NORGES BANK

Reports from the Central Bank of Norway No 3/2005

Inflation Report

with monetary policy assessments

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Norges Bank's Inflation Report

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

At its meetings on 13 and 30 June, 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 30 June for the period to the next *Inflation Report,* which will be published on 2 November. The strategy is presented in Section 3. During the period, the Executive Board's monetary policy meetings will be held on 11 August, 21 September, and 2 November.

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.

The series of reports is included in the subscription for *Economic Bulletin*. To subscribe please write to:

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

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

Editor: Svein Gjedrem (Section 3 presents the Executive Board's assessments)
Design: Grid Strategisk Design AS
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Inflation Report 2/2005
with monetary policy assessments

Editorial 5

Summary 6

1. The economic situation 8

2. Driving forces the next few years 17

3. Monetary policy assessments and strategy 25

- Conclusions – monetary policy strategy 33

Norges Bank`s projections 34

Boxes 41

Annex 51

The Inflation Report is based on information in the period to 24 June 2005.

Section 3 was approved by the Executive Board on 30 June 2005

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 relevant 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 three 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.

Editorial

Slow normalisation of the interest rate

The reduction in the interest rate through 2003 and into 2004 has resulted in low real interest rates. The real interest rate has for a period been considerably lower than normal. The low level of interest rates is supporting the high activity level in the Norwegian economy.

The upturn in the Norwegian economy over the past two years has been broad and is expected to continue. Low interest rates have contributed to a high level of debt accumulation and an increase in private consumption and housing investment. High petroleum investment, buoyant growth in the international economy, higher prices for Norwegian export goods and dampened cost inflation have boosted profitability in the business sector and are paving the way for renewed growth in business investment. Liquidity in the form of bank deposits is exhibiting strong growth, particularly in the enterprise sector.

Even though interest rates are low, there is little visible inflationary pressure in the Norwegian economy. Wage growth is moderate, the supply of labour – also from other countries – has been ample for many industries, productivity growth appears to be holding up and imports from low-cost countries have shown a steady increase. Inflation has nevertheless edged up over the past year, and there are prospects that it will move up further, partly as a result of the rise in capacity utilisation.

The effects of our interest rates also depend on interest rates abroad. So far, interest rates among our trading partners have increased or have been expected to increase. There are still expectations of higher interest rates in the US and some other countries. However, weaker growth in Europe has now changed the picture somewhat.

Against the background of higher capacity utilisation and debt accumulation, combined with the prospect of moderately rising inflation, it will be appropriate to raise the interest rate gradually – in small, not too frequent steps. However, we do not see any signs at present of a rise in price and cost inflation in Norway relative to other countries that would suggest that interest rates in Norway will be considerably higher than interest rates among our trading partners ahead.

30 June 2005

Svein Gjedrem

Summary

The Norwegian economy is in an upturn and is now expanding at a brisk pace. Inflation remains low, but appears to be moving up. CPI-ATE inflation was 1.1% in the year to May. At the same time last year inflation was close to zero. The risk of a fall in the level of prices and markedly lower inflation expectations has diminished.

Growth in the Norwegian economy has been high over the past eight quarters. The fall in sickness absence, intensified competition in many industries and a shift in imports towards low-cost countries have curbed the effects on capacity utilisation and inflation. So far, there are no signs of considerable pressures in the Norwegian economy. As assessed by Norges Bank, capacity utilisation is close to a normal level.

Global economic growth is expected to be somewhat lower this year than in 2004. In the US, growth was solid in 2004 and in the first quarter of 2005, but is projected to moderate somewhat. In the euro area, growth is expected to remain fairly weak the next few years. In the UK and Sweden, there are prospects for lower growth. In Japan, activity picked up in the first quarter, but various indicators suggest somewhat weaker developments ahead. It appears that growth in China remains buoyant. Overall, it seems that growth among our trading partners this year will be somewhat weaker than previously expected. This has contributed to a decline in international long-term interest rates since the March *Inflation Report*.

Activity in Norway is still being stimulated by low interest rates, strong growth in demand in the petroleum sector and high prices for Norwegian export goods. The economic upturn is expected to continue this year. Employment growth is projected to pick up. Unemployment is expected to fall somewhat faster than has been the case so far in the upturn. Capacity utilisation is expected to rise to a higher-than-normal level in the course of this year. The economy will then be experiencing a boom.

The projections for the years ahead are based on market interest rate expectations. Forward interest rates seem to provide a reasonable indication of these expectations up to 2007. On 24 June, the key rate was expected to increase to 2% over the summer, to a further 2¼% towards the end of the year and to 2¾% at the end of 2006. For 2007 and 2008, it is assumed that actual interest rate expectations are somewhat higher than forward interest rates in both Norway and abroad.

The exchange rate is assumed to follow the forward exchange rate, which remains broadly unchanged over the next three years. This implies an assumption that the krone will remain somewhat stronger than assumed in the March *Report*.

Table 1 Projections for main macroeconomic aggregates. Change from previous year. Per cent

	2005	2006	2007	2008
Mainland demand	4	3¾	2½	2
Private consumption	4	3¾	2¾	2¼
Public consumption	1¾	1½	1½	1½
Mainland fixed investment	7½	6	2¾	1½
Petroleum investment	25	-5	-2½	0
Traditional exports	5½	3½	3½	3½
Import	8	3½	2¼	1¾
GDP, mainland Norway	3¾	3	2½	2¼
Output gap[1)], M-Norway	½	1	1	¾
Employment	1	1½	1	½
LFS unemployment)	4¼	3¾	3¾	4
CPI-ATE[3)]	1	1½	2	2½
Annual wages[4)]	3½	4½	4½	4½

1) Deviation in per cent between actual and trend GDP
2) Per cent of labour force
3) CPI-ATE: CPI adjusted for tax changes and excl. energy products
4) Based on TBU definitions and calculations. Includes costs connected to the introducion of compulsory occupational pensions

Source: Norges Bank

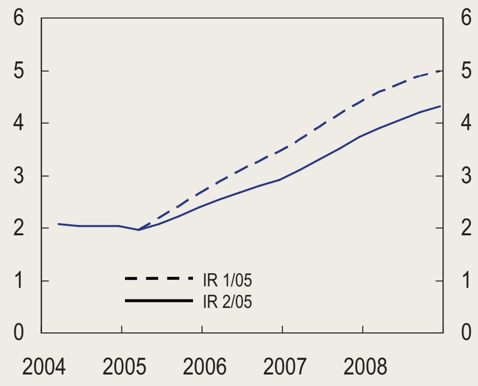
Table 2 Projections for GDP growth in other countries.
Change from previous year. Per cent

	2005	2006	2007	2008
US	3½	2¾	2¾	2¾
Japan	1½	1¼	1¼	1¼
Germany	¾	1¼	1¼	1½
France	1¼	2	2	2
UK	2¼	2¼	2¼	2¼
Sweden	2	2½	2½	2½
Trading partners[1)]	2	2¼	2¼	2½
Euro area[2)]	1¼	1¾	2	2
China[3)]	8,9	8,1	8,3	9,1

1) Export weights
2) Weights from Eurostat
3) Projections from Consensus Forecasts

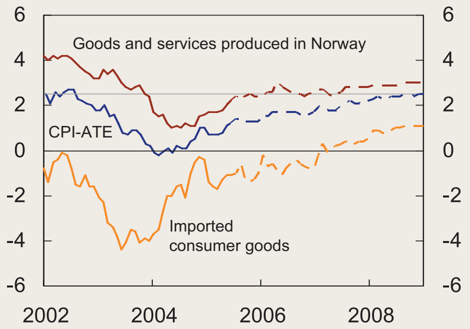
Sources: Consensus Forecasts and Norges Bank

Chart 1 Interest rate in the baseline scenario. *Inflation Report* 1/05 and 2/05. Quarterly figures. 04 Q1 – 08 Q4



Source: Norges Bank

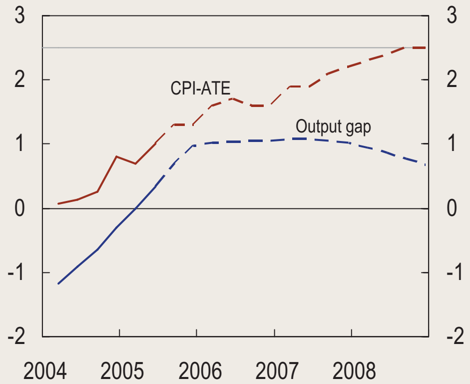
Chart 2 CPI-ATE[1]. Total and by supplier sector.[2] 12-month change. Per cent. Jan 02 – Dec 08[3]



[1]CPI-ATE: CPI adjusted for tax changes and excluding energy products
[2] Norges Bank's estimates
[3] Projections from Jun 05 – Dec 08

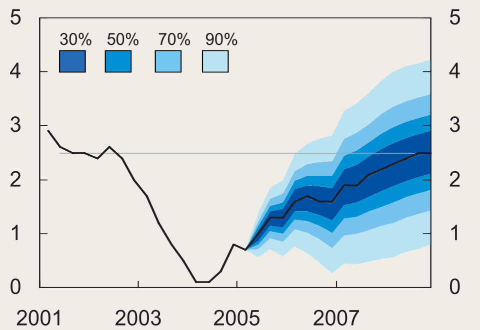
Sources: Statistics Norway and Norges Bank

Chart 3 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 4 Projections and uncertainty for CPI-ATE.[1] 4-quarter change. Per cent. 01 Q1 – 08 Q4



[1] The fan chart depicts the probability of various outcomes for 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

The interest rate assumption is somewhat lower than in the previous *Report* (see Chart 1). In the analysis this will curb the effects on inflation of a somewhat stronger krone and lower wage growth.

With a path for the interest rate and the krone exchange rate as outlined above, capacity utilisation in the Norwegian economy is projected to rise also next year. There are prospects for lower unemployment and somewhat higher wage growth. Profit margins in the business sector may show a further rise. The rise in prices for domestically produced goods and services will probably continue to edge up (see Chart 2). The rate of decline in prices for imported consumer goods is expected to decelerate gradually. Higher external price impulses and increased domestic costs will gradually push up prices. CPI-ATE inflation is projected to move up gradually from a good 1% today to almost 2% in the first half of 2007.

According to our projections, the output gap will increase to about 1% towards the end of this year (see Chart 3). A positive output gap is interpreted to mean that output and capacity utilisation are higher than the level consistent with stable inflation over time. A gradual increase in the interest rate towards a more normal level will probably result in lower growth in private demand. Capacity utilisation may decline again after a period. This will restrain the rise in inflation. Given the underlying assumptions, there are prospects that inflation will be close to 2½% three years ahead (see Chart 4).

The projections and assessments in this *Report* indicate that a path where the key rate is gradually - in small, not too frequent steps - brought up to a more normal level provides a reasonable balance between the objective of stabilising inflation at target and the objective of stabilising output and employment.

The Executive Board's assessment is that the sight deposit rate should be in the interval 1¾ – 2¾% in the period to the publication of the next *Inflation Report* on 2 November 2005, conditional on economic developments that are broadly in line with the projections.

Monetary policy must be assessed regularly on the basis of new information emerging during the strategy period that is of significant importance to the outlook for inflation and output. New information may reveal economic developments that indicate that the Norwegian economy is following other paths than projected. Stronger trade shifts and increased labour market competition may, on the one hand, result in lower price and wage inflation. The unusually low real interest rate may, on the other hand, result in a higher-than-projected rise in output and inflation. A stronger krone will imply that inflation will take longer to reach the target. Interest rate setting must be assessed in the light of the reasons for and the expected duration of disturbances.

1 | The economic situation

Financial markets

Continued low international interest rates

Low interest rates in the US and many other countries have been an important driving force behind the international cyclical upturn. Since the March *Inflation Report*, the key rate has been increased on two occasions in the US. In Sweden, the key rate has been reduced by 0.5 percentage point. Interest rates are still low among most of our trading partners, and are fuelling activity. Market participants seem to expect the interest rate to remain low in the near term (see Chart 1.1). Interest rates are expected to be reduced further in some countries over the next year.

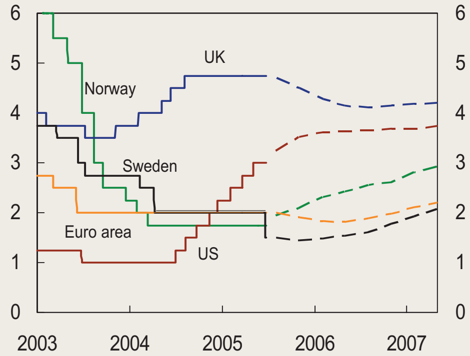
Market participants now expect interest rates in trading partner countries to rise somewhat later than they expected when the March *Report* was published. The uncertainty surrounding the global growth outlook has increased, partly as a result of high oil prices. Long-term interest rates have declined and are at a historically low level (see Chart 1.2). Forward rates ten years ahead have fallen by around ¾ percentage point for an average of our trading partners. Extraordinary factors in the bond market are still keeping long-term interest rates at a low level[1].

In Norway, the key rate has been kept unchanged at 1.75% since March 2004. Forward rates for the year ahead have edged down, which indicates expectations of a rise in the key rate to 2% in summer 2005 and to 2¼% at the end of 2005. Forward rates indicate that market participants expect interest rates in Norway to be lower than an average for our trading partners up to autumn 2005. Long-term interest rates in Norway have declined as a result of the fall in long-term interest rates internationally.

Stronger krone exchange rate

Since mid-February 2005 the krone exchange rate has appreciated by about 5%, as measured by the import-weighted index I-44 (see Chart 1.3). Markets have focused on a possible positive interest rate differential in favour of the Norwegian krone ahead, in addition to high oil prices. See box on page 42 on factors that help to explain recent developments in the krone exchange rate. Oil prices influence the krone exchange rate through several channels. Higher oil prices imply higher current account surpluses and higher income for distribution between oil companies and the state. Oil companies' higher earnings and profits will largely be invested abroad. Additional government petroleum revenues are primarily invested abroad through the Government Petroleum Fund.

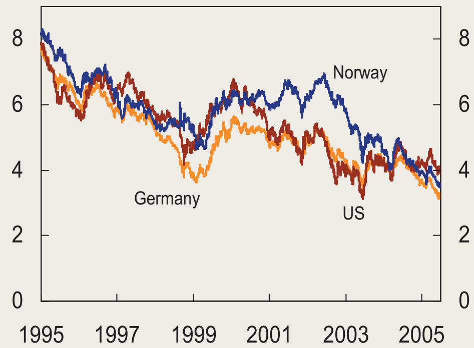
Chart 1.1 Actual and expected key rate[1)] at 24 June 2005. 2 Jan 03 – 1 Feb 07



[1)] Based on 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 Yield on government bonds with 10 years' residual maturity. Daily figures. 2 Jan 95 – 24 Jun 05



Sources: Norges Bank and Bloomberg

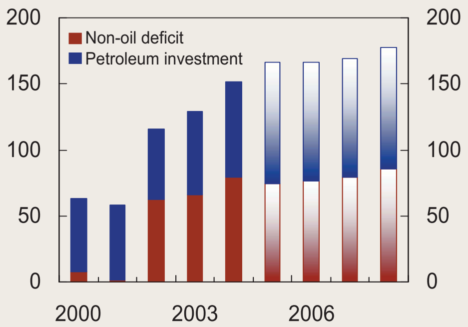
Chart 1.3 Actual and expected interest rate differential[1)] and krone exchange rate (I-44)[2)]. Daily figures. 3 Jan 02 – 15 Jun 06

[1)] Weighted average of interest rate differential against euro area countries, Sweden, the US and the UK
[2)] A rising curve denotes a weaker krone exchange rate

Source: Norges Bank

[1] See box on "Why are long-term interest rates so low?" in *Inflation Report* 1/05.

Chart 1.4 Non-oil government budget deficit and petroleum investment. In billions of NOK. Annual figures. 2000 — 2008[1)]



[1)] Projections for 2005 - 2008

Sources: Statistics Norway, Ministry of Finance and Norges Bank

In isolation, this contributes to holding down the value of the krone. Even if petroleum revenues are largely invested abroad, petroleum investment will rise substantially this year. Moreover, government petroleum revenue spending has increased in recent years. Developments in the nominal and real krone exchange rate over the past year probably reflect terms-of-trade gains and an increase in spending of petroleum revenues in Norway. In the years ahead, there are prospects that petroleum revenue flows into the Norwegian economy will stabilise (see Chart 1.4).

Monetary policy since 16 march

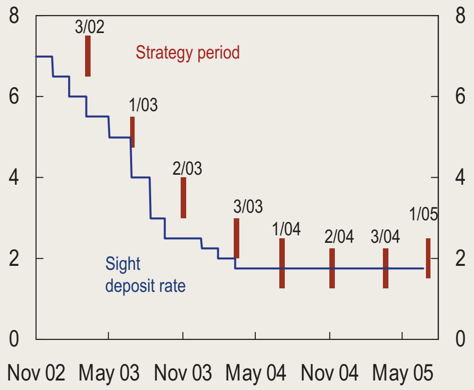
Norges Bank's projections for economic developments in the March *Inflation Report* implied a sight deposit rate in the interval 1½ - 2½% at the end of June this year. The projections assumed that the interest rate moved broadly in line with forward interest rates as observed in mid-March. The unusually low interest rate and developments in output and inflation implied that further interest rate reductions were less likely. The objective of bringing inflation back to target and anchoring inflation expectations nevertheless implied a continued expansionary monetary policy. The Executive Board's assessment was that the interest rate could, after a period, gradually be raised towards a more normal level.

The March *Inflation Report* highlighted uncertainties associated with the risk of overheating in the Norwegian economy while international price impulses might at the same time prolong the period of low inflation. These factors have been assessed throughout the period, but developments have been broadly in line with expectations.

At the monetary policy meeting on 20 April, the assessments in the March *Report* were maintained. Although a gradual rise in the interest rate seemed to provide a reasonable balance between the different objectives, the Executive Board concluded that it was too early to increase the interest rate at that monetary policy meeting. The interest rate was also left unchanged at the monetary policy meeting on 25 May, although at that meeting the Executive Board considered the alternative of increasing the interest rate. With the prospect of continued low inflation, the Executive Board did not find grounds to deviate from expectations in the money and foreign exchange market.

Interest rate developments in other countries have been an important factor for interest rate setting in Norway. The Federal Reserve increased the interest rate further in March and May. Financial market expectations indicated gradual interest rate increases in a number of countries, but after a period expectations were lowered somewhat. In June, the Swedish central bank lowered its key rate by 0.5 percentage point.

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



Source: Norges Bank

Higher equity prices

Equity prices on the Oslo Stock Exchange have advanced by more than 18% so far in 2005, which is more than the gains on most major international stock exchanges. The sharp rise in equity prices in Norway may reflect expectations of solid profitability ahead. During the previous stock market boom at the end of the 1990s, advances were particularly concentrated on ICT shares. The rise in equity prices since 2003 apply to several of the sub-indices on the Oslo Stock Exchange (see Chart 1.5).

Demand

After a moderate downturn in the first half of 2003, growth in the Norwegian economy has picked up markedly. The economic upturn is broad-based. At the beginning of the recovery, activity was primarily fuelled by private consumption, traditional exports and petroleum investment. In addition, growth in mainland fixed investment has gradually gained considerable momentum.

The easing of monetary policy and low inflation have resulted in strong growth in household real disposable income. Private consumption and housing investment have risen sharply. House prices have continued to rise. According to TNS Gallup's consumer confidence indicator for the second quarter, households perceive their financial position as solid. Debt accumulation remains high (see Chart 1.6).

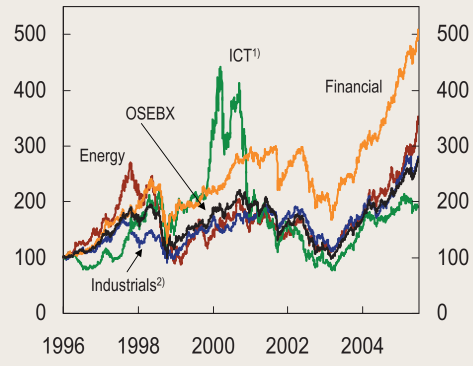
The level of household net lending is uncertain. Figures from Statistics Norway show a considerably higher level than figures from Norges Bank. Both sources show a fall towards the end of last year, however,

Mainland business fixed investment expanded sharply in the last quarters of 2004. Moderate wage growth, low interest rates and rising demand have improved corporate profitability. In 2004, the return on equity before tax for listed companies was at the same high level as in the mid-1990s. Reports from Norges Bank's regional network point to a continued increase in corporate profitability.

Credit demand in the mainland business sector has shown an overall rise, in spite of a decline in foreign credit (see Chart 1.7). An increasing number of enterprises report that they are considering an upward adjustment of their investment plans. The number of business start-ups is rising sharply. Demand for new offices and production facilities was weak in the wake of the downturn, but there are now signs that office rents are on the rise. Overall, there are prospects of continued high growth in investment ahead.

Growth in the money supply (M2) has risen sharply since the beginning of 2004 (see Chart 1.8). Twelve-month

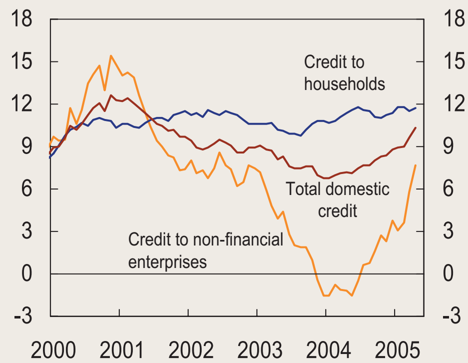
Chart 1.5 Developments in some sub-indices on the Oslo Stock Exchange. Daily figures.
2 Jan 96 – 24 Jun 05. Index, 2 Jan 96 = 100



1) Average of IT and telecom indices
2) Average of industrials and materials indices

Sources: Bloomberg and Norges Bank

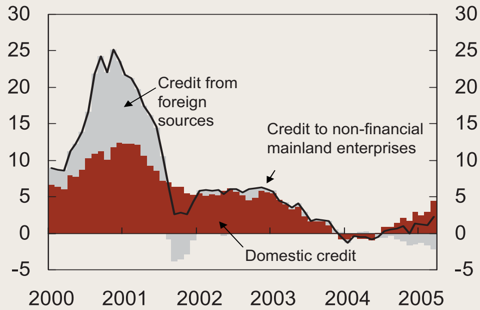
Chart 1.6 Growth in credit to households and enterprises.[1] 12-month growth. Per cent.
Jan 00 – Apr 05



1) From domestic sources (C2)

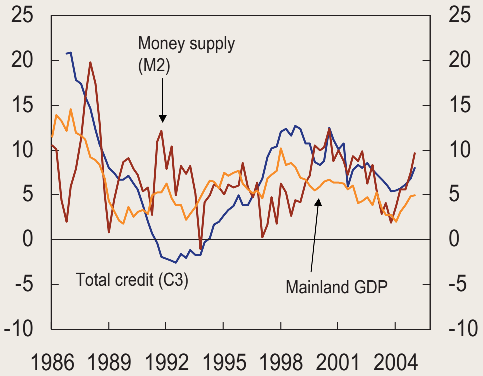
Source: Norges Bank

Chart 1.7 Credit to mainland enterprises (C3). 12-month growth. Per cent. Contribution in percentage points from domestic and foreign sources. Jan 00 – Mar 05



Source: Norges Bank

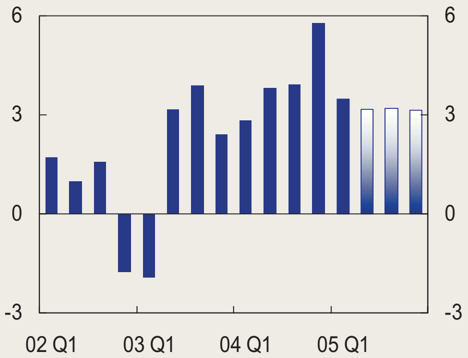
Chart 1.8 Total credit (C3), money supply (M2) and Mainland GDP[1]. Percentage growth on same quarter previous year. 86 Q1 – 05 Q1



[1] Four-quarter moving average, current prices

Sources: Statistics Norway and Norges Bank

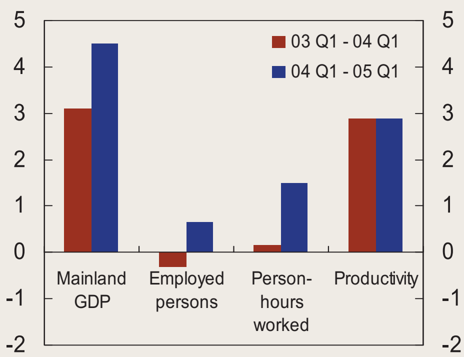
Chart 1.9 Mainland GDP. Annualised quarterly growth. Seasonally adjusted. Per cent. 02 Q1 – 05 Q4[1]



[1] Projections for period 05 Q2 - 05 Q4

Sources: Statistics Norway and Norges Bank

Chart 1.10 Mainland GDP, employment and productivity. Average quarterly growth (annualised). Per cent



Sources: Statistics Norway and Norges Bank

growth is now close to 10%, which is considerably higher than nominal GDP growth. Higher monetary growth over the past year primarily reflects an increase in liquid holdings in the enterprise sector, which underpins the picture of higher profitability.

