

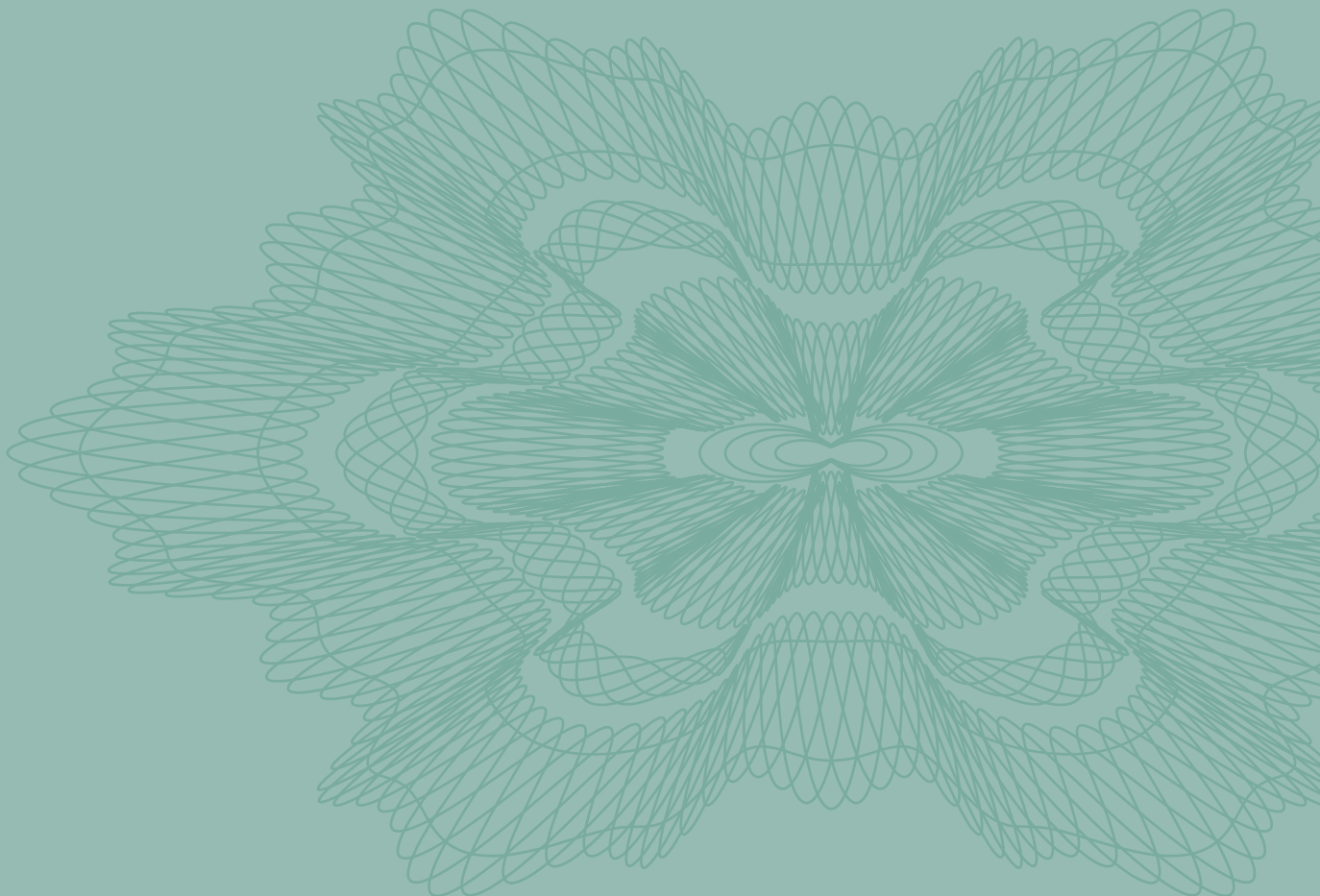
Reports from the Central Bank of Norway No. 1/2005



Inflation Report

with monetary policy assessments

1
05
March



Norges Bank's Inflation Report

Norges Bank's *Inflation Report* is published three times a year, in February/March, June/July and October/November. The report contains an analysis of developments in inflation, output and demand for the next three-year period.

In its meetings on 1, 2 and 16 March, Norges Bank's Executive Board discussed the main content of the *Inflation Report*. Norges Bank's Executive Board approved a monetary policy strategy based on these discussions at its meeting on 16 March for the period to the next *Inflation Report*, which will be published on 30 June. The strategy is presented in Section 3. During the period, the Executive Board's monetary policy meetings will be held on 16 March, 20 April, 25 May and 30 June.

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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Monetary policy in Norway

Objective

The operational target of monetary policy is low and stable inflation, with 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 are not taken into account.

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 a 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 interest rate setting and adopts a monetary policy strategy for the period to the next *Inflation Report*. Their assessments are published in Section 3 of the *Inflation Report*.

Communication of the interest rate decision

The monetary policy decision is announced at 2pm on the day of the meeting. The Bank gives a press conference at 2.45pm on the same day. The press release provides an account of the main features of economic developments that have been of importance for the decision on interest rates and the Executive Board's assessments. The press release and the press conference are available on <http://www.norges-bank.no>.

Reporting

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 Kredittmeldingen (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 1/2005

with monetary policy assessments

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The Inflation Report is based on information in the period to 10 March 2005.

Section 3 was approved by the Executive Board on 16 March 2005

Editorial

Interest rate developments

The decline in interest rates through 2003 and the low level of interest rates over the past year have resulted in higher activity in the Norwegian economy. Overall capacity utilisation in the economy has now reached its normal level and is rising. It may appear that growth has become more self-driven.

The rise in prices for consumer goods, which was close to zero a year ago, has gradually picked up. Even though an unexpected fall in prices for some imported goods reduced consumer price inflation in the first months of this year, we must expect in the light of our open economy some variability in inflation, and perhaps somewhat wider variations than some other countries. Monetary policy has probably contributed to fairly stable long-term inflation expectations at close to 2½%.

The prospects and assessments in this *Inflation Report* are based on interest rate developments in line with financial market expectations. This implies a gradual normalisation of the interest rate. It is the Executive Board's assessment that the key rate should be in the interval 1½–2½% in the period to end-June, conditional on economic developments that are broadly in line with the projections. The unusually low interest rate and developments in output and inflation imply that further interest rate reductions are now less likely. The lower limit for the strategy interval has therefore been increased to 1½%. The uncertainty surrounding economic developments implies that we should adhere to an interval of 1 percentage point for interest rate setting.

On the one hand, monetary policy shall be aimed at bringing inflation up to the target and to stabilising inflation expectations at 2½%. On the other hand, in the current environment we must also place emphasis on avoiding a situation where capacity utilisation becomes too high. A path where the interest rate then gradually rises seems to provide a reasonable balance between these considerations. Against this background, it may take some time before inflation reaches the target, but a more aggressive monetary policy aimed at pushing up inflation rapidly would probably increase the risk of bottlenecks and pressures in the economy. Allowing such pressures to emerge could, in fact, undermine expectations that future inflation will be close to the target.

The interest rate outlook is important for households and enterprises when they make financial decisions, and hence for developments in inflation, output and employment. Our formulations concerning the key rate over the next four months may provide some guidance. In the report, we also present a more qualitative assessment of market interest rate expectations ahead and the neutral real interest rate over time. Interest rate developments are uncertain. The economy is periodically exposed to disturbances that may result in an interest rate path ahead that is different from the one we have outlined. Information about Norges Bank's response pattern, which we attempt to shed light on in this report and through other channels, may be useful in gaining insight into how such disturbances will affect interest rate setting.

16 March 2005
Jarle Berge

Main features of the economic outlook

Inflation was low in 2004. As measured by the CPI-ATE, prices rose by 0.3% between 2003 and 2004. Inflation picked up towards the end of the year. In the beginning of 2005, CPI-ATE inflation slowed as a result of a fall in prices for imported consumer goods. The decline probably reflected some temporary factors. However, there are also signs that prices for imported consumer goods in foreign currency are falling somewhat more than projected earlier. Prices for domestically produced goods and services have moved broadly in line with projections. The risk of a fall in the general price level and markedly lower inflation expectations has probably been reduced.

Output growth in the Norwegian economy has been strong since mid-2003. Higher demand and output must be seen in connection with the low level of interest rates. The krone exchange rate, as measured by the trade-weighted index, is about the same as in the mid-1990s. Measured in terms of relative labour costs, competitiveness is still fairly weak, but wage growth has moderated over the past two years. At the same time, developments in the world economy are making a positive contribution to growth in the Norwegian economy. Prices for oil and other important Norwegian export goods are high. Petroleum investment is exhibiting sharp growth. Fiscal policy has contributed to somewhat higher demand than originally planned.

It may appear that growth in the Norwegian economy has become more self-driven. Early in the recovery, the main driving forces were private consumption combined with traditional exports and fixed investment in the petroleum sector. Mainland fixed investment has now also picked up.

In spite of the strong upturn in the mainland economy, employment growth has been relatively modest. Productivity has probably increased more than normal in a number of industries and sickness absence fell sharply through 2004. This increased the supply of labour in the business sector and may have curbed the demand for new employees. Measured in terms of the number of person-hours worked, employment showed solid growth in 2004. Unemployment has exhibited only a moderate decline over the past year.

An increase in available person-hours and intensified competition and rationalisation in many sectors led to a higher-than-normal increase in potential output last year. The economy has therefore been able to grow fairly rapidly for a period without the emergence of bottlenecks in the labour market. Capacity utilisation is close to normal.

Growth in demand and output is expected to remain high in the coming period. There are prospects of a somewhat faster tightening in the labour market than observed over the past year. Capacity utilisation will probably move to above its normal level in 2005. The output gap will be positive in 2005.

The projections for the years ahead are based on market interest rate expectations. Forward rates seem to provide a reasonable indication of these expectations in the period to 2007. On 10 March, the key rate was expected to be increased to 2% in the course of the summer, to about 2½% at the turn of the year and to 3¼% at the end of 2006. Further ahead, there are expectations of a further interest rate increase, but at a slower pace than market participants expected when the previous *Inflation Report* was published. Five years ahead, forward interest rates are still only 4¾%. For 2007 and 2008, actual interest rate expectations are assumed to rise somewhat faster than forward interest rates. The adjustment implies that money market rates in Norway will move up to about 5% at the end of 2008 and then towards a normal level of 5 ½% (see box on the level of long-term interest rates on page 44). The exchange rate is assumed to follow the forward exchange rate, which implies that the krone will remain fairly stable around today's level in the years ahead.

Even if interest rates gradually rise through the projection period, the level of both nominal and real interest rates will remain slightly below their long-term neutral levels in the coming years. Moreover, strong growth in petroleum investment this year will have spillover effects on the mainland business sector. Against this background, there are prospects that activity in the Norwegian economy will continue to increase fairly rapidly this year and next. The projections imply an increase in the output gap to about 1¼% in 2006.

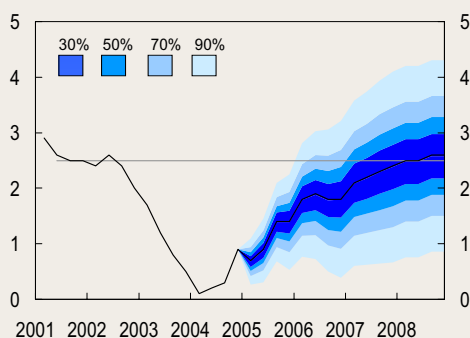
As capacity utilisation in the economy increases, there are prospects of lower unemployment and some increase in wage growth. The extraordinary factors that have contributed to curbing the rise in prices for imported consumer goods are expected to fade gradually in the years ahead. CPI-ATE inflation may then increase from less than 1% today to almost 2% in 2006.

As interest rates approach a more normal level, growth in private demand will probably slacken. Mainland GDP may then grow at a somewhat slower pace than potential output, with a fall in capacity utilisation. The output gap is estimated to move down to ½% in 2008.

A normalisation of capacity utilisation towards the end of the projection period implies that unemployment will show a small increase. However, higher inflation is expected to hold up nominal wage growth. Against this background, there are prospects that inflation will stabilise around 2½% three years ahead.

The projections are uncertain (see Charts 1 and 2). Our projections are also based on our analysis of relationships in the economy and conditional on the underlying interest rate and exchange rate assumptions.

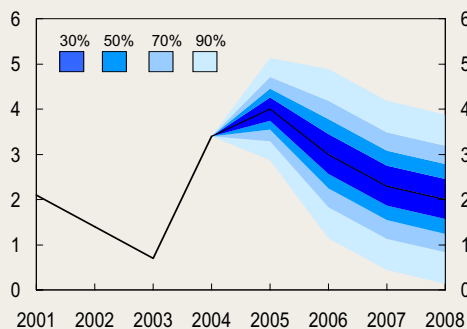
Chart 1 Projections and uncertainty for CPI-ATE.¹⁾ 4-quarter change. Per cent. 01 Q1 – 08 Q4



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 2 Projections and uncertainty for growth in mainland GDP.¹⁾ Annual change. Per cent. 2001 – 2008



¹⁾ The bands in the fan indicate different probabilities for growth in mainland GDP. Probabilities are based on the difference between projected and actual developments in mainland GDP in the period 1994 – 2003

Sources: Statistics Norway and Norges Bank

1 | Recent developments

1.1 Developments in financial markets

Low long-term interest rates

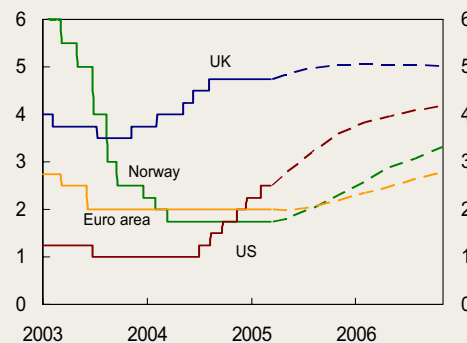
So far in this upturn, key rates among an average of our trading partners have increased by a little more than ¼ percentage point. In the US, the key rate has been increased six times since June 2004 and is currently 2.5% (see Chart 1.1). Market rates indicate expectations of further increases through 2005. The key rate in the euro area has remained unchanged, but a rate increase is expected towards the end of 2005. In the UK, the key rate has been increased by 1.25 percentage points since November 2003 to 4.75%. Market participants expect a further increase in the next six months. Canada's key rate was raised to 2.5% in 2004 and further increases are expected in the autumn. The key rate in Australia is 5.5%, up 1.25 percentage points since 2002. The key rate in Sweden is unchanged at 2.0%, but an increase is expected towards the end of the year. Market participants now expect interest rates in the US and the UK to increase more than expected at the beginning of November 2004. On the other hand, market participants expect interest rates to rise at a slower pace in Sweden and the euro area than they assumed when the previous *Inflation Report* was published in November 2004.

Long-term interest rates fell during autumn 2004 and in the first months of 2005. Recently, long-term interest rates have risen again, particularly in the US. All in all, developments in long-term rates have contributed to a decline of around ¼ percentage point in forward interest rate rates 10 years ahead for an average of our trading partners. Normally, we assume that forward rates reflect market expectations concerning short-term money market rates. With such an interpretation, recent interest rate developments imply that expectations concerning long-term interest rates have fallen somewhat.

Supply and demand factors may have contributed to pushing down long-term rates and hence forward rates. Low interest rates on short-term investments may have induced a number of investors to invest in long-term bonds in order to achieve a higher return. New regulations pertaining to European life insurance companies have also led to an increase in their share of investments in debt instruments with longer maturities. Substantial excess liquidity as a result of low short-term interest rates has increased demand for government bonds. Asian central banks' purchases of US government bonds may also be contributing to keeping US interest rates low (see box on developments in long-term interest rates on page 44).

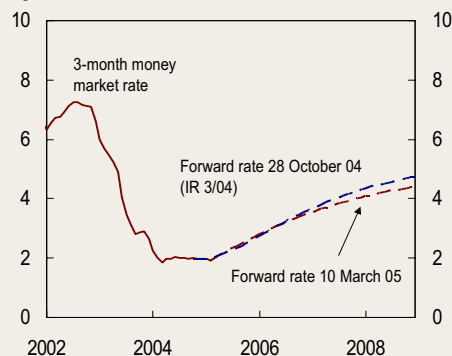
In Norway, the key rate has remained unchanged at 1.75% since the previous *Inflation Report* (see separate box below on monetary policy since 3 November 2004). Short-term

Chart 1.1 Interest rate expectations. Actual developments and expected key rate¹⁾ at 10 March 05. Per cent. 2 Jan 03 – 1 Nov 06



¹⁾ FRAs and futures contracts adjusted for the estimated difference between 3-month money market rates and the key rate
Sources: Reuters and Norges Bank

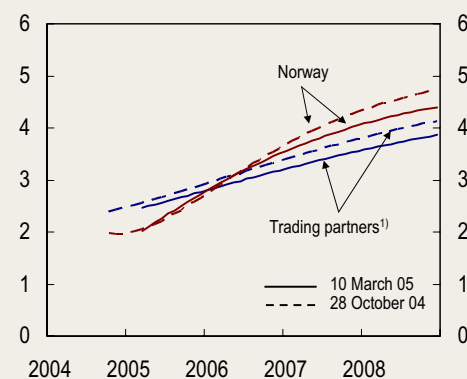
Chart 1.2 Forward interest rates^{1) 2)}. Monthly figures. Per cent. Jan 02 – Dec 08



¹⁾ The money market rate is normally about ¼ percentage point higher than the sight deposit rate
²⁾ 3-month money market rates to end-February 2005

Source: Norges Bank

Chart 1.3 Forward interest rates. Monthly figures. Per cent. Oct 04 – Dec 08



¹⁾ Estimated as a weighted average of trading partners' forward rates

Source: Norges Bank

forward interest rates are virtually unchanged since the last report (see Chart 1.2). Forward interest rates indicate expectations that the key rate will be increased to 2% during the summer of 2005 and to about 2½% at the turn of the year. Forward interest rates indicate that market participants expect interest rates in Norway to be lower than the average for our trading partners until the beginning of 2006 (see Chart 1.3).

In the long term, forward interest rates are low in Norway as well. They have fallen in pace with international interest rates and have probably been affected by the same extraordinary factors.

Moderate fluctuations in the krone exchange rate

The Norwegian krone depreciated toward the end of 2004. Many foreign investors reduced their NOK investments before year-end. This depreciation intensified at the beginning of 2005 due to an appreciation of the US dollar

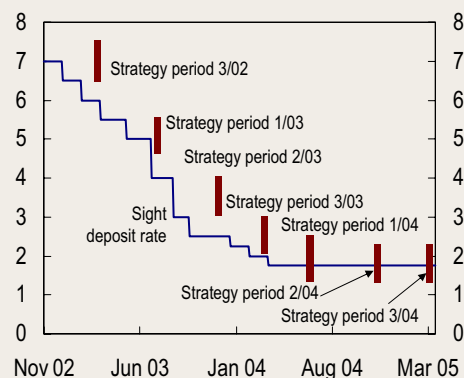
Monetary policy since 3 November

In *Inflation Report 3/04*, Norges Bank's projections for economic developments implied a sight deposit rate in the interval 1¼-2¼% in mid-March 2005 (see Chart 1). The Executive Board focused in particular on factors that could delay an increase in inflation. However, uncertainty concerning the effects of previous monetary policy easing and the unusually low interest rate implied caution with regard to further interest rate reductions. The prospect of continued low inflation for a period ahead implied that wide deviations from projected economic developments would be required before the interest rate should be increased. In addition, prospects of continued low inflation in Norway implied that we should lag behind other countries in setting interest rates at a more normal level.

Economic developments in Norway since November have been broadly in line with expectations. Inflation picked up in November and December, but a marked fall in prices for imported consumer goods curbed inflation in January and February. It is uncertain how much of this price fall is due to a decline in underlying inflation. The risk of a fall in the general price level and of declining inflation expectations is probably smaller now than in the summer and autumn of 2004. The effects of previous monetary policy easing have been approximately as expected. The sight

deposit rate has remained unchanged at 1.75% since 12 March 2004. At the monetary policy meetings on 3 November, 15 December and 2 February, the Executive Board did not see any clear alternatives to leaving the interest rate unchanged. Many countries have raised their key rates during this cyclical upturn, also in several steps. On average our trading partners have increased their key rates by a little more than ¼ percentage point. The Federal Reserve increased the key rate again in February and the market expects further increases. With the prospect of low inflation for a period ahead, Norway has lagged behind other countries in adjusting interest rates to a more normal level.

Chart 1 Interval for the sight deposit rate at the end of each strategy period and actual developments. Daily figures. Per cent. 1 Nov 02 – 16 Mar 05



Source: Norges Bank

and expectations of low interest rates in Norway for some time ahead. Recently, the krone has again appreciated somewhat. High oil prices and higher market interest rate expectations may have contributed to the appreciation. As measured by the import-weighted exchange rate index I-44, the krone exchange rate is now slightly stronger than the level prevailing at the time of the previous *Inflation Report*. The nominal krone exchange rate, measured by the trade-weighted index (TWI) is now approximately back to the level prevailing in the mid-1990s (see Chart 1.4). Labour costs in manufacturing have risen considerably more than among our trading partners in the same period, and the real exchange rate, measured by relative labour costs in common currency, has so far this year been about 4% stronger than the average since 1970 (see Chart 1.5). The real exchange rate, measured by relative consumer prices in common currency, is approximately the same as the average since 1970.

Higher equity prices

The advances on the Oslo Stock Exchange indicate considerable optimism in the business sector. Equity prices have risen substantially since the spring of 2003, and the price rise has been significantly sharper than in Europe, the US and Japan. From the trough in 2003 to the end of the year, the Oslo Stock Exchange's all-share index (OSEAX) has advanced by a little less than 75%. The all-share index rose by nearly 40% in 2004 and the rise in equity prices has continued in 2005.

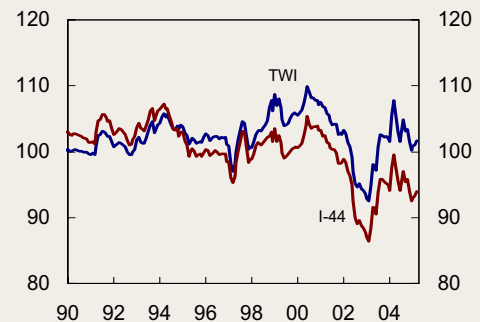
1.2 Output and capacity utilisation

The Norwegian economy experienced a relatively moderate recession in 2002 and the beginning of 2003. Since the first half of 2003, growth has again been high. Mainland GDP rose by 3.5% from 2003 to 2004. Official statistics and information from our regional network may indicate that economic growth has become more self-driven.

Coupled with low interest rates, higher petroleum investment and high demand for Norwegian export goods have contributed to boosting output in goods-producing industries (see Chart 1.6). Manufacturing output has edged up since the trough last spring. Developments in service industries reflect continued strong demand in the household sector. Growth in public sector expenditure has been fairly strong in recent years but may be slowing. We have limited overall knowledge about real growth in public service production. Reliable measures of productivity and price developments have not been developed.

