004

Chart 8 CPI-ATE. The last two projections published for 2004. Percentage rise



Sources: Ministry of Finance (FIN): National Budget 2004, Revised National Budget 2004. Statistics Norway (SN): *Economic Survey* 1/2004 and 3/2004. Norges Bank (NB): *Inflation Report* 1/2004 and 2/2004

[2] The projection from Statistics Norway was updated using the quarterly national accounts figures for the fourth quarter of 2003. Norges Bank did not have access to this information when the projections for *Inflation Report* 1/04 were made.

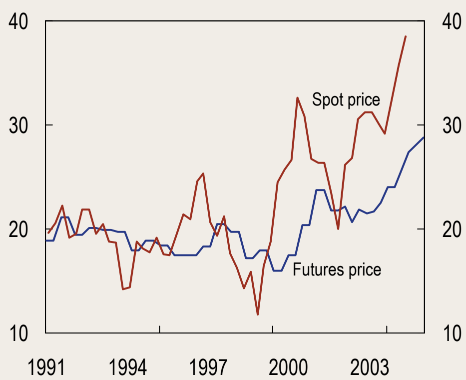
What are the factors behind the rise in oil futures prices?

Oil prices are high. Spot prices have averaged more than USD 33 so far this year. The average price so far this decade is USD 28, while the average price for the 1990s was a little more than USD 18.[1]

Oil futures prices have also shown a marked increase. Chart 1 shows futures prices using the benchmark for pricing oil in the US (West Texas Intermediate) for delivery 6-7 years ahead.[2] While this futures price was lower than USD 20 in the 1990s, it is now higher than USD 28.

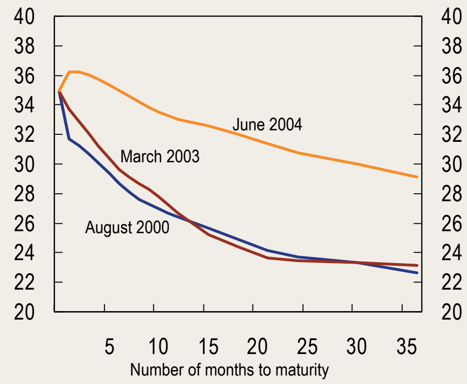
Normally, there is a close and positive relationship between oil spot prices and futures prices. Long-term futures prices are generally more stable than spot prices and short-term futures prices. However, medium- to long-term futures prices have risen markedly over the past year with the same spot price. Chart 2 shows the curve for futures contracts with rising term to maturity for three different points in time with the same spot price: in August 2000, March 2003 and June 2004.

Chart 1 Spot and futures prices (6 – 7 years) for oil in the US. USD per barrel. Quarterly figures. 91 Q1 – 04 Q2



Source: EcoWin

Chart 2 Futures price curves for Brent Blend at three different times with the same spot price (USD 35 per barrel)



Source: EcoWin

Futures prices indicate that oil prices may remain high in the period ahead, owing to several factors:

- Demand for oil is expected to increase in large, emerging economies, particularly in Asia. China alone has accounted for close to half of the growth in global oil demand in the past five years. Economic growth in several of the emerging economies in Asia is expected to be high in the period ahead. Moreover, production in these countries is considerably more energy-intensive than in most OECD countries.
- Growth in non-OPEC oil supply is expected to slow faster than previously assumed. According to a report from Energy Intelligence Research[3], non-OPEC oil supply is projected to stabilise after 2005 – growth in the supply of oil from the former Soviet Union, West African countries and Latin America will be offset by a fall in the supply of oil from the North Sea and North America.
- World oil reserve estimates were recently revised up by British Petroleum[4], but some international oil companies have recently revised down fairly markedly their oil

[1] Even though oil prices are high, the real oil price – i.e. the oil price adjusted for the general rise in prices – is not particularly high from a historical perspective. For example, prices were markedly higher in the first half of the 1980s, but were also higher during the first Gulf War in the beginning of the 1990s.

[2] The price of West Texas Intermediate (WTI) is normally a few dollars higher than Brendt Blend owing to a higher grade and lower transport costs.

[3] Energy Intelligence Research: The Oil Supply Dilemma: The Financial Positions and Investment Needs of Major Oil Exporters. See http: //www.energyintel.com

[4] BP Statistical Review of World Energy, June 2004. See http:// www.bp.com.

reserve estimates. Some analysts also predict that some of the large international oil companies may find it difficult to increase their reserves through their own finds (rather than through acquisitions of other companies) and assume that this will inhibit production growth.

- The need to increase capacity in the extraction, production and transport of crude oil and refined products will require substantial new investments in the coming years. Capacity constraints may lead to higher oil prices for a transitional period, at the same time that higher oil prices are needed to make these investments profitable. The rise in futures prices may therefore reflect a higher long-term marginal oil cost for countries other than the oil-rich countries in the Middle East.
- In recent years, OPEC has shown a growing willingness and capacity to sustain oil prices. The trade-off between a higher oil price and a loss of market shares for OPEC – which historically has been one of the main challenges facing the cartel – should also prove to be easier in the years ahead. With limited idle production capacity in OPEC, with the exception of Saudi Arabia and the United Arab Emirates, most OPEC countries will favour higher prices over a higher market share.[5] Moreover OPEC countries need a high oil price from the point of view of state finances, even though production costs in these countries are low. Equally important, however, is an expected increase in the need for OPEC oil production in line with the continued growth in global oil demand as the supply of non-OPEC oil stagnates.
- Several OPEC countries are experiencing heightening political uncertainty. Recently, oil prices have been influenced in particular by growing fears of terror and political unrest in Saudi Arabia. Sabotage, terror and political uncertainty in Iraq have also reduced the prospects for current and future oil production in Iraq compared with one year earlier. Other OPEC countries – in particular Venezuela and Nigeria in recent years – have faced and may continue to experience political unrest that may affect oil production. Market expectations seem to indicate that these factors will have a more long-lasting effect on oil prices, and that a risk premium has now also been factored into long-term futures prices.