Growth in traditional exports picked up from 2002 in pace with the international recovery. Higher prices for many Norwegian export goods and solid global growth have generated growth in traditional merchandise exports. High export prices have contributed to an increase in capacity and higher exports from the processing industry. Some moderation in global growth is expected to result in somewhat slower growth in Norwegian exports of traditional goods ahead.

In recent years, import growth has been strong, and picked up further last year. Brisk demand for imported goods and services reflects strong growth in the Norwegian economy and a low rise in prices for some imported goods. In addition, a larger share of growth in demand, for example in the construction industry, has probably been covered by higher service imports. Growth in imported goods was strong through 2004, but decelerated somewhat in the first quarter of this year. The deceleration probably reflects transient factors such as a fall in new car sales following the sharp increase last autumn and low electricity imports. In recent months, the value of traditional merchandise imports has picked up somewhat again.

Output and capacity utilisation

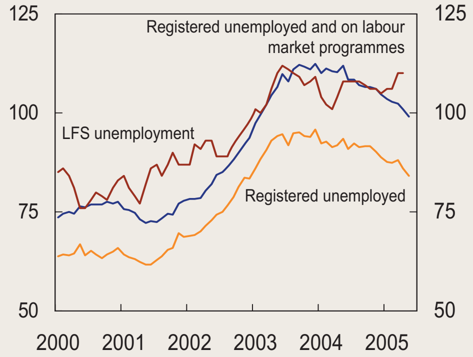
Over the past four quarters, mainland GDP growth has averaged more than 4% annualised. The economic upturn is expected to continue this year (see Chart 1.9).

High petroleum investment, the international upturn and higher commodity prices have boosted production and earnings in the manufacturing sector. Statistics Norway's business tendency survey points to continued favourable prospects for Norwegian manufacturing. Activity in service industries and in the construction sector is expected to show a further rise ahead as a result of continued low interest rates and high growth in household demand.

So far this year, employment measured by the LFS has been broadly unchanged, and lower than projected in the previous *Report*. According to the quarterly national accounts, employment rose by 0.2% between the fourth quarter of 2004 and the first quarter of 2005. The rise in the number of employed has so far been fairly moderate in relation to output growth (see Chart 1.10).

LFS unemployment has remained virtually unchanged over the past year and has shown signs of rising again this year. At the same time, registered unemployment fell (see Chart 1.11). In the first five months of the years, registered unemployment dropped by close to 6000 when including persons participating in ordinary labour market programmes, which is approximately in line with that projected in the previous *Report*. The difference between LFS unemployment and registered unemployment may be ascribable to different definitions and measurement methods. The decline in registered unemployment this year may indicate that employment is growing at a somewhat faster pace than implied by LFS figures. According to the preliminary national accounts figures for the first quarter of 2005, employment growth is somewhat higher than indicated by LFS figures.

Chart 1.11 Unemployed. LFS unemployment, registered unemployed and persons on ordinary labour market programmes. In thousands. Seasonally adjusted. Monthly figures. Jan 00 – May 05



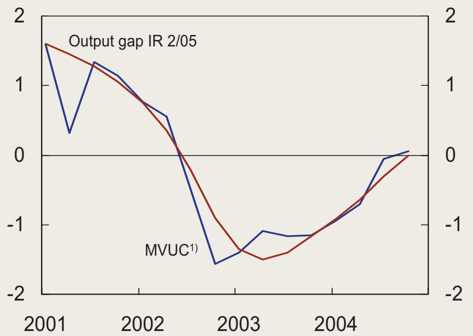
Sources: Statistics Norway and the Directorate of Labour

Nevertheless, the rise in the number of employed seems to be somewhat smaller this year than projected in the March *Report*. This may be due to lagged effects of the sharp fall in sickness absence through 2004. Many companies have probably not made full use of the considerable increase in available person-hours. A large share of production growth so far this year may have come about through an improved utilisation of the existing workforce. In addition, the use of foreign labour seems to have increased recently. This labour is not fully registered in LFS employment figures. The statistics may therefore underestimate actual employment growth.

Intensified competition, the fall in sickness absence and increased use of foreign labour probably led to higher-than-normal growth in potential output last year. High growth in actual output has nevertheless led to an increase in capacity utilisation over the past two years. Continued high growth in the Norwegian economy is expected to result in a somewhat faster fall in unemployment this year than has been the case over the past year.

As estimated here, capacity utilisation in the Norwegian economy is now close to a normal level (see Chart 1.12). Alternative estimates of the output gap indicate that the actual output level is close to potential output. The situation in the labour market does not imply a build-up of substantial pressures in the Norwegian economy even though growth has been high for a fairly long period. In manufacturing, capacity utilisation has been close to its historical average. Norges Bank's regional network reports that about 40% of enterprises will have some or considerable difficulties in increasing production.

Chart 1.12 Alternative measures of the output gap. Percentage deviation from trend mainland GDP. 01 Q2 – 05 Q1

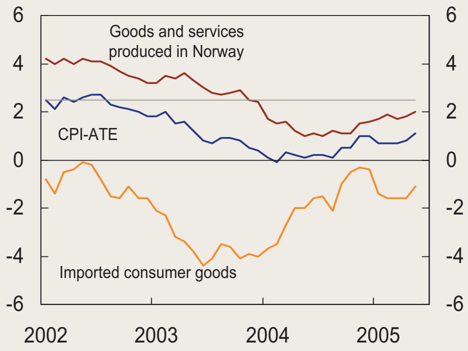


1) Multivariate unobserved component method. See article "The output gap in Norway - a comparison of different estimation methods" in *Economic Bulletin* 2/05 for a further discussion

Sources: Statistics Norway and Norges Bank

Growth in mainland GDP is expected to be almost as high this year as during the expansion during the mid-1990s. During this upturn, a decline in sickness absence, increased

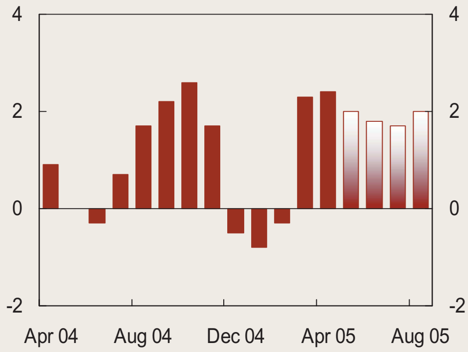
Chart 1.13 CPI-ATE[1]. Total and by supplier sector.[2] 12-month change. Per cent. Jan 04 – May 05



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

Sources: Statistics Norway and Norges Bank

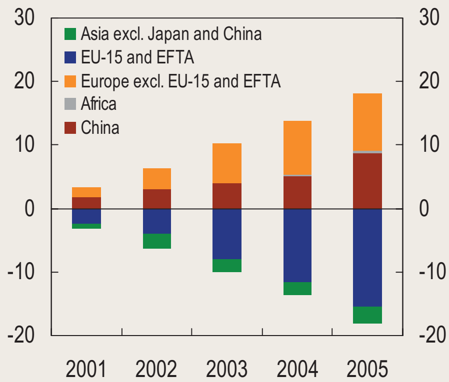
Chart 1.14 CPI-ATE[1]. Seasonally adjusted monthly change. 3-month moving average, centred and annualised. Per cent. Apr 04 – Aug 05[2]



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products
2) Projections for May - August 2005

Sources: Statistics Norway and Norges Bank

Chart 1.15 Cumulative change in share of clothing imports from different regions since 2000[1]



1) First 4 months each year compared with same period in 2000

Sources: Statistics Norway and Norges Bank

competition in many industries and a shift in imports towards low-cost countries have kept capacity utilisation and inflation at a low level. The impact of these factors is expected to diminish ahead, but there is considerable uncertainty as to future developments. There is also uncertainty associated with developments in output and demand in the period ahead. The experience of such a low interest rate over time is limited. Enterprises and households may choose to move forward fixed investments and purchases of consumer durables to a further extent than we have assumed.

Prices and wages

Inflation decelerated markedly from summer 2003 and continued to fall in the beginning of 2004. Subsequently, consumer price inflation has picked up, albeit at a gentle pace. Consumer price inflation adjusted for tax changes and excluding energy products was 1.1% in May compared with the same one month one year earlier (see Chart 1.13). This was a slightly higher than projected in the previous *Report*. Excluding the estimated direct effects of the interest rate fall on house rents, inflation can be estimated at 1.3% in May. The rate of increase in prices, as measured by a 3-month moving average annualised, has been around 2% in recent months (see Chart 1.14).

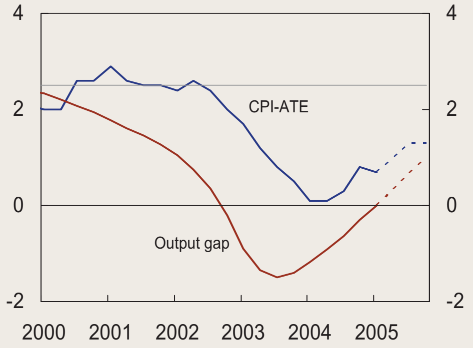
Prices for imported consumer goods have continued to fall in spite of the depreciation of the krone through 2003, which in isolation pushes up prices. The price fall may reflect high productivity growth in the production of some goods and large investments to increase production capacity, particularly in China. This has led to strong competition and a low rise in prices for internationally traded goods. The shift in imports, for example clothing imports, towards low-cost countries seems to be substantial again this year (see Chart 1.15), which is contributing to pushing down the rise in prices for imported consumer goods. Prices for imported consumer goods rose between April and May, but most of the rise reflects higher prices for telecommunications equipment. This is not expected to be the case in the months ahead.

Prices for domestically produced goods and services rose by 2% in the twelve months to May this year. Low interest rates are stimulating domestic demand. Higher capacity utilisation is providing room for higher margins in some industries. Service prices, which showed little rise last year, have increased again this year. In many industries where price competition is strong, including the airline industry, low profitability has led to an increase in prices. High oil prices have also resulted in price increases, for example in the transport industry.

On the basis of the pay increases agreed in this year's wage settlement, combined with the estimates for wage drift and wage carry-over, annual wage growth is projected at around 3½% this year. This is somewhat lower than projected in the previous *Report*. Wage growth may be lower than projected partly because there were few signs of improvement in labour market conditions ahead of this year's wage negotiations. Lower-than-projected consumer price inflation last year may also have contributed to restraining wage demands this year.

Inflation is projected to accelerate, albeit slowly. In the twelve months to May, consumer prices rose at a somewhat faster rate than projected in the previous *Report*. However, lower-than-expected wage growth this year implies a somewhat lower rise in prices in the period ahead than projected earlier. At the same time, higher inward labour migration is expected to result in a slightly smaller rise in capacity utilisation this year than projected in the March *Report*. Changes in the projections since the previous *Report* are discussed further in a box on page 46. Our projections for CPI-ATE inflation and the output gap over the next few quarters are shown in Chart 1.16.

Chart 1.16 The output gap[1)] and the CPI-ATE[2)]. Quarterly figures. Per cent. 00 Q1 – 05 Q4[3)]



[1)] Quarterly figures for the output gap have been derived from annual figures
[2)] CPI-ATE: CPI adjusted for tax changes and excluding energy products
[3)] Projections for 05 Q2 - Q4

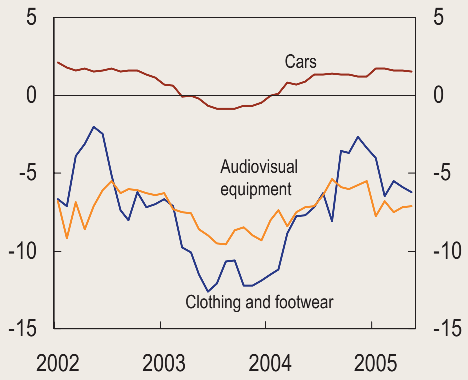
Sources: Statistics Norway and Norges Bank

Recent price developments

Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) appears to be on the rise. The year-on-year rate of increase moved up from 0.7% in March to 1.1% in May. In recent months, prices have risen at a somewhat faster pace than projected. The consumer price index (CPI) rose by 1.6% in the year to May 2005.

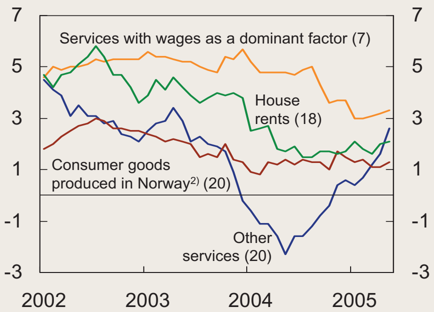
The rise in prices for domestically produced goods and services has edged up since summer 2004 when the annual rate of increase was about 1.0%. The annual rise in these prices moved up further from 1.7% in March to 2.0% in May. Prices for goods and services that are not exposed to foreign competition are now showing the fastest rise. The fall in prices for imported consumer goods decelerated markedly through autumn 2004, but the rate of decline accelerated again in January 2005 when the annual rate of decline was about 1.5%. Following a marked pick-up in these prices between April and May, the annual rate of decline in May was 1.1%. Changes in VAT rates from the beginning of the year make it more difficult than normal to interpret price developments.

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



Source: Statistics Norway

Chart 2 Prices for goods and services produced in Norway[1]. 12-month change. Per cent. Jan 02 – May 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

Slower price fall for imported consumer goods

Prices for imported consumer goods were 1.1% lower in May than one year earlier, primarily reflecting the price fall for clothing and footwear of 6.2% in the year to May (see Chart 1). Moreover, prices for audiovisual equipment are still falling. In May, these prices were 7.1% lower than in May one year earlier. The annual rate of increase in car prices, which account for a substantial share of prices for imported consumer goods, has been approximately unchanged this year. In May, car prices were 1.5% higher than one year earlier. The high rate of increase in prices for telecom equipment in May, particularly mobile phones, entails some uncertainty as to developments in prices for imported consumer goods ahead.

Higher domestic inflation

Prices for services, excluding house rents and with dominant cost factors other than wages ("other services"), have shown a pronounced rise in recent months. In May, these prices were 2.6% higher than one year earlier (see Chart 2), primarily reflecting higher airfares. The tendency of a somewhat higher rise in house rents has continued, at an annual rate of increase of 2.1% in May. The rise in prices for services with wages as the dominant cost factor slowed through 2004, but has accelerated somewhat in recent months. In May, the annual rate of increase was 3.3%, which is very low from a historical perspective and must be seen against the background of low wage growth. The rise in prices for domestically produced consumer goods has been stable over the past year, showing an annual rise of a little more than 1%.

The year-on-year rise in the producer price index for consumer goods supplied to the domestic market fell through 2004 and up to March this year. Over the past two months, the rate of increase has moved up, and in May the price index was 1.0% higher than one year earlier. Wholesale prices were 2.6% higher in May than one year earlier. The rate of increase in this price index has generally been decelerating over the past year, but with wide variations.

Indicators of underlying inflation

Indictors that give less weight to the most extreme price changes support the picture of rising inflation (see Chart 3). Measured by the year-on-year change in a trimmed mean[1], inflation increased from 0.9% in March to 1.4% in May. A weighted median[2] shows an increase in the year-on-year rate from 1.5% in March to 1.6% in May.

Overall, the indicators show an underlying annual rise in consumer prices in the range 1.1-1.6%. Inflation is lowest measured by the CPI-ATE.

Higher CPI inflation

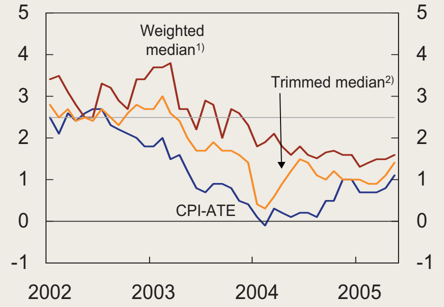
The consumer price index (CPI) includes tax changes and energy products. The year-on-year rate of increase in the CPI moved up from 1.0% in March to 1.6% in May. In recent years, the annual rise in the CPI has varied more than the CPI-ATE (see Chart 4), primarily reflecting substantial fluctuations in energy prices. There are wide variations in electricity prices, but prices were at about the same level as one year earlier in May. Swings in oil prices resulted in considerable variations in petrol prices over the past year. In May, petrol prices were 5.2% higher than one year earlier.

The CPI-ATE is adjusted for the direct effect of the increase in energy prices. Higher energy prices will nevertheless eventually have an impact on other goods and services through higher input price inflation. For example, high oil prices have pushed up transport prices, which are included in the CPI-ATE.

1 A trimmed mean for inflation is calculated by excluding the largest price movements when measuring inflation. The goods and services excluded vary from one month to the next.

2 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.

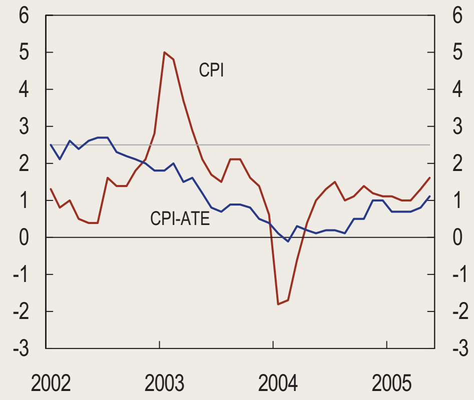
Chart 3 Indicators of underlying price inflation. 12-month change. Per cent. Jan 02 – May 05



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

Chart 4 CPI and CPI-ATE1). 12-month change. Per cent. Jan 02 – May 05



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

Source: Statistics Norway

2 Driving forces the next few years

International conditions

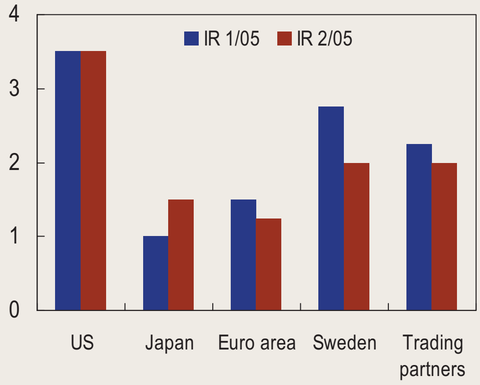
Global economic growth is expected to be somewhat lower this year than in 2004. In the US, growth was solid in 2004 and in the first quarter of 2005, but is projected to moderate somewhat. In the euro area, growth is expected to remain fairly weak the next years. In the UK and Sweden, there are prospects for lower growth. In Japan, activity picked up in the first quarter, but various indicators suggest somewhat weaker developments ahead. It appears that growth in China remains buoyant. Overall, it seems that growth among our trading partners this year will be somewhat weaker than previously expected (see Chart 2.1). Long-term interest rates have fallen further since the previous *Inflation Report*. This may be due to lower expectations concerning GDP growth and inflation, but extraordinary factors in bond markets probably play a role.

In the US, slower growth in domestic demand and a further weakening of the trade balance contributed to a slackening of growth. Strong growth in private consumption and housing investment has buoyed up demand in the US economy in recent years. A low saving ratio and high debt, combined with somewhat higher interest rates ahead, will entail slower growth in household demand. However, solid business sector profitability points to continued investment growth. On balance, this implies a relatively moderate decline in growth in the US.

In the euro area, growth in recent quarters has been lower than has been usual in previous upturns (see Chart 2.2). Domestic demand has been weak in Germany and Italy, for example. Confidence indicators suggest a weakening of the willingness both to consume and to invest. Consumers appear to be influenced by the uncertainty associated with pension and welfare reforms, and greater uncertainty concerning employment and wages. Corporate sector profitability is solid. In isolation, this may contribute to higher investment. However, high energy prices and a strengthening of the euro in recent years may restrain investment growth. Intensified competition in product markets, increased competition for investment from new EU member states and uncertainty concerning further developments following the referenda in France and the Netherlands may have the same effect. It appears that euro-area countries will need time to lay the foundation for solid growth. We therefore assume that growth in the euro area will be weak this year and only pick up slowly over the next few years.

Low activity growth in the euro area is contributing to weaker-than-expected developments in Sweden. Recently there has also been weak growth in private consumption and a decline in public sector activity. Inflation is low. Sveriges Riksbank cut its key rate by 0.5 percentage point in June. An expansionary economic policy and a slow improvement in the euro area are expected to contribute to a gradual pick-up in GDP growth in Sweden.

Chart 2.1 Projections for GDP growth in 2005 among Norway's trading partners in *Inflation Report* 1/05 and 2/05. Per cent



Source: Norges Bank

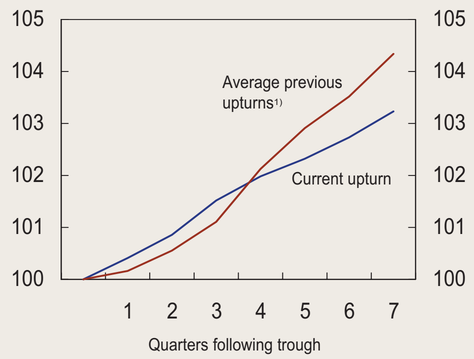
Tabell 2.1 Projections for GDP growth in other countries. Change from previous year. Per cent

	2005	2006	2007	2008
US	3½	2¾	2¾	2¾
Japan	1½	1¼	1¼	1¼
Germany	¾	1¼	1¼	1½
France	1¼	2	2	2
UK	2¼	2¼	2¼	2¼
Sweden	2	2½	2½	2½
Trading partners[1]	2	2¼	2¼	2½
Euro area[2]	1¼	1¾	2	2
China[3]	8.9	8.1	8.3	9.1

[1] Export weights
[2] Weights from Eurostat
[3] Projections fromConsensus Forecasts

Source: Consensus Forcasts and Norges Bank

Chart 2.2 GDP in the euro area – comparison with previous recoveries. Index, trough = 100. Trough in current upturn: 03 Q2



[1] Troughs: 75 Q1, 80 Q3 and 93 Q1

Sources: OECD and Norges Bank

Alternative paths for the international economy - implications for the Norwegian economy

There are many conceivable alternative paths where growth among our trading partners proves lower than we have projected. The implications for Norway vary depending on the causes. The oil price, for example, is an important factor. Two possible paths with lower growth among our trading partners are presented below with different consequences for Norway.