Despite the strong upturn in the mainland economy, the rise in the number of employed has been fairly modest (see Chart 1.7). Productivity rose quite sharply in the first few quarters after economic growth picked up. Normally, strong

Chart 1.4 Nominal effective exchange rate¹⁾. Import-weighted exchange rate index (I-44, 1995=100) and the trade-weighted exchange rate index (TWI, 1990=100). Monthly figures. Jan 90 – Feb 05



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

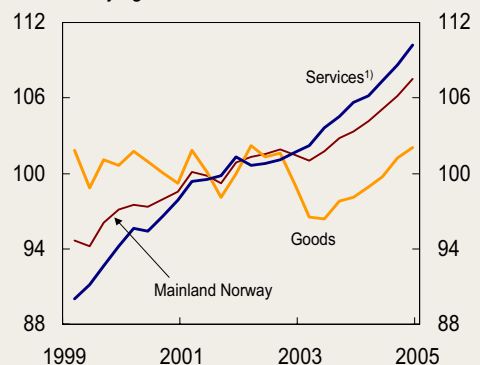
Chart 1.5 Real exchange rates (relative consumer prices and labour costs in common currency). Annual figures. Per cent. Deviation from average 1970 – 2004¹⁾



¹⁾ Average nominal exchange rate (TWI) for 2005 based on the average so far this year (through 10 March)
²⁾ Projections for wage growth in 2005 from IR 1/05
³⁾ Projections for consumer price inflation in 2005 from IR 1/05

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

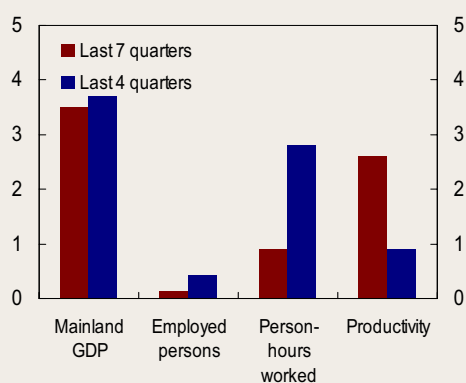
Chart 1.6 Value added, mainland Norway. Index. 2001 = 100. Seasonally adjusted. Quarterly figures. 99 Q1 – 04 Q4



¹⁾ Excluding public sector

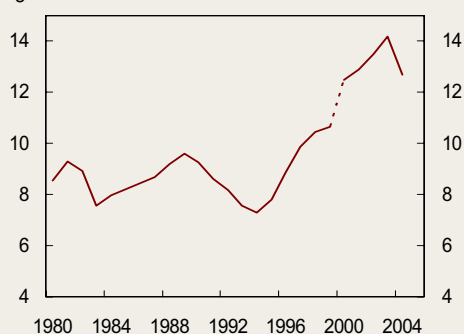
Source: Statistics Norway

Chart 1.7 Output, employment and productivity.
Average quarterly growth (annualised) up to 04 Q4.
Per cent



Sources: Statistics Norway and Norges Bank

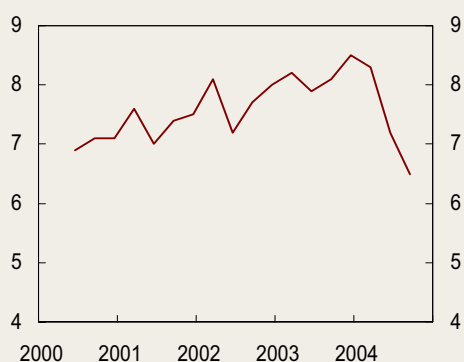
Chart 1.8 Number of sick pay days paid by the National Insurance per employee.¹⁾ Per cent. Annual figures. 1980 – 2004



¹⁾ 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 1.9 Person-days lost due to sickness absence, both self-certified and doctor-certified, for employees aged 16-69. Per cent of contractual person-days. Quarterly figures. 00 Q2 – 04 Q3



Source: Statistics Norway

productivity growth is gradually followed by an increase in employment. The current upturn has lasted about two years. The fairly low level of growth in employment, as measured by the number of employed, must be seen in the light of the sharp decline in sickness absence through 2004 after rising for several years (see Chart 1.8 and 1.9). The decrease in sickness absence has increased companies' supply of labour and reduced the need for new employees. Measured in person-hours worked, employment growth was solid last year. Person-hours worked increased by 2.2% from 2003 to 2004. A corollary to the increase in the number of person-hours worked is partly reduced sickness absence and partly three more working days in 2004 compared with 2003.

One reason for the reduction in sickness absence may be that changes in the National Insurance Act from 1 July have tightened the eligibility requirements for sickness benefits. It cannot be ruled out that increased use of foreign labour may also have affected sickness absence. A sharp decline in sickness absence in the construction sector, where the share of foreign labour is relatively high, may be an indication of this.

An increase in available person-hours and increased competition and rationalisation in many sectors led to higher-than-normal growth in potential output last year. The economy has therefore been able to grow a fairly rapidly for a period without the emergence of bottlenecks in the labour market.

In the business tendency survey, manufacturing industry reported higher output volumes and capacity utilisation. Average capacity utilisation in the manufacturing sector is now close to its historical average. Norges Bank's regional network reports that nearly half of the contacts would have some or substantial problems in increasing production in excess of planned levels. This may indicate approximate balance between supply and demand in the economy, and that capacity utilisation is about normal. A normal level of capacity utilisation is consistent with an output gap that is now close to zero.

Growth in demand and output is expected to remain high in the near term. Unemployment may fall somewhat more quickly than has been the case over the past year. The output gap is expected to be positive in 2005.

1.3 Demand

In the early phase of the recovery, private consumption, traditional exports and fixed investment in the petroleum sector were the most important driving forces behind growth (see Chart 1.10). Growth in mainland fixed investment has also picked up. Developments in the last few quarters have been broadly in line with the projections in the November

Inflation Report. Signs of higher investment demand indicate, however, that growth in overall demand and output in the next few quarters may be somewhat stronger than previously projected.

Strong growth in household demand

In the last few years, household demand has been underpinned by low interest rates, high real wage growth and higher asset prices. According to preliminary national accounts figures, private consumption increased by 4.3% last year. However, retail sales statistics, based on VAT payments, may indicate somewhat stronger growth. Nevertheless, private consumption probably increased somewhat less in 2004 than projected in the last *Inflation Report*.

House price inflation has slowed somewhat, but remains high. In 2004, housing starts were the highest in several years (see Chart 1.11). Growth in housing investment has been somewhat higher than projected in the previous *Inflation Report*. On the other hand, growth in household consumption has been somewhat lower. Overall household demand is approximately as projected in the previous report.

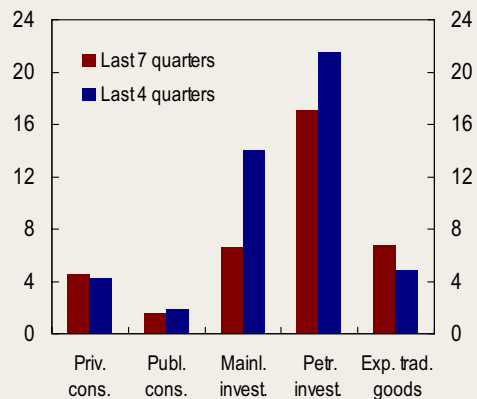
Real wage growth was relatively high in 2004, although nominal wage growth was lower than it has been in several years. Higher imports from low-cost countries and intensified competition in a number of industries have kept inflation at a low level. These factors have contributed to brisk growth in household purchasing power.

Overall, the supply of capital to households has increased sharply. Debt accumulation was slightly higher than 11% in 2004 and is considerably higher than growth in household disposable income (see Chart 1.12). This largely reflects the sharp rise in house prices since the mid-1990s.

Housing starts are high. Home refurbishment is probably also rising sharply. Growth in housing investment will probably remain somewhat higher the next few quarters than we expected in the previous *Inflation Report*.

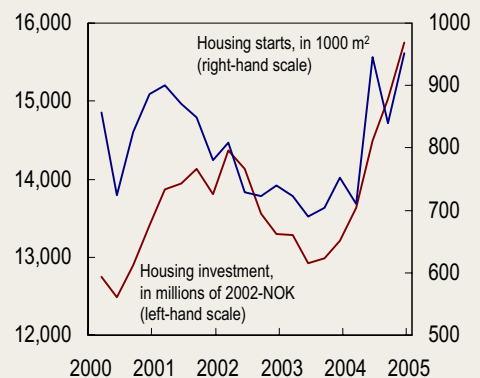
According to TNS Gallup's consumer confidence indicator for the first quarter of 2005, households are still highly optimistic with regard to their personal finances and the domestic economy. Our regional network confirms this view with reports of strong growth in companies that provide goods and services to households. On the whole, household consumption and housing investment are projected to show fairly strong growth over the next few quarters.

Chart 1.10 Demand. Average quarterly growth (annualised) through 04 Q4. Per cent



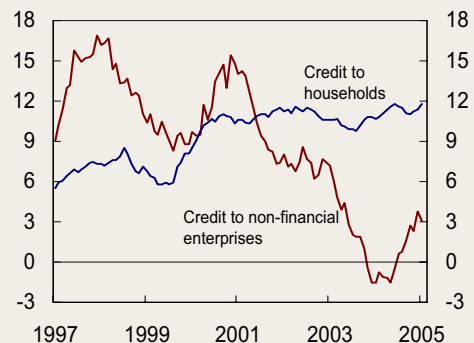
Sources: Statistics Norway and Norges Bank

Chart 1.11 Housing investment and housing starts. Seasonally adjusted. 00 Q1 – 04 Q4



Sources: Statistics Norway and Norges Bank

Chart 1.12 Growth in credit to households and enterprises.¹⁾ 12-month growth. Per cent. Jan 97 – Jan 05



¹⁾ From domestic sources (C2)

Source: Norges Bank

Continued fiscal stimulus

The rise in expenditure over the central government budget was somewhat higher than nominal mainland GDP growth last year. In the National Budget for 2005, the increase in the structural deficit as a share of trend mainland GDP was projected at 0.7 percentage point from 2003 to 2004. This was somewhat higher than estimated in the Revised National Budget for 2004.

The central government budget proposal for 2005 implies a further increase in the structural deficit this year. Measured as a share of trend mainland GDP, the deficit will increase by 0.4 percentage point from 2004, or a good NOK 6bn.

Increased corporate investment

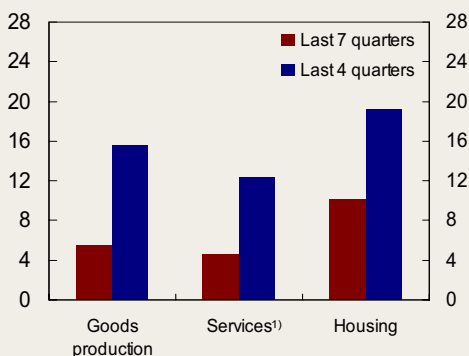
Mainland fixed investment has gradually become an important driving force behind the upturn (see Chart 1.13). Investment has picked up in most industries and growth was stronger than expected towards the end of 2004. Norges Bank's regional network has registered rising investment in all industries. Petroleum investment in particular appears to be growing at a faster pace than projected. This may continue to boost mainland output.

Higher investment is probably due to improved profitability and the prospect of continued solid growth in demand and output. Many companies have reduced costs in the last few years by reducing their workforces and improving efficiency. Norwegian listed companies' operating profits rose by roughly 40% in the first three quarters of 2004 compared with the same period in 2003. Reports from Norges Bank's regional network point to a continued rise in profitability. Optimism seems to be high in the business sector. Growth in credit to the corporate sector is still low, however (see Chart 1.12).

Growth in activity is high in service industries, and employment rose through 2004. We expect that healthy household finances and increased activity in the business sector will contribute to continued growth in demand and investment. Commercial property accounts for a large share of investment in this sector. The level of activity here has been low for several years and has reduced investment activity. However, a number of factors may indicate that the market is improving. Commercial building starts increased through 2004. In addition, the share of vacant office premises has fallen somewhat from a high level (see Chart 1.14). The fall in rental prices seems to have come to a halt.

The completion of some major projects in the metals industry towards the end of 2004 will in isolation contribute to pushing down manufacturing investment in 2005. However, the investment intentions survey for

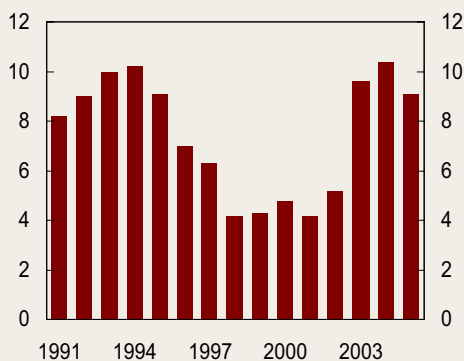
Chart 1.13 Mainland fixed investment. Average quarterly growth (annualised) through 04 Q4. Per cent



¹⁾ Excluding public sector

Sources: Statistics Norway and Norges Bank

Chart 1.14 Vacant office premises in Oslo, Asker and Bærum. Per cent of total property stock. Annual figures. 1991 – 2005¹⁾



¹⁾ As at February

Source: Eiendomsspar AS

manufacturing indicates an increase in investment. Sharp growth in petroleum investment in 2005 will have spillover effects on mainland manufacturing.

High growth in foreign trade

Growth in domestic demand has been higher than mainland GDP growth for several years. A rise in imports has thus curbed production growth in the mainland economy. This may partly reflect a low rise in prices for imported goods. At the same time, high wage growth in Norway relative to other countries and a periodically high krone exchange rate have weakened the profitability of Norwegian export companies and dampened export growth.

Growth in traditional exports has nevertheless picked up in the past two years. Prices for many of our main export goods have risen as a result of strong growth in new markets. However, growth in Norway's total exports, excluding oil and gas, is lower than import growth among our trading partners.

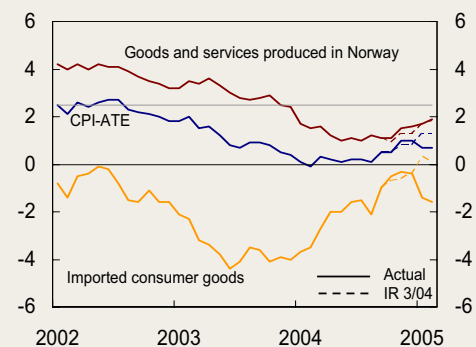
Growth in imports has been strong in the last few years and accelerated through 2004. In addition to strong demand growth in the Norwegian economy and low prices for imported goods, petroleum investment contributed to this upswing. Investment on the Norwegian continental shelf and in on-shore installations rose by nearly NOK 7bn in 2004. Imports probably account for about half of this. Very high petroleum investment and a high level of activity in the mainland economy may contribute to continued firm growth in imports in 2005.

1.4 Consumer price inflation

Underlying inflation, measured by the CPI-ATE, has been below the inflation target since mid-2002. Higher imports from low-cost countries, stronger competition and improved efficiency in Norwegian production have kept inflation at a low level.

Initially, it was the fall in prices for imported consumer goods that pushed down underlying inflation. After a period, the rise in prices for domestically produced goods and services also decelerated (see Chart 1.15). This was due in particular to increased competition in some goods and service markets. At the same time, wage growth slowed as a result of lower capacity utilisation in the economy. A slower rise in house rents also contributed (see Chart 1.16). Inflation measured by the CPI-ATE reached its lowest level in the first months of 2004. Inflation remained at less than ½% until after the summer before picking up in autumn. Inflation moved up primarily as a result of a slower decline in prices for imported consumer goods, but the depreciation of the krone since the beginning of

Chart 1.15 CPI-ATE¹⁾. Total and by supplier sector.²⁾ 12-month change. Per cent. Jan 02 – Feb 05

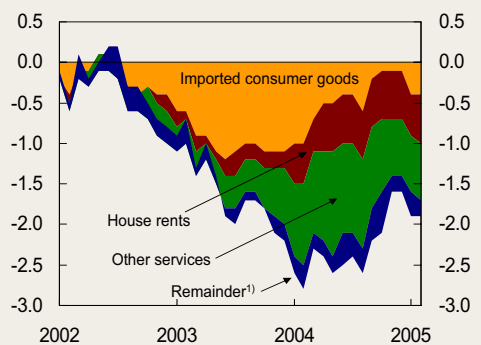


¹⁾ CPI-ATE: CPI adjusted for tax changes and excluding energy products

²⁾ Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

Chart 1.16 Contribution to the decline in the CPI-ATE inflation from Dec 01. Percentage points. Jan 02 – Feb 05



¹⁾ Agricultural products, fish products, consumer goods produced in Norway, services with wages as dominant factor

Sources: Statistics Norway and Norges Bank

2003 has also contributed. In addition, the rise in prices for domestically produced goods and services stabilised, and towards the end of 2004 there was a tendency of a higher rise in prices for these goods and services.

At the beginning of 2005, inflation measured by the CPI-ATE was lower than expected (see Chart 1.15). Prices for imported consumer goods fell more than expected. It is uncertain whether this price fall was due to abnormal seasonal patterns or a fall in underlying inflation. The fall in prices may be related to an unusually warm winter, which has made it more difficult to sell winter clothing and sports equipment at ordinary prices. On the other hand, there are indications that prices for imported consumer goods in foreign currency may have fallen somewhat more than previously assumed.

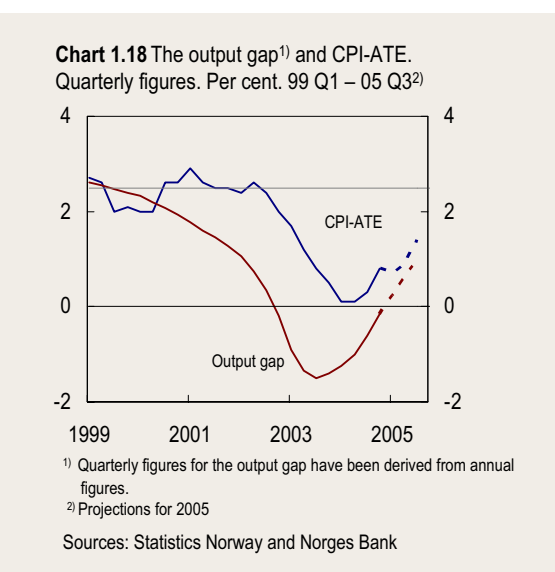
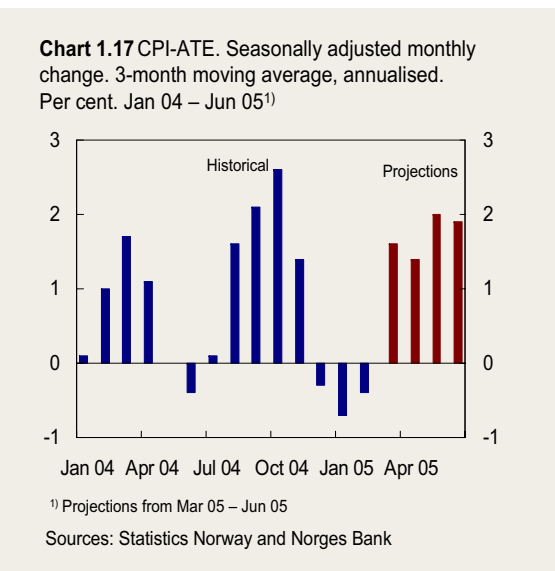
Among the companies in our regional network, the share expecting a sharper rise in selling prices is larger than the share expecting a slower rise in prices. TNS Gallup's business sentiment survey shows a more neutral impression. Nevertheless, both surveys indicate expectations of sharper rise in prices in the service sector.

The wide variations in prices for some imported consumer goods, especially clothing and footwear, may entail wide monthly variations in consumer price figures. Excluding changes in prices for clothing and footwear, the year-on-year rise in the CPI-ATE was 1.3% in February, up from 1.1% in January.

Other indicators of underlying inflation increased somewhat more than the CPI-ATE in the twelve months to February. The 12-month rise in a trimmed average and a weighted median for the consumer price index was 0.9% and 1.4% respectively in February.

Changes in indirect taxes, particularly in VAT rates, make it difficult to interpret the most recent price figures. In the calculations of the CPI-ATE, it is fully adjusted for tax changes from the time they are introduced. Statistics Norway has estimated the effect of the tax changes since the beginning of the year at 0.5 percentage point. The low level of inflation at the beginning of the year may be due to a lag in price adjustments following the indirect tax changes.

The risk of a fall in the general price level and of markedly lower inflation expectations may have diminished even though inflation was lower than expected at the beginning of the year. Inflation expectations five years ahead, as measured by TNS Gallup's expectations survey, still seem to be close to the inflation target of 2½%. On the whole, inflation is projected to show a renewed rise in the period to summer (see Chart 1.17). Our projections for CPI-ATE inflation and the output gap over the next few quarters are summarised in Chart 1.18.



Recent price developments

Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) moved up through autumn and winter. From December to January, however, the annual rate of increase fell from 1.0% to 0.7%. In February, inflation was unchanged at 0.7%. Changes in indirect taxes from the beginning of the year make it more difficult than usual to interpret inflation developments.

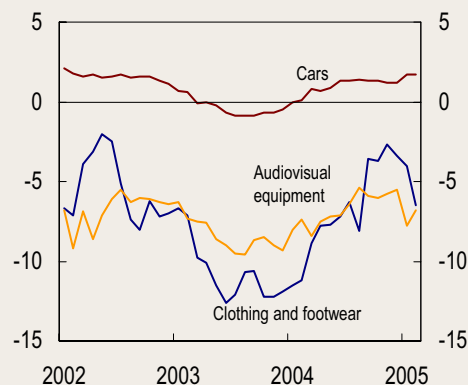
The rise in prices for domestically produced goods and services has picked up gradually since early summer 2004 when the annual rate of increase was as low as 1.0%. The annual rate of increase in these prices moved up further from 1.6% in December to 1.9% in February. It is particularly prices for goods and services not exposed to foreign competition, that are now rising at a faster pace. The fall in prices for imported consumer goods slowed markedly through autumn 2004. This trend was broken in January 2005. Prices for imported consumer goods fell by 3.0% from December to January. In January, prices for imported consumer goods were 1.4% lower than in the same month one year earlier. In February, prices for imported consumer goods were 1.6% lower than one year earlier. Developments in these prices in the beginning of the year may be related to the unusually mild winter, which may have made it more difficult to sell winter clothing and sports equipment at ordinary prices. However, external price impulses to Norwegian consumer goods have also been somewhat weaker than previously assumed.

The year-on-year rise in the consumer price index (CPI) was 1.0% in February 2005. Other price statistics tend to confirm the general picture of low inflation.

More pronounced fall in prices for imported consumer goods

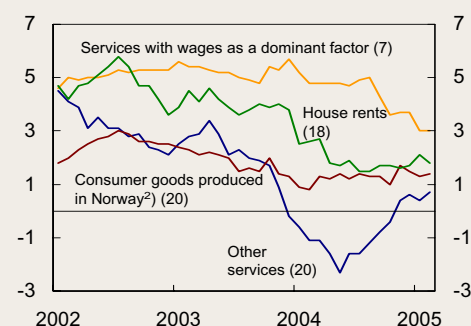
The fall in prices for imported consumer goods slowed through 2004. The depreciation of the krone through 2003 contributed to restraining the fall in prices for clothing and footwear (see Chart 1). Clothing and footwear prices fell by as much as 10.4% from December to January, and by a further 1.3% in February. In February, these prices were 6.5% lower than in February one year earlier. The decline in prices for audiovisual equipment slowed

Chart 1 Prices for some imported consumer goods. 12-month change. Per cent. Jan 02 – Feb 05



Source: Statistics Norway

Chart 2 Prices for goods and services produced in Norway¹⁾. 12-month change. Per cent. Jan 02 – Feb 05



¹⁾ Adjusted for tax changes and excluding energy products. Percentage share of CPI-ATE in brackets. Norges Bank's estimates up to December 2003

²⁾ Excluding energy and agricultural and fish products

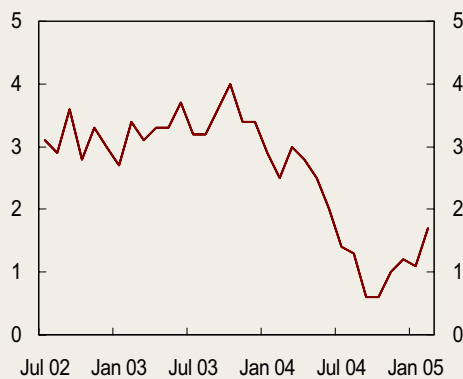
Sources: Statistics Norway and Norges Bank

in the latter half of last year. The rate of decline accelerated again in January, when prices were 7.8% lower than one year earlier. In February, these prices were 6.8% lower than one year earlier.

Accelerating rise in prices for domestically produced goods and some services

The rise in prices for domestically produced goods has edged up over the past year. Prices for "other services" have increased since May last year and the annual rate of increase turned positive in November

Chart 3 Prices for food and non-alcoholic beverages. 12-month change. Per cent. Jul 02 – Feb 05

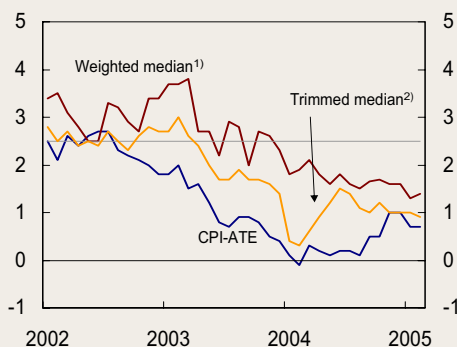


Source: Statistics Norway

(see Chart 2). This primarily reflects higher airfares. House rents also edged up towards the end of 2004 and in January. In February, the annual rise was 1.8%. Food prices have risen since last autumn after a period of downward pressure on prices due to new entrants and increased competition (see Chart 3). The rise in prices for services with wages as the dominant cost factor exhibited a falling trend through 2004. In January and February 2005, the annual rise was down to 3.0% (see Chart 2). This is the lowest rise in prices for these services in 10 years. These developments must be viewed in the context of declining wage growth.

With some exceptions, other price statistics confirm the picture of low inflation. The annual rise in the household consumption price index in the national accounts was 1.3% in the fourth quarter of 2003 to the fourth quarter of 2004. The investment price indices, which are influenced by higher prices for housing investment, rose by 2.9%. Prices for traditional exports and imports rose by 7.5% and 1.1%, respectively, in the same period. The rise in import prices has gradually slowed since the second quarter of last year.