5 OPEC must naturally be cautious about pressing up oil prices to a level that makes it more profitable to develop alternative energy sources, thereby undermining oil's dominant role.

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			
15 December 2004			
3 November 2004			
22 September 2004			
11 August 2004			
Previous monetary policy meetings			
1 July 2004	1.75	0	
26 May 2004	1.75	0	Downside bias
21 April 2004	1.75	0	Downside bias
11 March 2004	1.75	0	Downside bias
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
07 August 2001	7	0	Neutral
20 June 2001	7	0	Neutral

[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 manageing 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* indicated that according to Norges Bank's assessment, with an unchanged interst rate (at the rate after the change approved the same day), the probability that inflation two years ahead would be higher than 2½ per cent was the same as the probability that it would be lower. A *downside bias* indicated that according to Norges Bank's assessment, with an unchanged interest rate (at the rate after the change approved the same day), the probability that inflation two years ahead would be lower than 2½ per cent was greater than the probability that it would be higher. An *upside bias* indicated that according to Norges Bank's assessment, with an unchanged interest rate (at the rate after the change approved the same day), the probability that inflation two years ahead would be higher than 2½ per cent was greater than the probability that it would be lower. As from the monetary policy meeting on 1 July 2004, Norges Bank will no longer publish a separate statement with an assessment of the inflation outlook.

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 purpose of the regional network is to obtain updated 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 (North-and South-Trøndelag)	Center for economic studies at NTNU
Region North-West (Møre and Romsdal, Sogn and 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 1/04

In the two contact rounds since the March *Inflation Report*, discussions have been held with a total of approximately 570 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 26 May. Summaries from the last round of contacts will be available on our website on 2 July. 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:

- Most business sectors report continued growth and increased activity. The market outlook is positive and the growth rate ahead is expected to be approximately the same as in the preceding period.
- The export industry is experiencing a period of solid growth. High steel prices and strong international demand have resulted in a favourable situation for the metal and process industries. The technology industry reports solid growth, both at home and abroad. The shipbuilding industry in the North-West, however, is still struggling with low demand and tough competition.
- The growth rate for domestically-oriented manufacturing appears to be levelling off after a steady rise since the spring of 2003. Manufacturing supplying households and the building and construction sector is experiencing a positive period. The food industry reports moderate growth.
- The offshore industry has experienced a pronounced upturn since the winter and is currently experiencing a period of high activity. This has a positive effect on the offshore yards, equipment suppliers and technical consulting companies. High oil prices, development of the Snøhvit and Ormen Lange offshore fields and the allocation of new exploration blocks create expectations of solid growth ahead.
- The building and construction sector reports solid growth and good prospects throughout the country. Residential construction and public sector projects are still the primary drivers of growth. In some regions, the construction of onshore installations for oil and gas production is also contributing to growth. The decline in the commercial buildings market has levelled off, and there are still few signs of recovery.
- The positive trend that has prevailed in the corporate services sector since last autumn continues. Demand for IT, consulting, advertising, financial and architectural services is rising steadily. Temporary employment agencies have experienced sharp market growth recently.
- Wholesale and retail trade reports pronounced growth throughout the country. Growth is particularly strong for consumer durables such as cars, building materials, furniture and electrical articles. Growth in demand for household services is still solid. Low air fares have increased the desire to travel. Growth in household credit is high, whereas the default rate is reported to be low.
- There is now a moderate willingness to invest in the manufacturing sector, and particularly in the export and oil industries. Wholesale and retail trade also reports a moderate willingness to invest in the next few years. The public and private service sectors intend to keep investment at about the same level.
- Employment growth in wholesale and retail trade, other services and construction is reported to be moderate. The decline in manufacturing employment is reported to have come to a halt. Employment continues to fall slightly in the public sector.
- In the export industry, the fall in prices has come to a halt, and prices are reported to have increased markedly since the March *Inflation Report*. Retail prices in domestically-oriented manufacturing continue to rise moderately. The rate of increase in prices have edged up in the wholesale and retail sector. Profitability is improving in all business sectors. Wage growth is expected to be lower in 2004 than in 2003.