High oil prices curb international growth – upturn continues in Norway?

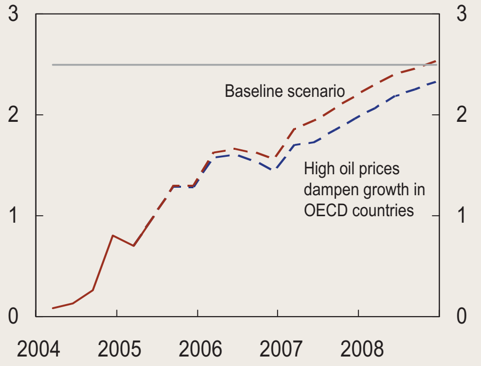
Rising or persistently high oil prices may lead to slower growth among our main trading partners. The slowdown may occur gradually, and will not necessarily be particularly pronounced.

For our traditional trading partners, higher oil prices will in isolation push up inflation, while a slowdown points to lower inflation. It is not obvious what the net effect will be, but it is not unreasonable to assume that external interest rates will then be lower than in the baseline scenario in Section 3. This may be because the overall effect on inflation is negative or that greater weight is given to (more) negative output developments than to an inflation rate that is a little too high.

Unless there are oil supply shortages, demand in some regions must be high for oil prices to rise and remain at a high level. This may be the case if growth in China and other Asian countries remains buoyant, at least for a period, in spite of somewhat slower growth rates in OECD countries. In such a situation, other commodity prices and shipping activity may hold up. Activity may then remain high in key sectors of the Norwegian economy, such as petroleum-related industries and the shipbuilding industry. At the same time, higher oil prices and lower external interest rates may, other things being equal, lead to an appreciation of the Norwegian krone, which will contribute to keeping domestic inflation low.

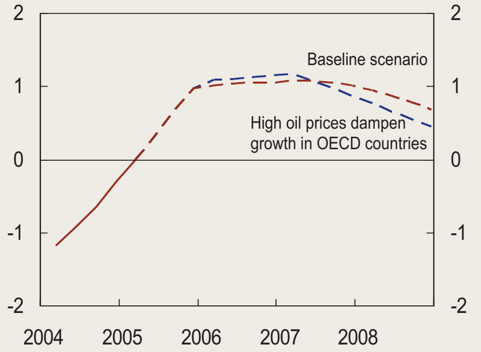
Over time, a strong krone and weak demand among major trading partner countries will probably have a dampening impact on activity in Norway. Chart 1 shows a possible path for inflation and the output gap in Norway under the assumption that high oil prices reduce growth in OECD countries to a further extent than in our baseline scenario.

Chart 1a Projections for the CPI-ATE in the baseline scenario and the alternative where high oil prices dampen growth in OECD countries and higher income counters this effect in Norway



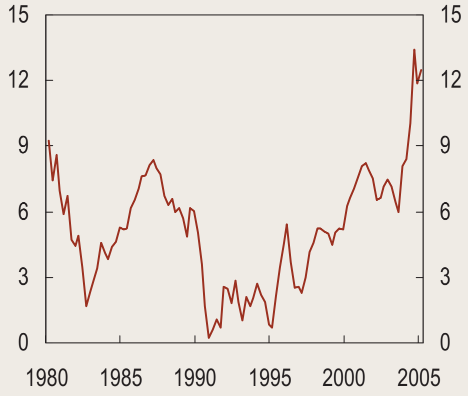
Source: Norges Bank

Chart 1b Estimates for the output gap in the baseline scenario and the alternative where high oil prices dampen growth in OECD countries and higher income counters this effect in Norway



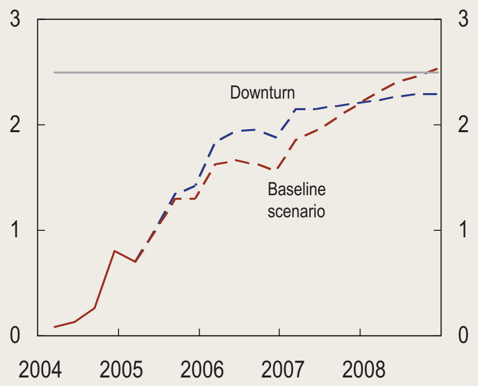
Source: Norges Bank

Chart 2 House prices in the US. Percentage change on same quarter previous year. 80 Q1 – 05 Q1



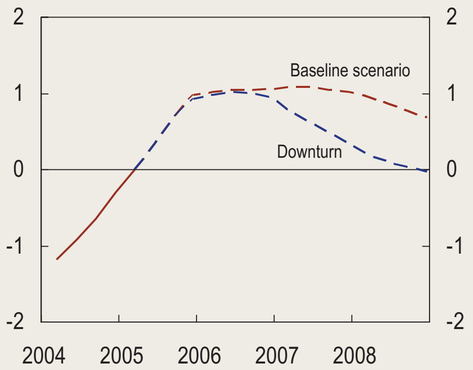
Source: The Office for Federal Housing Enterprise Oversight

Chart 3a Projections for the CPI-ATE in the baseline scenario and with possible effect for Norway of a global downturn



Source: Norges Bank

Chart 3b Estimates for the output gap in the baseline scenario and with the possible effect for Norway of a global downturn



Source: Norges Bank

Downturn in the US spills over to the world economy

High growth in the US in recent years has supported growth in other countries. We assume that growth will moderate somewhat in the US in the period ahead. A more pronounced downturn in the US cannot be ruled out, however. A downturn could be triggered by a marked rise in household saving, for example due to a flattening or a sharp fall in house prices. House prices have exhibited a pronounced rise recently (see Chart 2), which has probably contributed to strong growth in private consumption.

An abrupt and pronounced downturn in the US will fairly rapidly lead to falling growth rates in the entire OECD area. Growth is low in both Japan and the euro area and has primarily been driven by exports. A downturn in the US will also erode household and business confidence, and in turn curb growth in domestic demand. On the whole, this may lead to lower capacity utilisation and lower inflation, and prompt an interest rate reduction.

A pronounced slowdown in growth in the entire OECD area is also likely to lead to markedly slower growth in China and emerging economies in Asia as exports are an important driving force behind growth in the region. This could lead to an appreciable fall in prices for oil and other commodities and slackening activity in the shipping industry. In the same way that Norway has benefited strongly from the sharp international upswing in recent years, the Norwegian economy could be relatively hard-hit by such a downturn. For example, activity in the petroleum industry might show a sharp fall.

If the fall in oil prices leads to a depreciation of the Norwegian krone, inflation in Norway may accelerate. However, lower growth and a decline in the output gap will gradually curb inflation. Chart 3 shows the path for domestic inflation and the output gap in the baseline scenario compared with a possible path with a pronounced downturn in the world economy.

In the UK, growth in private consumption has eased. The sharp increase in house prices has come to a halt. Investment growth has been sluggish. However, wage growth has remained high, which will support consumption. On balance, there are prospects for relatively moderate GDP growth in the UK.

Growth has remained buoyant in China and other Asian countries, and developments in this region are assumed to remain fairly strong. Growth in private consumption in China still appears to be solid. Exports have been stimulated by the removal of quotas on textiles. The risk of Chinese exports being restrained by protectionist measures appears to have increased, however. International freight rates have fallen (see Chart 2.3). Growth in China's imports has slackened this year. This may indicate an easing of growth in activity, but may also indicate that a larger share of domestic demand is being satisfied by Chinese enterprises following several years of sharp increases in production capacity. There is some risk of overinvestment with a subsequent downturn in the economy.

In Japan, both private consumption and investment increased sharply in the first quarter, but current statistics indicate weaker second-quarter growth. Signs of a mild improvement in the labour market and continued solid growth in other countries in the region suggest that growth in Japan will be moderate in the period ahead.

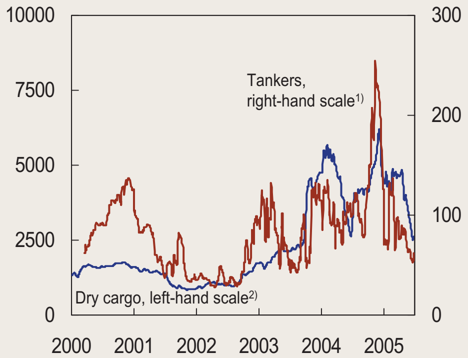
Growth among trading partners is expected to slow this year, and stabilise in the period ahead. However, there are a number of downside risks. Some of these are discussed in a box on page 18.

Although some factors may lead to weaker international growth than we have assumed, the risks to our projections are regarded as balanced. Strong business sector profitability in many countries may lead to stronger-than-projected investment growth. In addition, a high saving ratio in both the euro area and Japan may provide scope for stronger growth in household demand than we have assumed.

Oil prices

Oil prices have shown fairly wide variations since *Inflation Report* 1/05. The price of North Sea Brent Blend reached a new high of over USD 56 per barrel at end-March, but fell through the spring to around USD 45 in mid-May (see Chart 2.4). Record-high OPEC production in a period when demand for oil is seasonally low resulted in a build-up of oil stocks, particularly in the US. There were also signs of weaker developments globally, which contributed to expectations of slower growth in oil demand. A sharp reduction in non-commercial participants' net purchase positions in the oil derivatives market amplified the price fall.

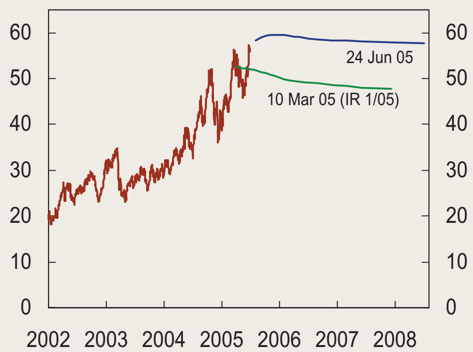
Chart 2.3 Freight rates. Indices based on rates in USD. Daily figures. 3 Jan 00 – 24 Jun 05



[1] Tankers: World Scale westwards from the Middle East
[2] Dry cargo: Baltic Dry

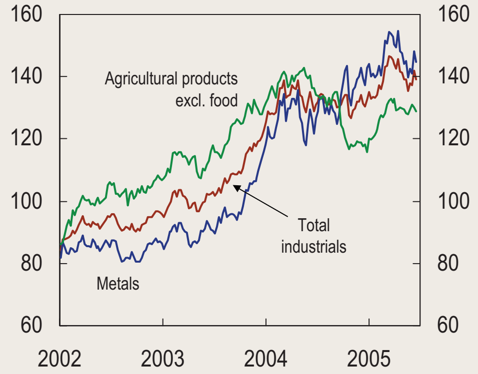
Source: EcoWin

Chart 2.4 Oil price (Brent Blend) in USD per barrel. Daily figures. 2 Jan 02 – 24 Jun 05. Futures prices from 10 Mar 05 and 24 Jun 05



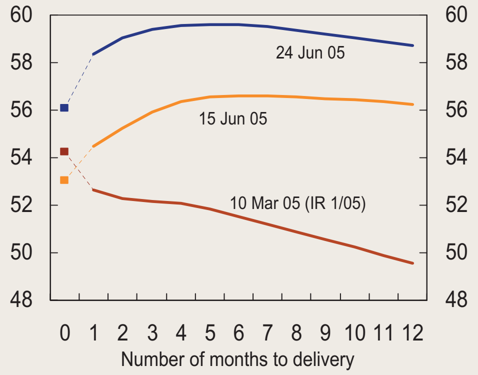
Sources: Telerate, International Petroleum Exchange and Norges Bank

Chart 2.5 International prices for industrial commodities in USD. Indices, 2000=100. Weekly figures. Week 1 2002 – Week 25 2005



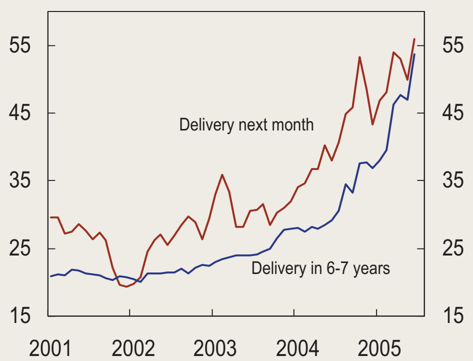
Source: EcoWin

Chart 2.6 Oil spot and futures prices. USD per barrel Brent Blend crude



Sources: EcoWin, International Petroleum Exchange and Norges Bank

Chart 2.7 Oil futures prices. USD per barrel of light crude. Monthly figures. Jan 01 – Jun 05[1)]



[1)] The figure for June is the average up to and including 24 June

Sources: EcoWin/NYMEX and Norges Bank

Since mid-May, oil prices have risen markedly. In the second half of June, the oil price reached a new peak of over USD 57 per barrel. The increase in oil stocks came to a halt. An important factor behind the price rise was expectations of a tighter oil market ahead when seasonal demand picks up again, particularly towards the end of the year. OPEC's decision at the meeting on 15 June to increase its production quotas only curbed the rise in oil prices to a limited extent. The cartel has limited idle production capacity, and vulnerability to a decline in oil production again came into focus. Prices for metals and other industrial commodities also rose during this period (see Chart 2.5). This may indicate that market participants became more optimistic regarding the global economic outlook, at least with respect to the countries and regions that have contributed most to higher demand for commodities.

Oil futures prices 1-12 months ahead are still higher than the spot price, despite the rise in the spot price since mid-June (see Chart 2.6). This is a highly unusual situation when oil prices are that high. On the one hand, this situation – which was more pronounced in the early spring - reflects the relatively ample supply of oil. This provided a further incentive to build up oil stocks. Increased oil stocks contributed to a slower rise in the spot price than in futures prices during this period. On the other hand, higher futures prices reflected expectations that oil prices would remain high, or perhaps rise. Continued growth in oil demand, combined with little idle OPEC production capacity, underpinned these expectations.

The longest oil futures prices have risen markedly, and more than the spot price, so far this year (see Chart 2.7). Since mid-June, futures contracts for US benchmark oil, West Texas Intermediate, for delivery in December 2011 have been close to USD 55 per barrel. High prices for long-term futures contracts reflect expectations that the underlying structural conditions may mean that the oil market will remain tight for a longer period. The potential for production growth in non-OPEC countries appears limited in the somewhat longer term. Although the OPEC countries in the Middle East have very large oil reserves and would have no difficulty increasing production for several decades ahead, they would first have to make substantial investments.

In the short to medium term, oil prices may fall more than futures prices would imply. This is particularly likely to occur if global economic developments are weaker than projected, for example in the event of an abrupt and pronounced correction of global imbalances. In the long term, we should not underestimate the possibility that technological advances – precisely because of high oil prices – will contribute to increased energy efficiency and hence lower demand for oil. This shift in oil demand was observed in the OECD area in the wake of the oil price shocks of the 1970s and 1980s.

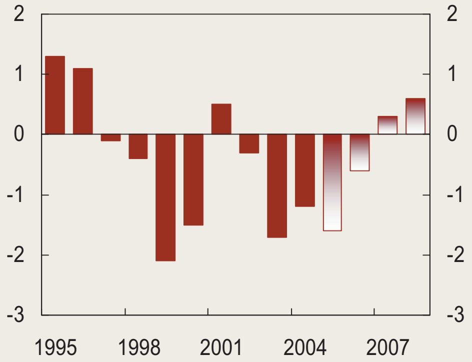
External price impulses

Prices for imported consumer goods measured in foreign currency have fallen in recent years. This must be viewed in conjunction with the trade shift towards low-cost countries and high productivity growth in the production of audiovisual equipment. The trend of falling prices for clothing, footwear and audiovisual equipment appears to be continuing. On the other hand, high oil prices may gradually contribute to a somewhat higher rise in prices for other goods such as building materials and cars.

On balance, we assume that economic growth among some of our main trading partners will not be sufficiently high to employ all their idle resources in the next few years. This applies to the euro area in particular. Moderate growth and high unemployment in a number of countries will probably result in low wage growth. Wage growth in the euro area will probably not exceed 2¾% in the next few years. Somewhat stronger wage growth, for example in Sweden and the UK, may result in overall wage growth among trading partners of around 3%. Developments in labour costs imply that consumer price inflation among our trading partners will remain relatively low for the next few years.

We project that prices for imported consumer goods, measured in foreign currency, will continue to fall in the next few years (see Chart 2.8). The shift in trade towards low-cost countries is still strong. If Chinese goods encounter restrictions in large markets, the prices Norwegian importers pay for Chinese goods may be pushed down. Towards the end of the projection period we nevertheless assume that the effects of the structural changes that have restrained external price impulses to the Norwegian economy will gradually dissipate.

Chart 2.8 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual figures. Per cent. 1995 – 2008[1)]



[1)] Projections for 2005 -2008

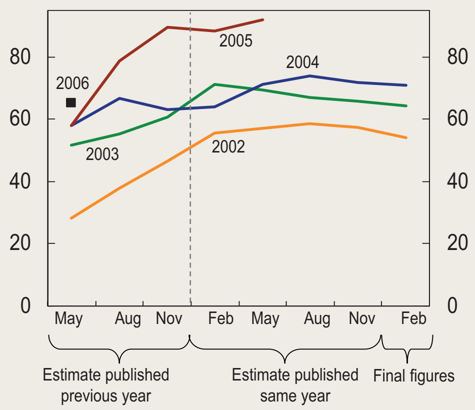
Source: Norges Bank

Domestic conditions

Petroleum investment

Petroleum investment will increase substantially in 2005 as a result of large, ongoing development projects both offshore and onshore. Our regional network currently reports a very high level of activity among suppliers to the petroleum industry. However, investment may decline as large development projects like Ormen Lange, Kristin and Snøhvit near completion. It is uncertain how sharp the fall will be, but today's high level of exploration activity and a long period of high oil prices imply that petroleum investment will remain high in the years ahead. Statoil has recently increased the oil price level underlying its investment decisions to USD 25-30 per barrel. So far, the investment intentions survey for petroleum activities indicates that investment will remain high in 2006 (see Chart 2.9). However, these projections are highly uncertain.

Chart 2.9 Investment intentions survey for oil and gas activity incl. pipeline transport. Estimated and actual investments. In billions of NOK



Source: Statistics Norway

It may appear that both oil companies and some supplier industries are increasingly concentrating their activities in areas outside the Norwegian continental shelf. For example, Norwegian oil companies are exhibiting a strong interest in the large gas development projects in northern Russia.

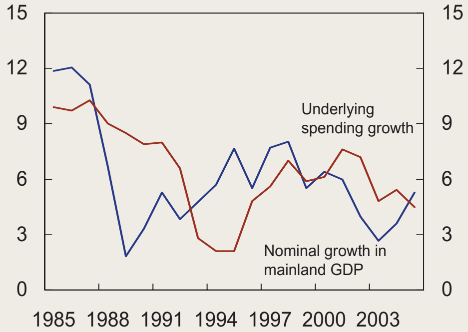
Such a development may mean that the activity level in the slightly longer term may become somewhat less dependent on investment developments in the North Sea, which is regarded as a mature area with limited growth potential with respect to future oil production.

Fiscal policy

The fiscal rule, which was introduced in March 2001, implies that the structural, non-oil deficit should be equivalent over time to 4% of the capital in the Government Petroleum Fund. Partly owing to an unexpected shortfall in tax revenues, petroleum revenue spending has been higher than this limit in recent years.

The structural, non-oil deficit is projected to increase by NOK 4.9bn from 2004 to 2005, or by 0.3 percentage point, measured as a share of trend mainland GDP. Measured by this indicator, the budget will stimulate activity also in 2005, but a little less than estimated in the National Budget for 2005. Underlying growth in spending over the government budget is estimated at 4.5% in 2005, which is somewhat lower than estimated nominal growth in mainland GDP (see Chart 2.10).

Chart 2.10 Underlying spending growth in the central government budget and nominal growth in mainland GDP. Growth on previous year. Per cent. 1985 – 2005[1)]



1) Projections for 2005 from Ministry of Finance

Sources: Ministry of Finance (RNB 2005) and Statistics Norway

For 2006 and 2007, it is assumed that the real tax level will remain unchanged and that nominal growth in central government expenditure will be approximately the same as nominal growth in central government revenues. This implies an unchanged structural, non-oil deficit for these two years. According to the fiscal rule, and given the present projections for developments in the Petroleum Fund, the structural, non-oil deficit may increase by NOK 3.2bn (2005 prices) from 2007 to 2008, from 4.7% to 4.8% of trend mainland GDP.

The proposals in the Revised National Budget imply an estimated rise in total local government revenues of 4.6% from 2004 to 2005, following growth of as much as 6.8% in 2004. The economic programme for 2006, as outlined in the Local Government Proposition, implies growth of around 4½% in local government revenues. During the Storting deliberations, a proposal was made entailing higher allocations, but the Government's proposal and alternative proposals did not win majority support.

Increased supply of foreign labour in Norway

Ten new countries joined the EU and the EEA on 1 May 2004. Labour from the new member states now has easier access to the Norwegian labour market. The use of foreign labour in Norway appears to have increased. The level is relatively moderate, but appears nonetheless to have reduced bottleneck tendencies in some industries where demand has increased sharply.

Many foreign workers who come to Norway find employment in Norwegian enterprises. Figures from the Norwegian

Directorate of Immigration show an increase in the number of work permits issued to citizens of the new EU countries. Many of these permits have been issued for seasonal agricultural work. However, the figures also show an increase in the number of permits issued outside harvest periods, and probably involve employment in the construction industry. This represents an increase in the supply of labour in Norway. Employment will thus be able to increase to a further extent than would otherwise have been the case without the emergence of labour shortages. In isolation, an increased supply of labour from new EU countries may lead to a higher-than-normal increase in potential output for a period.

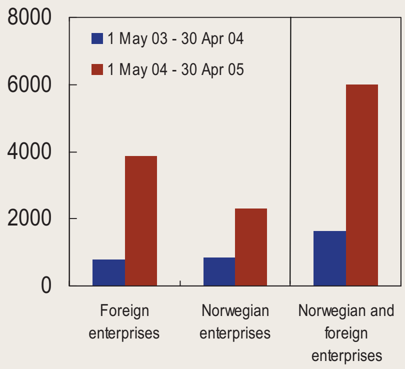
A large share of foreign workers also work for a shorter period in Norway without being employed in a Norwegian enterprise. Examples are foreign contractors and self-employed in the construction industry who perform various assignments in Norway. Figures from the Central Office – Foreign Tax Affairs show a sharp increase in the number of workers from the new EU member states in foreign enterprises from 1 May last year (see Chart 2.11). An increase in the use of these short-term contracts will be reflected in an increase in Norway's service imports, and contribute to dampening GDP growth. This will also restrain capacity utilisation in Norway.

Protectionist measures may dampen the impact of an increased supply of labour from the new EU member states on the Norwegian economy. The transitional rules from 1 May last year stipulate that foreign workers shall be provided with Norwegian pay and working conditions. As a result of the general application of wage agreements, foreign suppliers of services are losing much of their competitive edge in relation to Norwegian enterprises. The Government recently issued a circular to government agencies stipulating that pay and working conditions for workers on government service and construction contracts shall not be less favourable than normal Norwegian conditions. At the same time, the resources and appropriations for the supervision and control of foreign workers' pay and working conditions have been increased.