Chart 4 Indicators of underlying price inflation. 12-month change. Per cent. Jan 02 – Feb 05



¹⁾ Estimated on the basis of 93 sub-groups of the CPI
²⁾ Price changes accounting for 20% of the weighting base are eliminated

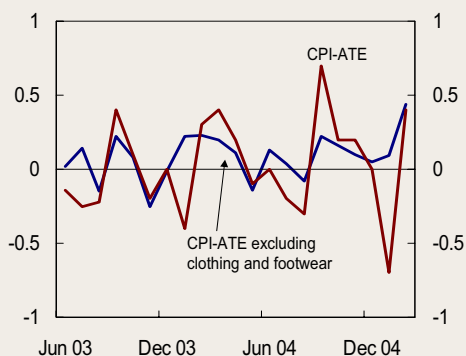
Source: Statistics Norway

The rise in producer prices for consumer goods supplied to the domestic market edged down in 2004 and the annual rate of increase has been a little less than 1% since November last year. In February, these prices were 0.7% higher than in February last year. Wholesale prices were 3.6% higher in February than one year earlier.

Indicators of underlying inflation

A trimmed mean is calculated by excluding the largest and smallest price movements when measuring inflation. A weighted median is obtained by ranking changes in prices for some goods and services according to rising value. The median is the middle value obtained when the CPI weights are taken into account. These indicators, which place less emphasis on the most extreme price changes, present as a whole a picture of a more moderate decline in inflation so far in 2005 than the CPI-ATE (see Chart 4). Measured by the year-on-year change in a trimmed mean, inflation was stable from December to January at 1.0%, and fell to 0.9% in February. The weighted median shows an increase in the 12-month rate of increase from 1.3% in January to 1.4% in February.

Chart 5 CPI-ATE including and excluding prices for clothing and footwear¹⁾. Monthly change. Per cent. Jun 03 – Feb 05



¹⁾ Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

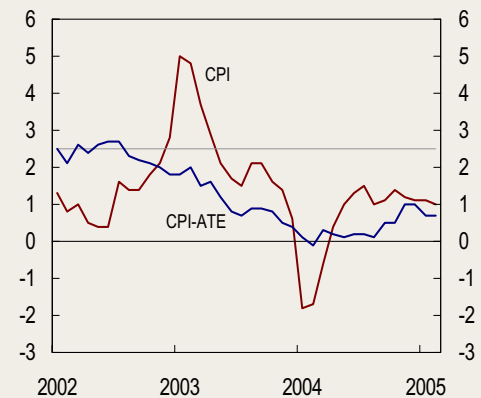
Prices for clothing and footwear show fairly wide variations, and have shown wider variations recently than in earlier periods. Measured by the CPI-ATE, inflation fell by 0.7% from December to January. If clothing and footwear are excluded, inflation rose by 0.1%. In February, inflation was CPI-ATE inflation was 0.4% irrespective of whether clothing and footwear are excluded (see Chart 5). If clothing and footwear prices are not included, the 12-month rise in the CPI-ATE was 1.1% in January and 1.3% in February.

On the whole, the indicators show an underlying annual rise in consumer prices in the order of $\frac{3}{4}$ - $1\frac{1}{2}\%$. Inflation is lowest measured by the CPI-ATE.

Moderate CPI inflation

The consumer price index (CPI) includes tax changes and energy products. In recent years, the annual rise in the CPI has varied more than the CPI-ATE (see Chart 6), primarily reflecting substantial fluctuations in energy prices. There are wide variations in electricity prices, which are now considerably lower than was the case last winter. The annual rise was -10.6% in February. Very high and unstable oil prices have resulted in large variations in petrol prices in recent months, and the annual rise in February was 5.7%. CPI inflation was by 1.0% in the 12 months to February 2005.

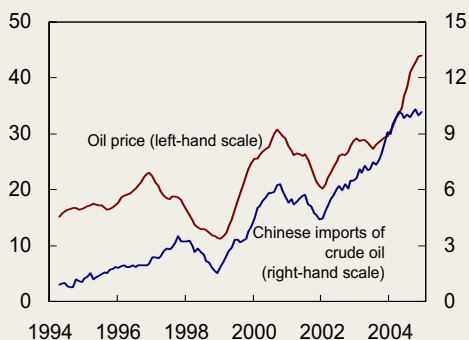
Chart 6 CPI and CPI-ATE. 12-month change.
Per cent. Jan 02 – Feb 05



Source: Statistics Norway

2 | Driving forces the next few years

Chart 2.1 Chinese imports of crude oil and oil prices. Monthly imports in millions of tons. Oil price, USD/barrel. 6-month moving average. Apr 94 – Dec 04



Sources: EcoWin / National Bureau of Statistics and Norges Bank

Table 2.1 GDP estimates
Percentage change from previous year

	2005	2006	2007	2008
US	3½	2¾	2¾	2¾
Japan	1	1¼	1¼	1¼
Germany	1	1¼	1¼	1½
France	2	2	2	2
UK	2½	2¼	2¼	2¼
Sweden	2¾	2½	2¼	2¼
Norway's trading partners ¹⁾	2¼	2¼	2¼	2¼
Euro area ²⁾	1½	1¾	2	2
China ³⁾	8,4	7,8	8,2	8,0

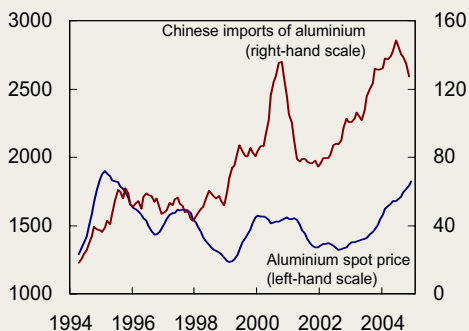
¹⁾ Export weightings

²⁾ Weights from Eurostat

³⁾ Estimates from Consensus Forecasts

Sources: Consensus forecast and Norges Bank

Chart 2.2 Chinese imports of aluminium and aluminium prices. Monthly imports in thousands of tons. Aluminium price in USD/ton. 6-month moving average. Apr 94 – Dec 04



Sources: EcoWin / National Bureau of Statistics and Norges Bank

2.1 International conditions

Growth in the euro area and Japan was weaker towards the end of 2004 than projected in the November *Inflation Report*. Demand in these countries appears to be somewhat weaker than expected. The contribution from net exports has also diminished. It appears that it will take time for structural changes that have been implemented, in Germany for example, to contribute to an increase in output. In the US, on the other hand, economic growth remains firm and capacity utilisation is rising. Even though developments in the US economy are favourable, higher interest rates, among other factors, will gradually result in an increase in household saving. At the same time, the plans call for a lower rise in government spending. Weaker growth in US demand may imply slower growth also in other countries. In addition to the euro area, economic growth is expected to slow in the UK and Sweden.

Growth in Asia, except Japan, and in Central and Eastern Europe is expected to moderate but to remain strong. Robust expansion in China and India has in particular pushed up prices for oil and other important commodities (see Charts 2.1 and 2.2). Growth impulses to the Norwegian economy may therefore be somewhat stronger than the overall outlook for our most important trading partners would indicate. High demand for commodities produced by Norway is boosting activity and is strengthening profitability for Norwegian enterprises.

On balance, we assume that growth among our trading partners will slacken this year and stabilise in the years ahead (see Table 1). Growth is expected to be slightly lower than projected in the November *Inflation Report*.

The outlook for growth in different regions indicates that the imbalances in the global economy, with large deficits in the US and large surpluses in some other countries, will persist. Low growth in the euro area and Japan weakens the prospect of a gradual correction. This increases the risk associated with these imbalances. Should other countries' willingness to finance the US deficit be reduced, long interest rates in the US may increase markedly, with a substantial depreciation of the dollar. This may result in slower global economic growth than we have assumed. If household saving in the US increases markedly, this might also push down growth.

Any further increase in oil prices might reduce growth and push up inflation, even though the recent rise in oil prices does not seem to have had strong negative effects. Another uncertain factor is growth in China, which is largely being

supported by very high investment. There is a risk that many of these investments will prove unprofitable, with a marked decrease in the willingness to invest. This will not only have an impact on growth in China, but might also affect important global markets.

Oil prices

Partly due to very high growth in demand for oil, the average price of Brent Blend oil rose to almost USD 40 per barrel in 2004. Strong economic growth, particularly in the US and China, has resulted in high energy consumption. So far this year, the price of Brent Blend oil has largely hovered around USD 45 per barrel, although the price rose to more than USD 50 per barrel at the beginning of March (see Chart 2.3).

As a result of strong demand growth in 2004, excess global production capacity, which is largely controlled by OPEC, has now fallen to a low level. Consequently, small disturbances in supply or demand could have a relatively strong impact on oil prices. It may take several years of substantial investment before production and refinery capacity reaches a normal level again in relation to demand.

US crude oil stocks are now far larger than they were at the same time last year and the previous year (see Chart 2.4). Petrol stocks are also relatively high. This reduces the risk that low stocks and high petrol demand will push up the price of crude oil, as was the case last summer. At the same time, OPEC's excess production capacity has increased somewhat over the past months. This is partly due to somewhat lower production, but additional capacity has also been developed.

These conditions should imply that the situation in the oil market is not as tight as it was some time ago. Oil prices have nonetheless remained high. The explanation for this may be that economic growth in important oil-importing countries like China and some other emerging economies is more robust than previously assumed. This may result in continued high growth in demand for oil, even though it does not seem likely at present that demand will be as strong as in 2004.

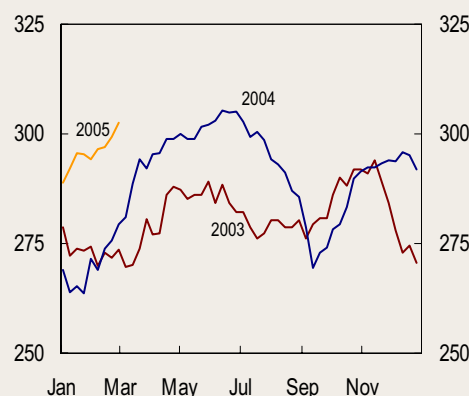
There are signs that oil production in non-OPEC countries may be lower than previously assumed. There is particular uncertainty with regard to Russia, where production growth in recent months has fallen considerably after several years of strong growth. OPEC is likely to use its strong position to set its production quotas to achieve an oil price equivalent to over USD 40 per barrel for North Sea oil.

Chart 2.3 Oil price¹⁾ in USD per barrel. Forward prices from 28 Oct 04 and 10 Mar 05. Daily figures. 2 Jan 02 – 31 Dec 07



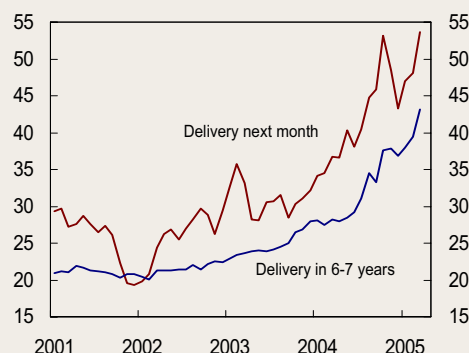
¹⁾ Brent Blend
Sources: Telerate, IPE and Norges Bank

Chart 2.4 Crude oil stocks in the US. In million barrels. Weekly figures. Jan 03 – Mar 05



Source: Energy Information Agency

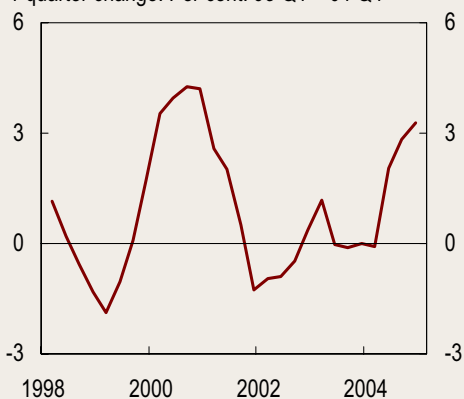
Chart 2.5 Oil price futures. USD per barrel of light crude. Monthly figures. Jan 01 – Mar 05¹⁾



¹⁾ The figure for March is the average up to and including the 10th

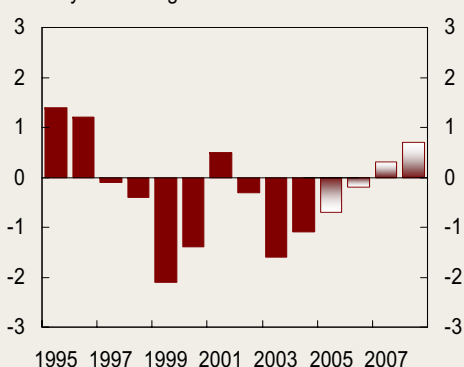
Sources: EcoWin/NYMEX and Norges Bank

Chart 2.6 Producer prices among trading partners. 4-quarter change. Per cent. 98 Q1 – 04 Q4



Sources: National statistical offices and Norges Bank

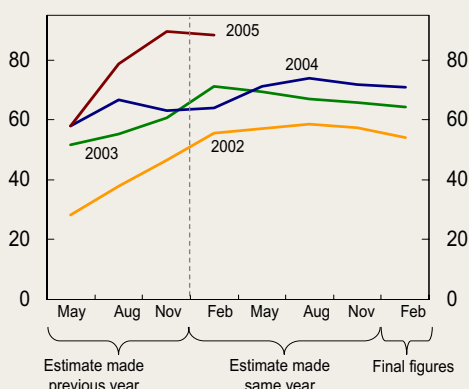
Chart 2.7 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual figures. Per cent. 1995 – 2008¹⁾



¹⁾ Projections for 2005–2008

Source: Norges Bank

Chart 2.8 Investment intentions survey. Oil and gas recovery incl. pipeline transport. Estimated and actual investments. In billions of NOK



Source: Statistics Norway

Long-term futures prices are also currently well above USD 40 per barrel (see Chart 2.5). Even though the rise in oil prices has to some extent pushed up producer and consumer prices, the impact will be more limited in many countries due to the relatively weak dollar.

Externally generated price impulses

The rate of increase in prices for internationally traded manufactured goods moved up through 2004 (see Chart 2.6). High prices for oil and other industrial commodities contributed to a rise in trading partners' producer and export prices despite substantial spare capacity and low cost growth in a number of countries. Due to trade shifts towards low-cost countries and high productivity growth in the production of audiovisual equipment, however, prices for Norwegian imports of clothing, footwear and audiovisual equipment continued to fall last year. This contributed to an overall decline in prices for imported consumer goods measured in foreign currency from 2003 to 2004 (see Chart 2.7). Prices for imported consumer goods have also moved on a sluggish trend in the other Nordic countries (see box on page 48).

It is likely that high prices for oil and other commodities will continue to push up prices for goods where wages account for a small portion of total costs. On the other hand, growth among most of our main trading partners will probably be too low for idle resources to be utilised in the next few years. Particularly in the euro area, wage growth is likely to be low as a result of moderate economic growth and high unemployment. This implies that inflation will be low among our trading partners over the next few years. If there is a long period of slack in the economy, this might result in slower growth in potential output, higher capacity utilisation in the economy and rising inflation towards the end of the projection period.

Overall, it would appear that international price impulses via consumer goods to the Norwegian economy will remain negative this year and next. There is no indication that growth in imports from low-cost countries is declining. For example, China's share of footwear imports to Norway increased by 4 percentage points to 20% in 2004. The decline in prices for clothing and footwear will probably continue in the coming years. Prices for audiovisual equipment are still falling as a result of strong international competition and high productivity growth. We assume that the effects of structural changes in these markets will gradually be exhausted towards the end of the projection period. External price impulses via consumer goods are expected to increase in pace with unit labour costs among our trading partners.

2.2 Domestic conditions

Petroleum investment

Planned, large-scale projects resulted in strong growth in petroleum investment in 2004. Due to persistently high oil prices and expectations that oil prices will remain high, investment in the petroleum sector may reach record levels this year. The investment intentions survey for the petroleum sector points to very high growth (see Chart 2.8). We estimate an increase of 25% this year. The level is expected to remain high next year. A number of projects are now regarded as profitable, and planned investments will probably be brought forward. The prospect of increased exploration activity this year may contribute to holding up the level of investment towards the end of the projection period. Activity in the petroleum sector will have spillover effects on the mainland economy, initially on the shipbuilding industry and the construction sector.

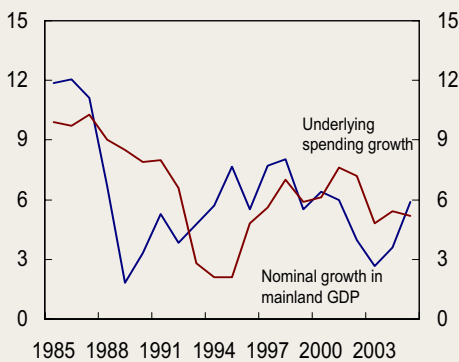
The scale of petroleum investment and its spillover effects are highly uncertain. The last time petroleum investment showed a sharp increase, in 1997/1998, growth was substantially stronger than had been assumed. An upturn occurred in the Norwegian economy as a whole at the same time. The unexpected increase in petroleum investment contributed to an economic upturn that was substantially stronger than projected. If oil prices rise further or remain at the current high level for a long period, petroleum investment may again amplify the cyclical upturn more than projected.

Fiscal policy

In the final central government budget bill for 2004, the non-oil deficit is estimated at NOK 80.6bn. This is NOK 8.9bn more than estimated in the central government budget for 2005, which was presented in October. The increased deficit is a result of lower-than-expected tax revenues from mainland Norway and higher local government block transfers. A marked fall in sickness absence had the opposite effect.

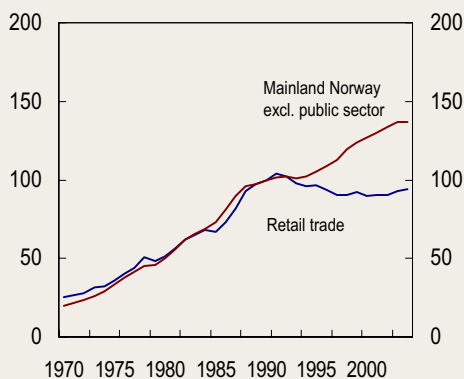
The fiscal rule, which was introduced in March 2001, implies that the structural, non-oil deficit should over time be equivalent to 4% of the capital in the Government Petroleum Fund. Since 2001, the structural deficit measured in this way has been at between 5.6 and 7.8% of the Fund, and is estimated at 6.3% this year. The deviation in these years is partly the result of an unexpected shortfall in tax revenues.

Chart 2.9 Underlying spending growth in the government budget and nominal growth in mainland GDP. Growth on previous year. Per cent. 1985 – 2005



Sources: Ministry of Finance (NB 2005) and Statistics

Chart 2.10 Unit labour costs (ULC). Wholesale and retail trade and mainland Norway excl. public sector. Index. 1990=100. Annual figures. 1970 – 2004



Sources: Statistics Norway and Norges Bank

The estimate for sickness absence has been revised downwards. This has contributed to a far lower estimate for the National Insurance Scheme's rules-based expenditure in both 2004 and 2005 than assumed in the central government budget for 2005. In the budget agreement for 2005, the estimated savings as a result of lower sickness absence covered to a large extent increases in other expenditure and tax reductions. Final figures for sickness absence financed by the National Insurance Scheme indicate that expenditure will be even lower in 2004 and 2005 than the Government has assumed.

In the adopted budget for 2005, the structural, non-oil deficit increases compared with 2004. It therefore appears that fiscal policy will provide some stimulus to growth this year. In the National Budget for 2005, the underlying rise in expenditure over the central government budget was projected at 5.2%, which is somewhat lower than the previous year and somewhat lower than projected nominal growth in mainland GDP (see Chart 2.9). As from 2006, it is assumed that nominal growth in general government expenditure will be approximately the same as nominal growth in general government revenues and that the real tax level will remain unchanged.

Local government revenues increased sharply in 2004. Preliminary accounts figures indicate that local government deficits were reduced. It is assumed that a larger portion of the increase in local government revenues will this year be used to increase activity. The National Local Government Pension Fund recorded a surplus of NOK 3.2bn last year. It is likely that about NOK 1.9bn will be reversed to customers' premium fund. This will reduce the premium payment for the Fund's customers, which include municipalities and the regional health authorities. These funds can also be used for other purposes.

The number of employed persons in the public sector rose by 0.4% from 2003 to 2004. The number of person-hours worked in the same period increased by 2.0%. In the National Budget for 2005, the number of person-hours is projected to rise by 0.2% from 2004 to 2005.

Prices and competition

New technology and structural changes, such as mergers and more efficient use of economies of scale in distribution and inventories, resulted in high productivity growth in retail trade in the 1990s. Increased competition and efficiency measures have also contributed in recent years. Strong productivity growth has kept down costs in retail trade. Unit labour costs have remained virtually unchanged since the beginning of the 1990s (see Chart 2.10). The increase in chain store cooperation has also contributed to lower purchasing costs.

Our inflation projections are based on the assumption that the competitive situation will also have a dampening effect on inflation in the years ahead. However, after a decade of substantial structural changes, the potential for further rationalisation is more limited. We therefore assume that productivity growth in retail trade will slow towards the end of the projection period, reaching a level that is closer to the level of productivity growth in other industries.

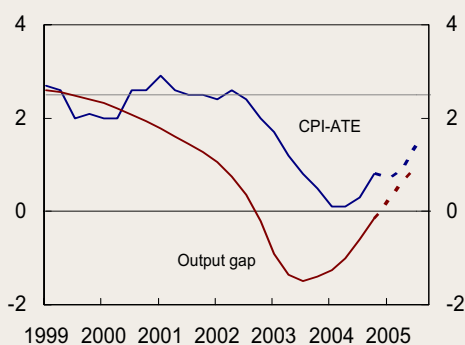
Intensified competition and increased rationalisation, which have exerted downward pressure on domestic production and distribution costs, also affect prices for imported consumer goods. On average, approximately half of the price of an imported consumer good is its cost. The rest of the price consists of domestic costs, such as distribution costs and margins. Retail trade productivity growth more in line with other industries will therefore probably also contribute to a rebound in retail prices for imported consumer goods towards the end of the period.

In spite of low inflation over several years, some consumer goods are still substantially more expensive in Norway than in other European countries. Improved opportunities for cross-border trade, for example via the Internet, may contribute to a more rapid move towards a European price level than we have seen in recent years.

Studies of developments in price levels across countries, however, provide little support for the notion that price differences are smoothed over time. This is largely because transport costs and selling costs vary across countries. Many consumer goods cannot easily be purchased from other countries by individual consumers. Even though increased use of internet shopping may contribute to lower inflation ahead, we have not assumed that it will have any substantial effect on consumer prices as a whole.

3 | Monetary policy assessments and strategy

Chart 3.1 The output gap¹⁾ and CPI-ATE. Quarterly figures. Per cent. 99 Q1 – 05 Q3²⁾

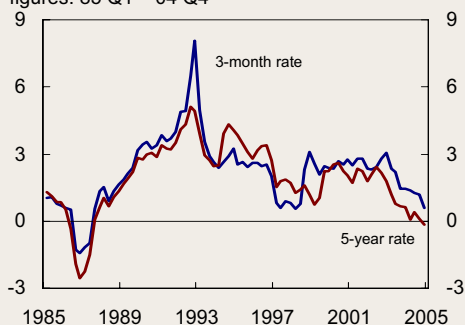


¹⁾ Quarterly figures for the output gap have been derived from annual figures.

²⁾ Projections for 2005

Sources: Statistics Norway and Norges Bank

Chart 3.2 Real interest rate after tax.¹⁾ Quarterly figures. 85 Q1 – 04 Q4



¹⁾ 3-month money market rates deflated by the CPI excluding energy products up to 1995, Norges Bank's estimates for the CPI adjusted for tax changes and excluding energy products from June 1995 to July 2000, thereafter the CPI-ATE. The same deflator is used for 5-year rates, but from 2001 Q2 the inflation target of 2½ per cent is used

Sources: Statistics Norway and Norges Bank

Monetary policy easing between December 2002 and March 2004 has made a substantial contribution to higher demand, output and employment in the Norwegian economy. It may appear that growth in the Norwegian economy has become more self-driven. Capacity utilisation has picked up and reached a normal level. It appears that growth will remain strong in 2005. Capacity utilisation is therefore likely to be higher than its normal level in the course of the year, and the output gap will be positive (see Chart 3.1). Monetary policy easing since 2002 and low real interest rates have contributed to this (see Chart 3.2).

The upturn in the Norwegian economy has been marked by strong growth in household income and demand, exports and petroleum investment. Fiscal policy has contributed to somewhat higher demand than originally planned. Investment in the mainland economy has also picked up. Productivity growth was strong in the initial phase of the recovery. The number of employed rose marginally through 2004, but measured in terms of the number of person-hours worked employment showed solid growth. These driving forces will probably continue to contribute to high growth in mainland demand and output ahead. As capacity utilisation in the economy increases, corporate profit margins may increase further. Moreover, there are prospects of a continued decline in unemployment. Experience shows that after a period these developments will result in a faster rise in prices and wages.