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

Adviso AS
Advokatfirmaet Schjødt AS
Aetat Grenland
Aetat Vest-Agder
Air Products AS
AIT Otta
Aker Kværner ASA
Aker Stord
Aker Universitetssykehus
Aker Verdal
Akershus Universitetssykehus
Akershus Fylkeskommune
Aksel L. Hansson
Albert E Olsen AS
Alexandra Hotel AS
Allianse AS
Alta kommune
Amek AS
Amersham Health AS
Amfi Drift AS
Amfi Veita
Ankerløkken AS
Ankerske Naturstein AS
Anleggsgartnerfirma Strandman AS
Apotekene Vest HF
Aquarius AS
Arbor Gruppen AS
Arendal kommune
ARKI arkitektar AS
Arkitektfirma Brandsberg-Dahl
Arntzen de Besche Advokatfirma AS
Art In Dent AS
Artic Seafood Holding AS
Asker kommune
ASKO Agder AS
Atmel Norge
Avinor AS
Avisa Nordland AS
Ballangen Camping AS
Balsfjord kommune
Bardu Hotell AS
Bennett BTI Nordic Norge AS
Berg-Hansen Storby
Berg Jacobsen Gruppen
Bergen kommune
Bergene Holm AS
Bergens rørhandel
Bergens Tidende
Berg-Hansen Reisebureau
Berle Fisk AS
Bertel O. Steen
BeWi Produkter AS
Bio Mar AS
Black Design AS
Bladet Vesterålen/Norvest AS,
Block Watne AS
Bodø kommune
Bodø Transport og Caravan AS
Borgstein AS
BP Norge AS
Bravida ASA
Bravida Sørøst AS
Brekke Industrier AS
Brødrene Bakk AS
Brødrene Flaarønning AS
Brødrene Pedersen AS
Buer Entreprenør AS
Bunnpris
Bussen Trafikkselskap AS
Bygg og Maskin AS
Bygger'n Orkdal
Byggkjøp Kåre Abelsen AS
Byggmakker Norgros
Byggmester Grande AS
Bærum kommune
Børset og Bjerkset AS
Båtservice Holding ASA
Båtsfjordbruket AS
CBB Stål AS avd. Trondheim
CC Martn
CHC Norway
Christie & Opsahl AS
Clear Channel Norway AS
Comfort Hotell Lillehammer AS
Comrod AS
Conoco Phillips Norway
Consept AS
Coop Finnmark BA
Coop Finnsnes BA
Coop Hordaland BA
Coop Inn-Trøndelag BA
COOP Sambo AS
Coop Sogn og Fjordane BA
Coop Sunndalsøra BA
Coop Trondheim og omegn BA
Creato
Daldata AS
David Andersen AS
De Sandvigske Samlinger Maihaugen
Deloitte Norge
Demex AS
Den Norske Bank ASA, Region Sørlandet
Den Norske Bank ASA, Tønsberg
Diakonhjemmet
Dinamo Norge AS
Dokka Fasteners
Domstein ASA
Drammen kommune
EFD Induction AS
Egil Kristoffersen & Sønner AS
Eidesvik Holding AS
Eidsiva Kontorservice AS
Eiendomsdrift Nord AS
Eiendomsmegler 1 Midt-Norge AS
Ekornes ASA
Elcon Finans
Elektro AS
Elgiganten AS
Elkem Aluminium ANS
Elkem ASA
ELKJØP Stormarked Skien
Elvemo og Hjertås Bygg AS
Elverum kommune
Ementor Norway ASA
Emma EDB AS
Engerdal kommune
Eramet Norway
ErgoRunit AS
Ernst & Young AS
Esmeralda AS
Euronics Norge AS
Eurosko AS
Expert Norge AS
Falkanger Sko AS
Farveringen AS
Fauske Hotell AS
FAV Gruppen
Felleskjøpet Bergneset
Ferner Jacobsen
First Victoria Hotel
Fiskeridirektoratet
Fjellpulken AS
Fjord 1
Fjord Marin AS
Fjordline - Bergen
Fjällräven AS
Flatsetsund Møbel- og Trevarefabrikk AS
Flyspesialisten Trondheim AS
Flytoget AS
Friele kaffehus
Fritjof Kristiansen AS
Frost Entreprenør AS
Fundamus AS
Fylkesmannen i Vest-Agder
Gaupen Henger
Geelmuyden Kiese AS
Geoservice AS
Gilde Norsk Kjøtt AS
Gilstad Trelast AS
Gjensidige Nor Forsikring
Gjestal Spinneri ASA
Gjestegården AS
Gjøco AS
Gjøvik kommune
Glamox ASA
Glava AS
Glomma Papp AS
Godstrafikk og Bilspedisjon AS
Grieg Logistics
Grieg Seafood AS
Grimstad kommune
Gro Industrier AS
Grytnes Betong AS
Gudesen Produkter AS
Gunnar Karlsen AS
Gunnar Klo AS
Gyldendal ASA
H. O. Bernhardsen
H.Jøkelsrud
Hafjell Alpinsenter AS
Hakon Distribusjon AS
Hamar Elektro AS
Hamar kommune
Handels- og Servicenæringens Hovedorganisasjon
Handelsbanken Trondheim
Hank Sport AS
Hansa Borg Bryggerier ASA
Hansen Dahl Holding AS
Haram kommune
Harila Midt -Troms AS
Havforskningsinstituttet
Havkrefter AS
Havsølv AS
Hedmark Eiendom AS
Hegra Sparebank
Heimdal Gruppen AS
Helgeland Kraft AS
Helgeland Vekst AS
Helly Hansen Spesialprodukter AS
Helse Bergen HF
Helse Nordmøre og Romsdal
Hennig-Olsen Is AS
Hepro AS
Herman Lepsø AS
Herøy kommune
Hitec Framnæs AS
Hitec O AS
Holm Grafisk AS
Hordaland Reiseliv
Hotell Refsnes Gods AS
Hunter Douglas Norge
Hustadmarmor A/S
Hydro Aluminium AS
Hydro Aluminium Profiler AS
Hydro Exploration and Production Norway
Høgskolen i Sør-Trøndelag
Høgskolen Lillehammer
Høgskolen Molde
I. P. Huse AS
Ikea
Indre Sogn Sparebank
Intersport Lillehammer AS
IPEC Instrumentering AS
ISS Norge AS
Itet AS
Ivar Mjåland, Mandal
Iver Bil AS
J. M. Johansen AS
JC Jeans & Clothes AS
Jiffy Products International AS
Johansen TH & Sønner AS
Julius Maske AS
Jøtul ASA
Kantega AS
Karmøy Stål
Kewa Invest AS
Kiwi Norge AS
Kleiven Sogn A/S
Kleven Florø AS
Klingenberg Hotel AS
KLP Eiendom Trondheim
Knutsen OAS
Kolberg Motors AS
Kongsberg Automotive ASA
Kongsberg Spacetec AS
Kontali Analyse AS
KPMG
Kragerø kommune
Kristiansand Cementstøperi AS
Kristiansand Næringsforening
Kristiansund Havn KF
Krogsveen Raknes AS
Kroken Caravan AS
Kruse Betong
Lafopa Industrier AS
Landskapsentreprenørene AS
Lefdal Elektromarked AS Lade
Lefdal Installasjon AS
Leif Gromstads Auto AS
Leiv Sand Transport AS
Lenvik kommune
Lidl Norge
Lilleborg AS
Lillesand produkter AS
Lindex AS
Lindstrøm Hotell AS
Linjebygg Offshore AS
Link Arkitekter
Lofoten Fiskerestaurant AS
Løvenskiold Handel AS
Løvenskiold Trelast AS
Madsen Bil AS
Madshus AS
Mandal kommune
Manpower
Maritech AS
Martin M. Bakken
Martin Olsen Møbelgalleri AS
Max Mat AS
Melhus Sparebank
Meløy Bedriftsservice AS
Meløy kommune
Meløy Næringsutvikling
Mercuri Urval AS
Mesta AS
Microsoft Norge AS
Midnor Group AS
Midsund Bruk AS
Midtre Gauldal kommune
Mills DA
Minde Sjokolade
Mjosundet Båt og Hydraulikk AS
Mjøsplast AS
Modolv Sjøset Pelagic AS
Moelven Østerdalsbruket
Multi Elektro AS
Multiconsult AS
Mårli & Pettersen Reklame AS
Nannestad kommune
Narvik kommune
Narvik Storsenter Drift AS
Navigator AS
NCC Construction AS
Nerland Granitindustri AS
Nettbuss Sør AS
Nexans Norway AS
NHO Trøndelag
Nobø Electro AS
Norac AS
Nor-Dan AS
Nordbohus Vinstra AS
Nordea Bank Norge ASA
Nordek AS
Nordia AS
Nordlaks AS
NordMegler AS
Nordmøre Revisjon AS
Norges Handels- og Sjøfartstidende
Norgesbuss Østfold-Vestfold AS
Norgestaxi Trondheim AS
Norisol Norge AS
Norli Gruppen AS
Norpower Brødr. Malo AS
Norsk Gallup Institutt AS