On balance, we expect increased use of labour from the new EU member states to contribute to reducing pressures on economic resources in Norway in 2005. A higher share of growth in the construction industry may be covered by increased imports of services. In some segments of manufacturing there are also signs of increased use of foreign services. We have assumed that increased use of foreign labour in Norway through higher imported services will, in isolation, contribute to pushing down growth in mainland GDP by ¼ percentage point in 2005 compared with earlier assumptions.

We have not assumed that increased cross-border mobility of labour and capital will give rise to substantial changes in wage formation in Norway. However, this assumption is uncertain. Section 3 discusses the possible effects of the interest rate, inflation and output of continued low wage growth, despite the decline in unemployment.

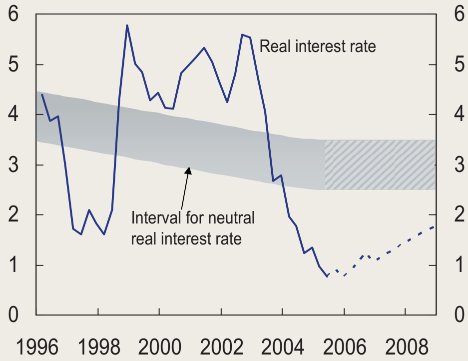
Chart 2.11 Number of employees from new EU countries on assignment in Norway. In Norwegian and foreign enterprises



Source: Central Office - Foreign Tax Affairs

3 | Monetary policy assessments and strategy

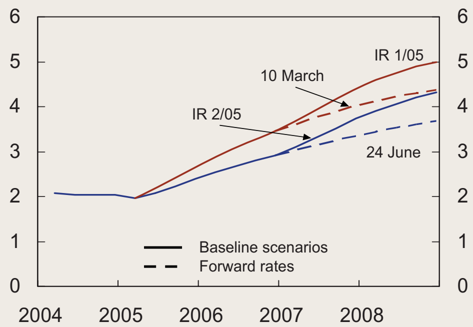
Chart 3.1 3-month real interest rate[1)] and the neutral real interest rate in Norway. Quarterly figures. 96 Q1 – 08 Q4



[1)] 3-month money market rate deflated by inflation measured by the CPI-ATE

Source: Norges Bank

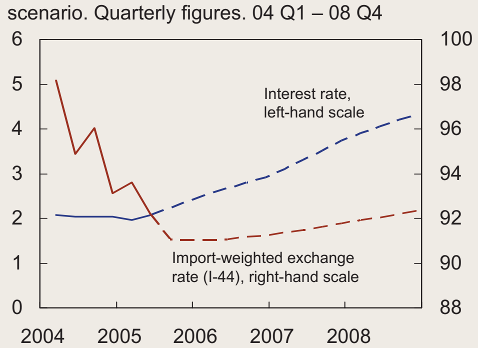
Chart 3.2 Interest rate[1)] in the baseline scenario (IR 1/05 and IR 2/05[2)]) and forward rates in Norway. Quarterly figures. 04 Q1 – 08 Q4



[1)] The money market rate is normally about ¼ percentage point higher than the sight deposit rate
[2)] 3-month money market rate up to and including 05 Q2. The figures for 2005 Q2 are based on the average through 24 June

Source: Norges Bank

Chart 3.3a 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. Reflects the forward rate on 24 June
[2)] The figures for 2005 Q2 are based on the average through 24 June

Source: Norges Bank

Monetary policy easing through 2003 and into 2004 has resulted in low real interest rates. Short-term real interest rates are now probably considerably lower than the level that implies balance in the economy in the long term – the neutral real interest rate (see Chart 3.1). A low real interest rate, and expectations of a continued low real interest rate, will contribute to stimulating activity even after the effects of the interest rate fall unwind. Calculations may, on an uncertain basis, indicate that the neutral real interest rate for Norway is between 2½ and 3½%[1]. It has probably fallen somewhat in recent years.

Weaker prospects for growth abroad and a downward revision of projected wage growth in Norway point to a somewhat lower interest rate ahead than at the time of the March *Inflation Report*. It appears that the level of capacity utilisation will be somewhat lower than expected this year (for a more detailed discussion, see Section 1). Growth in employment, for example, has recently been lower than projected. Different sources of labour market statistics are conveying mixed signals.

Forward interest rates normally provide an indication of market expectations concerning future interest rate developments. Forward interest rates in Norway are somewhat lower than at the time of the March *Report*. This must be seen against the background of expectations of lower growth and inflation internationally. Market participants now expect interest rates among our trading partners to rise somewhat later than was the case in March. Norwegian forward rates, however, still point to a gradually higher interest rate through the projection period and indicate expectations of an increase in the key rate to approximately 2¼% towards the end of the year and 2¾% at end-2006.

Estimated forward rates still appear to be somewhat low towards the end of the projection period in relation to our assessments of the economic outlook. We have assumed that forward rates to some extent underestimate actual interest rate expectations slightly further ahead. The projections in this report are based on forward interest rates (as observed on 24 June), but with adjustments from 2007 onwards (see Chart 3.2).[2] A similar adjustment was made in the March *Report*. The adjustment means that money market rates in Norway will gradually increase to about 4¼% at the end of 2008 followed by a further rise to an assumed normal level of 5½% in the long term. Because of the fall in forward rates, the interest rate assumption is now lower than in the March *Report*, see Chart 3.2.

On the basis of this interest rate path and other driving forces, we have drawn up a possible scenario for the Norwegian

[1] See, for example, Bernhardsen, T. (2005): "The neutral interest rate", Staff Memo No. 1, Norges Bank

[2] The forward interest rate path has been adjusted in the same way for trading partners.

Criteria for an appropriate future interest rate path

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.

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 in turn 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.

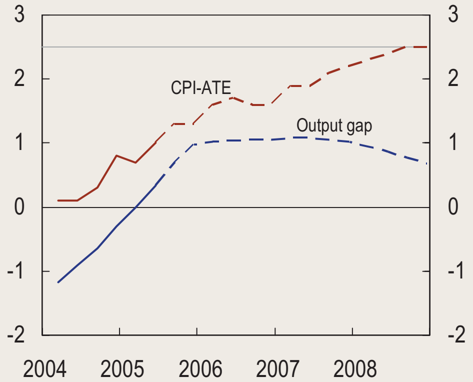
[1] The inflation gap is the difference between actual inflation and the inflation target of 2.5%. The output gap measures the percentage difference between actual and trend mainland GDP.

economy (see Charts 3.3a and 3.3b). 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 somewhat lower than in the March *Inflation Report*, thereby countering the effects on inflation of a somewhat stronger krone and lower wage growth than projected in the March *Report*. Even if the interest rate is gradually increased through the projection period, the level of short-term nominal and real interest rates will remain below what we regard as neutral levels. With a path for the interest rate and the krone exchange rate as described above, inflation may increase gradually from a good 1% today to close to 2% in the first half of 2007 (baseline scenario). Under these assumptions, there are prospects that inflation will be close to 2½% at the three-year horizon.

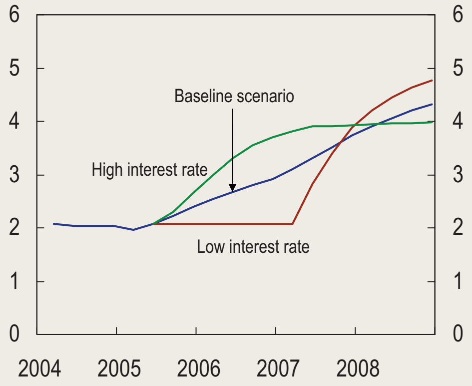
Developments in inflation must be viewed in the context of monetary policy that is expected to continue to be expansionary. Developments in line with projections imply at the

Chart 3.3b Projections for the CPI-ATE and output gap in the baseline scenario. Quarterly figures. Per cent. 04 Q1 – 08 Q4



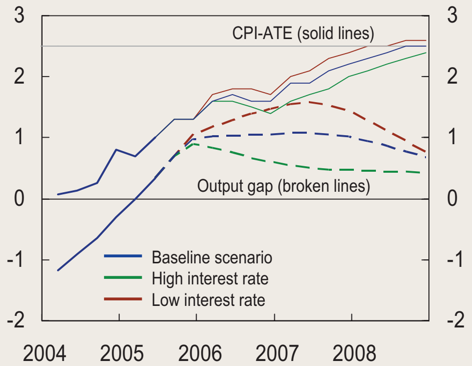
Sources: Statistics Norway and Norges Bank

Chart 3.4a 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



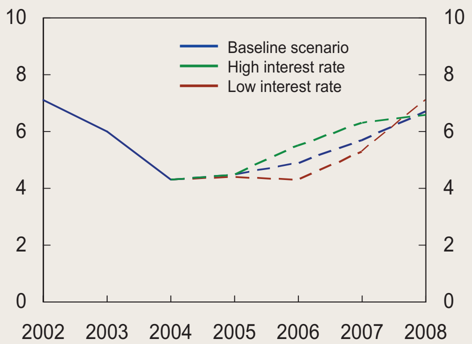
Source: Norges Bank

Chart 3.4b Projections for the CPI-ATE and 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 3.4c Projections for households' interest burden[1)]. Annual figures. Per cent. 2002 – 2008[2)]



[1)] Interest expenses as a percentage of disposable income less the return on insurance claims plus interest expenses Adjusted for extraordinary dividends 2002 - 2004
[2)] Projections for 2005 - 2008

Source: Norges Bank

same time that the output gap will increase to about 1% towards the end of this year. A gradual increase in the interest rate towards a more normal level will probably result in lower growth in private demand, and capacity utilisation in the economy may gradually be brought down and stabilise. This will also curb the rise in inflation, preventing it from overshooting the target.

Alternative interest rate path

If greater weight is given to bringing inflation back to the target quickly, the interest rate may be left unchanged for a longer period than in the baseline scenario. Charts 3.4a, 3.4b and 3.4c show projections based on an unchanged interest rate up to the end of the first quarter of 2007. By the same token, if the interest rate is kept low for a longer period, it must increase all the more quickly in 2007 and 2008. In this case, interest rate developments may contribute to a somewhat weaker krone exchange rate than in the baseline scenario in the short term and stronger growth in output and inflation. Under these assumptions, inflation may reach the target at the beginning of 2008.

Such interest rate developments may also contribute to a situation where capacity utilisation becomes too high further ahead. Low interest rates and expectations among economic agents of continued low interest rates imply that the price of moving consumption forward is low. Thus, a low interest rate level might in itself result in considerable growth in demand for goods and services.

If the interest rate is kept low for a longer period, with a further downward adjustment in interest rate expectations, the result may be a continued sharp increase in consumption, house prices and household debt. There is an increasing risk of a marked correction when interest rates eventually have to be raised. This may lead to repercussions through a fall in house prices and consolidation in the household sector, with a higher savings ratio and lower consumer demand. The household interest burden may increase markedly (see Chart 3.4c). There is therefore a risk that fluctuations in output become wider than indicated in Chart 3.4b.

Charts 3.4a and 3.4b also show projections based on an interest rate approximately ¾ percentage point higher than in the baseline scenario at end-2006. The interest rate rises less thereafter and eventually falls below the level in the baseline scenario. This interest rate path may be appropriate if greater emphasis is given to stabilising output and curbing the risk of capacity utilisation becoming too high. The output gap may be kept below 1%. However, inflation does not quite reach the target in the course of the period. This implies a greater risk that inflation expectations will fall below target. There is also a risk that such a marked interest rate increase in Norway will result in a stronger krone than implied by the assumptions underlying our calculations. A stronger krone would curb inflation and output further.

The various paths that are outlined here illustrate that the objective of bringing inflation up to target in the short term may come into conflict with the objective of avoiding growth in the Norwegian economy that is too strong, with ensuing instability. Overall, it may appear that the baseline scenario, where the interest rate increases in small and not too frequent steps, provides a reasonable balance between the objective of bringing inflation up to target and the objective of stabilising developments in output and employment. Such a gradual increase in the interest rate will also provide ample time for ongoing assessments of the effects of interest rate changes and other new information about economic developments.

Uncertainty surrounding the projections

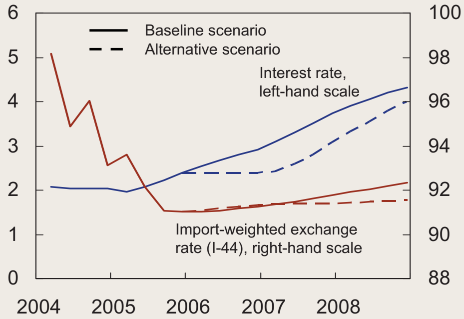
There is considerable uncertainty associated with the projections. Two alternative scenarios for the Norwegian economy, based on alternative paths for key, but uncertain assumptions in the analysis, are shown below. Both alternatives are based on a stylised assumption that the central bank will adhere to the interest rate path in the baseline scenario in the initial months and not respond to disturbances until the beginning of 2006. Nor will market participants be aware that the economy is following a different path until the first quarter of next year. This may be due to the difficulty of distinguishing erratic effects on current statistics from real disturbances and because it may take time to become aware that the economy is following a different path.

<u>Alternative scenario (1): Stronger trade shifts and lower wage growth</u>

In recent years, the rise in prices for imported consumer goods has been pushed down by rising imports from low-cost countries in Asia and central and eastern Europe. Even though developments are largely due to the removal of tariff and quota regulations in textile trade, it is difficult to estimate exactly when the effects will be exhausted. Today, although most of these regulations on manufacturing goods have been removed, shifts in the import pattern still occur. In the baseline scenario, it has been assumed that the price-curbing effects will moderate through the projection period. Should trade shifts persist, the rise in prices for imported goods will not pick up as quickly as expected.

Additional inward labour migration may also influence the prospects for wage growth. Competition in the labour market has increased. This may curb wage growth in Norway. In addition, an increase in the labour supply and intensified competition may contribute to higher potential output.[3] The Norwegian economy will then be able to absorb higher growth in demand and output without generating inflationary pressures. Various labour market measures

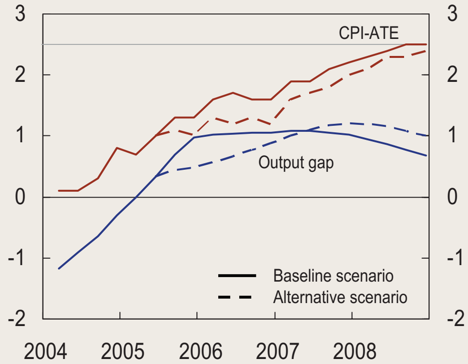
Chart 3.5a 3-month money market rate and import-weighted exchange rate (I-44)[1) 2)] in scenario with stronger trade shifts and lower wage growth. Quarterly figures. 04 Q1 – 08 Q4



1) A rising curve denotes a weaker krone exchange rate
2) The figures for 2005 Q2 are based on the average through 24 June

Source: Norges Bank

Chart 3.5b Projections for the CPI-ATE and output gap in scenario with stronger trade shifts and lower wage growth. Quarterly figures. Per cent. 04 Q1 – 08 Q4



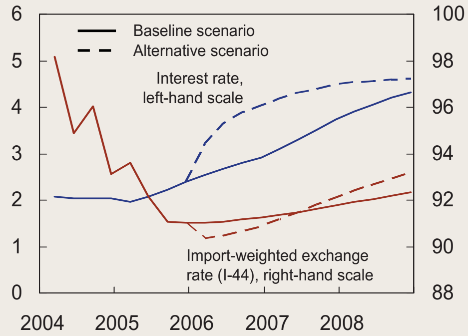
Sources: Statistics Norway and Norges Bank

with protectionist effects may, however, curb inward labour migration.

Charts 3.5a and 3.5b provide an illustration of how the interest rate may be set if it becomes clear through the latter half of the year that the impact of these globalisation effects is greater than assumed in the baseline scenario.[4] It is assumed that monetary policy will be adjusted from the first quarter of next year. Lower inflation and pressures in the economy imply in isolation less frequent interest rate increases than in the baseline scenario. In this alternative scenario, the interest rate is kept unchanged in 2006. The output gap will gradually exceed the level in the baseline scenario as production picks up as a result of the lower interest rate.

The rise in prices for imported consumer goods may also be pushed down for other reasons, for example lower external growth, which will dampen Norwegian exports (see Section 2).

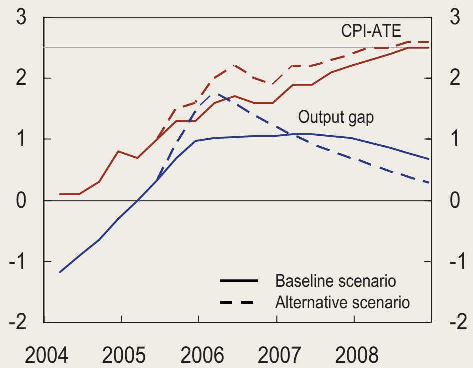
Chart 3.6a 3-month money-market rate and import-weighted exchange rate (I-44)[1) 2)] in scenario with higher inflation. Quarterly figures. 04 Q1 – 08 Q4



1) A rising curve denotes a weaker krone exchange rate
2) The figures for 2005 Q2 are based on the average through 24 June

Source: Norges Bank

Chart 3.6b Projections for the CPI-ATE and output gap in scenario with higher inflation. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

Alternative scenario (2): Inflation picks up more rapidly than expected

There are also reasons why inflation may be higher than expected. The real interest rate is markedly lower than what we regard as a neutral real interest rate. The monetary stance is therefore expansionary. So far, the effects do not appear to be stronger than expected, but we have little experience of such low interest rates. It is uncertain how quickly prices and wages will react when growth in output and employment picks up. It is also uncertain how long economic agents expect the low interest rate to persist. There is a risk that an interest rate that is kept low for a longer period may in itself result in expectations of a persistently low interest rate. This kind of shift in expectations may entail a higher-than-projected rise in output, demand, wages and consumer prices.

A possible monetary policy response to this alternative scenario with pent-up pressures in the Norwegian economy and the total result for inflation and the output gap[5] are illustrated in Charts 3.6a and 3.6b. Again, it is assumed that it will take time before the reasons underlying developments become apparent and policy is adjusted. In the beginning of the projection period, it is assumed that output growth will be higher and cost and price inflation stronger than in the baseline scenario. Due to pent-up pressures, it

[3] This is illustrated here by a reduction in the output gap in the third and fourth quarters of 2005. This is not inconsistent with a rise in observed GDP growth that may be higher than expected, which in practice may easily give the impression that pressures have increased.

[4] It is assumed that intensified labour market competition will contribute to lower wage growth and lower domestic inflation. Stronger trade shifts are assumed to contribute to lower imported inflation. Overall, this results in price inflation that will be ½ percentage point lower than in the baseline scenario in 2006.

[5] It is assumed that the output gap will increase by ¼ percentage point compared with the baseline scenario in each of the next three quarters. It is also assumed that price inflation will increase more rapidly and be ½ percentage point higher than in the baseline scenario in 2006.

is also possible that prices are affected later, but that the impact is then all the stronger. Higher inflation may be due to increased margins and stronger wage growth. In isolation, this points to a more rapid increase in the interest rate than in the baseline scenario to avoid a situation where the wide output gap persists and inflation eventually overshoots the target.

Current statistics and news about the Norwegian economy may reveal whether there are any developments in the economy that are in line with the scenarios outlined above. Information will not necessarily be unequivocal, and information about different aspects of economic developments is published at different times and at different intervals.

Interest rate setting must be assessed in the light of the reasons for, and the expected duration of disturbances. The later monetary policy reacts to such disturbances, the stronger the response will have to be, and the wider the fluctuations will be in output, employment and inflation.

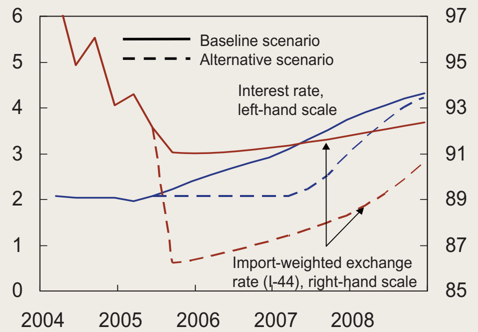
Even though the scenarios above illustrate the uncertainty surrounding the projections, there are also other conditions that may unexpectedly affect demand, output and consumer prices.

Developments in the krone exchange rate are particularly uncertain. With weaker economic developments in many other countries, there may be a risk that the Norwegian krone will appreciate. The calculations in Charts 3.7a and 3.7b are based on the assumption that the Norwegian krone will be regarded as attractive throughout the projection period. In this scenario, the krone appreciates immediately by over 5 per cent in relation to the baseline scenario and remains stronger over the next two-three years. Inflation takes longer to reach the target, and capacity utilisation is reduced. In this case, the interest rate should be kept low for a longer period.

There is also uncertainty with regard to the level of the real interest rate that will result in balance in the economy in the long term – the neutral real interest rate. Market participants in fixed income markets now seem to expect a real interest rate in the years ahead at around the lower end of the estimated interval for the neutral real interest rate. Such a lower neutral real interest rate will imply that the monetary policy outlined will be less expansionary than assumed in the analysis and will result in lower inflation and overall output growth.

Strong developments in the Norwegian economy since 2003 demonstrate that monetary policy has had an expansionary effect. This may to some extent confirm that the current real interest rate is considerably lower than the neutral real interest rate. Credit growth indicates that Norwegian borrowers perceive the real interest rate as very low. Current information from fixed income markets and developments in output

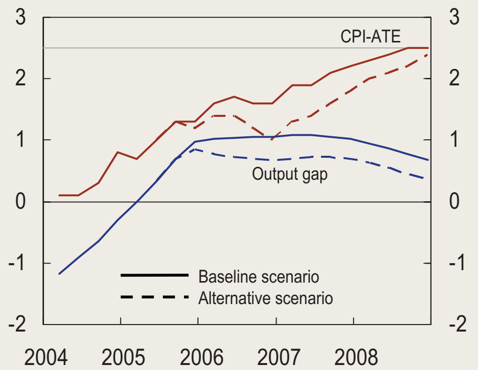
Chart 3.7a 3-month money market rate and import-weighted exchange rate (I-44)[1) 2)] in scenario with stronger krone exchange rate. Quarterly figures. 04 Q1 – 08 Q4



[1)] A rising curve denotes a weaker krone exchange rate.
[2)] The figures for 2005 Q2 are based on the average through 24 June

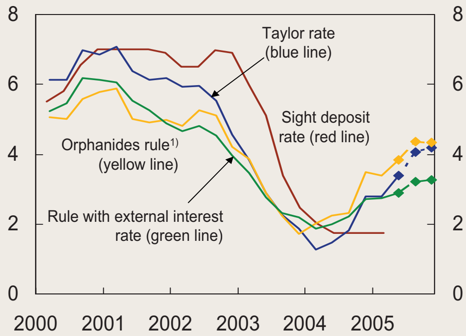
Source: Norges Bank

Chart 3.7b Projections for the CPI-ATE and output gap in scenario with a stronger krone exchange rate. Quarterly figures. Per cent. 04 Q1 – 08 Q4



Sources: Statistics Norway and Norges Bank

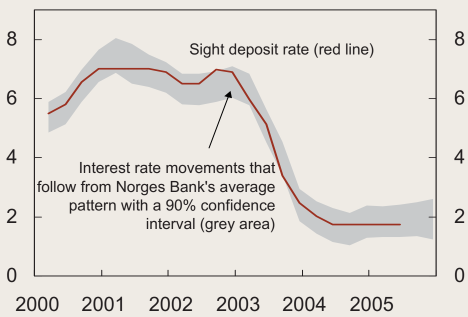
Chart 3.8 Sight deposit rate, Taylor rule and Orphanides rule. Inflation as in the baseline scenario. Quarterly figures. 00 Q1 – 05 Q4



[1] The calculations are based on Norges Bank's projection for growth in mainland GDP one to two quarters earlier

Source: Norges Bank

Chart 3.9 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. 00 Q1 – 05 Q4



[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. See *Inflation Report* 3/04 for further discussion

Source: Norges Bank

and inflation ahead may provide more information about the real interest rate level that over time is consistent with balanced economic developments.