At the same time, underlying inflation is currently low. Developments over the past year may indicate that it is moving up, albeit at a slow pace. The effect of the expansionary monetary policy on inflation and output has been broadly in line with expectations. Structural conditions, primarily changes in import patterns, have contributed to an unusually subdued rise in prices for imported consumer goods in recent years. There is considerable uncertainty as to how long this situation will persist. It is assumed that the rise in prices for both imported and domestically produced goods will pick up further as a result of the expansionary monetary policy.

An interest rate that is kept at the current level for a long period may lead to a situation where capacity utilisation becomes too high further ahead. The objective of stabilising developments in output and employment therefore implies a gradual normalisation of the interest rate. A gradually higher interest rate through the projection period will curb strong growth in demand and output after a period.

A gradual normalisation of the interest rate is also consistent with estimates of market expectations. Forward interest rates normally provide an indication of market expectations

Criteria for an appropriate future interest rate path

Norges Bank operates a flexible inflation targeting regime, so that weight is given to both variability in inflation and variability in output and employment in interest rate setting. Flexible inflation targeting builds a bridge between the long-term objective of monetary policy, which is to keep inflation on target to provide an anchor for inflation expectations, and the more short-term objective of stability in the real economy. As monetary policy influences the economy with a lag, interest rate setting must be forward-looking.

Developments in output, employment, income and inflation are affected not just by the current interest rate, but also by interest rate expectations. To the extent that the central bank can influence these expectations, they play a key role in monetary policy. Expectations regarding the future path of the interest rate must be based on the assumption that monetary policy keeps inflation close to the target over time and contributes to stabilising developments in output and employment. Often several interest rate paths may produce these results, and it may be difficult to assess which future interest rate path results in the optimal balance between the different considerations. Economic theory provides some guidelines, but they are not easy to apply in practice. The following criteria may be useful in assessing whether a future interest rate path appears reasonable compared with the monetary policy objective.

1. If monetary policy is to anchor inflation expectations around the target, the interest rate must be set so that inflation moves towards the target. Inflation should be stabilised near the target within a reasonable time horizon, normally 1-3 years. For the same reason, inflation should also be moving towards the target well before the end of the three-year period.
2. Assuming that inflation expectations are anchored around the target, the inflation gap and the output gap should be in reasonable proportion to each other until they close.¹ The inflation gap and the output gap should normally not be positive or negative at the same time further ahead. If both gaps are positive, for example, a path with a higher interest rate would be preferable, as it would bring inflation closer to the target and contribute to more stable output developments.

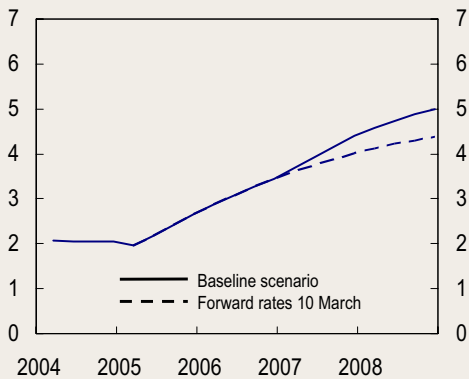
How easy it is to fulfil the criteria simultaneously will depend on the disturbances to which the economy has been exposed, capacity utilisation in the economy at the outset and how far inflation is from the target.

Even if different future interest rate paths are assessed on the basis of expected developments in inflation and output, there will be considerable uncertainty associated with the estimates. Interest rate setting must therefore take into account that the actual state of the economy is not fully known, and that unforeseen disturbances may occur:

3. Interest rate developments, particularly in the next few months, should result in acceptable developments in inflation and output also under alternative, albeit not unrealistic assumptions concerning the economic situation and the functioning of the economy.
4. The interest rate should normally be changed gradually so that we can assess the effects of interest rate changes and other new information about economic developments.
5. Interest rate setting must also be assessed in the light of developments in property prices and credit. Wide fluctuations in these variables may constitute a source of instability in demand and output in the somewhat longer run.
6. It may also be useful to cross-check by assessing interest rate setting in the light of some simple monetary policy rules. If the interest rate deviates systematically and substantially from simple rules, it should be possible to explain the reasons for this.

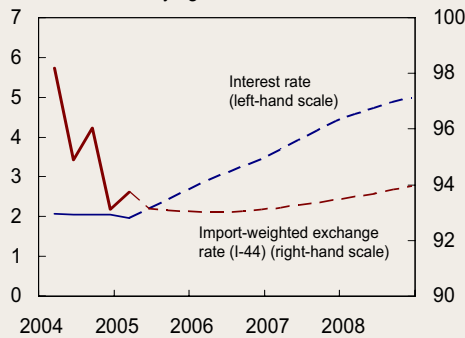
¹ The inflation gap is the difference between the inflation target of 2.5% and actual inflation. The output gap measures the percentage difference between actual and potential mainland GDP

Chart 3.3 The interest rate in the baseline scenario and forward interest rates in Norway. Quarterly figures. 04 Q1 – 08 Q4



Source: Norges Bank

Chart 3.4a 3-month money-market rate and import-weighted exchange rate (I-44)^{1) 2)} in the baseline scenario. Quarterly figures. 04 Q1 – 08 Q4

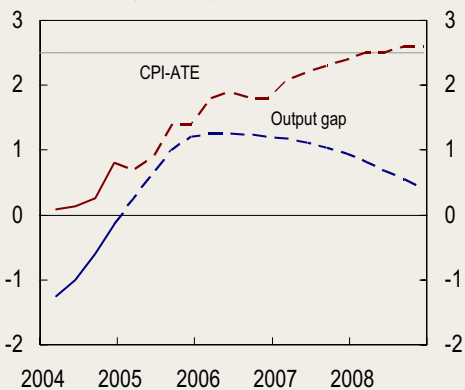


¹⁾ A rising curve denotes a weaker krone exchange rate

²⁾ The figures for 2005 Q1 are based on the average through 10 March

Source: Norges Bank

Chart 3.4b Projections for the CPI-ATE and output gap in the baseline scenario. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

concerning future interest rate developments. Forward rates indicate expectations that the key rate will increase to 2% in the course of summer 2005 and further to about 2½% at the turn of the year and 3¼% at the end of 2006. In subsequent years, expectations point to a further rise in interest rates, albeit at a slower pace than market participants expected when the last report was published. Five years ahead, the forward rate is still only 4¾%. With long-term inflation expectations at 2½%, this nominal interest rate implies that the expected real interest rate is 2¼%. This seems low as a long-term equilibrium rate and lower than our estimates of a neutral real interest rate over time. It may therefore be questioned whether the low long-term interest rates now provide an accurate picture of expectations concerning Norges Bank's interest rate setting in the longer term (see discussion of long-term interest rates in Section 1.1 and box on page 44). There may be reason to assume that forward rates from the two-three year horizon have been pushed down by temporary, extraordinary factors, partly stemming from international conditions. In that case, actual market expectations concerning interest rates may be somewhat higher than forward rates further ahead both in Norway and among trading partners. The projections in this report are therefore based on forward interest rates as observed on 10 March, but with adjustments from 2007 and subsequent years. The adjustment means that money market rates in Norway will gradually increase to about 5% at the end of 2008 followed by a further rise to a normal level of 5½% (see Chart 3.3).

On the basis of these assessments, developments in the Norwegian economy and driving forces ahead, we have drawn up a possible scenario for the Norwegian economy in the period ahead, the baseline scenario (see Chart 3.4)¹. The krone exchange rate is assumed to shadow the forward exchange rate, which remains broadly unchanged over the next three years.

The interest rate assumption is not significantly different from the assumption in *Inflation Report 3/04*. Stronger growth in petroleum investment ahead and somewhat stronger growth in output in the very short run point, on the one hand, to a somewhat higher interest rate ahead than in the previous report. On the other hand, the outlook for global growth and inflation is now somewhat weaker. In isolation, this would point to a somewhat lower interest rate path ahead. Lower-than-expected inflation at the beginning of the year may also to some extent be an indication of weaker price impulses, which in isolation would imply slightly lower interest rates ahead. In addition, we have assumed that structural conditions that contribute to low imported inflation will persist for a somewhat longer period than assumed earlier.

¹ See also Sections 1 and 2 and "Norges Bank's projections" on page 38.

With such a path for the interest rate and the krone exchange rate in line with the baseline scenario, inflation may increase gradually from less than 1% today to close to 2% in mid-2006. Under these assumptions, inflation may stabilise at around 2½% at the three-year horizon. Even if the interest rate increases gradually through the projection period, the level of short-term nominal and real interest rates will remain somewhat below neutral levels through the projection period.

Developments in inflation must also be seen in connection with developments in output and the risk that capacity utilisation will be too high. Developments in line with these projections imply that the output gap will increase to about 1¼% in 2006. As the interest rate gradually increases to a more normal level, growth in private demand will probably ease, and capacity utilisation may be brought down and stabilise. Such a relationship between the path for capacity utilisation and developments in inflation may appear reasonable given the current situation. The interest rate path shown in Chart 3.4a therefore seems to provide a good balance between the objective of bringing inflation back to target and the objective of stabilising output and employment (see Chart 3.4b).

Alternative interest rate path

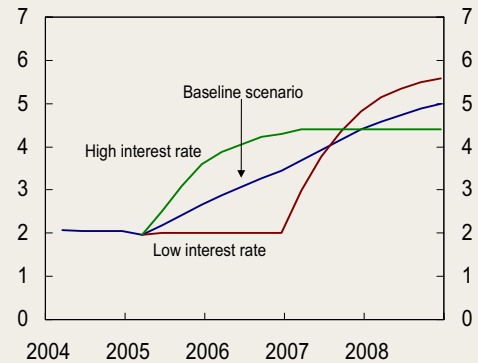
Even though the interest rate assumption appears to provide a reasonable balance between the objectives stated above, other trade-offs between developments in inflation and output may imply other paths for the interest rate.

If greater weight is given to pushing inflation back to target quickly, the interest rate can remain unchanged for a longer period than in the baseline scenario. Charts 3.5a and b show projections based on keeping the interest rate unchanged until the beginning of 2007 (red lines). The counterpart to keeping the interest rate low for a longer period is that the interest rate increases even more rapidly in 2007 and 2008. This path for the interest rate might contribute to a somewhat weaker krone exchange rate² than in the baseline scenario and a sharper rise in output and inflation. Under these assumptions, inflation may reach the target in mid-2007, about three quarters earlier than projected in the baseline scenario. At the same time, the output gap will increase rapidly and reach close to 2%. Such a high level of capacity utilisation may result in bottlenecks in some sectors of the economy with the risk of stronger price and cost inflation than suggested by these calculations. Such an interest rate path will probably also contribute to a sharper rise in property prices and household borrowing than in the baseline scenario (see Chart 3.6).³ It may therefore be more demanding for households to service their debt further

² Developments in the krone exchange rate follow uncovered interest parity in shift calculations. However, it has been assumed that the expected interest rate differential further ahead is of lesser importance to developments in the krone exchange rate than the interest rate differential in the short term.

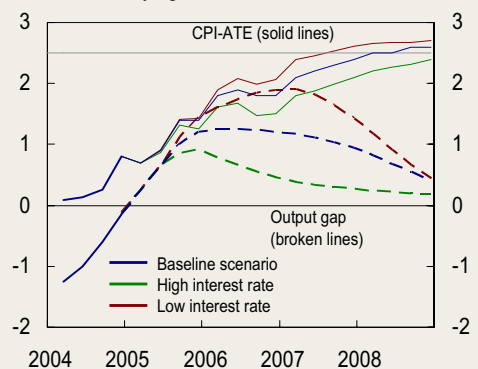
³ See box on "Developments in household debt on page 50.

Chart 3.5a 3-month money market rate in the baseline scenario and in alternative scenarios with high and low interest rates. Quarterly figures. 04 Q1 – 08 Q4



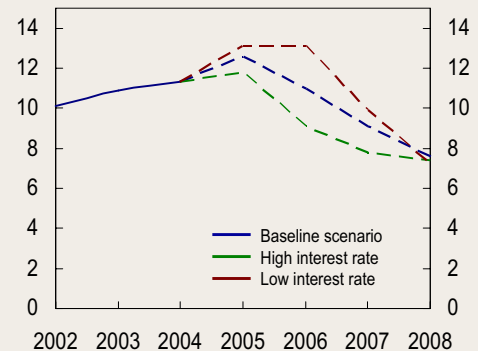
Source: Norges Bank

Chart 3.5b Projections for the CPI-ATE and the output gap in the baseline scenario and in alternative scenarios with high and low interest rates. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

Chart 3.6 Credit to households (C2) in the baseline scenario and in alternative scenarios with high and low interest rates. Annual percentage change in stock. 2002 – 2008



Source: Norges Bank

ahead when interest rates are gradually normalised or are high. This may in turn be a source of instability in demand and output in the somewhat longer term.

Charts 3.5a and b also show projections based on an interest rate that is about 1 percentage point higher than in the baseline scenario at the end of 2006 (green lines). The interest rate then moves back to a path that is somewhat below the path in the baseline scenario. Such an interest rate path may be appropriate if greater emphasis is placed on stabilising output and reducing the risk of a capacity utilisation level that is too high. Under our assumptions, this interest rate path would mean that the output gap is kept at less than 1%. However, inflation does not quite reach the target during the period. This entails a greater risk that inflation expectations will fall below the target. There is also a risk that such a pronounced rise in interest rates relative to other countries will result in a stronger krone exchange rate than shown in these calculations. This would then further reduce the inflation path.

All in all, the baseline scenario provides a balance between the objective of stabilising inflation at the target and the objective of stabilising output and employment that is broadly consistent with Norges Bank's earlier assessments. The baseline scenario also implies that the interest rate is changed gradually, so that we can assess the effects of interest rate changes and new information concerning economic developments.

Uncertainty and robustness

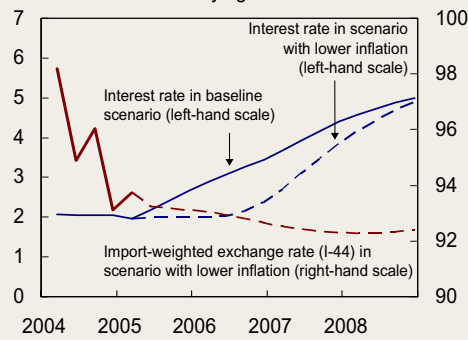
There is considerable uncertainty surrounding the projections. Projected developments in output and inflation are based on important assumptions.

The monetary policy strategy for the next four months should be robust to various assumptions concerning the current situation in the Norwegian economy and the possibility that relationships in the economy may be incorrectly described. The monetary policy strategy is robust when it results in acceptable inflation and acceptable developments in the real economy through the projection period under alternative, albeit not unrealistic, assumptions concerning the economic situation and the functioning of the economy.

In Charts 3.7-3.9 we have analysed possible effects on the interest rate, inflation and output based on some alternative assumptions.

- *Lower inflation.* In recent years, the rise in prices for imported consumer goods has been restrained as a result of a growing share of imports from low-cost countries. In addition, intensified competition and strong productivity growth in distributive trades have exerted downward pressure on inflation. It is

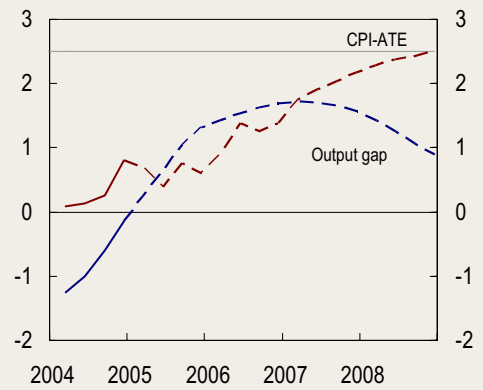
Chart 3.7a 3-month money-market rate and import-weighted exchange rate (I-44)^{1) 2)} in scenario with lower inflation. Quarterly figures. 04 Q1 – 08 Q4



¹⁾ A rising curve denotes a weaker krone exchange rate
²⁾ The figures for 2005 Q1 are based on the average through 10 March

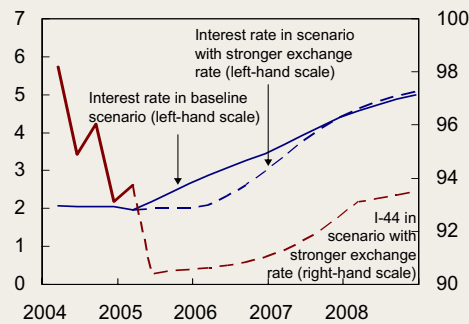
Source: Norges Bank

Chart 3.7b Projections for the CPI-ATE and output gap in the scenario with lower inflation. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

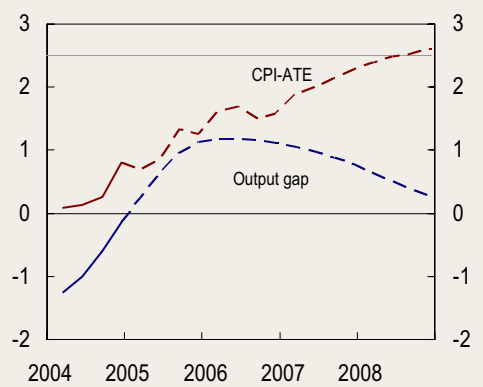
Chart 3.8a 3-month money-market rate and import-weighted exchange rate (I-44)^{1) 2)} in scenario with stronger exchange rate. Quarterly figures. 04 Q1 – 08 Q4



¹⁾ A rising curve denotes a weaker krone exchange rate
²⁾ The figures for 2005 Q1 are based on the average through 10 March

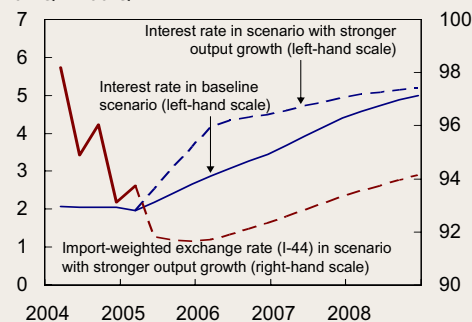
Source: Norges Bank

Chart 3.8b Projections for the CPI-ATE and output gap in the scenario with a stronger exchange rate. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

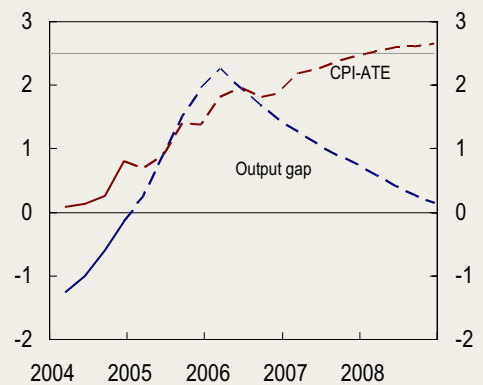
Chart 3.9a 3-month money-market rate and import-weighted exchange rate (I-44)^{1) 2)} in scenario with stronger output growth. Quarterly figures. Per cent. 04 Q1 – 08 Q4



¹⁾ A rising curve denotes a weaker krone exchange rate.
²⁾ The figures for 2005 Q1 are based on the average up to 10 March.

Source: Norges Bank

Chart 3.9b Projections for the CPI-ATE and output gap in the scenario with stronger output growth. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

assumed that these factors will influence imported price inflation to a diminishing extent through the projection period. Continued shifts in trade patterns, with higher imports from Asia and intensified competition in retail trade, may prolong the period of low inflation. Lower-than-projected inflation in the near term implies, in isolation, that we should assess whether the interest rate should be kept unchanged for a longer period than in the baseline scenario (see Charts 3.7a and b). In this scenario, it is assumed that inflation will be half a percentage point lower than in the baseline scenario in the second quarter of 2005. On the other hand, low imported inflation, which is due to growing imports from low-cost countries, may be accompanied by strong growth in output and high domestic price and cost inflation. Monetary policy must in this situation assess the background for and the expected duration of the deviations.

- *Stronger krone exchange rate.* The krone exchange rate fluctuates. Charts 3.8a and b illustrate a possible scenario if the krone were to appreciate almost immediately by 3% in relation to the baseline scenario and remain 2-3% stronger over the next couple of years. With this path for the krone exchange rate, acceptable results for inflation and output may be achieved by keeping the interest rate unchanged for a longer period than in the baseline scenario, but an assessment must also be made of the background for and the expected duration of the deviations.
- *Weaker krone exchange rate.* Alternatively, the exchange rate may depreciate in the near term. In isolation, this will contribute to higher inflation and increased capacity utilisation. Such a path for the exchange rate would in isolation call for an increase in interest rates at an earlier time than otherwise. The interest rate response must, however, be assessed against capacity utilisation in the economy. If, at the same time, output appears to be expanding less than assumed, it may be appropriate to refrain from countering the effects of a weaker krone exchange rate.
- *Stronger growth in output.* There is uncertainty associated with developments in output in the near term. In the calculations shown in Charts 3.9a and b, it is assumed that GDP growth will be $\frac{1}{4}$ percentage point higher than in the baseline scenario in each of the next four quarters. This results in a high output gap. Such developments in output would, in isolation, warrant a swifter increase in interest rates than in the baseline scenario.

In the baseline scenario, it is assumed that wage growth in Norway may remain somewhat higher than wage growth among our trading partners. In the projections, it is assumed that the krone exchange rate remains approximately unchanged. All in all, this results in somewhat weaker competitiveness. On the other hand, low interest rates contribute to lower capital costs in the business sector. A more pronounced deterioration in competitiveness, for example through unexpectedly low cost inflation abroad, might also in turn lead to lower cost inflation in Norway. In isolation, this might imply lower interest rates. An increased inflow of labour from new EU countries to Norway may also curb wage growth ahead, but mobility may be hampered by protectionist measures. The picture of competitiveness must also be seen in connection with growth in the public sector. The projections are based on the assumption of a fairly neutral fiscal policy. It must be assumed that increased spending over government budgets can initiate a movement towards a stronger real exchange rate.

The analysis indicates that a strategy where the interest rate is set at a level broadly in line with the baseline scenario in the next four months may provide acceptable developments in inflation and output even under alternative, albeit not unrealistic, assumptions. Major disturbances over the next months may nevertheless imply a different interest rate path.

Interest rate setting in the light of simple monetary policy rules

Interest rate setting may also be assessed in the light of simple monetary policy rules. A common feature of many simple interest rate rules is that the interest rate is set with a view to keeping inflation around a specific target, at the same time that the interest rate shall contribute to stabilising output. Both the Taylor rule and the Orphanides rule, as calculated here, indicate that the interest rate is now too low and that it should be increased in the period to summer (see Chart 3.10). This is because growth in Norway is now high and inflation is assumed to be moving up. If it is assumed that inflation will be lower over the next months, the rules indicate that the interest rate should not be raised to the same extent.

These rules, however, do not take into account that inflation is influenced by the difference between international and Norwegian interest rates through the exchange rate. The rules therefore have limitations as a reference for a small, open economy. The rule that incorporates foreign interest rates suggests a somewhat lower interest rate than the other rules because interest rates abroad are low.

The rules nevertheless show that monetary policy should now be expansionary because inflation is low. The rules also indicate that the interest rate should increase gradually when it is certain that inflation is approaching the target.

Monetary policy rules

The Taylor rule:

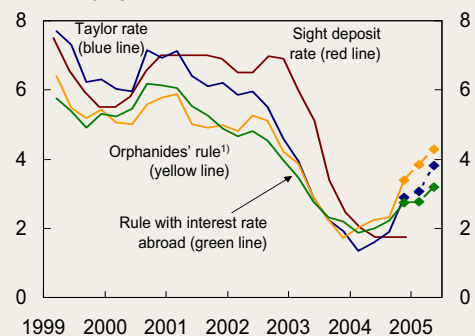
$$\text{Interest rate} = \text{inflation target} + \text{equilibrium real interest rate} + 1.5 \times (\text{inflation} - \text{inflation target}) + 0.5 \text{ output gap}$$

The rule was presented in 1993 by Professor John B. Taylor at Stanford University (see Taylor, J.B. (1993): "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pp. 195-214. In Chart 3.10 we have used the CPI-ATE as a measure of inflation.

The Orphanides rule: The Taylor Rule is vulnerable to error in the estimation of the output gap. Athanasios Orphanides, who is a researcher and adviser in the Federal Reserve, therefore proposes the alternative of replacing the output gap with the difference between actual growth and trend growth in the economy (the growth gap). See Orphanides A., R. D. Porter, D. Reifschneider, R. Tetlow and F. Finan (2000) "Errors in the measurement of the output gap and the design of monetary policy", Journal of Economics and Business, vol. 52, pp.117-141.

Rule with interest rates abroad: $\text{Interest rate} = 0.5 \times \text{Taylor rate} + 0.5 \times \text{Money market rate among Norway's trading partners}$.