Norsk Stein AS
Norske Skogindustrustrier
Nortrans Touring AS
Nortroll AS
Nortronic AS
Notodden Mur- og Entreprenørforretning AS
NTNU
Nycomed Pharma
Nye Møre Tre AS
NYMO AS
Nøsted Kjetting AS
O. Kavli AS
Obos Eiendosmforvaltning AS
Oceanor AS
Odfjell ASA
Ole K. Karlsen Entrepenør AS
Ole Moe Engros
Oljedirektoratet
Olsen Johs AS
Opera Software ASA
Oppland Entrepenør AS
Opus AS
Orkdal Installasjon AS
Orkdal kommune
Os kommune
Oslo Entrepenør AS
Osram AS
Owens Corning Fiberglas Norway AS
PA Consultning Group AS
Pareto Securities AS
Parfymelle AS
Pay & Brinck Motor AS
PDC Tangen AS
Peab AS
Pedersens Lastebiltransport AS
Per Solem Arkitektkontor AS
Personalservice AS
PGS Production Group
PipeLife Norge AS
Plast Sveis AS
Polargruppen AS
Polimoon AS
Porsgrunds Porselænsfabrik AS
PricewaterhouseCoopers DA
Prior Norge BA
Proffice Vestfold
Profil Lakkering AS
Protech AS
Protek TELsoft AS
På Håret AS
Radisson SAS Caledonien Hotel
Radisson SAS Hotel Tromsø
Radisson SAS Lillehammer Hotell
Rambøll Norge AS Lillehammer
Rapp Bomek ASA
Rasmuss Tallaksen
Rasmussen K. A. AS
Rauma kommune
Reber Schindler Heis AS
Reinertsen Anlegg AS
Reinertsen Engineering AS
Rema 1000
Restech Norway AS
Rica Hotel Hamar
Rica Hotels ASA
Rica Park Hotel
Rieber & Søn Elverum
Riibe Mynthandel
Ring Mekanikk AS
Ringnes AS
Robinson Scandinavia AS
Rogaland Kunnskapspark
Rolls Royce Marine
Romsdals Budstikke AS
Rygge kommune
Rørteknikk AS
SalMar AS
Saltenposten AS
Samarbeidende Revisorer AS
Sandefjord kommune
Scan Wafer ASA
ScanPartner AS
ScanRope AS
Schibsted ASA
SEB Kort AB
Selje Hotel AS
Selmer Skanska AS
Sentrum Regnskap Hitra
Siemens AS
Silvinova
Simon Møkster Shipping AS
SINTEF konsernstab
SIVA Selskapet for industrivekst SF
Sjøsiden Senter AS
Sjøvik AS
Sjåtil og Fornæss
Skagen Brygge Hotell
Skagen Fondene
Skanska, Rogaland
Skifer & Naturstein AS
Skipsplast AS
Skodje Byggvare AS
Slatlem & Co AS
SMV Hydraulic AS
SND Sogn og Fjordane
Snillfjord kommune
Solhaug Entreprenør AS
Sortland Entreprenør AS
Sortland kommune
SPAR Hamresanden
Sparebank 1 Nord-Norge
Sparebank Sør
Sparebanken Hedmark
Sparebanken Møre
Sparebanken Sør
Sparebanken Vest
Sparebanken Øst
Sperre Støperi
Spice AS
Sport 1 Gruppen AS
Sportshuset AS
Stabburet AS
Stange kommune
Stansefabrikken Lillesand AS
Stantek Kongsvinger AS
Star Carboline Gruppen
Star Tour
Steertec Raufoss AS
Stillasservice AS
Stokke Gruppen AS
Stormoa Butikksenter
Storvik AS
Studentsamskipnaden i Agder
Støren Trelast AS
Subsea7 AS
Svaneaptoeket i Hamar
Sveins Auto AS
Sykehuset Innlandet HF
Sykehuset Telemark HF
Syljuåsen AS
Sylteosen Betongvarefabrikk AS
Sønnico AS
Sørco AS
Sørlandet sykehus HF
Sør-Trøndelag fylkeskommune
Taubåtkompaniet AS
Taxi Molde
Team Ged AS
Team Trafikk AS
Teeness ASA
Teknisk Bureau AS
Timpex AS
Tine Meierier Vest
Tine Midt-Norge AS
Tine Østlandsmeieriet
Tommen Gram Folie AS
Topp Auto AS
Toten Bygg og Anlegg AS
Toten Transport A/L
Totens Sparebank
Trafikk & Anlegg AS
Trebetong AS
Trioving AS
Triplex AS
Trondheim kino
TV Nordvest AS
Tysvær kommune
Uldal Vinduer og Dører AS
Ullevål Universitetssykehus
Ulstein Verft AS
Umoe Catering AS
Union Hotel
United Pan-Europe Communications
Universal Spedisjon AS
Valle sparebank
Vann og Varme AS
Veidekke ASA
Verdal kommune
Vest Inkasso AS
Vest Sandblåsing AS
Vestbase AS
Vest-Busscar Stryn AS
VIBO Entreprenør AS
Vigor AS
Vinn
Vital Forsikring ASA
Vital Næringseiendom AS
Volmax AS
Volvo Trucks Norway AS
Våler Bygg AS
Webrift AS
Wennberg Trykkeri AS
Wenaas AS
Westnofa AS
Westres Bakeri AS
Widerøes Flyveselskap ASA
Xerox AS
Yara International ASA
YIT Building Systems AS
Østbyen Bil AS
Øveraasen AS
Åmot kommune
Årdal Stålindustri AS
Åsen & Øvrelid AS
3T Produkter AS