Analyses indicate that a strategy where the interest rate is set approximately in line with the baseline scenario over the next four months may provide the basis for acceptable developments in inflation and output even with alternative, although not unrealistic assumptions.

Interest rate setting in the light of simple monetary policy rules

Interest rate setting may also be seen in the light of simple monetary policy rules for interest rate setting. The rules must be interpreted with caution and provide only approximate indications of the appropriate interest rate level. 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 over time and at the same time contributing to stabilising output.

Both the Taylor rule[6] and the Orphanides rule[7], as applied here, indicate that the interest rate is currently too low and that it should be increased up to end-2005 (see Chart 3.8). This should be seen in the light of high growth in the Norwegian economy and a projected increase in inflation ahead. Below-target inflation in the short term implies that monetary policy should, according to this guideline, also be expansionary at the end of the year. The rules have, however, limitations as a reference for a small, open economy. An interest rate increase in keeping with the rules may lead to a marked appreciation of the krone and imply a considerably longer period before the inflation target is reached. The rule involving external interest rates[8] results in a somewhat lower interest rate than the other rules. This is because the external interest rate level is low.

Norges Bank has also calculated a reaction function based on the Bank's previous response pattern (see box in the November 2004 *Inflation Report*). This rule implies a minor monetary policy tightening, with the key rate at about 2% at the end of the year (see Chart 3.9). The interest rate now indicated by this reaction function is lower than the estimate in the March *Inflation Report*, and this is primarily due to weaker wage growth in 2005.

[6] The Taylor rule: Interest rate = inflation target + equilibrium real interest rate + 1.5 x (inflation -inflation target) + 0.5 x output gap. See Taylor, J.B. (1993): "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pp. 195–214. We have used the CPI-ATE as a measure of inflation.

[7] Athanasios Orphanides proposes replacing the output gap with the difference between actual growth and trend growth in the economy (growth gap). The reason for this is partly because the Taylor rule is vulnerable to error in the estimation of the output 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.

[8] Rule involving external interest rates = 0.5 x Taylor rate + 0.5 x money market rate among Norway's trading partners.

Assessments

The Norwegian economy is growing at a solid pace, and capacity utilisation is rising. Output has developed approximately as expected in the March *Inflation Report*. At the same time, although registered unemployment has fallen further, labour market figures convey mixed signals. Growth in demand for goods and services is high and broadly based. Credit growth is rising. Developments among our trading partners seem to be somewhat weaker than previously expected.

Inflation is low. Even if growth in the Norwegian economy is solid and capacity utilisation is rising, there appears to be little risk that inflation will rapidly move up to a level that is too high. The most recent inflation figures confirm that the rise in prices for domestically produced goods and services is moving up. At the same time, wage growth this year appears to be somewhat lower than previously projected.

Monetary policy cannot fine-tune economic developments, but it can seek to prevent the largest effects when the economy is exposed to disturbances.

The objective of bringing inflation back to target and anchoring inflation expectations implies a continued expansionary monetary policy. External interest rates have an impact on Norwegian monetary policy. Market participants' expectations concerning external interest rate developments have fallen since the March *Inflation Report*. There may therefore be a risk of upward pressure on the krone in the months ahead.

Given the low interest rate level, the output gap and inflation are assumed to rise further. The objective of stabilising developments in output and employment implies, in isolation, a higher interest rate. High capacity utilisation may generate a sharper rise in property prices and household borrowing. This could be a source of instability in demand and output in the somewhat longer run.

The projections and assessments in this report imply that a path where the key rate gradually – in small, not too frequent steps – is brought up towards a more normal level provides a reasonable balance between the objective of stabilising inflation at the target and the objective of stabilising output and employment. The assessments are based on the assumption that the economy develops broadly in line with projections. A considerable deviation in developments from the projections may imply a different interest rate path in the strategy period.

Conclusions – monetary policy strategy

- The Executive Board's assessment is that the interest rate may gradually –in small, not too frequent steps – be brought back towards a more normal level. The objective of bringing inflation back to target and anchoring inflation expectations nevertheless implies a continued expansionary monetary policy.

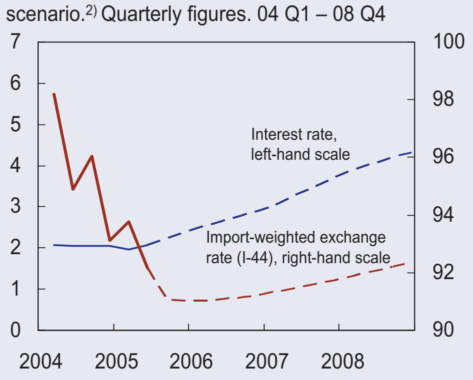
- The Executive Board's assessment is that the sight deposit rate should be in the interval 1¾ - 2¾% in the period to the publication of the next *Inflation Report* on 2 November 2005, conditional on economic developments that are broadly in line with the projections.

- Monetary policy must be assessed regularly on the basis of new information that is of significant importance to the outlook for inflation and output. New information may reveal economic developments that indicate that the Norwegian economy is following other paths than projected. Stronger trade shifts and increased labour market competition may, on the one hand, result in lower price and wage inflation. The unusually low real interest rate may, on the other hand, result in a higher-than-projected rise in output and inflation. A stronger krone will imply that inflation will take longer to reach the target. Interest rate setting must be assessed in the light of the reasons for, and the expected duration of disturbances.

Norges Bank`s projections

Norges Bank`s projections

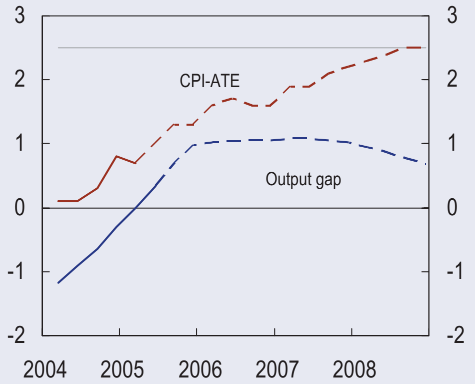
Chart 1 3-month money-market rate and import-weighted exchange rate (I-44)1) in the baseline scenario.2) Quarterly figures. 04 Q1 – 08 Q4



1) A rising curve denotes a weaker krone exchange rate
2) The figures for 2005 Q2 is based on the average through 24 June

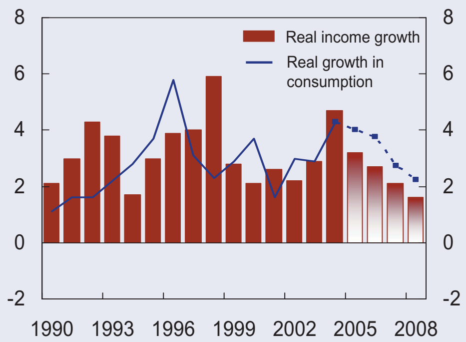
Source: Norges Bank

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 estimated extraordinary share dividends since 2000
2) Projections for 2005 -2008

Sources: Statistics Norway and Norges Bank

The projections in the period to 2008 are based on our assessment of the economic situation described in Section 1 and the driving forces discussed in Section 2. The projections are based on the path for the interest rate and the exchange rate in the baseline scenario as discussed in Section 3. In the baseline scenario, it is assumed that short-term money market rates will increase gradually in the years ahead to around 4¼% at end-2008 (see Chart 1). The krone exchange rate is assumed to follow the forward exchange rate. This implies an approximately unchanged krone exchange rate in the next few years. Chart 2 shows developments in the output gap and inflation in the baseline scenario.

Demand

Low real interest rates, solid growth in real disposable income and a continued sharp rise in house prices will result in high growth in private consumption again this year. Higher employment and somewhat higher wage growth will continue to contribute to growth in household demand in the period ahead. Household debt, however, has risen sharply. A gradual normalisation of interest rates will reduce growth in household disposable income (see Chart 3). This suggests lower growth in consumption. We assume that households will choose to spread consumption over time, so that the saving ratio will continue to fall even if interest rates rise (see Chart 4).

Housing investment rose sharply last year. It appears that growth in residential construction will remain high this year, although the rate of growth is expected to slow somewhat through the year. Low interest rates may have contributed to moving forward some housing projects. A gradual normalisation of interest rates implies more moderate growth in housing investment. Developments in underlying demand for housing may also imply that residential construction will stabilise and gradually decline somewhat.

Household debt has increased at a faster pace than income in the last ten years. Norges Bank's calculations indicate that the sharp rise in house prices in recent years may explain a large share of debt growth.[1] Higher house prices have a relatively long-term effect on household debt growth. As a result, credit growth will remain high for a fairly long period even though the rise in house prices is expected to slow. Given the assumptions underlying our projections, it is likely that debt will continue to grow at a faster pace than disposable income through the entire projection period.

[1] An estimated model for the relationship between the rise in house prices and household credit is explained in "What influences the growth of household debt?" by D.H. Jacobsen and B.E. Naug in *Economic Bulletin* 3/04.

In recent years, household debt and assets have grown more or less in tandem, a tendency that is expected to continue in the years ahead. Gross debt as a share of disposable income is expected to increase and reach a high level towards the end of the projection period. However, the estimated debt to income ratio is not substantially higher than those observed in some other countries. Nevertheless, the sharp rise in household debt and assets increases the uncertainty surrounding economic developments in the years ahead.

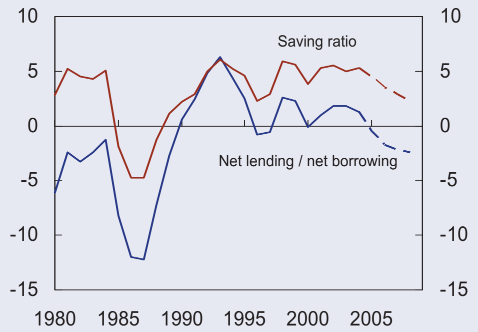
Mainland fixed investment normally fluctuates more than mainland GDP (see Chart 5). Growth is higher in periods of expansion and the decline is steeper in periods of contraction. So far, there are no signs that developments in fixed investment are substantially different during this upturn than earlier. Reports from our regional network suggest that capacity utilisation is increasing in a number of industries. The number of companies reporting that they would experience some or considerable difficulties in satisfying an unexpected increase in demand has increased. In a number of industries, investment plans have been revised upwards (see Chart 6). With the prospect of continued solid growth in demand in the period ahead, investment growth is projected to remain high in 2005 and 2006. Growth is subsequently expected to slow in pace with other demand components and output.

Investment in services and distributive trades accounts for approximately 60% of mainland business investment. Developments in these industries are marked by growing demand and solid profitability. Investment has shown fairly strong growth over the past year. Investment growth in services and distributive trades is expected to remain buoyant this year and next. Subsequently, investment growth is likely to slacken as a result of higher real interest rates and moderating household demand.

Manufacturing companies report higher capacity utilisation. Reports from our regional network indicate that profitability has improved, especially in the offshore supplier industry. These factors, combined with the prospect of continued solid growth in demand, imply relatively high investment growth in 2005 and 2006.

Sluggish growth in many European countries is in isolation having a dampening impact on mainland exports of goods and services. This is partly being offset by high demand in the US and a number of countries in Asia and central Europe. Slower growth in demand among our trading partners will result in somewhat lower export growth in the period ahead. Imports of goods and services are projected to remain high this year, primarily reflecting strong growth in petroleum investment. A moderate decline in petro-

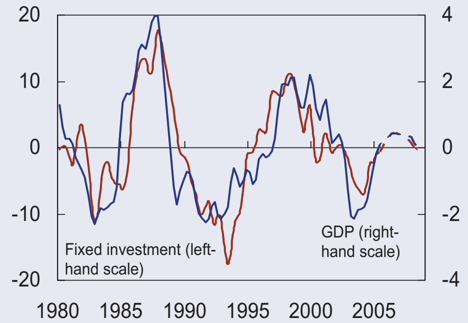
Chart 4 Household saving ratio and net lending / net borrowing as a share of disposable income[1]. Annual figures. 1980 – 2008[2]



[1] Adjusted for estimated extraordinary share dividends since 2000
[2] Projections for 2005 -2008

Sources: Statistics Norway and Norges Bank

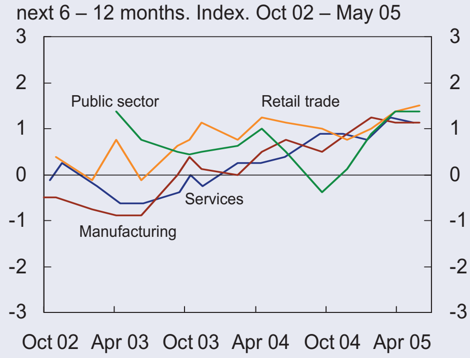
Chart 5 GDP and fixed investment. Mainland Norway. Percentage deviation from trend[1]. Quarterly figures. 1980 – 2008[2]



[1] Trend calculated using HP filter. See Staff Memo 2005/2 (www.norges-bank.no) for further details
[2] Based on projections for 2005 – 2008

Sources: Statistics Norway and Norges Bank

Chart 6 Investment plans of enterprises in Norges Bank's regional network. Change in investments in next 6 – 12 months. Index. Oct 02 – May 05



Source: Norges Bank

leum investment is expected from 2006. Growth in private consumption and mainland business investment is also expected to slow. On balance, this points to slower growth in imports.

Output

With strong growth in private demand and petroleum investment, growth in mainland GDP is projected to increase further from 2004 to 2005. Growth is also expected to remain high in 2006. In this three-year period, mainland GDP will grow at a noticeably faster pace than trend growth. The effects of low interest rates on demand and output are being amplified by strong growth in petroleum investment and continued positive external impulses. Growth during this upturn is expected to peak this year. Next year, the positive driving forces are expected to be weaker. Growth is then expected to moderate. Mainland GDP is projected to increase by 3¾% in 2005 and 3% next year (see Table 1).

Table 1 Projections for main macroeconomic aggregates. Change from previous year. Per cent

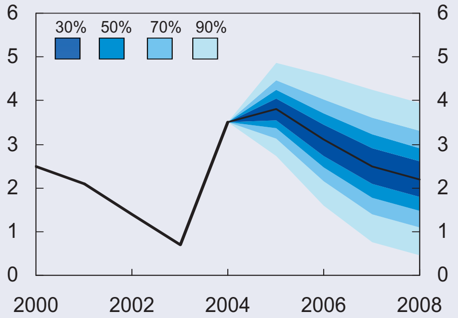
	2005	2006	2007	2008
Mainland demand	4	3¾	2½	2
Private consumption	4	3¾	2¾	2¼
Public consumption	1¾	1½	1½	1½
Mainland fixed investment	7½	6	2¾	1½
Petroleum investment	25	-5	-2½	0
Traditional exports	5½	3½	3½	3½
Import	8	3½	2¼	1¾
GDP, mainland Norway	3¾	3	2½	2¼
Output gap[1], M-Norway	½	1	1	¾
Employment	1	1½	1	½
LFS unemploymnent[2]	4¼	3¾	3¾	4
CPI-ATE[3]	1	1½	2	2½
Annual wages[4]	3½	4½	4½	4½

[1] Deviation in per cent between actual and trend GDP
[2] Per cent of labour force
[3] CPI-ATE: CPI adjusted for tax changes and excl. energyproducts
[4] Based on TBU definitions and calculations. Includes costs connected to the introducion of compulsory occupational pensions

Source: Norges Bank

The projections are based on a gradual normalisation of the interest rate from a low level and a moderate decline in petroleum investment in 2006 and 2007. Against this background, we project that mainland GDP will grow at a slower pace in 2007 and 2008 than in the preceding years. In 2008, mainland GDP is projected to expand at a somewhat slower rate than potential output, which is estimated at around 2½%. However, there is substantial uncertainty surrounding the projections for mainland GDP growth (see Chart 7).

Chart 7 Projections and uncertainty for growth in mainland GDP.[1] Annual growth. Per cent. 2000 – 2008



[1] The fan chart depicts the probability of different outcomes for mainland GDP growth. Probabilities are based on the difference between projected and actual developments in mainland GDP in the period 1994 - 2004

Sources: Statistics Norway and Norges Bank

The output gap is projected to be positive this year and increase to about 1% in 2006. At the end of the projection period, the output gap is likely to be about ¾%, given the assumptions underlying our projections.

Compared with the previous *Inflation Report*, the projections for mainland GDP growth and the output gap in 2005 have been revised downwards slightly. This is because we now assume that foreign labour will account for a somewhat larger portion of output growth. In Norges Bank's regional network, a number of manufacturing and construction companies report that they will expand capacity by using foreign contract labour or foreign employees. An increase in the use of foreign contract labour will result in higher imports of intermediate goods in the form of services, and will entail lower mainland GDP growth. In 2007 and 2008, the projections for mainland GDP growth have been revised upwards somewhat compared with the previous *Inflation Report,* primarily because the interest rate is assumed to be somewhat lower. The increase in the interest rate to an estimated normal level of around 5½% has been moved further ahead. On balance, these changes mean that the estimate for the output gap in 2008 is somewhat higher than in the March *Inflation Report.*

Labour market

In the years ahead, the labour market is expected to tighten at a somewhat faster pace than has been the case so far in this upturn. So far, employment has shown a somewhat smaller increase than in previous upturns (see Chart 8). Sickness absence began to fall in the second quarter of 2004 (see Chart 9), which has probably restrained growth in the number of persons employed. Reports from our regional network indicate that the decline in sickness absence to some extent reduced the need for new permanent and temporary employees in the enterprise sector. In the last three quarters of 2004, sickness absence was on average 1.5 percentage points lower than in the same period one year earlier. Figures for the first quarter of 2005 show a decline of 1.2 percentage points, indicating that the fall in sickness absence has come to a halt. With high growth in mainland GDP in 2005 and 2006 and a levelling off of sickness absence, employment growth is projected to edge up to 1% this year and 1½% in 2006.

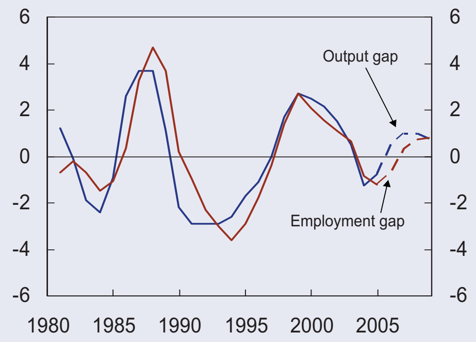
Experience shows that changes in unemployment are attenuated somewhat as the supply of labour varies in step with demand. Growth in the labour force is expected to be somewhat stronger than implied by demographic factors in the next few years. Nevertheless, unemployment is expected to decline this year and next. LFS unemployment is projected at 3¾% next year. In subsequent years, lower growth in demand and output will reduce the need for new employees in the enterprise sector and unemployment may edge up again. Higher costs in connection with the introduction of the compulsory occupational pension scheme may curb employment growth in service sectors.

Wage growth

Wage growth is likely to be somewhat higher in the years ahead. The labour market is expected to be somewhat tighter this year and next. At the same time, some of the factors that have pushed down consumer price inflation seem to be dissipating.

Through the last 10-15 years, there has been a fairly close correlation between unemployment and wage growth (see Chart 10). Our projections are based on this relationship. The effect of low inflation on wages is uncertain, however. This year's wage settlement resulted in somewhat lower pay increases than expected. Low consumer price inflation last year may have reduced wage demands to a greater extent than we envisaged. Our projections are based on the assumpti-

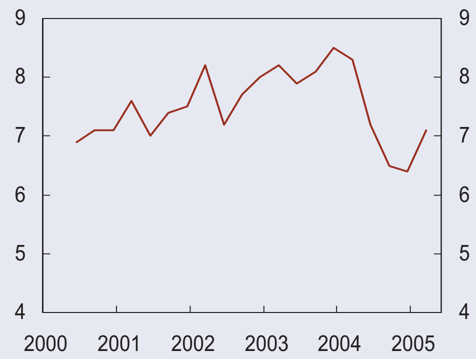
Chart 8 Employment gap[1)] and projected output gap in the baseline scenario. Annual figures. Per cent. 1980 – 2008



[1)] Percentage deviation from trend. Trend calculated using HP filter. Figures for 2005 – 2008 are based on employment projections and trend growth in employment of 0.5%

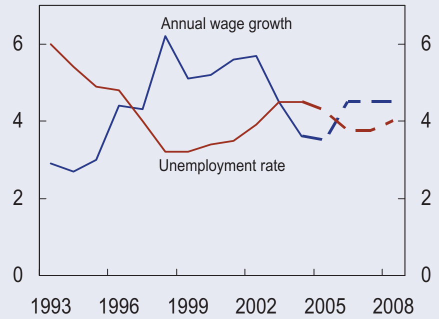
Sources: Statistics Norway and Norges Bank

Chart 9 Sickness absence in person-days for employees self-certified and certified by a doctor, for employees aged 16-69. In per cent of scheduled person-days. Quarterly figures. 00 Q2 – 05 Q1



Source: Statistics Norway

Chart 10 Annual wage growth[1)] and unemployment rate (LFS). Annual figures. Per cent. 1993 – 2008[2)]



[1)] Average for all groups. Including estimated costs of additional vacation days and introduction of compulsory occupational pensions
[2)] Projections for 2005 – 2008

Sources: Technical Reporting Committee on Income Settlements, Statistics Norway and Norges Bank on that continued low inflation over the next few years will curb wage growth somewhat more than assumed in the March *Inflation Report*.

From 1 January 2006, the Government will introduce minimum standards for occupational pensions for all employees that do not already benefit from more favourable schemes. In isolation, this will increase companies' costs. Our projections for wage growth are based on the assumption that the introduction of a compulsory occupational pension scheme will increase companies' average labour costs by an estimated ½ percentage point. These costs will have an effect on inflation and are therefore included in our wage projections. We have assumed, however, that higher costs will be partly offset by lower pay increases. If the introduction of compulsory occupational pensions does not result in lower pay increases or trigger demands for compensation from other groups, labour costs may increase more than projected.

Against the backdrop of our projections for labour market developments and market participants' inflation expectations, companies' labour costs are projected to rise by 4½% next year and to remain at around this level until the end of the projection period.

A number of factors point to a lower-than-projected rise in labour costs in the next few years. Inward labour migration from the new EU member states appears to be increasing. This has probably reduced bottlenecks. In the construction industry, wage growth is set to be moderate this year in spite of a sharp increase in activity. If the use of foreign labour becomes more widespread than we have assumed, wage growth may be lower than projected.

On the other hand, profitability is solid in many industries. The decline in overall unemployment has been small, but there are signs of skills shortages in the petroleum sector, manufacturing and construction. This entails increased bargaining power for these groups of employees. High pay increases in these groups may result in higher pay demands from other groups in subsequent wage settlements, which may result in higher wage growth than projected in this *Report*. At the same time, various protectionist measures may restrain the use of foreign labour to a further extent than we have assumed.