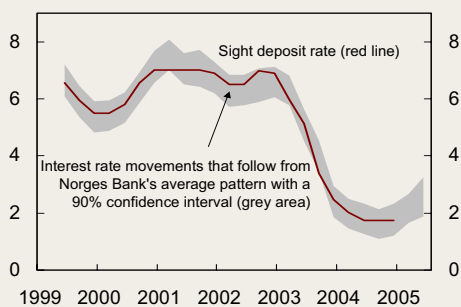
Chart 3.10 Sight deposit rate, Taylor rule, Orphanides rule and rule with interest rates abroad. Inflation as in the baseline scenario. Quarterly figures. 99 Q1 – 05 Q2



¹⁾ Norges Bank's projection for growth in mainland GDP one to two quarters earlier forms the basis for the estimates

Source: Norges Bank

Chart 3.11 The sight deposit rate and interest rate movements that follow from Norges Bank's average pattern for the setting of interest rates.¹⁾ Quarterly figures. 99 Q2 – 05 Q2



¹⁾ The interest rate movements are explained by developments in inflation, growth in mainland GDP, wage growth and 3-month interest rates among trading partners. A more in-depth account was provided in *Inflation Report 3/04*

Source: Norges Bank

Alternatively, interest rate setting may be assessed in the light of Norges Bank's historical response pattern. Through an estimated reaction function we have attempted to identify the factors that on average may have contributed to explaining interest rate setting in the last four years (see box in *Inflation Report 3/04*). There is considerable uncertainty surrounding such an estimated reaction function. In part, it is based on considerably more limited data than that underlying actual interest rate setting, and in part it attempts to capture an average pattern over time, thereby disregarding separate assessments at the various monetary policy meetings. The estimated reaction function may therefore have substantial drawbacks as a predictive model. Based on the historical average pattern and the projections in the baseline scenario, the rule implies a tightening of monetary policy in the period to summer (see Chart 3.11).

Assessments

It may appear that growth in the Norwegian economy has become more self-driven. It has taken time for inflation to pick up. This is partly ascribable to low interest rates abroad along with high oil prices, which have curbed the effects of the fall in interest rates in Norway on the krone exchange rate. Higher imports from low-cost countries, competition and increased efficiency in Norwegian production have also restrained inflation. Low inflation has resulted in low interest rates for a long period. The effects on output and employment are thereby greater.

Inflation was unexpectedly low in the first months of 2005. Monetary policy cannot fine-tune developments in the economy, but avoid the largest effects when the economy is exposed to disturbances. Experience seems to indicate that inflation expectations remain stable even if inflation varies somewhat as long as the interest rate is used actively to curb effects. Given our highly open economy, we may have to expect somewhat wider variations in inflation than some other countries.

Output growth is strong, and capacity utilisation is moving up. As a result of low interest rates, the output gap and inflation are likely to increase ahead. The objective of stabilising output and employment implies, in isolation, a higher interest rate. This will reduce the risk that capacity utilisation in the Norwegian economy becomes too high. High capacity utilisation may result in bottlenecks in some sectors of the economy and a sharper rise in property prices and household borrowing. This might be a source of instability in demand and output in the somewhat longer run.

The objective of bringing inflation back to target and anchoring inflation expectations nevertheless implies a continued expansionary monetary policy. Interest rates

abroad are rising, but at a slow pace and from a low level. There are prospects of low inflation also for a period ahead. Even though capacity utilisation in the Norwegian economy is rising, there appears to be little risk that inflation will rapidly move up to a level that is too high.

The projections and assessments presented in this report may as a whole imply that the key rate can after a period, and then gradually, be brought up to a more normal level. Major disturbances over the next months may nevertheless imply a different interest rate path than outlined here. The interest rate must therefore be assessed regularly in relation to new information. Developments in output, demand, the krone exchange rate, expectations concerning economic developments and underlying inflation must be followed closely in the period to the next *Inflation Report*.

The unusually low interest rate and developments in output and inflation imply that further interest rate reductions are now less likely. The lower limit for the strategy interval has therefore been increased to 1½%. Uncertainty surrounding economic developments implies that we adhere to an interval for interest rate setting of 1 percentage point.

Conclusions – monetary policy strategy

- It is the Executive Board's assessment that the interest rate can after a period, and then gradually, be brought up to a more normal level. The objective of bringing inflation back to target and anchoring inflation expectations nevertheless implies a continued expansionary monetary policy.
- The unusually low interest rate and developments in output and inflation imply that further interest rate reductions are now less likely. The lower limit for the strategy interval has therefore been increased to 1½%. Uncertainty concerning economic developments implies that we adhere to an interval for interest rate setting of 1 percentage point.
- The Executive Board's assessment is that the sight deposit rate should be in the interval 1½ – 2½% in the period to the publication of the next *Inflation Report* on 30 June 2005, conditional on economic developments in the strategy period that are approximately as projected.
- Monetary policy must be assessed regularly in relation to new information. Developments in output, demand, the krone exchange rate, expectations concerning economic developments and underlying inflation must be followed closely in the period to the publication of the next *Inflation Report*.

Norges Bank's projections

Norges Bank's projections

The projections in the period to 2008 are based on the driving forces that are discussed in Section 2 and developments in the interest rate and exchange rate discussed in Section 3. The projections are thus conditional on a gradual increase in money market rates to about 5% towards the end of 2008. Moreover, the exchange rate is assumed to shadow the forward exchange rate, which implies a fairly stable exchange rate ahead (see Chart 1). The output gap is estimated to be positive this year and to increase further in 2006 (see Table 1). In the following years, the output gap is estimated to fall. Inflation is projected to pick up and reach the inflation target towards the end of the projection period.

Output

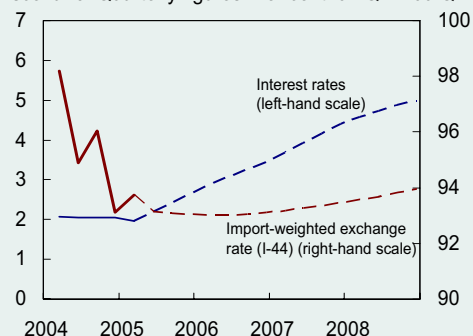
The projections point to continued high and broad-based growth in mainland GDP over the next few years. This year in particular, the combination of low interest rates, strong growth in petroleum investment and continued positive impulses from the international economy will contribute to high growth in output. Growth in household income and consumption is projected to remain high and implies buoyant activity in distributive trades and services. Increased capacity utilisation and solid profitability in the business sector will lead to a further pick-up in investment. Exports will continue to grow. Mainland GDP growth is projected to reach 4% this year and 3% next year.

Economic growth is projected to moderate further ahead, owing to a gradual normalisation of interest rates from a very low level and an unwinding of stimulus from petroleum investment to overall demand. Global growth is also expected to slow somewhat. Against this background, growth is projected to slow towards, and eventually fall below, growth in potential output (see Table 1). Growth in potential output is put at around 2½% annually.

Demand

Growth in private consumption is expected to remain buoyant both this year and next, primarily reflecting low real interest rates, strong growth in real disposable income and a continued rise in house prices. In the period ahead, higher employment and wage growth will continue to fuel household demand. On the other hand, household debt has risen sharply. This implies

Chart 1 3-month money-market rate and import-weighted exchange rate (I-44)^{1) 2)} in the baseline scenario. Quarterly figures. Per cent. 04 Q1 – 08 Q4



¹⁾ A rising curve denotes a weaker krone exchange rate
²⁾ The figure for 2005 Q1 is based on the average through 10 March

Source: Norges Bank

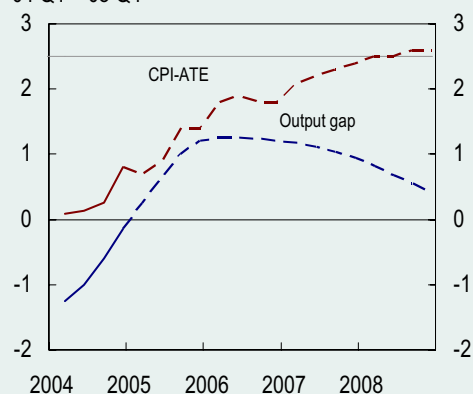
Table 1 Key aggregates for Norway 2004 - 2007. Percentage change from previous year

	2005	2006	2007	2008
Mainland demand	4	3½	2½	1¾
Private consumption	4½	3½	2½	2
Public consumption	1¾	1½	1½	1½
Fixed investment	7½	6½	2½	½
Petroleum investment	25	-5	-2½	0
Traditional exports	5½	3½	3½	3½
Imports	7½	3½	2½	1¾
Mainland GDP	4	3	2½	2
Mainland output gap	¾	1¼	1	½
Employment	1½	1½	¾	¾
LFS unemployment ¹⁾	4	3½	3¾	4

¹⁾ Percentage of labour force

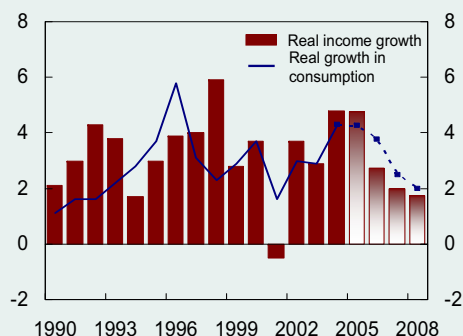
Source: Norges Bank

Chart 2 Projected CPI-ATE and output gap in the baseline scenario. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

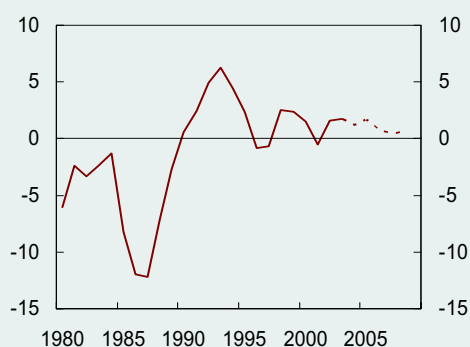
Chart 3 Real growth in household disposable income¹⁾ and consumption. Annual figures. Per cent. 1990 – 2008²⁾



¹⁾ Adjusted for extraordinary share dividends since 2001
²⁾ Projections for 2005 - 2008

Sources: Statistics Norway and Norges Bank

Chart 4 Households' net lending as a share of disposable income¹⁾. Annual figures. Per cent. 1980 – 2008²⁾



¹⁾ Adjusted for extraordinary share dividends since 2001
²⁾ Projections for 2005 - 2008

Sources: Statistics Norway and Norges Bank

that a normalisation of interest rates will increase household net interest expenses. After a period, growth in consumption may be fairly low. However, we assume that households will choose to spread consumption over time, so that the saving ratio will continue to fall in spite of an increase in interest rates (see Chart 3).

Growth in housing investment is expected to ease through 2005. However, the projection for housing starts is also very high for 2005. Such a high level of housing starts over several years probably means that more dwellings will be constructed than implied by underlying demand. As a result, housing investment is expected to decline after a period. Higher interest rates and weaker developments in the Norwegian economy may also lead to a fall in residential construction after a period.

The projections for household disposable income, consumption and fixed investment imply a gradual fall in household net lending towards the end of the projection period (see Chart 4). This indicates that households prefer to maintain growth in consumption even if higher interest rates push down growth in disposable income.

The upturn in mainland fixed investment is broadly based. Stronger profitability, higher capacity utilisation and solid export growth will contribute to continued investment growth in goods producing industries. Demand for services is expected to continue to grow for a period ahead with an attendant increase in investment in service sectors. When growth in the economy gradually slows down, investment growth will probably slacken.

Mainland exports of goods and services will also benefit from solid global growth this year. Later in the period, a continued loss of market shares as a result of high cost levels will dampen export growth.

Imports

Strong domestic demand growth, low prices for imports from many low-cost countries and higher petroleum investment will continue to underpin high growth in imports this year. As growth in mainland demand slows and petroleum investment declines, import growth will moderate. The projections imply

that import shares will increase, reflecting weak competitiveness in Norwegian companies competing on the domestic market and a continued shift in the international division of labour.

Labour market

Strong growth in output and demand this year and next implies a fairly pronounced increase in employment in the years ahead. In the first quarters of the upswing, enterprises were able to meet increased demand by utilising idle capacity. As a result, the rise in both the number of employed and the number of person-hours worked was small in relation to output. Productivity growth has since abated, but demand for labour has probably been restrained by the sharp fall in sickness absence. In the years ahead, growth in output and employment is expected to move on a more similar path.

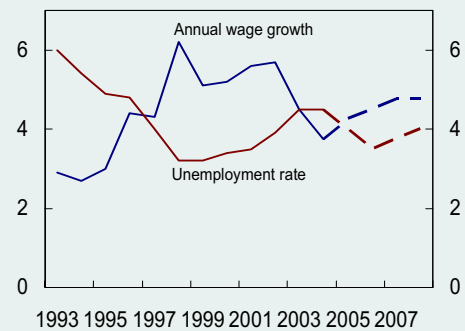
LFS unemployment is projected to decline this year and next. In 2006, unemployment is expected to come down to 3½%. In subsequent years, growth in demand and output is expected to ease and unemployment may edge up again when capacity utilisation approaches a more normal level (see Chart 5).

Experience shows that changes in unemployment are dampened somewhat as the supply of labour varies with demand. Growth in the labour force is expected to be somewhat stronger than implied by demographic factors this year and next. In 2008, the labour force is expected to account for approximately the same share of the population in the age group 16-74 as in 2004 (see Chart 6).

With a somewhat tighter labour market in the years ahead, wage growth may pick up. Over the past year, low consumer price inflation has probably contributed to keeping nominal wage increases lower than implied by labour market tightness in isolation. Low inflation has resulted in high growth in household purchasing power even with moderate pay increases. In the years ahead, some of the factors that contributed to low inflation are expected to play a less important role. Combined with growing labour shortages, this points to somewhat higher wage growth. Wage growth is projected to be broadly in line with the projection in the previous report and is then expected to move up to 4¾% towards the end of the projection period.

Over the past 10-15 years, there seems to have been a close correlation between unemployment and wage growth. Our projections for wage growth are based

Chart 5 Annual wage growth¹⁾ and unemployment rate (LFS). Annual figures. Per cent. 1993 – 2008²⁾



¹⁾ Average for all groups. Including cost of additional vacation days
²⁾ Projections for 2005-2008

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

Chart 6 Labour force as a percentage of population aged 16 – 74 (labour force participation rate). Annual figures. Per cent. 1980 – 2008¹⁾



¹⁾ Projections for 2005-2008

Sources: Statistics Norway and Norges Bank

on this relationship. However, there is substantial uncertainty surrounding wage developments ahead. Our projections for wage growth are somewhat lower than we have observed in earlier periods with the same low level of unemployment, but nevertheless imply fairly high growth in real wages. Our experience of such low inflation as at present is limited. It is conceivable that low inflation will push down nominal pay increases even more than we have assumed, which means that real wage growth may be lower than projected. The social partners may also place greater emphasis on competitiveness than implied by our wage projections. In addition, there is a potential for an increase in the supply of labour from new EU member states. This may dampen wage growth to a further extent than we have assumed, partly because bottlenecks may be reduced, particularly in the construction sector. Various protectionist measures that limit access to the Norwegian labour market or a general application of wage agreements may have the opposite effect.

The Government has indicated that it will propose certain minimum standards for occupational pensions for all employees that do not already benefit from more favourable schemes. The effect on companies' costs is uncertain. The introduction of an occupational pension scheme that is not matched by lower pay increases may result in higher-than-projected growth in labour costs.

Consumer price inflation

A positive output gap, a tighter labour market and higher wage growth imply a higher rise in prices for domestically produced goods and services in the years ahead. In 2004, intensified competition and lower profit margins in some industries contributed to a low rise in prices and to a considerably lower rate of increase than implied in isolation by wage growth and productivity. Recently, there have been signs of a renewed rise in prices in some of these industries. For example, airfares and prices in the grocery trade have shown a fairly substantial increase, which may indicate that margins are rising somewhat again. The fairly pronounced increase in the output gap projected in the years ahead may suggest that margins will continue to rise, which means that domestic inflation may pick up somewhat faster than implied by labour costs and productivity alone.

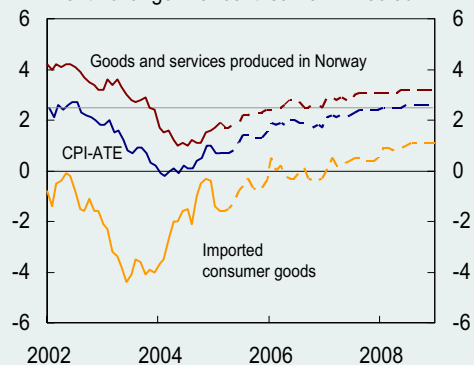
The rise in prices for imported consumer goods is also projected to edge up in the years ahead. Since autumn 2003, the year-on-year fall in prices has decelerated. The effect of the depreciation of the krone through 2003 is pushing up prices for imported consumer goods. However, several factors point to

low inflation in the period ahead. The krone exchange rate appreciated somewhat through 2004, which will have a dampening impact on inflation after a period. Moreover, prices for imported consumer goods measured in foreign currency are expected to continue to edge down over the next few years. The shift in our trading patterns with growing imports from China and other low-cost countries is expected to continue during a period ahead. This will contribute to keeping down inflation. It is difficult to project when the effect of such a shift will fully unwind. The projections are based on a normalisation of external price impulses to the Norwegian economy towards the end of 2007 (see Chart 2.7).

Prices for imported consumer goods are also influenced by developments in distribution and selling costs in Norway. In recent years, these costs have probably risen very little, primarily because wages in distributive trades seem to have shown a fairly limited rise in relation to productivity growth. The projections are based on a gradual rise in domestic costs, which contributes to pushing up the rise in prices for imported consumer goods through the projection period. However, this assumption is uncertain, probably because it implies a break with a tendency that has been observed for a fairly long period. Hence there is a risk that the low rise in prices for imported consumer goods will persist for a longer period than we have assumed. On the other hand, high demand and rising capacity utilisation in coming years may lead to somewhat higher margins also in distributive trades.

Given the assumptions underlying our projections, there are prospects that inflation, as measured by the CPI-ATE, will reach the inflation target in 2008 (see Chart 7). The interest rate will gradually normalise in the years ahead. It is likely that the output gap will gradually fall towards zero, which would imply that inflation will stabilise at a level close to the inflation target of 2½%

Chart 7 CPI-ATE. Total and by supplier sector.¹⁾ 12-month change. Per cent. Jan 02 – Dec 08²⁾



¹⁾ Norges Bank's estimates

²⁾ Projections from March 05 – Dec 08

Sources: Statistics Norway and Norges Bank

Boxes

Why are long-term interest rates so low?

Low inflation in the Nordic countries

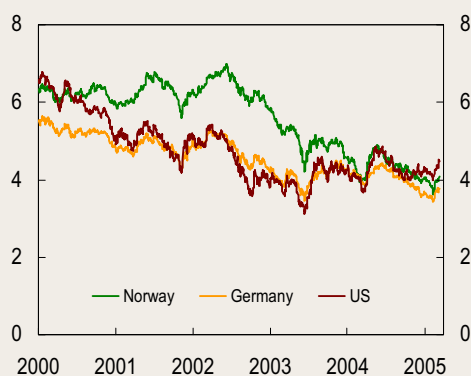
Developments in household debt

Evaluation of Norges Bank's projections for 2004

Why are long-term interest rates so low?

Since last summer and up to February this year, yields on long-term government bonds have fallen considerably both internationally and in Norway (see Chart 1). Long-term interest rates have since edged up, but are still low. Long-term forward interest rates in Norway, which can normally be interpreted as market interest rate expectations in the longer term, are also low at about 4¾% five years ahead.

Chart 1 Government bonds with a 10-year maturity. US, Germany and Norway. Daily figures. Per cent. 3 Jan 00 – 10 Mar 05



Source: EcoWin

An analysis of the fall could be based on three possible explanations:

- Market participants may expect weak economic growth and the need for an expansionary monetary policy for a very long period.
- Long-term interest rates may be influenced by extraordinary market conditions, and thereby provide an incorrect picture of actual expectations as to key rates in the long term.
- Market participants may have lowered their expectations as to what represents a neutral interest rate over time.

It may seem unreasonable that expectations of weak economic growth are behind low long-term interest rates. In the US, long-term interest rates have fallen in spite of solid growth in the economy, higher employment, rising inflation and higher key rates. Equity prices in many countries have risen and credit risk premia - the difference between yields on corporate bonds and government bonds - have narrowed. This normally reflects expectations of higher economic growth.

It may be more reasonable to assume that certain market conditions may have caused extraordinary disturbances in the bond market, which do not necessarily imply expectations of a persistently low interest rate:

- Pension reforms in a number of countries may entail higher investment in bonds with long maturities to improve the balance between financial investments and long-term obligations.
- Some of the fall in long-term interest rates may be explained by market participants who borrow at low short-term interest rates and invest in long-term bonds with higher interest rates, so-called carry-trading. With the increase in the key rate in the US, the effect has probably been reduced somewhat.
- An expansionary monetary policy, improved balance sheets in the corporate sector and large saving surpluses in Asian economies have supplied financial markets with liquidity. The search for returns may have contributed to pushing down yields on long-term bonds.

These factors may imply that market interest rates do not at present reflect actual long-term expectations concerning key rates in the long term. In the baseline scenario in this report, the interest rate is assumed to follow the forward interest rate over the next two years and then normalise somewhat more quickly than implied by forward interest rates.

Market participants may have lowered their interest rate expectations to a level that is lower than what is normal over time because of lower inflation expectations. Estimates from Consensus Forecasts indicate, however, that long-term inflation expectations have been relatively stable, both in Norway and abroad. Nor do international inflation-linked bonds point to a fall in inflation expectations.

The fall in long-term interest rates may also reflect market participants' assessment that the *neutral real interest rate* has fallen. The neutral real interest rate is the level of the real interest rate that is consistent with stable inflation and output equal to potential output.

During a business cycle it is the real interest rate's deviation from the neutral real interest rate - the real interest rate gap - that indicates whether monetary policy is expansionary or contractionary.^{1,2}

The neutral real interest rate is difficult to estimate and may change over time. It is determined by structural conditions in the economy such as productivity, households' saving and consumption preferences over time, the size of public debt and risk premia linked to uncertainty surrounding future inflation and exchange rates. The global neutral real interest rate is determined by structural conditions in the major economies.

Studies indicate that the global neutral real interest rate may have fallen somewhat in recent years and that it may now be in the range 2-3%. The European Central Bank points out that the neutral real interest rate fell in the euro area during the 1990s (ECB, 2004). The fall is attributed to lower productivity and population growth, the disappearance of intra-euro area exchange rate risk, a reduction of inflation risk premia in the euro area and fiscal consolidation in preparation for EMU. The ECB suggests that the neutral real interest rate for the euro area may now lie in the range 2-3%.

Laubach and Williams (2003) find that the neutral real interest rate in the US has varied considerably over time and estimates it at around 3% in 2001. The OECD (2004) argues that the neutral real interest rate in the US has varied between 2% and 5% since the 1960s and that it may now be slightly higher than 2%. Studies indicate that the neutral real interest rate in the US showed a temporary rise in the latter half of the 1990s as a result of higher productivity growth. In the wake of the collapse of equity prices and the recession after the turn of the millennium the estimates for the neutral real interest rate in the US have been lowered.

Ferguson (2004), the Vice Chairman of the Board of Governors of the Federal Reserve in the US, points out that the estimates of the neutral real interest rate in the US have fallen in recent years. He points to a number of factors such as "...an unusual hesitancy on the part of businesses to hire and spend emerged in 2001

after the collapse of equity prices"...and..."the restraint imposed on domestic consumers from an increase in the cost of energy..."

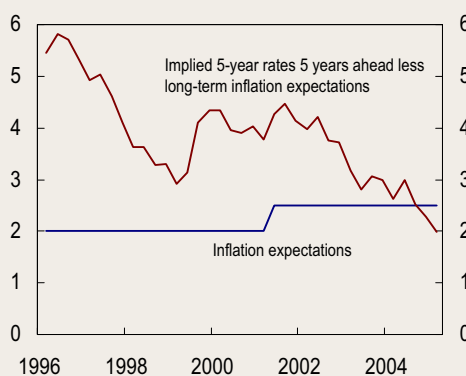
According to the *Financial Times* (2005), there is a widespread perception that the neutral real interest rate in the US is around 2.75%, while Goldman Sachs (2005) puts it at around 2.5%.

These conclusions are highly uncertain, but even with a low estimate of the global neutral real interest rate of around 2%, the global long-term nominal interest rate level is now low.

In a world with free capital flows, the neutral real interest rate for a small, open economy will be influenced by global conditions in addition to country-specific factors. Hence, if the global neutral real interest rate has fallen in recent years, this may also have influenced the neutral real interest rate in Norway.