Annex II
Statistics

Table 1 Main macroeconomic aggregates

Percentage change from previous year/quarter		GDP	Mainland GDP	Private consumption	Public spending on goods and services	Mainland fixed inv.	Petroleum inv.[1]	Exports trad. goods	Imports
1997		5.2	4.9	3.2	2.5	11.8	24.9	7.6	12.4
1998		2.6	4.1	2.7	3.3	8.6	22.2	5.4	8.5
1999		2.1	2.7	3.3	3.2	-0.1	-13.1	2.2	-1.8
2000		2.8	2.5	3.9	1.3	-1.2	-23.0	5.1	2.7
2001		2.7	2.1	1.8	5.8	4.3	-4.1	1.5	0.9
2002		1.4	1.7	3.6	3.1	-2.5	-3.6	1.6	2.3
2003		0.4	0.6	3.8	1.4	-4.7	15.8	2.6	2.2
2003[2]	Q1	-1.4	-1.0	0.1	1.3	-3.6	-2.3	1.6	0.5
	Q2	0.3	0.6	1.2	1.6	-1.8	13.7	3.2	-0.3
	Q3	1.2	1.4	1.2	-1.1	-1.7	2.9	1.2	0.0
	Q4	0.5	0.6	1.2	0.3	2.1	-6.8	1.5	2.1
2004[2]	Q1	1.0	0.5	1.8	0.2	-1.7	8.3	-0.4	2.9
Level 2003, in billions NOK		1564	1246	722	353	195	63	189	433

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

Table 2 Consumer prices

Twelve-month rise.		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
	Feb	-1.7	-0.1	-2.3	0.4	-1.5
	Mar	-0.6	0.3	-1.1	0.7	-0.4
	Apr	0.4	0.2	-0.1	0.5	0.4
	May	1.0	0.1	0.6	0.5	1.0

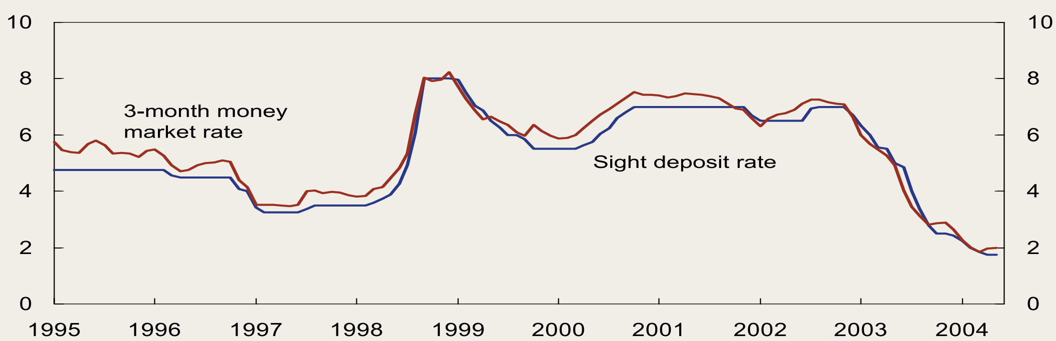
1) CPI-ATE: CPI adjusted for tax changes and excluding energy products
2) CPI-AT: CPI adjusted for tax changes
3) CPI-AE: CPI excluding energy products
4) HICP: The Harmonised Index of Consumer Prices. The index is based on international criteria drawn up by Eurostat.

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
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
	Mar	1.8	2.0	1.8	1.9	4.1
	Apr	1.8	2.0	2.0	2.2	4.7
	May	1.8	2.0	2.0	2.3	4.9
2004	04 Jun	1.8	2.1	2.0	2.4	4.8
	11 Jun	1.8	2.1	2.0	2.4	4.8
	18 Jun	1.8	2.0	2.1	2.4	4.7
	24 Jun[3]	1.8	2.1	2.0	2.4	4.6

[1] NIBOR= Norwegian interbank offered rate.
[2] Yield on representative 10-year government bond. The yield is calculated by weighting one or two governement bonds with th residual maturity.
[3] Average 21-24 June.