Consumer price inflation

The rise in prices for domestically produced goods and services has accelerated. The year-on-year rise in prices has picked up from around 1% in autumn 2004 to 2% in May 2005. In 2004, prices were held down by competition and increased efficiency in Norwegian production and retail segments. Prices for some goods and services fell sharply. The effect of this price fall on inflation is unwinding. Airfares, for example, have increased considerably in the last year (see Chart 11). The rise in food prices has also picked up again.

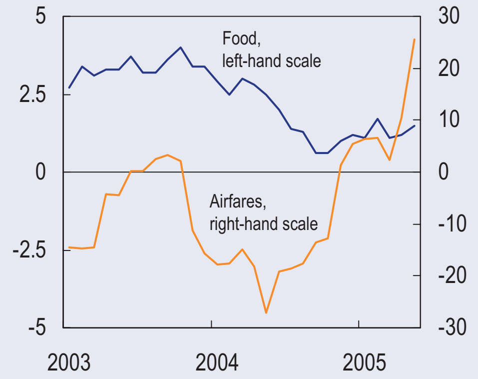
Wage growth is expected to be higher in the years ahead. We assume that productivity in the business sector will increase in line with the historical average. Higher wage growth thus implies higher business costs. At the same time, profit margins are expected to increase in pace with rising demand and capacity utilisation. This suggests that the rise in prices for domestically produced goods and services will continue to accelerate.

The year-on-year rise in prices for imported consumer goods has decelerated continuously since the beginning of 2002. The rate of decline was particularly sharp in 2003 but has since decelerated gradually. The depreciation of the krone through 2003 has contributed to pushing up prices. A number of factors indicate, however, that it takes time before prices for imported consumer goods begin to rise on an annual basis. The krone has appreciated again. If the krone remains at a strong level, the rise in prices will be delayed. Prices for imported consumer goods measured in foreign currency also appear to be falling somewhat more this year than previously projected (see Chart 12). This will also contribute to keeping inflation low.

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 only marginally, primarily because wage growth in distributive trades seems to have been fairly low 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. On balance, prices for imported consumer goods are projected to fall on annual basis this year and next, but at a gradually slower pace. In 2007 and 2008, we assume that prices for imported consumer goods will rise.

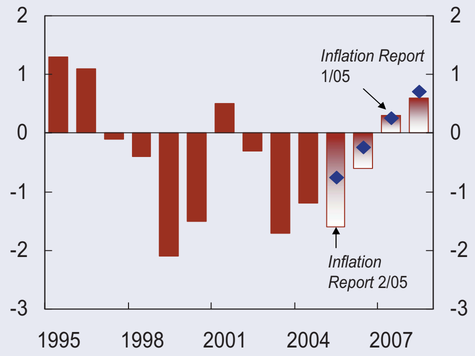
Given the assumptions underlying our projections, CPI-ATE inflation may rise gradually from a good 1% at present to almost 2% in the first half of 2007 (see Chart 13). Under these assumptions, there are prospects that inflation will be close to 2½% three years ahead. It is assumed that the interest rate will be increased gradually towards a more normal level in the years ahead. It is likely that growth in the Norwegian economy will gradually slow and that the output gap will narrow. This will also restrain the rise in inflation so that inflation does not overshoot the target.

Chart 11 Food prices and airfares. 12-month change. Per cent. Jan 03 – May 05



Source: Statistics Norway

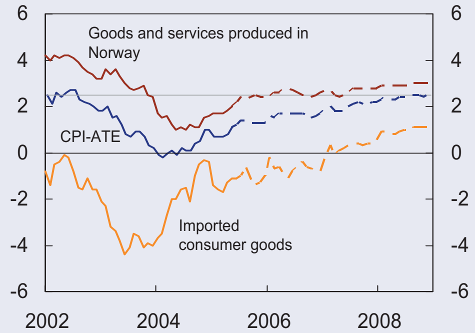
Chart 12 Indicator of external price impulses to imported consumer goods measured in foreign currency. Annual figures. Per cent. 1995 – 2008[1)]



[1)] Projections for 2005 – 2008 in *Inflation Report* 1/05 and 2/05

Source: Norges Bank

Chart 13 CPI-ATE[1)]. Total and by supplier sector.[2)] 12-month change. Per cent. Jan 02 – Dec 08[3)]



[1)] CPI-ATE: CPI adjusted for tax changes and excluding energy products
[2)] Norges Bank's estimates
[3)] Projections from June 05 – Dec 08

Sources: Statistics Norway and Norges Bank

Boxes

Developments in the krone exchange rate

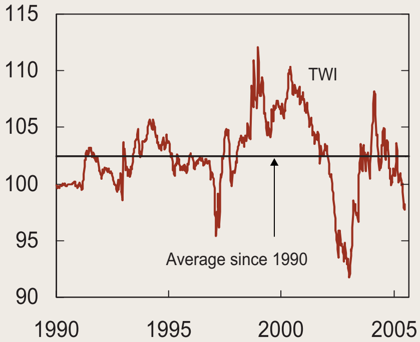
The projections in *Inflation Report* 1/05 and 2/05

Developments in the krone exchange rate

The krone appreciation in recent months

The krone has fluctuated since 1997 (see Chart 1). Since mid-February 2005 the krone exchange rate has appreciated by about 5%, as measured by the trade-weighted exchange rate index (TWI). Market participants point to higher oil prices and higher expected interest rate differentials relative to other countries as factors that have contributed to strengthening the krone. This box presents a more detailed discussion of the krone appreciation.

Chart 1 Nominal effective krone exchange rate[1]. Trade-weighted exchange rate index (TWI, 1990=100). Weekly figures. Week 1 1990 – Week 25 2005

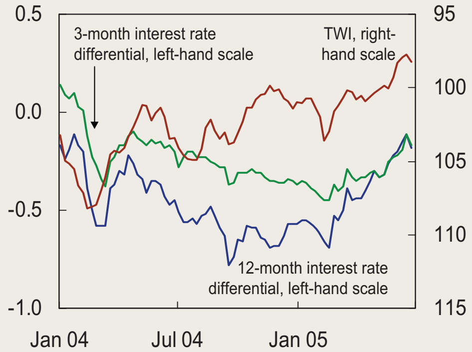


[1] A rising curve denotes a weaker krone exchange rate

Source: Norges Bank

With confidence in monetary policy, economic agents will assume that the interest rate in Norway is set with a view to achieving the inflation target of 2½%. Any prospect of increased pressures in the Norwegian economy will then generate expectations of higher key rates. In isolation, this will lead to expectations of wider interest rate differentials against other countries. As a result, the krone will appreciate. Chart 2 shows that the krone appreciation since February this year has been accompanied by an increase in the three- and twelve-month interest rate differential against other countries. The three-month interest rate differential has widened by around ¼ percentage point, while the twelve-month differential has increased by about ½ percentage point. Twelve-month rates reflect an average of expected future key rates over the next twelve months. The krone appreciation may therefore reflect an increase in the expected differential between Norwegian and foreign key interest rates.

Chart 2 The trade-weighted exchange rate index[1] (TWI, 1990=100), 3-month and 12-month interest rate differential against other countries. Weekly figures. Week 1 2004 – Week 25 2005



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

Source: Norges Bank

In an economy where capacity utilisation is high, the use of petroleum revenues can only be increased by transferring resources from the exposed to the sheltered sector. This may point to a real appreciation of the krone. As long as there is confidence among economic agents that the inflation target will be reached, this appreciation will primarily be confined to a nominal appreciation of the krone exchange rate. The use of petroleum revenues is regulated by the fiscal rule, which implies that only the expected real return on the Petroleum Fund is to be used over the central government budget. The remaining petroleum revenues are channelled to the Petroleum Fund (in foreign currency), which then functions as a buffer against movements in the krone exchange rate when oil prices vary. An increase in oil prices may nevertheless generate expectations of higher use of petroleum revenues ahead, particularly if high oil prices are assumed to persist. Such expectations may exert appreciation pressures on the krone. In addition, there may be expectations that developments on the Norwegian stock market will be more favourable than on for-

Table 1 Correlation between the oil price and the krone exchange rate (TWI)*.

	Jan 99 - Jun. 05	Mar 01 - Jun. 05	Jan 02 - Jan. 03	Jan 04 - Jun 05
Correlation coefiicient (oil price and TWI)**	0.21	-0.05	0.84	0.80

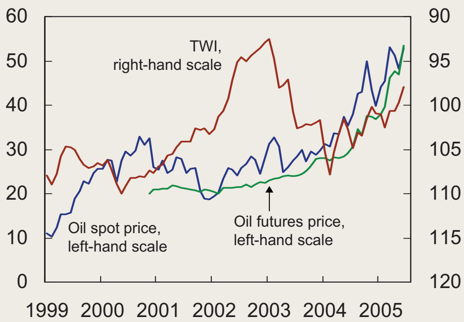
* Positiv correlation means that a stronger krone correlates with a higher oil price
** Monthly figures

Source: Norges Bank

eign markets when oil prices rise. This may fuel demand for NOK.

Chart 3 shows the krone exchange rate and oil spot prices from 1999, and oil futures prices 6-7 years ahead from end-2000. The chart indicates that there is no clear relationship between the krone exchange rate and oil spot prices over time. An appreciation of the krone has accompanied higher oil prices in some periods, and lower oil prices in others. The correlation between oil prices and the krone exchange rate has therefore varied over time (see Table 1). For the entire period from January 1999 up to June 2005, the average correlation was around 0.2. A positive correlation here means that higher oil prices are accompanied by a stronger krone. Since the introduction of the inflation target in March 2001 the average correlation has been about zero[1]. This may indicate that the Petroleum Fund has functioned as a buffer against movements in the krone exchange rate.

Chart 3 Trade-weighted exchange rate index[1)] (TWI, 1990=100), oil spot price[2)] and oil futures price 6-7 years ahead[3)]. Monthly figures. Jan 99 – Jun 05[4)]

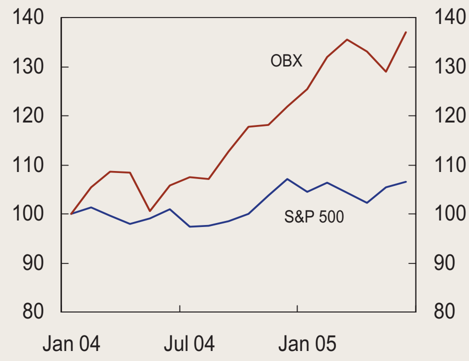


1) A rising curve denotes a stronger krone exchange rate
2) Brent blend, USD per barrel
3) USD per barrel light crude
4) Average 1-24 June

Sources: EcoWin/NYMEX and Norges Bank

The sharp rise in oil prices since mid-2004 may nevertheless contribute to explaining the appreciation of the krone of about 5% since mid-February this year and by 7½% since the first quarter of 2004. Chart 3 shows that the future oil price 6-7 years ahead has increased more than the spot price since January 2004; the two prices were approximately the same in June. Futures prices are linked to expected future spot prices. The high level of futures prices therefore suggests that spot prices are expected to be markedly higher in the future than in the years prior to 2004. In isolation, this has contributed to a substantial increase in the expected future value of the Petroleum Fund. At the same time, the price rise has generated increased interest in Norwegian equities in relation to foreign equities (see Chart 4). These conditions may have contributed to strengthening the krone.

Chart 4 Norwegian[1)] and US[2)] equity prices. Index (Jan 04 = 100). Monthly figures. Jan 04 – Jun 05[3)]

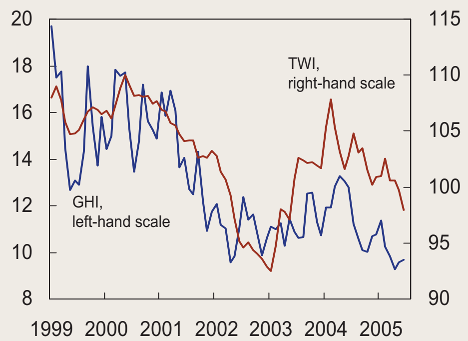


1) OBX index
2) Standard & Poor's 500 index
3) Average 1-24 June

Sources: EcoWin and Oslo Stock Exchange

The krone exchange rate is also influenced by other factors in international financial markets. Charts 5 and 6 show that the krone exchange rate is strongly correlated with US equity prices and expected fluctuations between the three major currencies, measured by an indicator based on options prices (GHI)[2]. Expected volatility between the three major currencies has diminished markedly since the first half of 2004. At the same time, US equity prices have shown little change since the beginning of 2004, after advancing sharply through 2003. These developments may have been seen by investors as a reduction in potential gains on investments in major currencies and the US equity market. Investors may thus have placed greater weight on other factors, such as oil prices and changes in expected interest rate differentials between countries. International financial market developments may therefore have amplified the impact on the krone of higher oil prices and an expected widening of the interest rate differential against other countries.

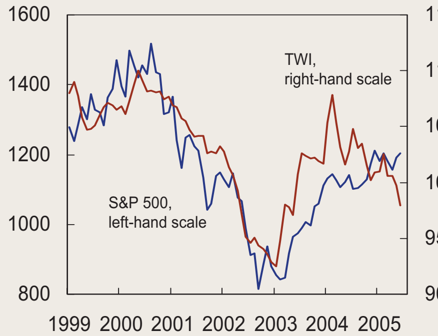
Chart 5 Trade-weighted exchange rate index[1)] (TWI, 1990=100) and indicator of expected volatility between major currencies (GHI)[2)]. Monthly figures. Jan 99 – Jun 05[3)]



1) A rising curve denotes a weaker krone exchange rate
2) Derived from currency options prices
3) Average 1-24 June

Sources: EcoWin and Norges Bank

Chart 6 Trade-weighted exchange rate index[1)] (TWI, 1990=100) and US equity prices[2)]. Monthly figures. Jan 99 – Jun 05[3)]

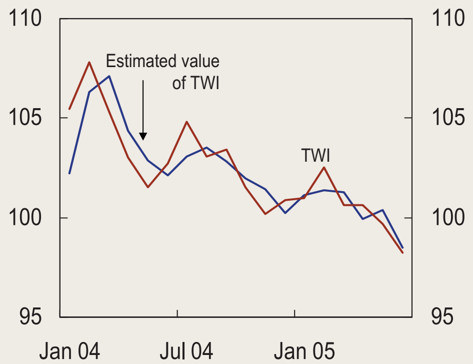


1) A rising curve denotes a weaker krone exchange rate
2) Standard & Poor's 500 index
3) Average 1-24 June

Sources: EcoWin and Norges Bank

We have estimated a model for the trade-weighted exchange rate index (TWI) that captures the driving forces described above (see annex in this box).[3] Chart 7 shows that the model explains the main factors behind exchange rate developments since 2004. This provides empirical support that the krone has appreciated as a result of higher oil prices, a wider expected interest rate differential against other countries, lower expected volatility between major currencies and weaker developments in the US stock market. Even though the model captures historical developments fairly well, it is not necessarily suitable as a forecasting model. This partly reflects shifting themes in the exchange market.[4]

Chart 7 Actual and estimated krone exchange rate (TWI)[1)]. Monthly figures. Jan 04 – Jun 05[2)]



1) A rising curve denotes a weaker krone exchange rate
2) Average 1-24 June

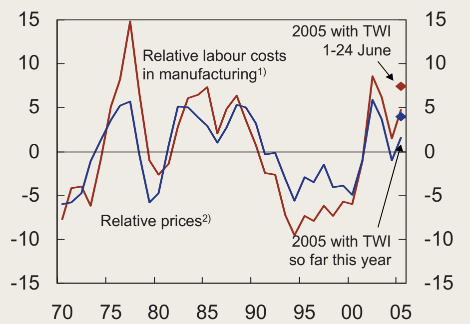
Source: Norges Bank

Movements and reversion mechanisms in the real krone exchange rate

The analysis above seeks to explain short-term movements in the nominal krone exchange rate. It is the real exchange rate that is important for the Norwegian business sector's competitiveness. Empirical studies have found evidence that the real exchange rate is stable in the long term[5]. The real exchange rate will therefore over time tend to move towards an equilibrium level. Monetary policy can contribute to stabilising the real exchange rate by influencing wage and price inflation and the nominal exchange rate.

Chart 8 shows developments in two measures of the real exchange rate: relative consumer prices and relative labour costs in Norway and trading partners, measured in common currency. Both series are measured by the deviation from their average values since 1970. The real exchange rate is stronger and competitiveness weaker than the average level since 1970 when the curves in the chart are above zero. The square points for 2005 show the real exchange rate, given the average level of the nominal krone exchange rate in the period 1-24 June and the projections for wage and price inflation in this *Report*. Measured in relative prices, the real exchange rate is now about 4% stronger than the average since 1970, whereas it is around 7½% stronger measured in terms of relative labour costs.

Chart 8 Real exchange rates (relative consumer prices and labour costs in common currency). Annual figures. Per cent. Deviation from average 1970 – 2004



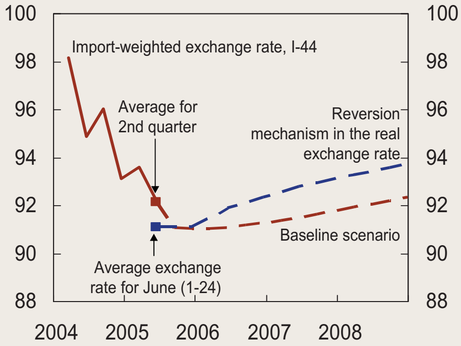
1) Projections for wage growth in 2005 from IR 2/05
2) Projections for consumer price inflation in 2005 from IR 2/05

Sources: Statistics Norway, TRCIS and Norges Bank

The two measures of the real exchange rate have fluctuated considerably over time and has deviated substantially from the average level over longer periods. As mentioned above and as shown in Chart 8, the real exchange rate has nevertheless shown a tendency to revert to its average level over time. The estimated half-life is around two years.[6] This means that a deviation from the average level has been halved over a two-year period. This estimate of the reversion in the real exchange rate is uncertain. It can nonetheless provide a basis for analysing future movements in the krone exchange rate.

Chart 9 shows the import-weighted nominal krone exchange rate from the beginning of 2004, the path for the nominal krone exchange rate underlying the projections in this *Report* and a path for the nominal krone exchange rate based on the historical reversion mechanism in the real exchange rate (given the inflation projections in this *Report*).[7] The path based on the reversion mechanism has as its starting-point the average level of the nominal krone exchange rate in the period 1-24 June, when the krone was relatively strong compared with the entire second quarter. It is assumed that the reversion mechanism in the real exchange rate only begins to have an effect after about six months. Up to that time, it is assumed that the krone exchange rate will remain at the average level for the period 1-24 June. Since the real exchange rate is relatively strong now, the path based on the reversion mechanism shows a stronger depreciation than in the baseline scenario in this *Report*.

Chart 9 The krone exchange rate (I-44) in the baseline scenario and based on reversion mechanisms in the real exchange rate. Quarterly figures. 04 Q1 – 08 Q4



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

Source: Norges Bank

[1] As shown in Table 1, there was a strong correlation between the oil price and the krone exchange rate when the krone appreciated trough 2002. This is probably because the krone functioned as a safe-haven currency in connection with the unrest in the Middle East from February-March 2002 to the beginning of 2003, see Naug (2003) for a further discussion.

[2] The GHI (Global Hazard Index) is derived from currency options prices (implied volatility) for the three major currencies, euro, US dollar and Japanese yen. The variable is described in more detail in Bernhardsen and Røisland (2000).

[3] The model is an updated version of the model presented in Naug (2003) and in the box "Factors behind developments in the krone exchange rate" in *Inflation Report* 1/2003.

[4] Several of the effects in the model thereby deviate substantially from the effects reported in Naug (2003) and in the box on the krone exchange rate in *Inflation Report* 1/2003

[5] See for example Akram (2002), and Bernhardsen and Holmsen (2005)

[6] The estimate is based on the real krone exchange rate measured by relative consumer prices, see Bernhardsen and Holmsen (2005, section 5).

[7] The analysis above is based on the trade-weighted exchange rate index (TWI). The projections in this Report are based on the import-weighted index (I-44). The krone has appreciated to approximately to the same extent by the two measures since mid-February this year.

References:

Akram, Q. F. (2002): "PPP in the medium run despite oil shocks: The case of Norway". Working Paper 2002/4, Norges Bank, and Journal of Macroeconomics 28(4), 2006 (forthcoming).

Bernhardsen, T. and A. Holmsen (2005): "The choice of exchange rate assumption in the process of forecasting inflation", Staff Memo 3/2005, Norges Bank.

Bernhardsen, T. and Ø. Røisland (2000): "Factors that influence the krone exchange rate" Economic Bulletin 4/2000, Norges Bank.

Naug, Bjørn E. (2003): "Factors behind developments in the krone exchange rate – an empirical analysis". Chapter 7 in Ø. Eitrheim and K. Gulbrandsen (ed.): «Explaining movements in the Norwegian exchange rate», Norges Banks Occasional Paper no. 32.

Annex: An econometric model for the krone exchange rate

$$\Delta e_t = \text{constant} + \underset{(2{,}30)}{0{,}22}\,\Delta e_{t-1} - \underset{(5{,}64)}{0{,}29}\,e_{t-1} + \underset{(2{,}47)}{0{,}038}\,ghi^*_t - \underset{(0{,}28)}{0{,}003}\,(oil\text{-}spot_t + oil\text{-}future_t)/2$$

$$- \underset{(1{,}05)}{0{,}014}\,\Delta oil\text{-}spot_t - \underset{(1{,}77)}{0{,}054}\,\Delta oil\text{-}future_t + \underset{(1{,}69)}{0{,}21}\,\Delta_6 stock_t \cdot \Delta_2 oil\text{-}spot_t$$

$$- \underset{(3{,}17)}{0{,}037}\,RDIFF_t + \underset{(2{,}89)}{0{,}014}\,ghi^*_t \cdot RDIFF^*_t + \underset{(2{,}16)}{0{,}013}\,\Delta_6 stock_t \cdot RDIFF_t$$

Estimation period: 1999.7 – 2005.6 (monthly figures). $R^2 = 0{,}53$. Absolute *t*-values are given in brackets under the estimates. Δ is a difference operator: $\Delta X_t = (X_t - X_{t-1})$, $\Delta_2 X_t = (X_t - X_{t-2})$ and $\Delta_6 X_t = (X_t - X_{t-6})$. * gives a two month average: $X^*_t = 0{,}5 \cdot (X_t + X_{t-1})$.

The variables are defined by (lower letters mean that the variable is measured in logs):

e	= Trade-weighted exchange rate index (an increase indicates a depeciation)
oil-spot =	=Oil Spotprice (Brent blend in USD)
olje-future	= Oil price for delivery in 6-7 years (in USD)
ghi	= Expected volatility between the three major currencies. Derived from the price on currency options
RDIFF	= Twelve-month interest rate differential against foreign countries
Stock	= US stock prices (S&P 500-index)

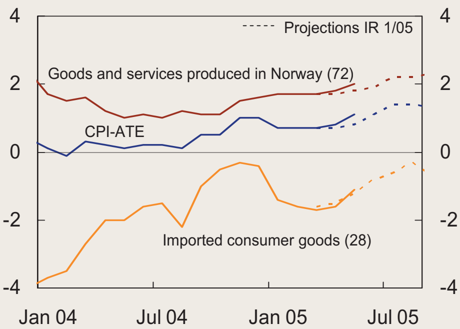
The projections in *Inflation Report* 1/05 and 2/05

Projections in Inflation Report 1/05

Our projections in the March *Inflation Report* conveyed a picture of the Norwegian economy in an upturn. Low interest rates, high petroleum investment and external growth impulses were important driving forces. Mainland GDP growth was projected at 4% this year. The output gap was therefore set to be positive after two years of economic activity that was lower than estimated potential output for the Norwegian economy. High growth and a positive output gap were expected to have an impact on the labour market. We envisaged a clear rise in employment and a reduction in unemployment. Inflation was expected to remain low through spring, then gradually pick up from summer. The inflation target was expected to be reached in early 2008.