Developments in expected long-term interest rates may provide an indication of market perceptions of the neutral real interest rate. Chart 2 shows implied long-term forward interest rates in Norway, deflated by long-term inflation expectations. These rates can be interpreted as the market's expected five-year real interest rate five years ahead. These implied interest rates ahead will normally be less influenced by cyclical developments than money market interest rates and bond yields. These interest rates can therefore be assumed to provide a better basis for assessing market participants' perception of the neutral real interest rate.³

Chart 2 Long-term inflation expectations and implied 5-year rates 5 years ahead less long-term inflation expectations



Sources: EcoWin and Norges Bank

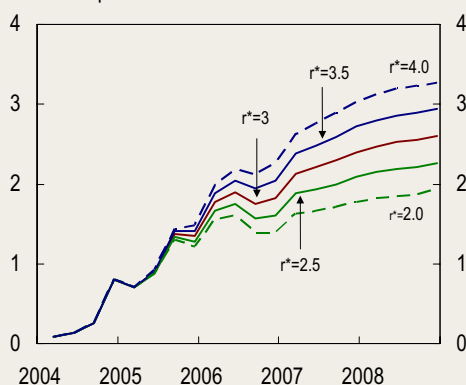
In the period 1998-2003, this measure of the neutral real interest rate generally varied in the range 3-4%. Since mid-2001, a falling trend has been observed, however, and from mid-2003 these interest rates have been lower than 3%. This may indicate a fall in the neutral real interest rate in Norway as well. In a study by Hammerstrøm and Lønning (2000), the neutral real interest rate was put in the range 3-4% for Norway. It may be reasonable to lower this interval somewhat to 2.5-3.5%. Hence it is difficult to attribute the entire fall in long-term interest rates to the fall in the neutral real interest rate.

The estimated interval for the neutral real interest rate in Norway is somewhat higher than the estimate for the global neutral real interest rate. It is natural to attribute this difference to specific conditions such as exchange rate and liquidity risk in addition to large international investors' preference of avoiding small markets.⁴

There is considerable uncertainty associated with the estimate of the neutral real interest rate. If monetary policy is based on an incorrect assessment of this variable, it may lead to an unintended tightening or easing of monetary policy. We have illustrated this by looking at possible consequences of an incorrect estimate of the level of the neutral real interest rate by 0.5-1.0 percentage point. Charts 3 and 4 show various paths for inflation and the output gap. In the baseline scenario in this report, the neutral real interest rate is assumed to be about 3%, i.e. at the middle of the range in which the neutral real interest rate in Norway probably lies. The baseline scenario is marked with red in the charts. The other paths show the estimated path of inflation and the output gap if it is incorrectly assumed that the neutral real interest rate is 3%, while the correct level is 2-2.5%, alternatively 3.5-4%. All the paths are calculated using a small model that seeks to reflect key relationships concerning how monetary policy affects the Norwegian economy.⁵

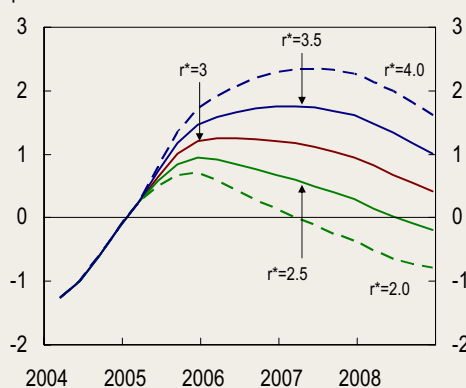
If the neutral real interest rate is assumed to be 3% while it is in fact 2-2.5%, monetary policy will be more contractionary than assumed. This results in lower inflation and output gap than in the baseline scenario (green lines). Up to end-2008, the annual rate of inflation is then close to ¼ percentage point and the output gap

Chart 3 12-month rise in the CPI-ATE given different values of the neutral real interest rate, while assuming that it is 3 per cent



Sources: Statistics Norway and Norges Bank

Chart 4 The output gap given different values of the neutral real interest rate, while assuming that it is 3 per cent



Source: Norges Bank

close to ¼ percentage points lower than in the baseline scenario. Similarly, if the neutral real interest rate is incorrectly assumed to be too low, monetary policy will be more expansionary and inflation and the output gap higher than in the baseline scenario (blue lines).

The charts illustrate that an incorrect estimate of the neutral real interest rate may have an impact on developments in inflation and the output gap.

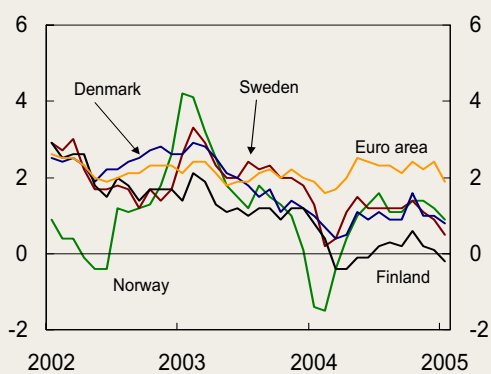
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- 1 The concept of the neutral real interest rate stems from the Swedish economist Knut Wicksell (1907, 1936). The concept has been of growing interest in the literature in recent years. The neutral real interest rate is further discussed in Bernhardsen (2005).
- 2 It is normal to associate the neutral real interest rate with the constant term in a Taylor rule. According to this rule the interest rate should be set so that $i = \pi^* + r^* + 1.5(\pi - \pi^*) + 0.5Y$, where i is the nominal interest rate, r^* is the neutral real interest rate, π is inflation, π^* is the inflation target and Y is the output gap. $\pi^* + r^*$ is the nominal neutral interest rate.
- 3 Nominal implied five-year interest rates five years ahead are estimated using synthetic government bonds with five- and ten-year maturities. Inflation expectations are assumed to be 2% from 1996 to the first quarter of 2001, and thereafter 2.5 per cent (after the inflation target was introduced.)
- 4 A general feature is that the estimates of the neutral real interest rate in small, open economies are higher than in large economies. Björkstén og Karagedikli (2003) discuss the reasons behind the particularly high neutral real interest rate in New Zealand. They also find estimates that indicate that the neutral real interest rate in the UK, Australia, Sweden and Canada (but not Switzerland) is higher than the neutral real interest rate in the US. For all the countries, the neutral real interest rate has fallen in recent years. Beechey et al. (2000) estimates the neutral real interest rate in Australia at 3.5%, higher than the estimates for the US and the euro area. Amato (2005) estimates that neutral real interest rate at 2½-2¾% in the euro area and the US, while it is estimated to be somewhat higher for the UK. Larsen and McKeown (2004) estimate the neutral real interest rate for the UK at around 3%.
- 5 The model is further documented in Husebø et al. (2004).

Low inflation in the Nordic countries

Inflation in the Nordic countries has declined, and is now relatively low in Sweden, Denmark, Finland and Norway (see Chart 1). According to the harmonised indices of consumer prices,¹ inflation in January was around 1 per cent in Denmark and Norway, around ½ per cent in Sweden, and marginally negative in Finland. By comparison, price inflation in the euro area was just under 2%.

Chart 1 Harmonised indices of consumer prices in the Nordic countries and the euro area. 12-month change. Per cent. Jan 02 – Jan 05



Source: Eurostat

A common feature of the low level of inflation in the Nordic countries seems to be the trend in prices for imported consumer goods, even though developments have not been entirely the same in all the Nordic countries. This reflects weak price developments for internationally traded goods as a result of strong competition, a shift in trade towards low-cost countries and period of an appreciating

krone exchange rate. The Nordic economies are relatively open, with high import shares. As a result, external price impulses are fairly strong compared with more closed economies such as the euro area. Relatively large trade flows between the Nordic countries also mean that low price inflation in one country may easily spread to the others.

Domestic conditions have also contributed to the low level of inflation. Growth in the Nordic countries slowed in 2003 and the output gap was probably negative in all the countries. This may have curbed price inflation in 2004. Moreover, strong international competition has spilled over to industries competing on the domestic market and restrained cost inflation through higher productivity growth and lower wage growth. In Sweden and Denmark, low inflation reflects high productivity growth. Increased competition in retail trade and the airline industry has also restrained inflation in several of the Nordic countries. In Finland, lower taxes on alcoholic beverages have had a temporary dampening impact on inflation. In the euro area, low resource utilisation seems to have had little effect on inflation. At the same time, higher indirect taxes have exerted upward pressure on inflation.

Table 1 shows the rise in the harmonised indices of consumer prices in the Nordic countries and in the euro area in the period from January 2004 to January 2005. The table also shows a selection of sub-indices where inflation in the Nordic countries has been particularly low in relation to the euro area.

Table 1 Harmonised indices of consumer prices in the Nordic countries and the euro area. Percentage change from January 2004 to January 2005.

	Norway	Sweden	Denmark	Finland	euro area
Harmonised indices of consumer prices	0,9	0,5	0,8	-0,2	1,9
Alcoholic beverages and tobacco	3,4	0,2	2,3	-13,0	7,5
Clothing and footwear	-4,2	-1,6	-3,6	-1,3	0,8
Housing, electricity, gas and other fuels	0,1	1,2	3,0	2,8	3,7
Electricity	-10,0	-4,1	0,6	-3,2	2,5
Furnishing and household equipment	-2,3	-1,3	0,3	0,7	1,0
Communication	-2,8	-3,2	-3,3	-7,7	-2,4
Recreation and culture	0,9	-1,2	-3,8	0,3	0,0
Audiovisual equipment	-7,8	-11,8	-17,7	-6,6	-7,1

Source: Eurostat

Prices for *clothing and footwear* have fallen in the Nordic countries over the past year, while they have shown a small rise in the euro area. The decline in prices in the Nordic countries can be attributed to a shift in imports from high-cost to low-cost countries. The Nordic countries have a lower level of production of clothing and footwear than the euro area. Changes in trading patterns thus have a greater impact on clothing prices in the Nordic countries than in the euro area. These prices showed the steepest fall in Norway. This may be because Norway was one of the first countries to remove import quotas on clothing and footwear. At the beginning of 2005, the EU also removed the last import quotas on clothing and footwear from non-EU countries. This may lead to a further slowdown in the rise in prices for these goods in Sweden, Denmark and Finland and the rest of the euro area in the period ahead. Prices for a number of other goods with a large import content have also moved on a weak trend in the Nordic countries. This includes prices for *furniture and household articles*.

Developments in prices for goods and services associated with *recreation and culture* have been relatively weak in all the Nordic countries, reflecting the fall in prices for *audiovisual equipment*. In Denmark and Sweden, prices for audiovisual equipment fell by 18% and 12%, respectively, from January 2004 to January 2005. In Finland and Norway prices fell by 7 and 8%. High productivity growth in international production of audiovisual equipment and a shift in production to low-cost countries have contributed to the weak price trend for these products. Prices for these goods have also fallen in the euro area. *Post and telecommunications services* constitute another group that is affected by high productivity growth, and where there has been a somewhat larger fall in prices in the Nordic countries than in the euro area. This primarily reflects developments in the mobile telephone market, where Sweden and Finland are large manufacturers and where competition among Nordic operators appears to be particularly intense.

Prices for *housing, electricity and fuel* have shown a small increase in Norway and Sweden over the past year, while prices in Denmark and Finland have increased by about 3%. In the euro area, housing, electricity and fuel prices rose by 3.7% in the year to January 2005. The relatively low rise in these prices in the Nordic countries reflect a sharp fall in electricity prices in Norway, Sweden and Finland. Electricity prices in the euro area rose by 2.5% in the year to January 2005. The Nordic electricity market is fairly closely integrated. Prices charged to households nevertheless seem to fluctuate more in Norway than in the other Nordic countries. This may be due to relatively limited use of fixed-price agreements in the Norwegian household sector.

There have been particularly large differences in the rise in prices for *alcoholic beverages and tobacco* both across the Nordic countries and between the Nordic countries and the euro area. This must be seen in connection with the harmonisation of taxes on these goods in the EU. Prices for these goods fell in Finland after substantial tax reductions in March 2004 and were approximately unchanged in Sweden. Prices have risen somewhat in Denmark and Norway, but far less than in the euro area, where taxes on tobacco, among other items, have increased appreciably. The rise in prices for *food and non-alcoholic beverages* has been relatively similar and relatively low in the Nordic countries and the euro area in the past year. The exception is Norway, where the rise in these prices edged up during the last half of 2004 after a fall in some food prices in connection with new entrants and increased competition in retail trade.

¹ In this box, the harmonised indices of consumer prices are used to describe price developments. These indices are constructed so that price figures are comparable across countries. These indices will show a different path than measures of underlying price inflation because they include tax changes and energy products.

Developments in household debt

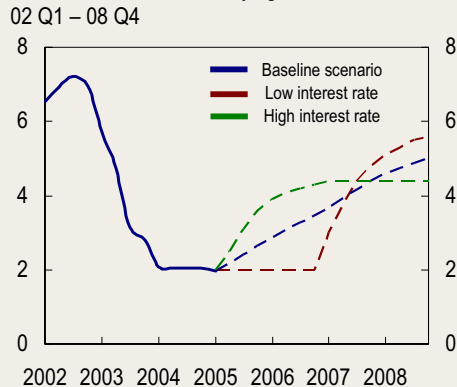
Household debt is still growing at a fast pace and faster than household income. Debt accumulation is closely linked to developments in house prices. With interest rates in line with the path in the baseline scenario in this report, projections are based on historical relationships for house prices and household debt.¹ The interest rate path in the baseline scenario is shown in Chart 1. There is considerable uncertainty associated with such projections and the results must therefore be interpreted with caution.

The interest rate decline through 2003 and the first half of 2004 pushed up the rise in house prices last year (see Chart 2). In the course of 2005, the effect of the interest rate decline will probably wane. As a result, house price inflation is projected to be lower in 2005 than in 2004. A further decline in

house price inflation from 2006 primarily reflects the interest rate path in the baseline scenario, where short-term money market rates gradually increase to around 5% at the end of 2008 and thereafter to a normal level of 5½%. In addition, the assumption of a high level of housing starts pushes down house price inflation throughout the projection period. On the other hand, an improvement in labour market conditions will contribute to pushing up house price inflation.

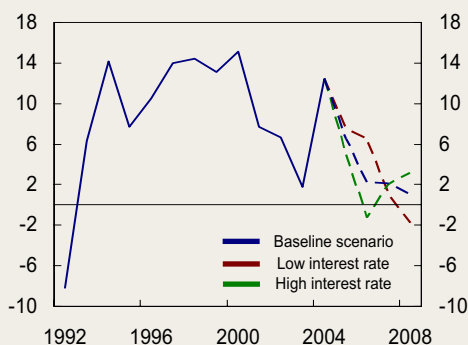
Experience shows that debt growth reacts rapidly to developments in house prices, and that the effects are fairly persistent. Debt growth is thus expected to continue to rise somewhat in 2005 (see Chart 3). As a result of the assumed interest rate increase in the baseline scenario and slower house price inflation from 2005, debt growth may slow gradually from

Chart 1 3-month money market rate in the baseline scenario and in alternative scenarios with high and low interest rates. Quarterly figures. 02 Q1 – 08 Q4



Source: Norges Bank

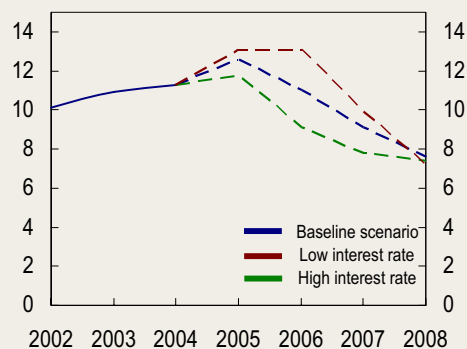
Chart 2 Rise in house prices. Annual figures. Per cent. 1992 – 2008¹⁾



¹⁾ Projections for 2005 – 2008

Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, Finn.no, ECON and Norges Bank

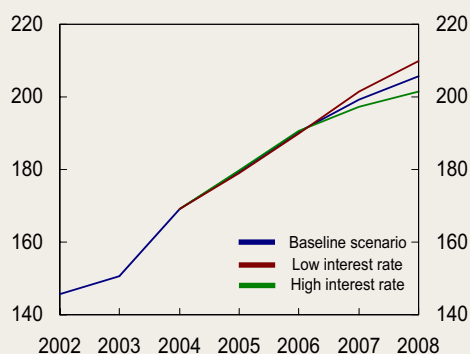
Chart 3 Credit to households (C2). Annual percentage change in household debt. 2002 – 2008¹⁾



¹⁾ Projections for 2005 – 2008

Source: Norges Bank

Chart 4 Projections of household debt burden¹⁾. Annual figures. Per cent. 2002 – 2008²⁾



¹⁾ Loan debt as a percentage of disposable income less the return on insurance claims.

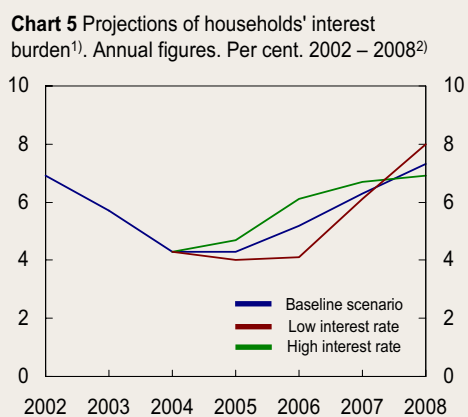
²⁾ Projections for 2005 – 2008

Source: Norges Bank

2006. Debt accumulation is expected to be higher than income growth, which will lead to a rise in the ratio of household debt to disposable income from the current level (see Chart 4).

Both a higher debt burden and higher interest rates point to an increase in the overall household interest burden between 2006 and 2008 (see Chart 5). At the end of the projection period, the interest burden is a little higher than 7%. In 2008, the interest burden will, under these assumptions, be about the same as in the mid-1990s.

To illustrate how different interest rate paths may affect developments in house prices and household debt, projections have also been made on the basis of the alternative interest rate paths described in Section 3. These alternative interest rate assumptions are also shown in Chart 1.



¹⁾ Interest expenses as a percentage of disposable income less the return on insurance claims plus interest expenses
²⁾ Projections for 2005 – 2008
 Source: Norges Bank

The alternative with an interest rate that remains unchanged to the end of 2006 (red broken line), results in a higher rise in house prices than in the baseline scenario over the next two years (see Chart 2) When the interest rate is raised more than in the baseline scenario in 2007, the rise in house prices slows markedly in 2007 and 2008. Under this

interest rate assumption, debt growth is estimated to be higher than in the baseline scenario, and the interest burden will be higher towards the end of the projection period. With a rapid and marked interest rate increase, many more households than earlier will have a high interest burden. It is uncertain how this will affect household financial behaviour and demand. Such an interest rate path will, in isolation, make it more demanding for households to service their debt further ahead when interest rates are gradually normalised or are high. This may in turn become a source of instability in demand and output in the somewhat longer term.

In the alternative where interest rates rise at a more rapid pace than in the baseline scenario (green broken line), the rise in house prices is projected to be lower in 2005 and 2006. Debt growth in this alternative will be lower than in the baseline scenario until end-2008.

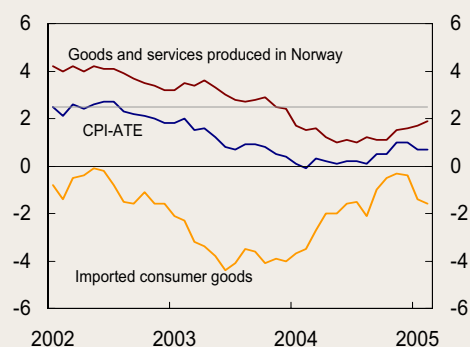
All three alternative paths for the interest rate will result in a higher household debt burden than at the end of the 1980s. However, the situation at that time was marked by rising real interest rates, rising unemployment and falling property and financial asset prices. The projections now point to higher employment and continued high house prices in the coming years. Debt developments may reflect household structural adaptation to new and improved credit markets.

¹ The projections are based on estimated models for house prices and household debt. The models are explained further in *Financial Stability* 1/2004 and in the articles "What influences the growth of household debt?" and "What drives house prices?" by D.H. Jacobsen and B.E. Naug in *Economic Bulletin* 3/2004 and in *Economic Bulletin* 1/2005 (to be published this spring) (www.norges-bank.no). A previous version of the debt equation is discussed in *Inflation Report* 2/2003.

Evaluation of Norges Bank's projections for 2004¹

Consumer price inflation adjusted for taxes and excluding energy products (CPI-ATE) was 0.3% in 2004 (see Chart 1). After adjusting the CPI-ATE for the introduction of maximum rates for day-care places, which has a one-off effect on inflation, and the direct effects of interest rates on house rents, underlying inflation was about ¾% in 2004.² CPI-ATE Inflation in 2004 was lower than projected by Norges Bank in 2002 and 2003, but developments have been closely in line with the projections in the 2004 *Inflation Reports* (see Table 1).

Chart 1 CPI-ATE¹⁾. Total and by supplier sector.²⁾ 12-month change. Per cent. Jan 02 – Feb 05



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

Sources: Statistics Norway and Norges Bank

The output gap, as estimated by Norges Bank, was approximately -1¼% in 2003, and is estimated at -¾% in 2004. The estimates indicate that the gap was approaching zero at end-2004, in line with previous estimates.

Normal capacity utilisation towards the end of 2004 in line with previous projections

Norges Bank's estimates of the output gap indicate that capacity utilisation approached its normal level towards the end of 2004, in line with previous estimates. The estimates for average capacity utilisation in the Norwegian economy in 2004 have, however, been revised down somewhat in spite of higher GDP growth in 2004 than that projected in the *Inflation Reports* in 2003. This is due to several factors:

- Capacity utilisation in the Norwegian economy is now estimated to have been lower in 2003 than projected in the *Inflation Reports* in 2003. The output gap in 2003 is now estimated to have been -1¼%, while in *Inflation Report* 1/03 it was estimated at zero. The downward adjustment primarily reflects weaker-than-

Table 1 Main assumptions and projections of some macroeconomic aggregates for the Norwegian economy in 2004, and actual developments. Percentage change from previous year unless otherwise stated

2004	Projection IR 3/02 ¹⁾	Projection IR 1/03 ¹⁾	Projection IR 2/03 ²⁾	Projection IR 3/03 ²⁾	Projection IR 1/04 ²⁾	Projection IR 2/04 ²⁾	Projection IR 3/04 ²⁾	Actual
CPI-ATE	2¼	2	2	2	½	½	¼	0,3
Output gap		-¼	0	¼	-¼	-¼	-¼	-¾
Interest rate (percent)	7	5,5	3,4	3,0	1,8	2,0	1,8	1,8
Exchange rate (I-44)	89,0	88,3	94,7	95,7	99,3	96,1	95,6	95,6
GDP trading partners	2½	2¼	2¼	2¼	2½	2½	2¾	2,9
International prices	¾	¾	¼	0	-1½	-1	-½	-1
GDP mainland Norway	2¼	2	2½	3	3¼	3½	3¾	3½
Annual wage growth	5¼	4½	4½	4¼	3¾	3¾	3¾	3¾

¹⁾ Based on assumptions of unchanged interest rate and exchange rate

²⁾ Based on forward interest rate and forward exchange rate

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

¹ The box is based on the article "Evaluation of Norges Bank's projections for 2004" in *Economic Bulletin* 1/05 (to be published in spring 2005).

² According to the Regulation on Monetary Policy, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account.

expected developments in output and the labour market. Capacity utilisation in the Norwegian economy was therefore lower at the beginning of 2004 than projected in 2003.

- As from *Inflation Report 1/04*, Norges Bank has assumed that the growth potential of the Norwegian economy increased more than normally in 2004. In many sectors, competition has intensified and enterprises have rationalised operations. In the latter half of 2004, a marked decline in sickness absence led to an increase in available person-hours. These factors have probably enabled the Norwegian economy to grow somewhat faster without the emergence of constraints in the form of a shortage of labour or productive capital. Nevertheless, high growth in 2004 means that capacity utilisation increased through the year. The output gap is estimated to have declined from -1¼% in 2003 to -¾% in 2004.

Higher-than-projected growth in the Norwegian economy in 2004 must be seen in the light of the reductions in Norges Bank's key rate from 7% in December 2002 to 1.75% in March 2004. As a result, growth projections were revised up – particularly in the most interest-rate sensitive sectors of the economy. In addition, the krone gradually depreciated through 2003. At the same time, impulses from the global upturn were stronger than either Norges Bank or other observers had anticipated. Prices for oil and other commodities increased, and exports of traditional goods were higher than expected. The prospect of persistently higher oil prices contributed to an upward revision of the projections for petroleum investment. Increased petroleum investment resulted in higher-than-expected imports, but also generated considerable impulses to production in Norway.

Price inflation in 2004 was lower than projected in 2003, but no major surprises through 2004

Unemployment increased more rapidly and employment fell more than expected from the end of 2002 and through 2003. This contributed to lower-than-projected wage growth in 2003 and 2004.

Competition increased in a number of industries. Stronger competition in retail trade, the airline industry and other services resulted in a substantial

fall in prices for some goods and services in these industries. This contributed to markedly lower-than-expected inflation towards the end of 2003 and early 2004. In *Inflation Report 1/04*, it was assumed that intensified competition would contribute to curbing the rise in prices for domestically produced goods and services throughout 2004.