3-month money-market rate and sight deposit rate[1]. Monthly figures. Jan 95 – May 04



[1] The money market rate is normally about ¼ percentage point higher than the sight deposit rate

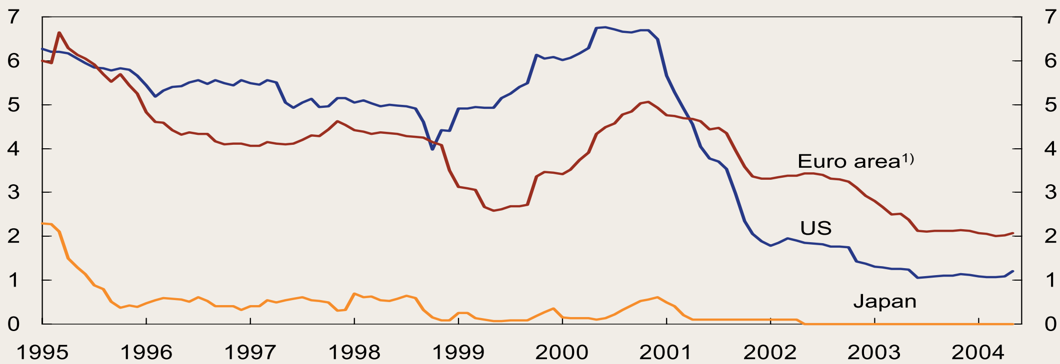
Source: Norges Bank

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	USA	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
2003		1.2	0.0	2.3	3.7	3.1	2.4	1.6	4.0	4.2
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	4.1	4.3
	Feb	1.1	0.0	2.1	4.1	2.5	2.2	-0.3	4.1	4.2
	Mar	1.1	0.0	2.0	4.3	2.3	2.1	-0.4	3.8	4.0
	Apr	1.1	0.0	2.0	4.3	2.1	2.1	-0.2	4.3	4.2
	May	1.2	0.0	2.1	4.5	2.1	2.1	-0.3	4.7	4.3
2004	04 Jun	1.3	0.0	2.1	4.6	2.1	2.2	-0.3	4.7	4.4
	11 Jun	1.4	0.0	2.1	4.7	2.1	2.2	-0.3	4.8	4.4
	18 Jun	1.5	0.0	2.1	4.8	2.1	2.2	-0.3	4.7	4.4
	24 Jun[4]	1.5	0.0	2.1	4.8	2.1	2.2	-0.3	4.7	4.3

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 21-24 June

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



1) Theoretical ECU rate up to December 1998

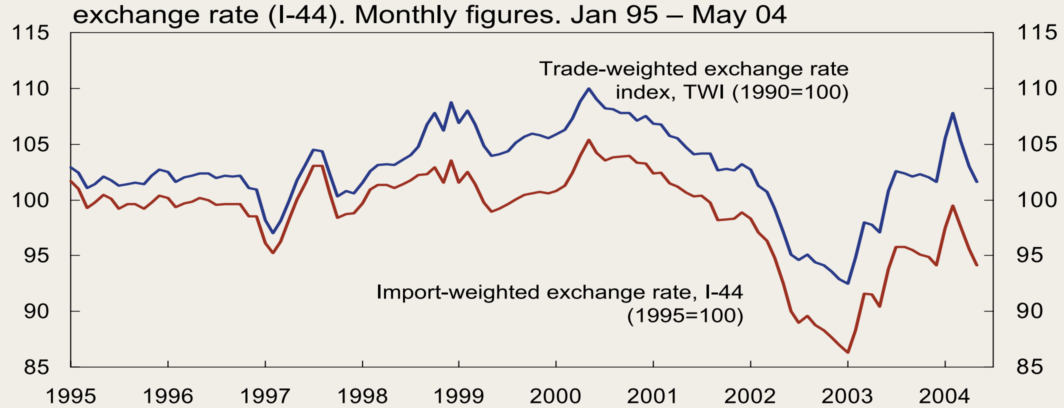
Source: Norges Bank

Table 5 Exchange rates

		Effective exchange rates		Bilaterale 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
2003		92.8	99.5	8.0	7.1	87.7
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
	Mar	97.6	105.3	8.5	7.0	92.5
	Apr	95.6	103.0	8.3	6.9	90.5
	May	94.1	101.6	8.2	6.8	89.8
2004	04 Jun	93.6	101.3	8.2	6.7	89.6
	11 Jun	94.3	102.0	8.2	6.8	90.1
	18 Jun	95.7	103.5	8.3	6.9	91.0
	24 Jun[3)]	95.8	103.6	8.4	6.9	91.1

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 21-24 June.

Trade-weighted exchange rate index (TWI) and import-weighted exchange rate (I-44). Monthly figures. Jan 95 – May 04