Preliminary national accounts figures indicate that output growth in the Norwegian economy has so far been broadly in line with the projections in the March *Inflation Report*. However, growth in the number employed measured by the LFS has been weaker than projected. This year's wage settlement was also more moderate than assumed in the March *Inflation Report*. In March, inflation was in line with our projections (see Chart 1). In April and May, inflation was slightly higher than projected. The deviation was due to a higher-than-expected rise in prices for some services.

Chart 1 CPI-ATE[1]. Total and by supplier sector.[2] Actual price inflation and projections IR 1/05. 12-month change. Per cent. Jan 04 — Aug 05



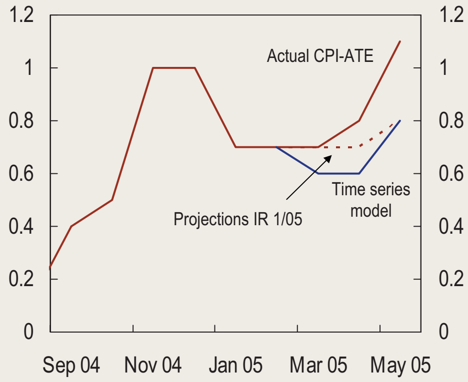
[1] CPI-ATE: CPI adjusted for tax changes and excluding energy products

[2] Norges Bank's projections. Percentage share of CPI-ATE in brackets

Sources: Statistics Norway and Norges Bank

Chart 2 compares actual inflation with the inflation projection in the March *Report* and with predictions based on a simple time series model that captures trend growth and seasonal variations in the CPI-ATE. This comparison may provide a basis for evaluating near-term projections. In March and April, the predictions based on the time series model were somewhat farther off the mark than our projections, while they were in line with our projections for May.

Chart 2 CPI-ATE. Projections in IR 1/05, projections from time series model and actual price movements. 12-month change. Per cent. Sep 04 – May 05

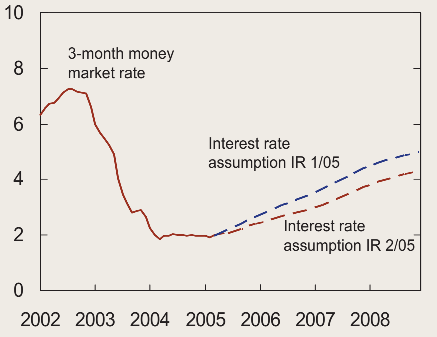


Sources: Statistics Norway and Norges Bank

Changes in the projections from Inflation Report 1/05 to 2/05

Our projections in the March *Inflation Report* were based on the assumption that the interest rate, both in Norway and internationally, would shadow forward interest rates in the first part of the projection period, but rise somewhat more from 2007. The projections in this *Report* are based on an adjustment of forward interest rates in the same way as in the March *Report* (for more details, see Section 3). On 24 June, forward interest rates were somewhat lower than at the time of publication of the March *Report*. The interest rate assumption thus implies that the interest rate in this *Report* increases somewhat more slowly than we expected in the previous *Report*. On average, the current interest rate is about ½ percentage point lower through the projection period (see Chart 3). The krone exchange rate is assumed to follow movements in the forward exchange rate. As in the previous *Report,* this

Chart 3 Assumption for the money market rate[1)2)]. Monthly and quarterly figures. Per cent. Jan 02 — 08 Q4

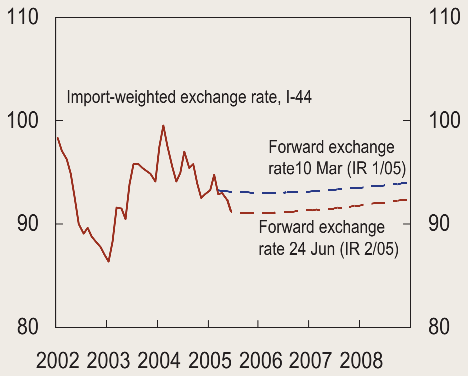


[1)] The money market rate is normally about ¼ percentage point higher than the sight deposit rate.
[2)] 3-month money market rate up to and including 05 Q2. The figures for 2005 Q2 are based on the average through 24 June

Source: Norges Bank

implies an approximately unchanged exchange rate over the next few years. The starting point for the forward exchange rate path is the average exchange rate in the period 1-24 June. Since the krone in this period was stronger than the corresponding starting point in the March *Report*, the krone will be about 1¾% stronger through the projection period than we assumed in the previous *Report* (see Chart 4).

Chart 4 The krone exchange rate (I-44)[1)]. Forward exchange rate. Monthly figures. Jan 02 — Dec 08



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

Source: Norges Bank

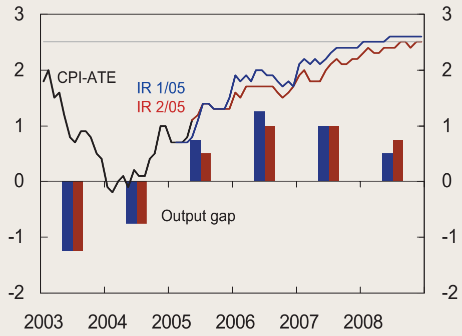
Projections for global growth are broadly in line with the projections in the March *Report*. However, our projection for activity among trading partners has been lowered somewhat owing to weaker developments in Sweden and the euro area. Oil prices are assumed to shadow futures prices. Oil prices have increased appreciably since March, implying that the price of oil will remain at more than USD 55 per barrel throughout the period.

The projections for the Norwegian economy in this *Inflation Report* show little change in relation to the March *Report*. The most important changes are discussed below.

<u>Slightly lower growth in mainland GDP this year, higher growth further ahead</u>

In the March *Inflation Report*, mainland GDP was projected to grow by 4% this year. Even though the projection for growth in total demand is unchanged since the previous *Report*, we have revised down projected mainland GDP growth to 3¾% this year. This partly reflects our assumption that inward labour migration will account for a somewhat larger share of output growth. An increase in the use of foreign contract labour will result in higher imports of intermediate goods in the form of services, with

Chart 5 Projections for the CPI-ATE[1)] and the output gap[2)] in IR 1/05 (blue) and 2/05 (red). Per cent. Annual and monthly figures. Jan 03 — Dec 08



[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

a corresponding fall in mainland GDP growth. Increased use of contract labour is reflected in somewhat lower employment growth than assumed in the March *Report*. Lower growth also implies that the output gap, as estimated by Norges Bank, will be ¼ percentage point lower than in 2005 (see Chart 5).

Later in the period, a somewhat lower interest rate will push up overall demand compared with the March projections, and projected mainland GDP growth has been revised upwards by ¼ percentage point in both 2007 and 2008 in relation to our projections in the March *Report*. The changes since the previous *Report* thereby point to steadier mainland GDP growth through the projection period. This means that the output gap will not be as high this year as estimated in the March *Report*. On the other hand, it will take longer for the output gap to begin to fall.

Somewhat lower wage growth ahead

The downward revision of the output gap and growth in mainland GDP for this year is closely related to labour market developments. Low employment growth may indicate that capacity utilisation in the economy is not increasing as much as previously assumed. Unemployment is therefore projected to be somewhat higher this year and next than projected in the March *Report*. The moderate wage settlement in 2005 may indicate that the social partners gave more weight to the low level of inflation in 2004. Continued low inflation over the coming years may curb wage growth somewhat more than assumed in the March *Report*. As a result of this, our projections for wage growth in 2007 and 2008 have been revised down by ¼ percentage point in each year, even though unemployment in this period is projected to remain unchanged in relation to the previous *Report*. In 2006, the introduction of compulsory occupational pensions will lead to slightly higher growth in labour costs than developments in unemployment and inflation expectations would imply.

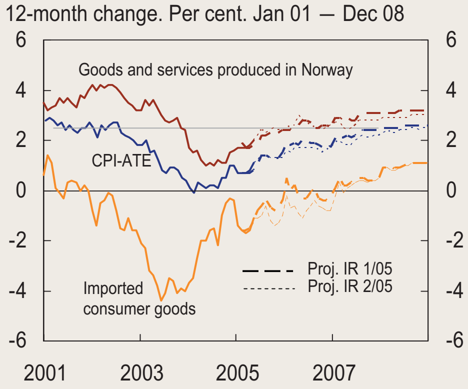
Moderate downward revision of inflation

Lower wage growth, particularly this year, but also towards the end of the projection period, will in isolation push down inflation somewhat throughout the period. So far in 2005, however, inflation has been somewhat higher than projected in the previous *Report* and on the whole changes in the inflation projection for this year are therefore minor. The assumption of a somewhat stronger krone, combined with lower wage growth and a more substantial shift towards imports from low-cost countries, will push down projected CPI-ATE inflation by ¼ percentage point in 2006 and 2007. Towards the end of the projection period, a somewhat higher output gap than assumed in the previous *Report* will push inflation up to target (see Chart 6).

Projections from other institutions

Statistics Norway, the Ministry of Finance and Norges Bank now project relatively high economic growth this year (see Chart 7). Norges Bank projects mainland GDP growth at 3¾% in 2005, which is ¼ percentage point lower than in the previous *Report*. When Statistics Norway published its projections for economic developments at about the same time as the previous *Inflation Report* was published, mainland GDP growth was projected at 3.8%. This projection has been maintained. In the Revised National Budget for 2005, the Ministry of Finance projects growth 3.6% in 2005, up from 3.1% in the National Budget for 2005. At the same time as the publication of the March *Inflation Report*, Consensus Forecasts projected growth for mainland Norway at 3.2% this year. In June, the average forecast has moved up to 3.6% growth.

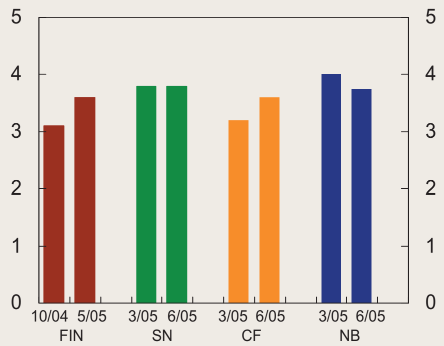
Chart 6 CPI-ATE. Total and by supplier sector.[1] 12-month change. Per cent. Jan 01 – Dec 08



[1] Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

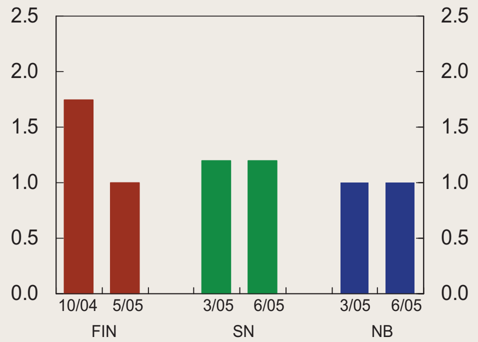
Chart 7 Mainland GDP The last two projections published for 2005.[1] Percentage growth



[1] The figures under the columns indicate publication month and year

Sources: Revised National Budget 2005
National Budget 2005, *Economic Survey* 1/05 and 3/05, *Inflation Report* 3/04 and 1/05
Consensus Forecasts March and June 2005

Chart 8 CPI-ATE. The last two projections published for 2005.[1] Percentage growth



[1] The figures under the columns indicate publication month and year

Sources: Revised National Budget 2005 National Budget 2005, *Economic Survey* 1/05 and 3/05, *Inflation Report* 1/05 and 2/05

In this *Inflation Report*, Norges Bank projects CPI-ATE inflation at 1% in 2005, or the same as in the March *Inflation Report* (see Chart 8). In the Revised National Budget, the Ministry of Finance also projects CPI-ATE inflation at 1%. Since the publication of the National Budget for 2005 in autumn, the Ministry of Finance has revised down its projection by ¾ percentage point. Statistics Norway projects inflation at 1.2% this year. This projection has remained unchanged since March. Consensus Forecasts does not collect projections for CPI-ATE inflation.

The Ministry of Finance's projections are from 6 October 2004 and 13 May 2005. Statistics Norway published its projections on 10 March and 16 June. Consensus Forecasts collects forecasts on 14 March and 13 June. The March *Inflation Report* was presented on 16 March. As the institutions publish projections at different times, the information on which the projections are based may differ.

Earlier boxes 2001-2005

2/05
Developments in the krone exchange rate
The projections in *Inflation Report* 1/05 and 2/05

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 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 krone exchange rate 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 does household debt growth remain high?
Levels of real capital in enterprises still too high?

1 / 03:
Factors behind developmenst 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 excange rate appreciated?
New expectations survey
Why have clothing prices fallen?
The impact of higher oil prices
How does the krone exchange rate influnce 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

(*) = 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. Five times a year, we talk to business and community leaders concerning financial developments in their enterprises and industries. Each round of talks comprises about 290 visits. The contacts reflect the production side of the economy, both in terms of industry sector and geographic area. The network comprises approximately 1300 individuals who are contacted once or twice a year.

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

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

We have divided Norway into seven regions, and 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)	Møreforsking 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 the last *Inflation Report*

In the contact rounds since the March *Inflation Report*, around 580 regional network contacts have been interviewed. The interviews were conducted in March and May. A summary for Norway as a whole and summaries for each region from the round in May will be available on Norges Bank's website on 1 July. The summary below is based on the regional reports from the institutions responsible for the various regions and does not necessarily reflect Norges Bank's view of economic developments.

Demand, output and market outlook

The general impression from the enterprises in the regional network is that the cyclical upturn in the Norwegian economy is continuing. All industries report growth in demand. Corporate services have recently recorded higher growth, while the export industry reports somewhat lower growth. The high investment and activity level in the petroleum industry, a high level of residential construction and solid household finances are important driving forces behind the upturn.

Expectations of continued high oil prices and record-high petroleum-related investment are fuelling growth in the onshore industry. Some suppliers to the petroleum industry are thus reporting strong growth. In the export industry, the shipbuilding and maritime industries are experiencing solid growth in demand. Growth in the processing industry, however, is somewhat more moderate than earlier. In domestically oriented manufacturing, suppliers to the building and construction sector are experiencing steadily increasing demand, while the upturn in the offshore and maritime industry is having positive spillover effects on the engineering industry and other subcontractors. Building and construction reports continued high growth, although growth has slowed in some regions. Growth in retail is still on the rise and is particularly strong for building materials. Nevertheless, overall growth is somewhat lower than in most of 2004. The service sector is experiencing solid growth, especially in commercial services and in the financial, transport and IT sectors.

The market outlook for the next six months indicates that the Norwegian economy will continue to expand, but probably at a somewhat slower pace. The outlook for the export industry is clearly less optimistic than earlier, as confirmed by reports from all regions. It also appears that the peak has been reached in building and construction. Growth is expected to be lower in the period ahead, primarily due to weaker developments in the housing market. Growth is expected to continue in the commercial building and construction industry. Retail trade and the service sector are expecting growth to continue at the same pace as in the previous period. No industry expects an increase in the growth rate in the next six months.

Capacity utilisation and investment

About 40% of all enterprises report that they would have some or considerable difficulty in accommodating higher demand. This percentage has been fairly stable so far this year. However, the percentage of enterprises that would have considerable problems satisfying higher demand has increased during the spring. Large operators in both building and construction and some petroleum-related industries have reached capacity limits. Shortages of skilled labour appear to be the most important constraint.

Investment plans are increasing in pace with developments in capacity utilisation. 42% of the enterprises report plans to increase investment, while 11% expect to reduce investment. On the whole, it appears that investment growth will be moderate in the entire private and public sector in the next six to twelve months. Manufacturing is investing heavily in new production equipment, which in many cases also boosts capacity. The retail industry is upgrading and expanding premises and the building stock. In the services sector, many transport companies are expanding capacity.

Employment and labour market

Despite solid growth, enterprises are reluctant to hire new employees. Since last winter, employment has increased somewhat in manufacturing and retail trade, while a small decline in employment has been registered in the public sector. However, the number of employees has increased most in petroleum-related industries, building and construction and the service sector. These sectors are also expecting growth in the next three-month period. Building and construction, however, is cutting back on employment plans. In a number of industries, typically the hotel and restaurant industry and some parts of manufacturing, the number of person-hours worked is increasing although the number employed is the same.

One in four enterprises indicates that the supply of labour is a constraint on production. Labour constraints are particularly pronounced in the building and construction industry, although an increasing number of manufacturing companies report problems in procuring qualified personnel.

Costs, prices and profitability

Growing shortages of resources and capacity have led to a sharper rise in prices in building and construction and petroleum-related industries. The export industry has also experienced a marked increase in prices in the last 12 months, largely driven by rising commodity prices. The rise in prices has been moderate in other industries. In the period ahead, there are more enterprises that expect higher rather than lower price increases, although price expectations appear to have moderated somewhat compared with earlier in the year.

It appears that enterprises are still placing considerable emphasis on cost control and enhancing internal routines. Combined with solid demand and production, this is improving profitability in all industries. Suppliers to the petroleum industry have posted the largest profitability gains.

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

A.B. Jürgensen
ABB Flexible Automation
AC Nielsen Norge AS
Adresseavisen ASA
Advokatfirmaet Schjødt AS
Aetat Bergen
Aetat Grenland
Aetat Sogn og Fjordane
Aetat Sør-Trøndelag
Aetat Vest-Agder
Aetat Vestfold
Ahlsell AS
Airlift AS
AIT Otta
Ajilon Norway AS
Aker Kværner ASA
Aker Kværner IPEC AS
Aker Langsten AS
Aker Stord
Aker Universitetssykehus
Aker Verdal
Akershus fylkeskommune
Akershus Universitetssykehus
Aksel L. Hansson
Albert E. Olsen AS
Alexandra Hotel AS
Alf R. Johansen AS
Allianse AS
Anleggsgartnerfirma Strandman AS
APS Norway AS
ARKI arkitektar AS
Artic Seafood AS
Asker kommune
Askim kommune
ASKO Agder AS
Aukra Midsund Offshore AS
Avinor AS Værnes
Axxessit ASA
Baker Hughes Inteq
Ballstad Slip AS
Bennett BTI Nordic Norge AS
Bergene Holm AS
Berg-Hansen Reisebureau Vestfold AS
Bertel O. Steen AS
BeWi Produkter AS
Birkenes kommune
Bjørge-Gruppen AS
Black Design AS
Block Berge Bygg AS
Brekke Industrier AS
Brevik Construction AS
Brunvoll AS
Brødrene Bakk AS
Brødrene Harsjøen
Brødrene Pedersen AS
Brødrene Reme AS
Brønnøysund Firma Info AS
Bunnpris
Bygg og Maskin AS
Bygger'n Orkdal
Byggma ASA
Byggmester Grande AS
Byggmo AS
Bærum kommune
Bærum Rørleggerbedrift AS
Bø kommune
Bølgen og Moi
Båtservice Holding ASA
Båtsfjordbruket AS
Catch Communications ASA
CC Martn
CHC Norway
Chiron AS
City Syd AS
Clarion Hotel Ernst AS
Clear Channel Norway AS
Comfort Hotel Lillehammer AS
Conseptor ASA
Coop Finnmark BA
Coop Hordaland BA
Coop Inn-Trøndelag BA
Coop Nordfjord og Sunnmøre BA
Coop Sør-Helgeland BA
CSC Solutions
Daldata AS
Dale Bruk AS
Dale of Norway
David Andersen AS
Deloitte Norge AS
Demex AS
Den Nationale Scene
Den Norske Høyttalerfabrikk AS
Diakonhjemmet
Dinamo Norge AS
DnB Nor ASA
Dokka Fasteners
Drammen kommune
E. A. Smith AS
Egersund Trål AS
Eidsiva Kontorservice AS
Eidsvaag AS
Eiendomsmegler 1 Midt-Norge AS
Eigersund kommune
Einar Valde AS
Elkem Aluminium ANS
Elkem Mosjøen
Elkem Thamshavn
Elkjøp Giganten Forus
Elkjøp Stormarked Bodø AS
Elkjøp Stormarked Skien
Eltek Energy AS
Eltel Networks
Elvemo og Hjertås Bygg AS
Elverum kommune
Ementor Norway ASA
Emma EDB AS
Engerdal kommune
Eramet Norway
Ernst & Young AS
Esmeralda AS
Euronics Norge AS
Eurosko Norge AS
Evje og Hornnes kommune
Fagbokforlaget
Farveringen AS
Fatland AS
Ferner Jacobsen
Fesil ASA
Figgjo AS
Finnøy Gear & Propeller AS
First Securities ASA
First Victoria Hotel
Fjellpulken AS
Fjord Seafood Norway AS
Fjällräven AS
Flatsetsund Møbel- og Trevarefabrikk AS
Flatøy Møbler AS
Flekkefjord kommune
Fokus Bank ASA
Foon Communications AS
Franzefoss Pukk AS
Friele kaffehus
Friskhuset AS
Fritjof Kristiansen AS
Fru Haugans Hotell AS
Fugro Oceanor AS
Fundamus AS
Fylkesmannen i Vest-Agder
Fædrelandsvennen AS
GE Health Care AS
Geelmuyden Kiese AS
Geoservice S
Gilde Norsk Kjøtt AS
Gilstad Trelast AS
Gjensidige Nor Forsikring
Gjøco AS
Gjøvik kommune
Glamox ASA
Glava AS
Goldfish Boat AS
Gozzi AS
Grieg Logistics
Gro Industrier AS
Grunnfjell Nord AS
Gunnar Karlsen AS
Gunvald Johansen AS
Gyldendal ASA
H. Jøkelsrud
Hafjell Alpinsenter AS
Hafslund Sikkerhet Bedrift AS
Hagen Treindustri AS
Halden Kjemi AS
Halliburton
Hamar kommune
Hank Sport AS
Hans H. Iversen
Hatteland Group
Hauans AS
Havkrefter AS
Hebos Interiør AS
Hedmark Eiendom AS
Hegra Sparebank
Helgelandske AS
Helly Hansen Spesialprodukter AS
Helse Nord HF
Helse Nordmøre og Romsdal
Helse Stavanger
Helse Sunnmøre HF
Hemnes kommune
Hemnes Mek. Verksted AS
Hennig-Olsen Is AS
Herman Lepsøe AS
Herregalleriet AS
Hitra kommune
Horns Slakteri AS
Hotell Refsnes Gods AS
Hovden Møbel AS
HSD AS
Hunter Douglas Norge
H-vinduet Vatne AS
Hydro Aluminium Profiler AS
Hydro Aluminium AS