Externally generated price impulses were lower than projected in 2002 and 2003. The shift in imports from high-cost to low-cost countries and strong productivity growth in the manufacture of audiovisual equipment led to a fall in prices for imported consumer goods. In *Inflation Report 1/04*, Norges Bank introduced a new indicator of external price impulses that took account of these effects.

The new indicator of external price impulses was used to make new estimates of the pass-through of changes in the exchange rate to consumer prices. The new estimates indicated that the pass-through from the exchange rate was more moderate and came later than previously assumed. It was accordingly assumed in *Inflation Report 1/04* that the rise in prices for imported consumer goods due to the depreciation of the krone in 2003 would occur at a later stage than previously assumed. Our price projections for imported consumer goods in 2004 have generally been close to the mark.

The rise in house rents was considerably lower in 2004 than it has usually been in previous years. The interest rate cuts through 2003 contributed to a slower rise in house rents, and probably contributed

Table 2 Decomposition of the gap between actual and projected price inflation in *Inflation Report 3/03* and *Inflation Report 1/04*.

	IR 3/03	IR 1/04
Gap between actual and projected rise in the CPI-ATE.		
Per cent	-1¼	-¾
Decomposition of the gap		
Contribution from the exchange rate	-¼	0
International price impulses	(-¼—0)	0
Lower wage growth	-¼	0
Stronger competition	-¾	0
Unknown/other conditions ¹⁾	-(½—¼)	-(½—¼)

¹⁾ Other conditions that may explain the gap are the introduction of maximum day-care rates and the direct impact of the cut in interest rates on rents. These factors contribute 0,3-0,4 percentage points to the gap between actual and projected price inflation. These factors are temporary disturbances that Norges Bank does not take into account when setting the interest rate.

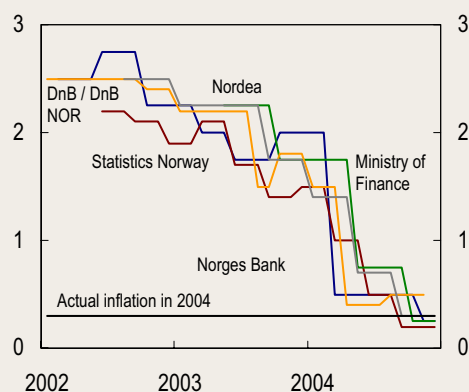
Source: Norges Bank

to pushing down overall consumer price inflation by about ¼ percentage point in 2004. Lower day-care rates as a result of the introduction of maximum rates also pushed down price inflation in 2004. These are factors that Norges Bank has not taken into account in its projections.

In Table 2 we have attempted to decompose the difference between actual and projected inflation in *Inflation Report 3/03* and *1/04* according to the various explanatory variables. Table 2 indicates that approximately 1 percentage point of the forecast error can be explained by structural changes such as increased competition in Norway and changes in trading patterns. This type of structural change is difficult to anticipate. The effects were amplified by low price inflation, which contributed to lower nominal wage growth and hence a further fall in inflation.

Chart 2 shows the projections of Norges Bank and some other institutions for the rise in the CPI-ATE in 2004 published at different times. Through 2003, no institution projected inflation to be as low as 0.3% in 2004. All the institutions expected substantially higher inflation.

Chart 2 CPI-ATE. Projections for 2004 published at different times. Per cent



Sources: Statistics Norway, the Ministry of Finance, DnB NOR, Nordea and Norges Bank

Developments in 2004

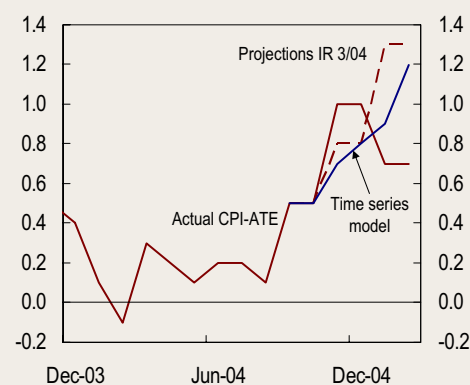
Relatively minor changes have been made in the projections since the beginning of 2004. The projections for inflation and the output gap in *Inflation Report 1/04* appear to have been closely in line with actual developments in 2004. Some of the reasons that the inflation projections have been broadly in line with actual developments may be improved estimates of external price impulses to

the Norwegian economy and new estimations of the pass-through from the krone exchange rate to imported consumer prices. It also appears to have been a correct assessment that increased competition would contribute to keeping the rise in prices for domestically produced goods and services at a low level through 2004. Nor was the Norwegian economy exposed to new, unexpected disturbances in 2004.

Preliminary evaluation of the projections in *Inflation Report 3/04*

Output developments in the Norwegian economy have been broadly in line with the projections in *Inflation Report 3/04*, which was published in November last year. According to preliminary national accounts figures, mainland GDP growth was ¼ percentage point lower in 2004 than projected in *Inflation Report 3/04*. Private consumption increased somewhat less and imports somewhat more than expected. The rise in the number employed was somewhat lower than envisaged. Measured in terms of the number of person-hours, employment growth was somewhat higher than projected. This is probably related to the appreciable decline in sickness absence through 2004. Inflation increased somewhat more than expected in the last quarter of 2004, but was surprisingly low in January. Prices for imported consumer goods moved closely in line with projections up to December, but the rate of increase was considerably lower than expected in January and February. Developments in prices for goods and services produced in Norway have been approximately as expected.

Chart 3 CPI-ATE. Projections in IR 3/04, projections from time series model and actual price movements. 12-month change. Per cent. Dec 03 – Feb 05



Sources: Statistics Norway and Norges Bank

Chart 3 compares actual inflation with the projections in *Inflation Report 3/04* and with predictions using a simple time series model that captures trend growth and seasonal variations in the CPI-ATE. Our projections and predictions based on the time series model were accurate for actual inflation in October, but were somewhat lower than actual inflation in November and December. Both our projections and the predictions based on the time series model were higher than the actual year-on-year rise in the CPI-ATE in January and February.

Changes in projections from Inflation Report 3/04 to Inflation Report 1/05

The projections in *Inflation Report 3/04* were based on the assumption that interest rates shadow forward interest rates in the market. The projections in this *Inflation Report* are based on forward rates observed in mid-March, but with adjustments from 2007 and thereafter (see Section 3). The adjustment implies a gradual increase in money market rates in Norway to 5% at end-2008. This means that the projections in this *Inflation Report* are based on an interest rate path similar to that in the previous report. As in *Inflation Report 3/04*, the krone exchange rate is expected to shadow the forward exchange rate. This implies a more or less unchanged krone exchange rate for the next three years. A similar path was assumed in *Inflation Report 3/04*.

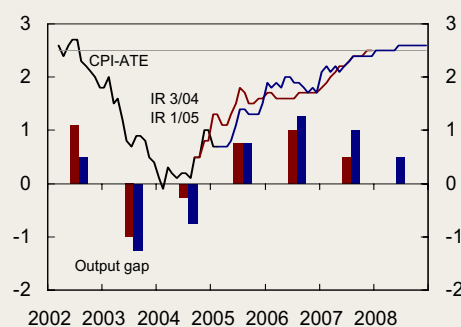
Lower output gap in 2004

Growth in the Norwegian economy in 2004 has been revised downwards by ¼ percentage point since the previous report, while the estimates of potential output remain unchanged and the output gap for 2003 has been revised down by ¼ percentage point (see Chart 4). These changes imply that the output gap in 2004 has been revised down by ½ percentage point compared with the estimate in *Inflation Report 3/04*. Capacity utilisation in the Norwegian economy is still estimated to have approached its normal level towards the end of 2004.

Higher growth in mainland GDP

Growth in mainland GDP is projected to be somewhat higher this year and next than in the previous report. The investment intentions survey for the petroleum industry points to higher petroleum investment this year than projected in the last report. A continued high level of housing starts implies higher growth in housing investment in 2005. The projections for

Chart 4 Projections for the CPI-ATE¹⁾ and the output gap²⁾ in *Inflation Report 3/04* (red) and *1/05* (blue). 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

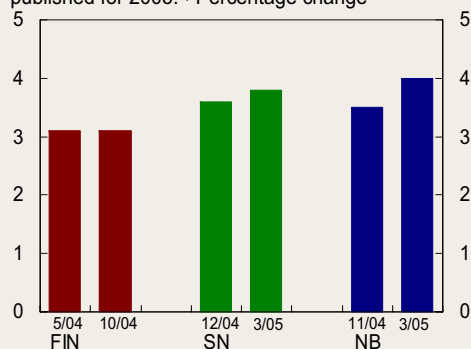
output growth in 2005 and 2006 are also higher because investment in other industries appears to be somewhat higher than projected in *Inflation Report 3/04*. The projection for employment growth has been revised slightly upwards in line with increased output growth.

With somewhat stronger growth in the Norwegian economy in 2005 and 2006 than projected in the previous report, capacity utilisation in the Norwegian economy is projected to be somewhat higher in 2006 and 2007 even though the output gap estimates for 2002-2004 have been revised downwards.

Downward revision of inflation

The inflation projections for 2005 have been revised downwards. This primarily reflects a somewhat weaker trend in prices for imported consumer goods than projected in *Inflation Report 3/04*. The decline in inflation from December to January is probably partly attributable to temporary factors, and we expect inflation to pick up again in the next few months. External price impulses to Norwegian consumer prices were slightly lower in 2004 than assumed in the last *Inflation Report*, however. New import figures indicate somewhat more pronounced shifts in trading patterns than estimated earlier. As a result, the projections for external price impulses to Norwegian consumer prices in 2005 and 2006 have been revised downwards. Slightly lower projections for nominal wage growth this year and next also point to a somewhat slower rise in prices. Higher growth in margins as a result of increased capacity utilisation and stronger pressures in the economy have the opposite effect.

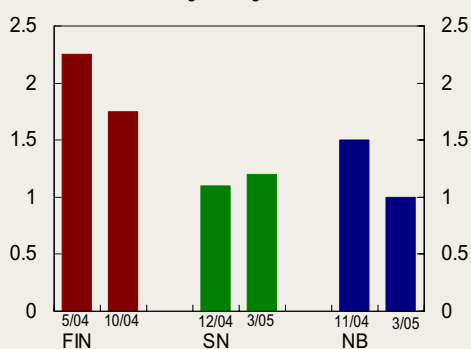
Chart 5 Mainland GDP. The last two projections published for 2005.¹⁾ Percentage change



¹⁾ The figures under the columns refer to publication month and year

Sources: Revised National Budget 2004, National Budget 2005, Economic Survey 4/2004, and 1/2005, Inflation Report 3/2004 and 1/2005

Chart 6 CPI-ATE. The last two projections published for 2005.¹⁾ Percentage change



¹⁾ The figures under the columns refer to publication month and year

Source: Revised National Budget 2004, National Budget 2005, Economic Survey 4/2004 and 1/2005, Inflation Report 3/2004 and 1/2005

Projections from other institutions

The Ministry of Finance, Statistics Norway and Norges Bank all project strong growth in the economy and rising inflation in 2005. Norges Bank now projects that mainland GDP will increase by 4% in 2005 (see Chart 5). This is ½ percentage point higher than projected in the previous *Inflation Report*. Statistics Norway has revised up its projection for mainland GDP growth in 2005 from 3.6% to 3.8%. In the National Budget for 2005, the Ministry of Finance has projected mainland GDP growth at 3.1%, or the same as in the Revised National Budget for 2004.

In the National Budget, the Ministry of Finance projected the rise in the CPI-ATE at 1¾% in 2004 (see Chart 6). This is ½ percentage point lower than in the Revised National Budget for 2004. Statistics Norway has revised up its inflation projections by 0.1% and its projection for the CPI-ATE in 2005 is now 1.2%. In this *Inflation Report*, the CPI-ATE is projected to increase by 1% in 2005. This is ½ percentage point lower than in *Inflation Report* 3/04.

¹ The box is based on the article “Evaluation of Norges Bank’s projections for 2004” in *Economic Bulletin* 1/05.

² According to the Regulation on Monetary Policy, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account.

Overview of boxes in Inflation Reports 2001-2005

1 / 05:

Criteria for an appropriate future interest rate path

Why are long-term interest rates so low?

Low inflation in the Nordic countries

Developments in household debt

Evaluation of Norges Bank's projections for 2004

3 / 04:

Estimated relationship for interest rate setting

Developments in household debt

Preliminary evaluation of the projections in Inflation Report 2/04

Norges Bank's foreign exchange purchases for the Government Petroleum Fund

The current account surplus and the demand for Norwegian kroner

2 / 04:

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 / 04:

Low external price impulses to the Norwegian economy

The pass-through from the krone exchange rate to prices for imported consumer goods (*)

The effects of the reduction in interest rates on household income

The exchange rate for the krone and exchange rate expectations

Evaluation of Norges Bank's projections for 2003

3 / 03:

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 / 03:

Low consumer price inflation

Evaluation of inflation reports in countries with inflation targets

Why is household debt growth remaining high?

Levels of real capital in enterprises still too high?

1 / 03:

Factors behind the development in the krone exchange rate (*)

Output gap

Imported price inflation and the exchange rate - the UK experience

Evaluation of Norges Bank's projections for 2001 and 2002

3 / 02:

The Scandinavian model of inflation-revisited

2 / 02:

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 / 02:

Evaluation of Norges Bank's projections for 2000

Wage growth (*)

Have Norges Bank's interest rate decisions been expected?

3 / 01:

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 / 01:

New regulation for monetary policy

Underlying inflation

Assessment of risks to the inflation projection effects of a sharper international downturn

1 / 01:

What are the effects on Europe of a cyclical downturn in the US?

The impact of interest rates on private consumption (*)

(*) = In-depth articles with special discussion of the effects of monetary policy and the functioning of the economy

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 for six regions we have engaged regional research institutions 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)	Covered by Norges Bank

Summary of the contact rounds since Inflation report 3/04

In the contact rounds since *Inflation Report 3/04* approximately 580 regional network contacts have been interviewed. The interviews were conducted in November and December. A summary for Norway as a whole and summaries for each region from the round in January will be presented on Norges Bank's web site on 17 March. The main points below are based on the regional reports from the institutions responsible for the various regions and do not necessarily reflect Norges Bank's view of economic developments.

- Information from the network shows a rising level of activity and continued solid growth in the Norwegian economy. Growth in demand and output is either unchanged or stronger in all industries, compared with autumn 2004. The contacts are positive about the next six months and expect growth approximately in line with growth in the previous period.
- The export industry experienced somewhat slower growth through the autumn of 2004. According to our contacts, however, activity picked up again towards year-end and at the beginning of 2005. Both the process industry and the transport industry report increased growth. Norwegian shipyards report a solid increase in orders from both the domestic market and abroad. A high level of investment and activity in the petroleum sector is resulting in highly favourable conditions for industries supplying goods and services to the petroleum sector. On the domestic market, manufacturing enterprises supplying goods and services to the building and construction sector have had a period of brisk growth.
- The strong growth in the building and construction sector in the summer and autumn of 2004 is continuing and there are few signs of a slowdown. Residential construction is still the main driving force. Growth has also been solid in the construction sector and public building projects are still boosting activity levels in several regions. The market for private commercial buildings is improving and many contacts believe that the market will continue to improve in 2005, also for office buildings.
- The corporate service sector reports continued brisk growth in demand. The market for placement services has grown sharply and demand for engineers, building and construction workers and IT experts is high. The IT industry, as well as consultants, advertising and law firms report an improved market situation and growing demand for their services.
- Many segments in retail trade reported somewhat slower growth towards the end of 2004, but a sharp increase in car sales before Christmas had the opposite effect. Demand for consumer durables such as furniture and brown and white goods still appears to be strong, although some regions have registered slightly lower demand in this market. Growth in household demand for services is exhibiting solid, and in some cases rising growth. Banks report that credit demand is high. There is a high level of activity in the housing market, resulting in solid growth for estate agents. The travel industry reports a continued high level of demand and hotels report a further rise in occupancy rates.
- The private and public sectors are planning a moderate increase in investment. Manufacturing is investing in new technology and production equipment which also increases capacity in many cases. The retail trade sector is upgrading existing premises and expanding with new premises. In the service sector, investment plans range from simple maintenance to IT equipment and more comprehensive infrastructure.
- Employment growth has been moderate in retail trade and somewhat stronger in building and construction. In the period ahead, employment is expected to rise across the private sector, with the exception of manufacturing. Growth is still expected to be strongest in the building and construction sector.
- All industries report a moderate rise in prices in the last 12 months. In the household service sector, prices have been virtually unchanged. About half of the contacts in the January round expect prices to rise at the same rate in the period ahead, while 35% expect prices to rise at a faster pace. The share of respondents expecting a more rapid price rise is highest in retail trade and corporate services.
- Profitability is still on the rise in all industries, with industries supplying goods and services to the petroleum sector showing the strongest increase.

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

A.B. Jürgensen
ABB AS
ABB Flexible Automation
Accenture
Adcom Data
Adecco Norge AS
Advokatfirmaet Schjødt AS
Aetat Kongsvinger
Aetat Vest-Agder
Air Products AS
Aker Kværner Ipec AS
Aktietrykkeriet
Allkopi
Alphatron AS
Altaposten
Alvdal Skurlag AL
Alvdal Tynset Sport AS
Amfi Drift AS
Amfi Namsos
Amfi Narvik
Amneus Boghandel AS
A-Møbler AS
Anleggsgartnerfirmaet Strandman AS
Apotekene Vest Hf
Apropos Internett AS
Arendal Auto AS
Arendal kommune
Arkitektfirma Brandsberg-Dahl
Arkitektfirmaet C.F. Møller
Arne Rustand AS
Art In Dent AS
Artic Seafood AS
Asko Kjeldsberg AS
Asplan Viak Bergen
Auster Frisør ANS
Auto Marin Personbiler AS
Avinor
Avisa Glåmdalen
Bakers AS
Banetele AS
Bates AS
Bautas AS
Bearing Point
Beitostølen Resort
Bergen kommune
Bergene Holm AS
Bergens Tidende
Berg-Hansen Reisebureau
Bertil O. Steen
Betong Øst AS
Bilalliansen AS
Bilsenteret Namsos AS
Birger Pedersen AS
Bjerge-Gruppen AS
Bjørn Bygg AS
Bohus Møbelhuset AS
Boliden AS
Box Delivery
BP Norge AS
Bravida Sørøst AS
Bredal & Hansen AS
Brilleland AS
Brødrene Andersen Bilverksted AS
Brødrene Dahl AS
Brødrene Flaarønning AS
Brødrene Hveding AS
Brødrene Røsand AS
Buer Entreprenør AS
Bussen Trafikkselskap AS
Bye Agenturer AS
Bygg og Maskin AS
Byggern E. A. Smith Bodø AS
Byggholt
Byggma ASA
Byggservice Nord-Østerdal AS
Byhaven Kjøpesenter
Byåsen Bakeri AS
Bøhmer Entreprenør AS
Børset og Bjerkset AS
Børstad Hotel & Gjestgiveri
Børstad Transport AS
Båtservice Holding ASA
Cad Net Øst
Capinor AS
Central Drift Hotel AS
Christie & Opsahl AS
Color Line AS
Comfort Hotel
Comfort Rørlegger Åsheim AS
Comrod AS
Connex Vest AS
Conoco Phillips Norway
Conceptor ASA
Consultit AS
Coop Lofoten BA
Coop Sogn og Fjordane BA
Coop Sunndalsøra BA
Coop Trondheim og omegn BA
Corrocean AS
Cowi AS
Dagligvareleverandørenes
Landsforening
Dark Arkitekter AS
De 3 Stuer Konsern AS
DFDS Seaways AS
Diplom-Is AS
Dnb NOR ASA
E. Flasnes Transport AS
EFD Induction AS
Egroup ASA
Eidesvik Offshore ASA
Eidsvoll kommune
Eiendomsmegler 1
Eiendomsspar AS
Ekornes ASA
Elektro AS
Elektrotema Agder AS
Elkem Aluminium ANS
Elkem Materials ASA
Elkjøp Giganten Forus
Elkjøp Stormarked Skien
Engum Elkjøp AS
Ernst&Young
Esmeralda AS
Eurospar
Evensen & Evensen AS
Fabelaktiv AS
Falkanger Sko AS
Farveringen AS
FAV Gruppen AS
Felleskjøpet Trondheim
Fesil ASA
Figgjo AS
Finnmark Reiseliv AS
Finny Sirevaag AS
Finsbråten AS
Fiskeridirektoratet
Fjeldseth AS
Fjord Line AS
Fjord Seafood Norway AS
Flora Hamn
Flora kommune
Flyspesialisten Trondheim AS
Forestia AS
Fosen Trafikklag ASA
Fosnavaag Seafood AS
Fossberg Hotell AS
Fotosentralen AS
Franzefoss
Fredrikstad kommune
Frost Entreprenør AS
Fundator AS
Fundia Armeringsstål AS
GE Health Care AS
Gilde Vest BA
Gitek
Gjensidige Nor Forsikring
Gjestal Spinneri ASA
Glomsrød AS
Glåma Bygg AS
Godstrafikk og Bilspedisjon AS
Granit Kleber AS
Grenland Framnæs AS
Grieg Seafood AS
Grimstad kommune
Gro Industrier AS
Grunnarbeid AS
Gudbrandsdalens Uldvarefabrikk
Gunnar Hippe AS
Hagen og Godager AS
Hakon Distribusjon AS
Halden kommune
Hammerfest kommune
Hamworthy KSE AS
Handelsbanken
Handicare Produksjon AS
Hansa Borg Bryggerier ASA
Haram kommune
Harila Alta AS
Havforskningsinstituttet
Havila AS
Heidenreich AS
Heimdal Gruppen AS
Helgeland Plast AS
Helse Bergen HF
Helse Finnmark HF
Helse Midt-Norge
Helse Nord RF
Hennes & Mauritz AS
Herlige Stavanger AS
Herøy kommune
Heyerdahl Gullsmed
Hifi Klubben AS
Hoff Norske Potetindustrier BA
Hol kommune
Holm Grafisk AS
Holmen Fjordhotell
Hordaland Reiseliv
Hotel Augustin AS
Hov Dokka AS
Hustadmarmor AS
Hydro Aluminium AS
Hydro Olje og Energi
Høgskolen i Nord-Trøndelag
Høie AS
Håg ASA
Håndverkscompagniet AS
I. P. Huse AS
ICA Distribusjon AS
ICA Norge AS
Iittala AS
Ikea Åsane
IKM Gruppen AS
Ingeniør Gunnar M. Backe AS
Interfil AS
ISS Norge AS
Itet AS
Ivar Mjåland
Jan Andreassen Malermester AS
Joar Ryttervoll Tømmermester AS
John Galten AS
Jotun AS
Jotunheimen og Valdresruten
Bilselskap
K. Lund AS
Kaffebrenneriet AS
Kirkestuen Transport AS
Kitron ASA
Kitron Microelectronics AS
KLP Eiendom
Kongsberg Spacetec AS
Kontali Analyse AS
KPMG AS
Kraft Foods Norge AS
Kragerø kommune
Kremmertorget Kjøpesenter
Kristiansand Cementstøperi AS
Kristiansand Næringsforening
Kristiansund Havn Kf
Krogsveen Raknes AS
Kroken Caravan AS
Kruise Smith
Kvalitet & Ledelse AS
Kaarbøverkstedet AS
Landskapsentreprenørene AS
Langmorkje Almønning
Leif Gromstads Auto AS
Leiv Eriksson Nyfotek AS
Leo Burnett Gruppen AS
Leonhard Nilsen Sønner AS
Lians Caravan & Fritid
Lillehammer kommune
Linjebygg Offshore
Litra AS
LKAB
Lofoten Not & Trål AS
Lofotprodukt AS
Lom Møbelindustri AS
Lom og Skjåk Sparebank
Lufftransport AS
Luxo Industrier AS
Lys og Varme AS
Lørenskog kommune
Løvenskiold-Fossum
Mackzymal AS
Mandal Industrier AS
Mandal kommune
Manpower AS
Maritech AS
Maritime Hydraulics AS
Mathisen & Mathisen AS
McCann Norge
Meglerhuset Nylander AS
Meløy Bedriftsservice AS
Mesna Bruk
Midtre Gauldal kommune
Minde Sjokolade
Moderne Byggefornylse
Moelven Eidsvoll
Moelven Limtre AS
Moelven Van Severen AS
Moelven Våler AS
Multiconsult AS
Møllergruppen
Møre Tre AS
Mørkveld Bygg & Betong AS
Nammo AS
Namsos kommune
Naper Informasjonsindustri AS
Narvesen
Narvik kommune
Narvik Rørleggerforretning AS
Narvik Sparebank
Narvik Storsenter Drift AS
Natech AS
Nedre Eiker kommune
Nerfland Granitindustri AS
Nesje AS
Nestle Norge AS
Netcom AS
Nettbuss Sør AS
Nettspesialisten AS
Nexans Norway AS
Nobø Electro AS
Nor Cargo AS
Norac AS
Norconsult AS
Nord-Aurdal kommune
Nordea Bank Norge ASA
Nordfjord og Sunnmøre Billag AS
Nordia AS
Nordland Betongindustri AS
Nordox AS
Norfolier AS
Norges Råfisklag
Norgesgruppen AS
Norgestaxi Trondheim AS
Norgesvinduet Svenningdal AS
Norisol Norge AS
Normotor AS
Norsk Gallup Institutt AS
Norsk Stål
Norsk Tipping AS
Norske Skogindustrier ASA
Nortrans Touring AS
Norway Seafoods
Notar Eiendom Vestfold AS
Notar Tromsø AS