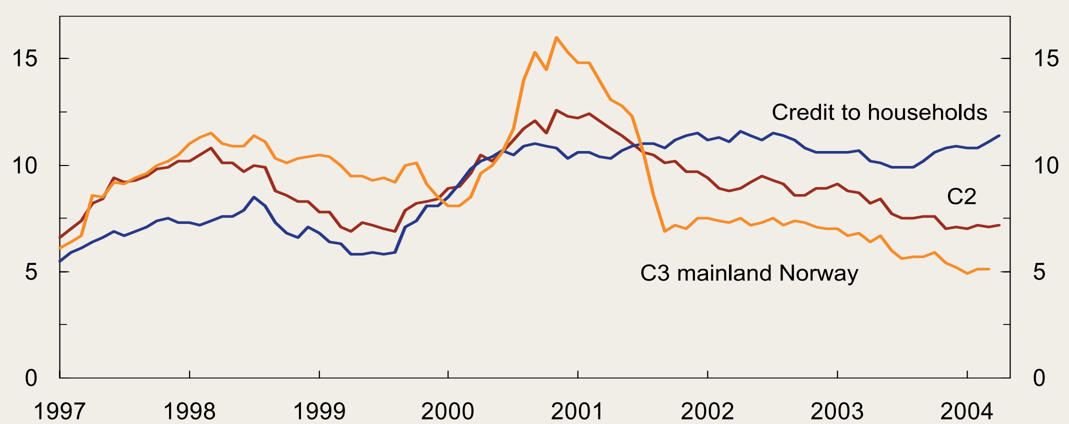


Source: Norges Bank

Table 6 Monetary aggregates

Annual growth/ twelve-month rise in per cent		Money supply	Domestic credit (C2)			Total credit (C3)	
		M2	Total	House-holds	Non-financial enterprices	Total	Mainland Norway
1997		2.2	8.8	6.7	13.8	9.0	8.7
1998		4.9	9.6	7.5	13.9	11.3	10.9
1999		6.5	7.6	6.6	9.6	10.6	9.6
2000		9.9	10.9	10.3	12.3	9.5	11.8
2001		9.2	11.0	10.9	10.5	8.3	10.8
2002		8.4	9.0	11.2	7.4	7.1	7.3
2003		4.4	7.9	10.4	2.9	5.5	6.1
2003	Jan	6.3	9.1	10.6	7.2	6.6	7.0
	Feb	6.2	8.8	10.6	5.9	6.6	6.7
	Mar	5.5	8.7	10.7	4.8	6.2	6.8
	Apr	5.9	8.1	10.2	3.9	5.8	6.4
	May	5.8	8.3	10.1	4.4	6.0	6.7
	Jun	2.9	7.6	9.9	2.8	5.5	6.0
	Jul	3.9	7.5	9.9	2.0	5.3	5.6
	Aug	4.6	7.5	9.9	1.9	5.3	5.7
	Sep	4.1	7.6	10.2	1.9	5.1	5.7
	Oct	2.8	7.6	10.6	1.0	5.2	5.9
	Nov	3.3	7.0	10.8	-0.4	4.5	5.4
	Dec	1.9	7.1	10.9	-0.9	4.3	5.2
2004	Jan	1.3	7.0	10.8	-1.0	4.1	4.9
	Feb	2.0	7.2	10.8	-0.2	4.0	5.1
	Mar	3.7	7.1	11.1	-1.1	3.9	5.1
	Apr	4.6	7.2	11.4	-1.1		
Level last month. In billions of NOK		884	1895	1143	602	2328	2118

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 97 – Apr 04



Source: Norges Bank

Annex III
Detailed projections and assumptions

Table 7 GDP growth in other countries

Percentage change from previous year

	USA	Japan	Germany	France	UK	Sweden	Trading partners[1)]	Euro area[2)]
1995	2.5	1.9	1.7	1.8	2.8	4.1	2.9	2.3
1996	3.7	3.4	0.8	1.0	2.7	1.3	2.3	1.4
1997	4.5	1.9	1.4	1.9	3.3	2.4	3.1	2.4
1998	4.2	-1.1	2.0	3.6	3.1	3.6	2.8	2.8
1999	4.4	0.1	2.0	3.2	2.8	4.6	3.5	2.8
2000	3.7	2.8	2.9	4.2	3.8	4.3	4.0	3.7
2001	0.5	0.4	0.8	2.1	2.1	0.9	1.4	1.7
2002	2.2	-0.3	0.2	1.1	1.6	2.1	1.4	0.9
2003	3.1	2.7	-0.1	0.5	2.2	1.6	1.3	0.5
Projections								
2004	4¼	4	1½	2	3	2¾	2½	1¾
2005	3	1½	1¾	2¼	2½	2¾	2½	2¼
2006	3	1½	2	2½	2½	2¼	2½	2½
2007	3	1½	2	2½	2½	2¼	2½	2½

1) Export weights, Norway's 25 most important trading partners
2) Eurostat weights

Sources: OECD and Norges Bank

Table 8 Consumer prices in other countries

Percentage change from previous year

	USA	Japan	Germany[1)]	France[1)]	UK[1)]	Sweden	Trading partners[2)]	Euro area[3)]
1995	2.8	-0.1	1.7	1.8	2.7	2.5	2.3	2.9
1996	2.9	0.1	1.2	2.1	2.5	0.5	1.8	2.4
1997	2.3	1.7	1.5	1.3	1.8	0.7	1.6	1.7
1998	1.5	0.7	0.6	0.7	1.6	0.3	1.1	1.2
1999	2.2	-0.3	0.6	0.6	1.3	0.5	1.3	1.2
2000	3.4	-0.7	1.4	1.8	0.8	0.9	2.0	2.1
2001	2.8	-0.7	1.9	1.8	1.2	2.4	2.4	2.4
2002	1.6	-0.9	1.3	1.9	1.3	2.4	1.9	2.3
2003	2.3	-0.3	1.0	2.2	1.4	1.9	1.8	2.1
Projections								
2004	2¾	0	1¾	2¼	1½	¾	1½	1½
2005	2¼	-¼	1¼	1½	2	1½	1½	1½
2006	2½	-¼	1¾	1¾	2	2	1¾	2
2007	2½	-¼	1¾	1¾	2	2	1¾	2

1) HICP, Harmonised Index of Consumer Prices
2) Import weights, Norways 23 most important trading partners
3) HICP. Eurostat weights (each country's share of total euro area consumption.)