Hydrotech Gruppen AS
Høie AS
IGLO Holding AS
IKEA AS
IKON AS
IN Sogn og Fjordane
Indre Sogn Sparebank
InMedia AS
Innoventi Reklamebyrå AS
Intersport Lillehammer AS
Intra AS
Iris Gjenvinning AS
Island Offshore AS
ISS Renhold AS
Ivar Mjåland AS
Iver Bil AS
J. M. Johansen AS
J. M. Nilsen AS
Jangaard Export AS
JC Jeans & Clothes AS
Jernia ASA
Jiffy Products International AS
Jotun AS
Julius Maske AS
Jørstad AS
Jøtul ASA
K.A. Rasmussen AS
Kantega AS
Kewa Invest AS
Kitron Arendal AS
Kiwi Norge AS
Kleiven Sogn AS
Kleven Florø AS
Klingenberg Hotel AS
Knutsen OAS Shipping
Komplett ASA
Kongsberg Automotive ASA
Kongsvinger kommune
Kontali Analyse AS
KPMG AS
Kristiansund kommune
Kruse Smith AS
Kvadrat Steen & Strøm
Kverneland Group
Kvestor Eiendomsmegling AS
Kynningsrud AS
Laerdal Medical AS
Lafopa Industrier AS
Landteknikk Fabrikk AS
Langset AS
Lefdal Elektromarked AS Lade
Lefdal Installasjon AS
Leif Gromstads Auto AS
Leiv Sand Transport AS
Lerum Fabrikker
Lerøy Midnor AS
LIDL Norge
Lillesand produkter
Lindex AS
Lindstrøm Hotel AS
Link Arkitekter
Lofoten Pelagiske AS
Lofotentreprenør AS
Lyse Energi AS
Løvenskiold Handel AS
M. Kristiseter Entreprenør AS
M. Peterson & Søn AS
Madsen Bil AS
Madshus AS
Malvik kommune
Mandal Reberbane AS
Marhaug Slip og Mekaniske Verksed AS
Marine Harvest
Maritime Hotell Flekkefjord
Maritime Hydraulics AS
Maritime Pusnes AS
Martin M. Bakken
Meca Norway AS
Mesta AS
Midsund Bruk AS
Midt-Norge Regnskap AS
Min Boutique Gruppen AS
Mjosundet Båt og Hydraulikk AS
Mjøsplast AS
Modolv Sjøset Pelagic AS
Moelven Østerdalsbruket
Moi Rør AS
Montér
Mosjøen Kulde og Klimaservice AS
Moxy Engineering AS
MTU Telecom AS
Multi Elektro AS
Multimaskin AS
MyTravel
Mørenot AS
Nannestad kommune
Naper Informasjonsindustri AS
Narud Stokke Wiig
NCC Roads AS
Nera Networks AS
Net Trans Services AS
Nexans Norway AS
NHO Trøndelag
Norconsult AS
Nor-Dan AS
Nordbohus Vinstra AS
Nordea AS
Nordea Bank Norge ASA
Nordek AS
Nordic Comfort Products AS
Nordlaks AS
Nordlandbuss
Nordmøre Revisjon AS
Norengros Johs. Olsen AS
Norges Handels- og Sjøfartstidende
Norlandia Royal Hotel
Norlense AS
Norli Gruppen AS
Norli Vestlandet
Nornett AS
Norplasta AS
Norpower Brødr. Malo AS
NorSea AS
Norsk Scania AS
Norsk Sjømat AS
Norsk Stein AS
Norske Skogindustrier ASA Skogn
Nor-Sport Bodø AS
Nortrans Touring AS
Nortroll AS
Notar Eiendom Nordland AS
Notodden Mur- og Entreprenørforretning AS
Nova-Group
Nycomed Pharma
Nysted AS
Næringsforeningen i Trondheim
Næringsrådet i Arendal kommune
Oasen
Olagutt AS
Ole K. Karlsen Entreprenør AS
Opera Software ASA
Oppland Entreprenør AS
Optimera Engros AS
Opus AS
Oras Trondheim AS
Orkdal Installasjon AS
Orkdal kommune
Os kommune
Oslo Entreprenør AS
Oslo Hi-Fi Senter
Osram AS
Otta Sag og Høvleri AS
Ottar Kristoffersen Eftf. AS
PA Consulting Group AS
Pareto Securities AS
Partner Reisebyrå AS
Paulsen Eiendom AS
Pon Power AS
PDC Tangen AS
Peab AS
Pedersens Lastebiltransport AS
Per Solem Arkitektkontor AS
Per Aaland AS
Personalservice AS
Petter Gagama AS
Petters Sjømat AS
PGS Production Group
Plast-sveis AS
PriceWaterhouseCoopers
Prior Norge BA
Proffice AS
Profil Lakkering
Promec AS
På Håret AS
Rainbow Hotel Bergen
Rainbow Hotel Vestfjord
Rambøl Unico AS
Rambøll Norge AS
Ramsvik Frisør
Rana Plast AS
Rana Trevarefabrikk AS
Rauma kommune
Rautaraukki Profiler AS
Reidar Flokkmann Eftf.
Reinertsen Anlegg AS
Reinertsen Engineering AS
Rema 1000
Restco AS
Revisorgruppen Vestfold AS
Revisorkonsult AS
Rica Hotel Alta
Rica Hotel Hamar
Rica Hotel Norge AS
Rica Hotels ASA
Rica Hotels Midt-Norge AS
Rica Ishavshotell
Rica Maritim Hotel
Rica Sunnfjord Hotell
Rieber & Søn ASA
Ring Mekanikk AS
Risa AS
Risør kommune
Robinson Scandinavia AS
Rockwool AS
Rogaland fylkeskommune
Rogaland Kunnskapspark
Rolf Domstein
Rolf Jentoft AS
Rolls-Royce Marine AS
ROM Eiendomsutvikling
Romerike Trelast AS
Romsdals Budstikke AS
Rotanor Bokproduksjon AS
Ruukki Norge AS
Rygge kommune
Rørlegger Jonny Valle AS
Rørteknikk og bademiljø AS
Saga Boats AS
Saint Gobain Ceramic Materials AS
Saipem Norvegia
SalMar AS
Samarbeidende Revisorer AS
Sandnes kommune
Santo AS
Scanbridge AS
Scandic Hotel Arendal AS
ScanPartner AS
ScanRope AS
Seafarm Invest AS
SEB Kort AB
Selje Hotel AS
Selmer Skanska AS
Sentrum Kiropraktikk og Helse AS
Sentrum Regnskap
SG Equipment Finance
SG-FINANS
Siemens AS
Sig.Halvorsen AS
Silvinova
Simon Møkster Shipping AS
SINTEF
Sjøsiden Senter AS
Sjøvik AS
Sjåtil og Fornæss
Skagen Brygge Hotell
Skarvik mekaniske verksted AS
Skeidar AS
Skeikampen Resort
Skibsplast AS
Skien kommune
Skifer & Naturstein
Skipsteknisk AS
Skodje Byggvare AS
Skretting AS
Slipen Mekaniske AS
Smurfitt Norpapp AS
Snillfjord kommune
Solstrand Fjord Hotell
Sortland Elektro AS
Sortland Entreprenør AS
Sortland kommune
Sparebank 1 Vestfold
Sparebanken Hedmark
Sparebanken Møre
Sparebanken Øst
Sperre Støperi
Spice AS
Spis Mørekjøtt AS
Sport 1 Gruppen AS
Sportshuset AS
Stabburet AS
Stange kommune
Stansefabrikken Lillesand AS
Stantek Kongsvinger AS
Star Tour
Statens Vegvesen
Stavanger Aftenblad
Stavanger kommune
Stavangerske AS
Steertec Raufoss AS
Stoa Storkjøp AS
Strax Trondheim AS
Surnadal kommune
Sveins Auto AS
Sykehuset i Vestfold HS
Syljuåsen AS
Södra Cell Tofte
Sønnico AS
Sørco AS
Sør-Norge Aluminium
T. Stangeland Maskin AS
Taubåtkompaniet AS
Tema Eindomsselskap AS
Th. Johansen & Sønner AS
Thomar AS
Tibe Reklamebyrå AS
Tine Meierier Vest BA
Tine Meierier Øst BA
Tinn kommune
Titania AS
Topp Auto AS
Torghatten Trafikkselskap AS
Torgkvartalet kjøpesenter
Torpa bilruter AS
Toten Bygg og Anlegg AS
Toten Transport AL
Totens Sparebank
Toyota Norge AS
Trafikk & Anlegg AS
Trioving AS
Trondheim kommune
Trondheim Stål AS
Trysilfjellet BA
Tvedestrand kommune
Tysvær kommune
Ulstein Verft AS
Umoe Catering AS
Umoe IKT
Umoe Mandal AS
UPC AS
Vadsø kommune
Valle sparebank
Vefsn kommune
Veidekke ASA
Verdal kommune
Vest Inkasso AS
Vest-Busscar Stryn
Vesterålsrevisjon AS
Vestvik Reklame AS
Vestvågøy kommune
VIBO Entreprenør AS
Vigor AS
Vik-Sandvik Group
Vital Forsikring ASA
Vital Næringseiendom AS
Vokks Installasjon AS
Våler Bygg AS
Wennberg Trykkeri AS
Westnofa
Westres Bakeri AS
Widerøe Internett AS
Widerøes Flyveselskap ASA
Wiersholm, Mellbye & Bech Advokatfirma AS
Windy Boats AS
Xerox As
Yara International ASA
YIT Building Systems AS
Økonor Sandnessjøen AS
Øksfjord Slip og Mek AS
Østbyen Bil AS
Østerdal billag AS
Østereng & Benestad AS
Øveraasen AS
Ålesund Storsenter AS
Åmot kommune
Aarsland Møbelfabrikk AS
Aas Mek. Verksted AS
Åsen & Øvrelid AS
3T Produkter 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		
14 December 2005		
2 November 2005		
21 September 2005		
11 August 2005		
Previous monetary policy meetings		
30 June 2005	2	+0,25
25 May 2005	1.75	0
20 April 2005	1.75	0
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

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 slightly higher than the sight deposit rate.

Table 1 Main macroeconomic aggregates

Percentage change from previous year/ quarter		GDP	Mainland GDP	Private con-sump-tion	Public spending on goods and servi-ces	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	4.4	2.3	6.1	12.3	3.0	9.1
2004[2]	Q1	1.2	0.7	1.9	1.0	0.6	7.4	-1.8	3.4
	Q2	1,1	0.9	0.0	1.0	2.2	2.2	-1.2	2.3
	Q3	-0.8	1.0	0.9	0.0	4.0	3.3	5.5	3.0
	Q4	1.1	1.4	1.4	0.2	6.2	9.8	2.4	2.8
2005[2]	Q1	0.5	0.9	-0.2	0.7	-5.6	-8.5	-1.2	-2.4
Level 2004, in billions of NOK		1688	1307	756	371	227	73	210	498

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

Source: Statistics Norway

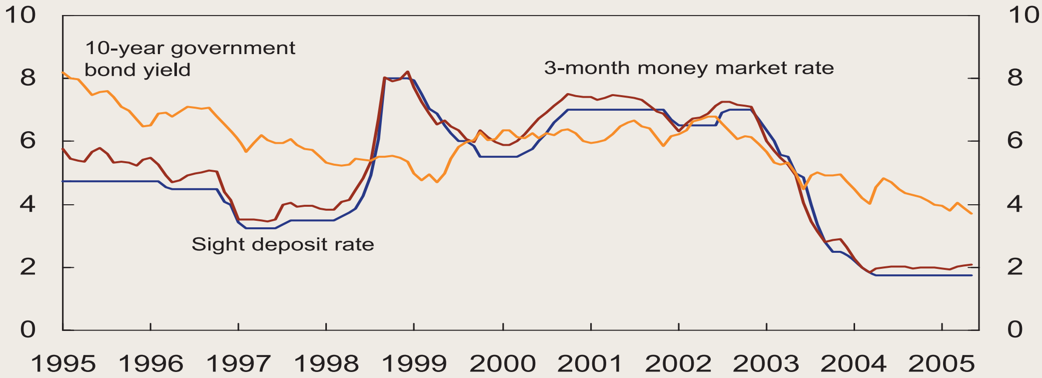
Table 2 Consumer prices

Twelve-month rise. Per cent		**CPI**	**CPI-ATE[1]**	**CPI-AT[2]**	**CPI-AE[3]**	**HCPI[4]**
1997		2.6			2.3	2.5
1998		2.2			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		0.4	0.3	0.0	0.8	0.6
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
	Mar	1.0	0.7	0.5	1.1	0.9
	Apr	1.3	0.8	0.8	1.3	1.2
	May	1.6	1.1	1.2	1.5	1.5

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.

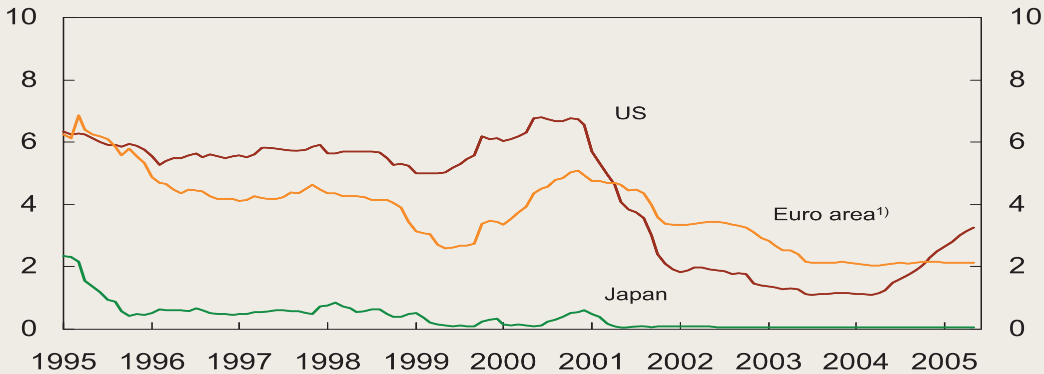
Source: Statistics Norway

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



Sources: EcoWin and Norges Bank

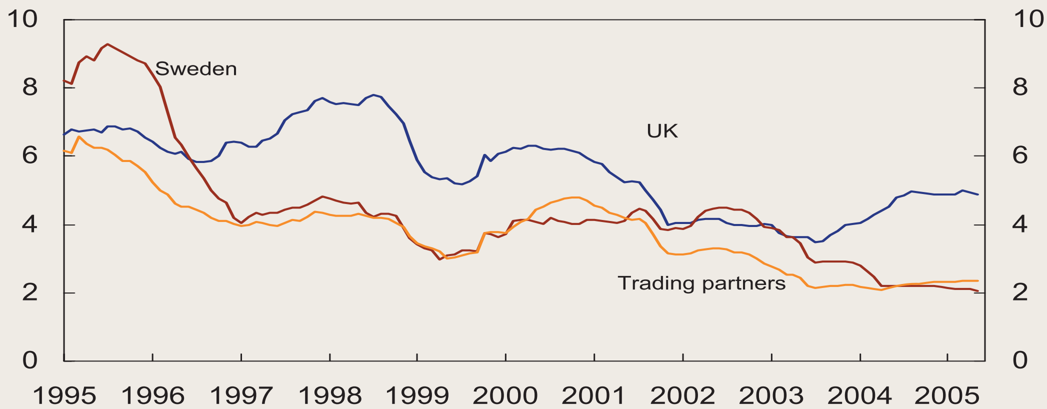
Chart 2 3-month interest rates in the US, the euro area and Japan. Monthly figures. Per cent. Jan 95 – May 05



[1)] Theoretical ECU rate up to and including December 1998

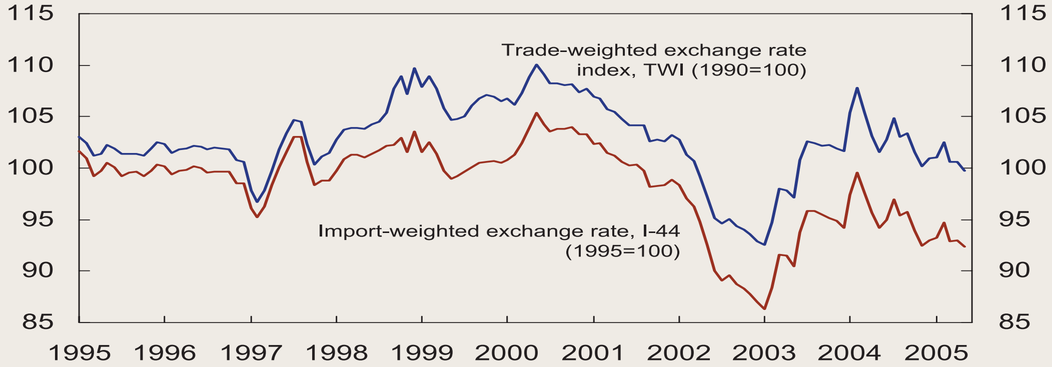
Sources: EcoWin and Norges Bank

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



Sources: EcoWin and Norges Bank

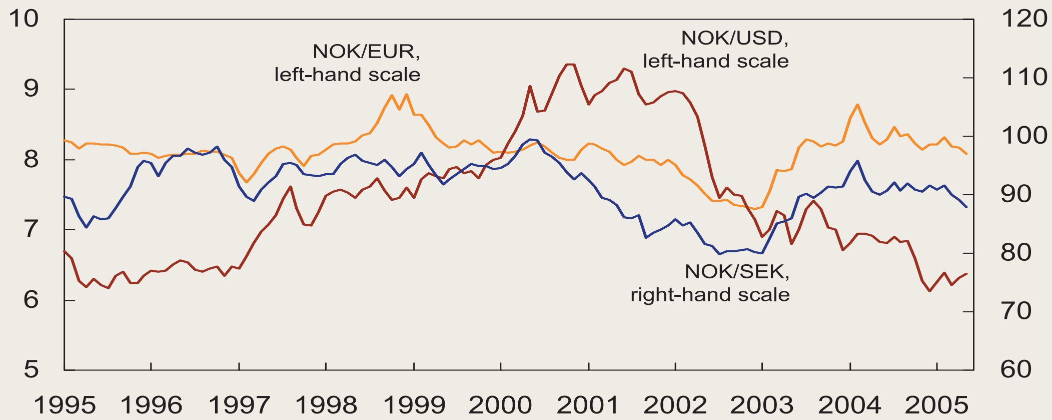
Chart 4 Trade-weighted exchange rate index (TWI) and import-weighted exchange rate (I-44).[1)] Monthly figures. Jan 95 – May 05



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

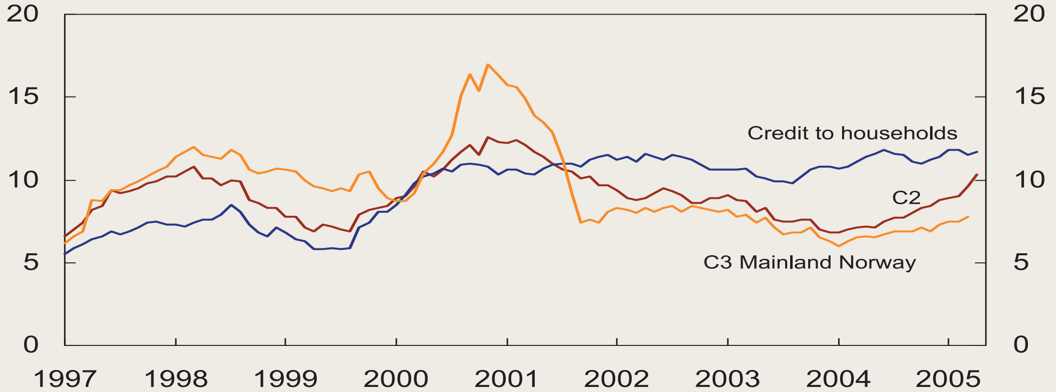
Sources: EcoWin and Norges Bank

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



Source: Norges Bank

Table 3 GDP growth in other countries

Percentage change from previous year
Projections for 2005-2008

	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	1½	¾	1¼	2¼	2	2	1¼
2006	2¾	1¼	1¼	2	2¼	2½	2¼	1¾
2007	2¾	1¼	1¼	2	2¼	2½	2¼	2
2008	2¾	1¼	1½	2	2¼	2½	2½	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
Projections for 2005-2008

	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	3	0	1¼	2	1¾	¼	1½	1¾
2006	2½	¼	1¼	1½	1¾	1¼	1½	1¾
2007	2½	¼	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 scenario[1)]

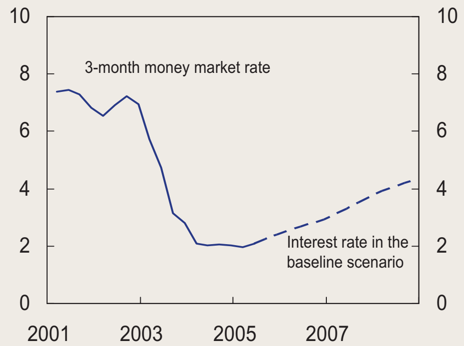
Historical developments		I-44[2)]	Sight deposit rate
1997		99.2	3.4
1998		101.7	5.5
1999		100.4	6.3
2000		103.3	6.2
2001		100.2	7.0
2002		91.6	6.7
2003		92.8	4.2
2004		95.6	1.8
2004	Q1	98.2	2.0
	Q2	94.9	1.8
	Q3	96.1	1.8
	Q4	93.1	1.8
2005	Q1	93.6	1.8
2005	Q2	92.1	1.8
	Q3	91.0	2.0
	Q4	91.0	2.1
2006	Q1	91.0	2.3
	Q2	91.0	2.4
	Q3	91.1	2.5
	Q4	91.2	2.7
2007	Q1	91.3	2.9
	Q2	91.4	3.1
	Q3	91.5	3.3
	Q4	91.7	3.5
2008	Q1	91.8	3.7
	Q2	92.0	3.8
	Q3	92.1	4.0
	Q4	92.3	4.1

1) I-44 is based on the forward exchange rate. The basis for the calculation is the average level of the index from 1-24 June. Three-month forward rates are estimated on the basis of interest rates in the money market and interest rate swap markets observed on 24 June. 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

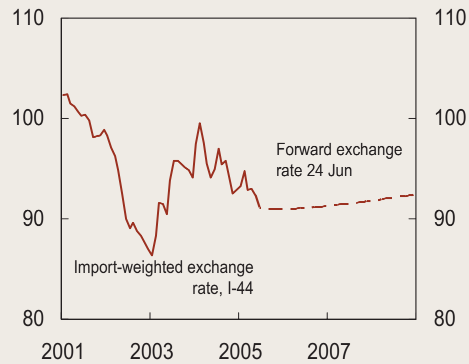
Assumption for money market rate[1)]. Quarterly figures. 01 Q1 – 08 Q4



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

Source: Norges Bank

The krone exchange rate (I-44)[1)]. Forward exchange rate. Monthly figures. Jan 01 – Dec 08



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

Source: Norges Bank

Table 6 Main macroeconomic aggregates

	In billions of NOK	Percentage change (unless otherwise stated)				
			Anslag			
	2004	2004	2005	2006	2007	2008
Real economy						
Mainland demand[1)]	1355	4.1	4	3¾	2½	2
- Private consumption	756	4.4	4	3¾	2¾	2¼
- Public consumption	371	2.3	1¾	1½	1½	1½
- Fixed investment	227	6.1	7½	6	2¾	1½
Petroleum investment[2)]	73	12.3	25	-5	-2½	0
Traditional exports	210	3.0	5½	3½	3½	3½
Imports	498	9.1	8	3½	2¼	1¾
GDP	1688	2.9	3	3½	2½	2
Mainland GDP	1307	3.5	3¾	3	2½	2¼
Potential mainland GDP		3	2½	2½	2½	2½
Output gap, mainland Norway		-¾	½	1	1	¾
Labour market						
Employment		0.2	1	1½	1	½
Labour force, LFS		0.3	¾	1	1	¾
Registered unemployment (rate)		3.9	3½	3¼	3¼	3½
LFS unemployment (rate)		4.5	4¼	3¾	3¾	4
Prices and wages						
CPI		0.4	1¼	1¾	2	2½
CPI-ATE[3)]		0.3	1	1½	2	2½
Annual wages[4)]		3.6	3½	4½	4½	4½

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. The projections include estimated costs connected to the introduction of compulsory occupational pensions.

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

Inflation Report No 2- June 2005