Nothuset AS
 Notodden Mur- og
 Entreprenørforretning AS
 Nova-Group
 Nycomed Pharma AS
 Nymo AS
 Nysted AS
 Nøstet Kjetting AS
 O. Kavli AS
 O. L. Engen & Co AS
 Odfjell ASA
 Oljedirektoratet
 Olympic Shipping AS
 Oppegård kommune
 Optimera Engro AS
 Optimera Vest
 Optiroc AS
 ORAS AS
 Orideekspressen Østerdal Reisebyrå
 AS
 Osk Elektrotilbehør AS
 Oslo kommune
 Ottadalen Mølle AI
 Otteren Gullsmid & Urmaker
 Overhalla Cementvare AS
 Owens Corning Fiberglas Norway AS
 P4 Radio Hele Norge ASA
 Pedersen Auto AS
 Petter Gagama AS
 Pipelife Norge AS
 Plannja
 Plasto
 Polimoon AS
 Pon Power
 Porsgrunds Porselænsfabrik AS
 Powel ASA
 Prepan Norge AS
 Pricewaterhousecoopers DA
 Primahus AS
 Proffice AS
 Profilteam AS
 Prosafe
 Protech AS
 Q-Free ASA
 Quality Fagernes Hotell AS
 Radisson SAS Caledonien Hotel
 Radisson SAS Hotel Tromsø
 Ragasco AS
 Rainbow Hotels AS
 Rambøl Unico AS
 Rana Gruber AS
 Rana kommune
 Rapp Hydema AS
 Rasmuss Tallaksen
 Raufoss United AS
 Reber Schindler Heis AS
 Rema 1000
 Rescon Mapei AS
 Reslab Reservoir Laboratories AS
 Revisorgruppen Vestfold AS
 Rica Hotel Hammerfest
 Rica Park Hotel
 Rikshospitalet
 Ringnes AS
 Risa AS
 Rogaland fylkeskommune
 Rogne Bygg AS
 Rolfsen AS
 Rosenborg Malerforretning AS
 Røros kommune
 Saga Fjordbase AS
 Saga Solreiser AS
 Saltenposten AS
 Sanacoustic Byggmontering AS
 Sandefjord kommune
 SAS Royal Garden Hotel AS
 Scandic Hotell
 Scanrope AS
 Schibsted ASA
 Securitas
 Siemens
 Sig.Halvorsen AS
 Sigdal Kjøkken AS
 Siva Selskapet for industrivekst Sf
 Skagen Fondene
 Skagen Hotell AS
 Skanska Norge AS
 Skeidar AS
 Skipsplast AS
 SKS Produksjon AS
 Song Networks AS
 Sortland Entreprenør AS
 Sparebank 1 Midt-Norge
 Sparebank 1 Nord-Norge
 Sparebank 1 SR-Bank
 Sparebanken Sogn og Fjordane
 Sparebanken Sør
 Sparebanken Vest
 Spenncon AS
 Spis Norge AS
 Stallgården Restauranthus
 Stansefabrikken Lillesand AS
 Statholdergaarden
 Statoil ASA
 Stavanger kommune
 Stavanger Rørhandel AS
 Stensaas Reinsdyrslakteri AS
 Stiftelsen Betanien Bergen
 Stillasservice AS
 Stjørdal kommune
 Stokke AS
 Storebrand ASA
 Stor-Elvdal kommune
 Stormoa butikksenter
 Storvik AS
 Strand Hotell AS
 Strandtorget kjøpesenter
 Støren Trelast AS
 Subsea7 AS
 Sulland Gruppen AS
 Sundvolden Hotel AS
 Sykehuset Asker og Bærum HF
 Sykehuset Innlandet HF
 Sykehuset Østfold HF
 Synnøve Finden ASA
 Søgne og Greipstad Sparebank
 Sørlandet Sykehus HF
 Sør-Trøndelag fylkeskommune
 T. Belsvik AS
 Tandberg Data ASA
 Team Trafikk AS
 Techteam AS
 Teeness ASA
 Teknisk Bureau AS
 Teleteam AS
 Terra Skadeforsikring AS
 TFDS ASA
 Thrane-Steen
 Timpex
 Tine Meierier Sør
 Titania AS
 Toyota Hell Bil AS
 Trebetong AS
 Trelleborg Viking AS
 Trico AS
 Tromsø kommune
 Tromsø Reker AS
 Trondheim Aktivum AS
 Trondheim Kino
 Trondheim Torg
 TV 2 Gruppen AS
 Umoe Ryvingen AS
 Universal Sodexho Norway AS
 Universal Spedisjon
 Universitet i Bergen
 Universitetssykehuset i Tromsø
 Valdres Auto AS
 Valdres Last
 Varden AS
 Varner Gruppen
 Vefsn kommune
 Veidekke ASA
 Vestvågøy kommune
 Veøy AS
 Vinmonopolet AS
 Visma Services Norge AS
 Viziqor Solution AS
 Volmax AS
 Volvat Medisinske Senter AS
 Vågå kommune
 Vågå Rekneskapslag AI
 Våler kommune
 Wartsila Norway
 Wenaas AS
 West Contractors AS
 Widerøe Internett AS
 Wikborg Rein & Co
 Wist Last og Buss
 WM Data Consulting AS
 YIT Building Systems
 Yngvar Christensen AS
 Ø.M. Fjeld AS
 Økonor Flisa
 Årbakke AS
 Årdal Stålinndustri AS
 Aarsland Møbelfabrikk AS
 Aasen Bygg AS

Annex II

Statistics, charts and detailed projections

Monetary policy meetings in Norges Bank

with changes in sight deposit rate

Date	Sight deposit rate ¹	Change
Future meetings		
2 November 2005		
21 September 2005		
11 August 2005		
30 June 2005		
25 May 2005		
20 April 2005		
Previous monetary policy meetings		
16 March 2005	1.75	0
2 February 2005	1.75	0
15 December 2004	1.75	0
3 November 2004	1.75	0
22 September 2004	1.75	0
11 August 2004	1.75	0
1 July 2004	1.75	0
26 May 2004	1.75	0
21 April 2004	1.75	0
11 March 2004	1.75	-0.25
28 January 2004	2	-0.25
17 December 2003	2.25	-0.25
29 October 2003	2.5	0
17 September 2003	2.5	-0.5
13 August 2003	3	-1
25 June 2003	4	-1
30 April 2003	5	-0.5
05 March 2003	5.5	-0.5
22 January 2003	6	-0.5
11 December 2002	6.5	-0.5
30 October 2002	7	0
18 September 2002	7	0
07 August 2002	7	0
03 July 2002	7	+0.5
22 May 2002	6.5	0
10 April 2002	6.5	0
27 February 2002	6.5	0
23 January 2002	6.5	0

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

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	1.1	1.4	3.0	3.7	2.5	-5.3	0.4	0.7
2003	0.4	0.7	3.0	1.4	-2.2	16.9	5.1	2.2
2004	2.9	3.5	4.3	2.0	6.2	11.5	3.0	9.0
2003 ²⁾ Q1	-0.9	-0.4	-0.2	0.1	-1.1	-2.9	3.0	1.1
Q2	0.3	0.7	1.7	0.7	-1.6	14.3	4.7	-0.8
Q3	1.4	1.0	1.2	0.0	-2.1	2.2	0.9	-0.6
Q4	0.2	0.5	0.6	0.2	1.9	-7.2	1.3	2.5
2004 ²⁾ Q1	1.1	0.8	1.7	0.9	1.1	7.4	-1.8	3.9
Q2	1.1	0.9	0.1	0.8	2.0	2.1	-1.5	1.7
Q3	-0.8	1.0	0.9	0.0	4.4	3.3	5.4	2.9
Q4	1.5	1.3	1.5	0.2	5.9	7.2	2.9	2.9
Level 2003, in billions of NOK	1686	1308	755	371	227	72	210	498

1) Extraction and pipeline transport

2) Seasonally adjusted quarterly figures

Source: Statistics Norway

Table 2 Consumer prices

Twelve-month rise. Per cent	CPI	CPI-ATE ¹⁾	CPI-AT ²⁾	CPI-AE ³⁾	HCPI 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
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
Jun	1.3	0.2	0.8	0.6	1.3
Jul	1.5	0.2	1.1	0.6	1.6
Aug	1.0	0.1	0.5	0.6	1.1
Sep	1.1	0.5	0.6	0.8	1.1
Oct	1.4	0.5	0.9	1.0	1.4
Nov	1.2	1.0	0.8	1.4	1.4
Dec	1.1	1.0	0.6	1.4	1.2
2005 Jan	1.1	0.7	0.5	1.2	0.9
Feb	1.0	0.7	0.4	1.3	0.9

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

2) CPI-AT: CPI adjusted for tax changes

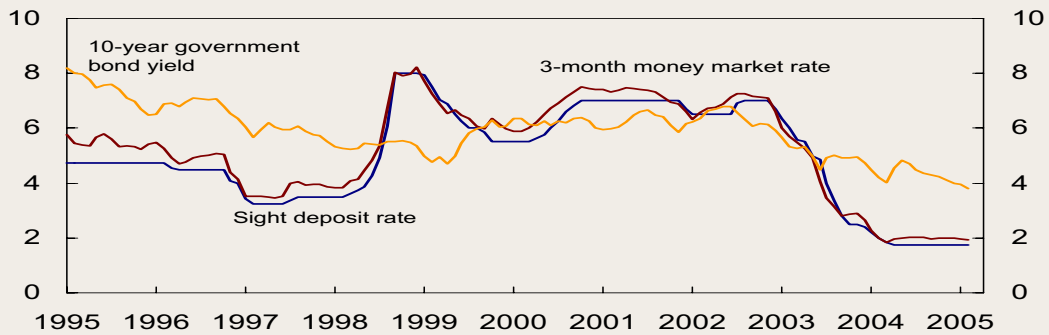
3) CPI-AE: CPI excluding energy products

4) HICP: The Harmonised Index of Consumer Prices. The index is based on international criteria drawn up by Eurostat.

Source: Statistics Norway

Charts

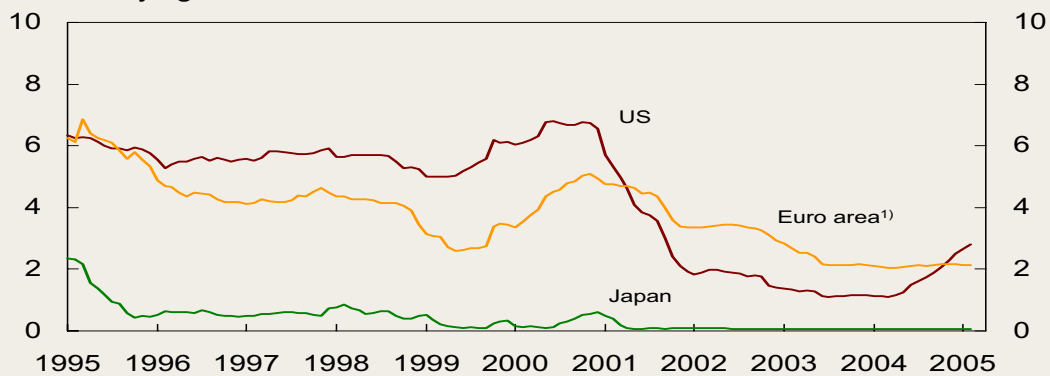
Chart 1 Norwegian interest rates. 3-month money market rate, sight deposit rate¹⁾ and 10-year government bond yield. Monthly figures. Jan 95 – Feb 05



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

Sources: EcoWin and Norges Bank

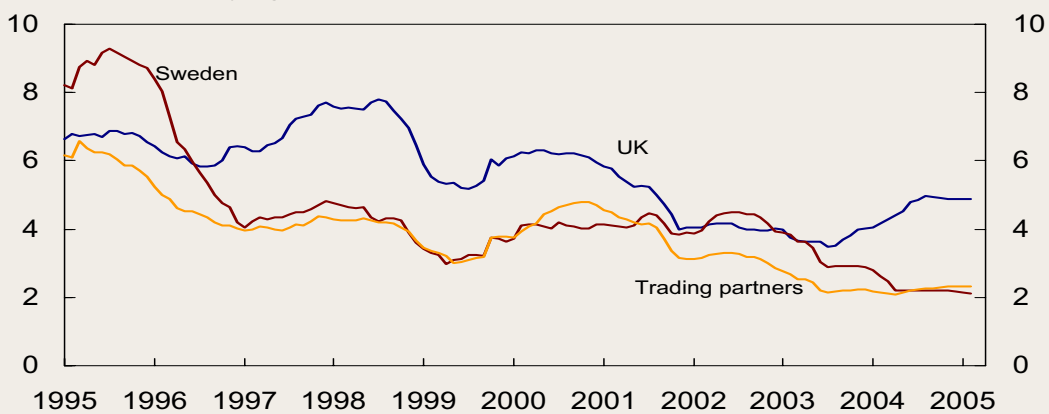
Chart 2 3-month interest rates in the US, the euro area and Japan. Monthly figures. Jan 95 – Feb 05



¹⁾ Theoretical ECU rate up to and including December 1998

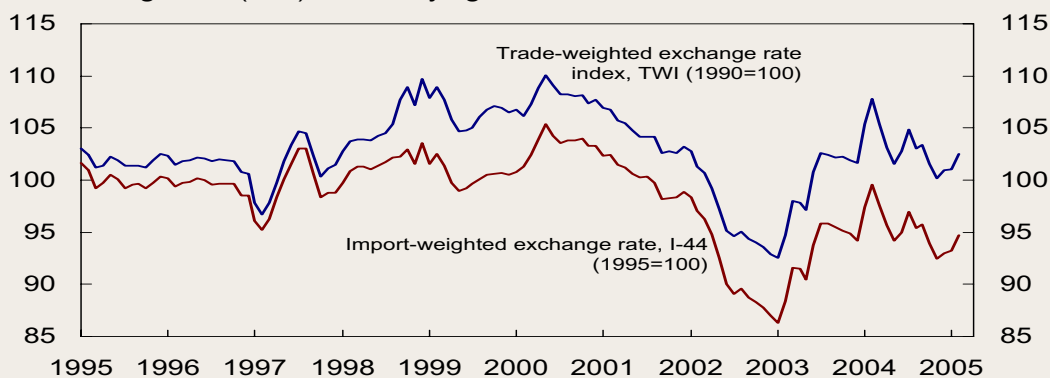
Sources: EcoWin and Norges Bank

Chart 3 3-month interest rates in the UK, Sweden and among trading partners. Monthly figures. Jan 95 – Feb 05



Sources: EcoWin and Norges Bank

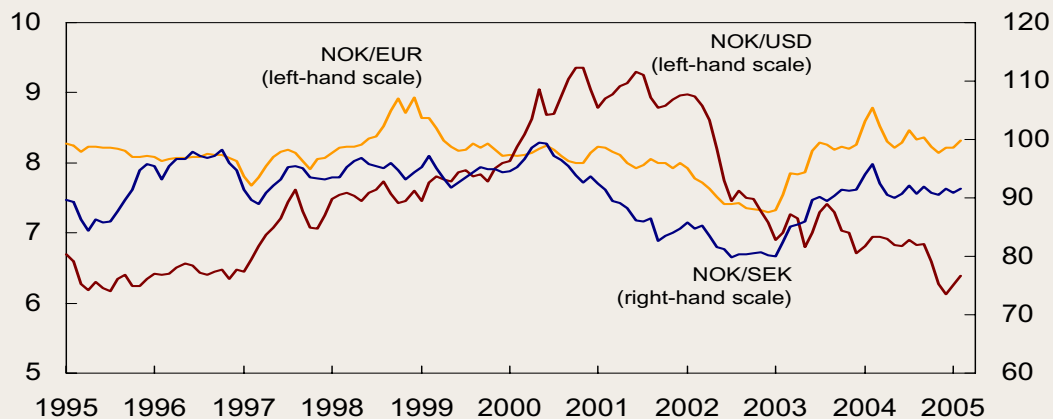
Chart 4 Trade-weighted exchange rate index (TWI) and import-weighted exchange rate (I-44).¹⁾ Monthly figures. Jan 95 – Feb 05



¹⁾A rising curve denotes a weaker krone exchange rate.

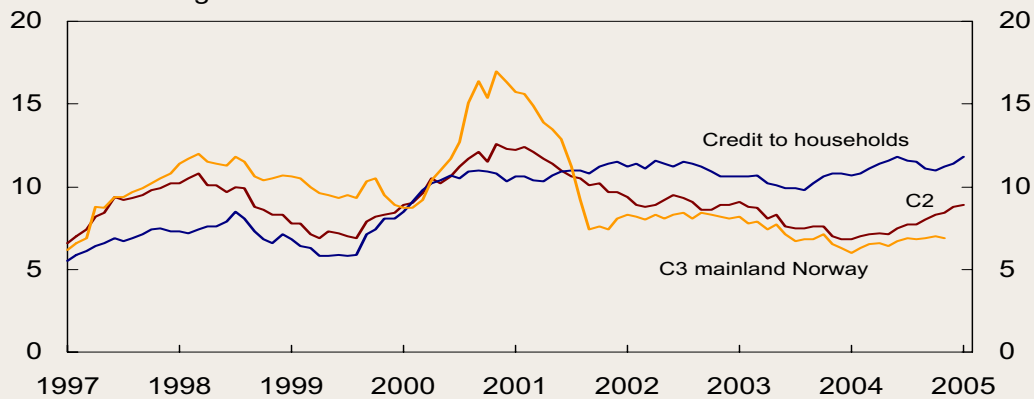
Sources: EcoWin and Norges Bank

Chart 5 Bilateral exchange rates. Monthly figures. Jan 95 – Feb 05



Sources: EcoWin and Norges Bank

Chart 6 The credit indicator (C2), credit to households and total credit to the non-financial private sector and municipalities, mainland Norway (C3). 12-month change. Per cent. Jan 97 – Jan. 05



Source: Norges Bank

Table 3 GDP growth in other countries

Percentage change from previous year

	US	Japan	Germany	France	UK	Sweden	Trading-partners ¹⁾	Euro area ²⁾
2004	4.4	2.6	1.6	2.5	3.1	3.5	2.9	2.0
Projections								
2005	3½	1	1	2	2½	2¾	2¼	1½
2006	2¾	1¼	1¼	2	2¼	2½	2¼	1¾
2007	2¾	1¼	1¼	2	2¼	2¼	2¼	2
2008	2¾	1¼	1½	2	2¼	2¼	2¼	2

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

2) Weights from Eurostat

Sources: OECD, EU Commission and Norges Bank

Table 4 Consumer prices in other countries

Percentage change from previous year

	US	Japan	Germany ¹⁾	France ¹⁾	UK ¹⁾	Sweden	Trading-partners ²⁾	Euro area ³⁾
2004	2.7	0.0	1.7	2.1	1.3	0.4	1.5	2.1
Projections								
2005	2½	0	1	1½	1¾	1	1½	1½
2006	2½	¼	1¼	1½	1¾	1¾	1¾	1½
2007	2½	½	1½	1¾	2	2	1¾	1¾
2008	2½	½	1¾	2	2	2	2	2

1) HICP, Harmonized Indices of Consumer Prices

2) Import weights, Norway's 25 most important trading partners

3) HICP. Eurostat weights (each country's share of total euro area consumption)

Sources: OECD, EU Commission and Norges Bank

Table 5 Interest rate and exchange rate in the baseline scenario¹⁾

Historical developments		I-44 ²⁾	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		92.8	4.2
2004		95.5	1.8
2004	Q1	98.1	2.0
	Q2	94.9	1.8
	Q3	96.1	1.8
	Q4	93.1	1.8
2005	Q1	93.8	1.7
	Q2	93.2	1.9
	Q3	93.1	2.2
	Q4	93.0	2.4
2006	Q1	93.0	2.6
	Q2	93.0	2.8
	Q3	93.1	3.0
	Q4	93.1	3.2
2007	Q1	93.2	3.4
	Q2	93.3	3.7
	Q3	93.4	3.9
	Q4	93.5	4.2
2008	Q1	93.6	4.3
	Q2	93.7	4.5
	Q3	93.8	4.6
	Q4	93.9	4.8

1) I-44 is based on the forward exchange rate. Three-month forward rates are estimated on the basis of interest rates in the money market and interest rate swap markets observed on 10 March. We have deducted 0.25 percentage points from the forward interest rates to provide an expression of the expected sight deposit rate. In addition the interest rate scenario has been adjusted for the fact that credit risk increases with the period to maturity. For 2007 and 2008, actual interest rate expectations are assumed to rise somewhat faster than forward interest rates.

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

Source: Norges Bank

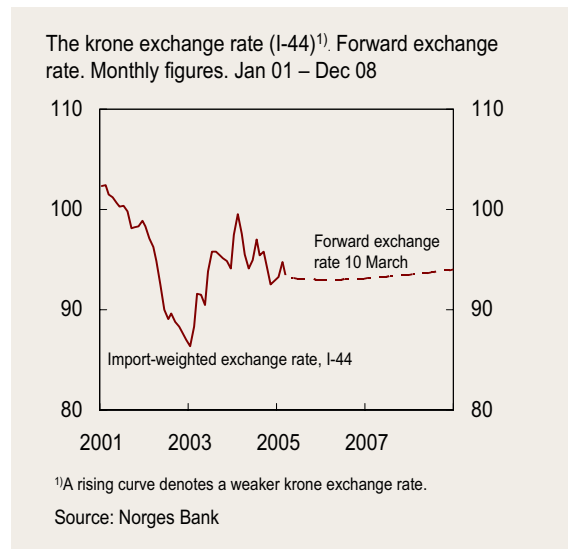
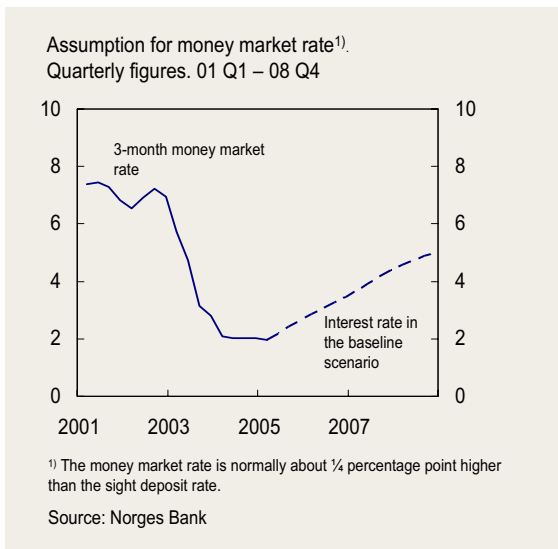


Table 6 Main macroeconomic aggregates

	In billions of NOK		Percentage change (unless otherwise stated)			
	2004	2004	Projections			
			2005	2006	2007	2008
Real economy						
Mainland demand ¹⁾	1353	4.0	4	3¾	2¼	1¾
- Private consumption	755	4.3	4¼	3¾	2½	2
- Public consumption	371	2.0	1¾	1½	1½	1½
- Fixed investments	227	6.2	7¼	6½	2¼	½
Petroleum investment ²⁾	72	11.5	25	-5	-2½	0
Traditional exports	210	3.0	5½	3½	3½	3½
Imports	498	9.0	7½	3½	2¼	1¾
GDP	1686	2.9	3¾	3	2	2
Mainland GDP	1308	3.5	4	3	2¼	2
Potential mainland GDP		3	2½	2½	2½	2½
Output gap, mainland Norway		-¾	¾	1¼	1	½
Labour market						
Employment		0.2	1½	1½	¾	¼
Labour force, LFS		0.3	1	1	¾	½
Registered unemployment (rate)		3.9	3½	3	3¼	3½
LFS-unemployment (rate)		4.5	4	3½	3¾	4
Prices and wages						
CPI		0.4	1¼	2	2¼	2½
CPI-ATE ³⁾		0.3	1	1¾	2¼	2½
Annual wages ⁴⁾		3¾	4	4½	4¾	4¾

1) Private and public consumption and mainland gross fixed investment.

2) Extraction and pipeline transport.

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

4) Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations.

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