Sources: OECD and Norges Bank

The fiscal rule and Norges Bank's assumptions

The fiscal rule

The fiscal rule, which was introduced in spring 2001 (Report to the Storting No. 29 (2000-2001)), implies that the structural, non-oil budget deficit shall be 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 particularly substantial changes in the Fund's capital or in factors that affect the structural, non-oil deficit from one year to the next, any change in the phasing-in 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 approved budget for 2004 was based on a structural, non-oil budget deficit of NOK 55.9bn in 2004. This is NOK 22bn higher than the expected real return on the capital in the Government Petroleum Fund at the beginning of 2004. In the final central government budget bill for 2003, the structural, non-oil budget deficit is estimated at NOK 48.1bn. This is more than NOK 8bn higher than estimated in the National Budget for 2004.

The assumptions in the Inflation Report

Norges Bank's projections are based on the adopted budget for 2004 and the estimates in the Revised National Budget for 2004. The structural, non-oil deficit increased markedly from 2002 to 2003. In the Revised National Budget for 2004, the deficit is expected to rise further, from 3.9% of trend GDP for mainland Norway to 4.2%. Measured by the traditional budget indicator, fiscal policy has had an expansionary effect on the economy since 2002. In the approved budget for this year, the budget balance was weakened by NOK 700m in relation to the Government's original proposal. Underlying spending growth over the central government budget may be estimated at little less than 5½% in 2004. The rise in total local government revenues is projected at close to 7% from 2003 to 2004. It is assumed that about half of this year's revenue growth will be used to reduce the deficits. We apply the technical assumption that annual real growth in public spending on goods and services will be about 2% in 2004 and 1½% in 2005, 2006 and 2007. The assumption implies that, in value terms, growth in public expenditure as from 2005 will be approximately in line with revenue growth.

Table: Changes 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 Petrolum 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	-	29.4	2.4
2002	619.3	26.4	37.3	3.0
2003	604.6	24.9	49.5	3.9
2004	847.1	33.9	55.2	4.2
2005	1016.2	39.4	55.2	4.2
2006	1151.5	43.1	55.2	4.1
2007	1299.5	46.9	55.2	4.1
2008	1459.1	50.9	55.2	4.0
2009	1639.5	55.2	55.2	4.0
2010	1832.6	59.5	59.5	4.2

1) Current prices.

Source: Revised National Budget 2004

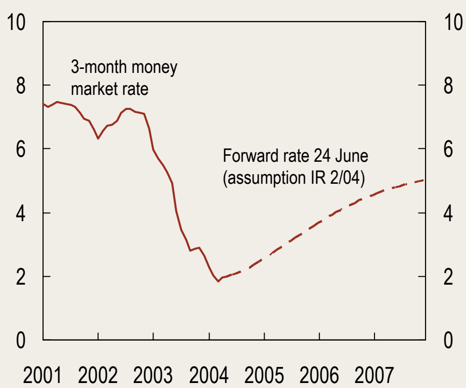
Table 9 Technical assumptions

Historical developments		I-44[1)]	Sight deposit rate
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
2003	Q1	88.7	6.0
	Q2	91.9	5.1
	Q3	95.7	3.4
	Q4	97.7	2.5
2004	Q1	98.2	2.0
Technical assumptions		Forward exchange rate	Based on forward interest rates[2)]
2004	Q2	95.1	1.8
	Q3	95.6	1.9
	Q4	95.5	2.1
2005	Q1	95.4	2.4
	Q2	95.3	2.7
	Q3	95.2	3.0
	Q4	95.2	3.2
2006	Q1	95.1	3.5
	Q2	95.1	3.8
	Q3	95.2	4.0
	Q4	95.2	4.2
2007	Q1	95.3	4.4
	Q2	95.3	4.5
	Q3	95.4	4.6
	Q4	95.5	4.7

1) Import-weighted exchange rate, 44 countries. Weights are calculated on the basis of imports from 44 countries which cover 97% of 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 24 June. We have deducted 0.25 percentage points from the forward interest rates to provide an expressin of the expected sight deposit rate.

Assumption for money market rate. Forward rate. Monthly figures. Per cent



Source: Norges Bank

Assumption for the krone exchange rate (I-44). Forward exchange rate. Monthly figures

1)A rising curve denotes a weaker krone exchange rate

Source: Norges Bank

Table 10 Main macroeconomic aggregates with forward interest rates and forward exchange rates

	In billions of NOK	Percentage change (unless otherwise stated)				
			Projections			
	2003	2003	2004	2005	2006	2007
Real economy						
Mainland demand[1)]	1270	1.7	4¼	3¼	2¾	2½
- Private consumption	722	3.8	5¼	4	2¾	2¾
- Public consumption	353	1.4	2	1½	1½	1½
- Fixed investment	195	-4.7	3¾	4	4	3½
Petroleum investment[2)]	63	15.8	10	5	5	-5
Traditional exports	189	2.6	5¼	3½	3	3
Imports	433	2.2	7½	3¾	2½	1½
Mainland GDP	1246	0.6	3½	3	2½	2½
GDP	1563	0.4	2¾	3	2¾	2
Labour market						
Employment		-0.6	½	1¼	¾	¾
Labor force, LFS		-0.1	½	1	¾	¾
Registered unemployment (rate)		3.9	3¾	3½	3½	3½
LFS-unemployment (rate)		4.5	4¼	4	4	4
Prices og wages						
CPI[3)]		2.5	½	1¾	2	2½
CPI-ATE[4)]		1.1	½	1½	2	2½
Annual wages[5)]		4½	3¾	4½	4¾	4¾

1) Private and public consumption and mainland gross fixed investment.
2) Extraction and pipeline transport.
3) Not adjusted for the introduction of maximum prices for day-care places.
4) CPI-ATE: CPI adjusted for tax changes and excluding energy products. Not adjusted for the introduction of maximum prices for day-care places.
5) 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, Aetat Arbeidsdirektoratet og Norges Bank

Inflation Report nr. 2 - July 2004