NORGES BANK

Reports from the Central Bank of Norway No 3/2007

Monetary Policy Report

2
07

June

Monetary Policy Report

The Report is published three times a year, in March, June and October/November. The Report assesses the interest rate outlook and includes projections for developments in the Norwegian economy, analyses of selected themes and a summary of Norges Bank's regional network reports.

At its meeting on 25 April, the Executive Board discussed relevant themes for the Report. At the Executive Board meeting on 13 June, the economic outlook was discussed. On the basis of this discussion and a recommendation from Norges Bank's management, the Executive Board adopted a monetary policy strategy for the period to the publication of the next Report on 31 October 2007 at the meeting held on 27 June. The Executive Board's assessment of the economic outlook and the monetary policy strategy are presented in Section 1. In the period to the next Report, the Executive Board's monetary policy meetings will be held on 15 August, 26 September and 31 October.

The *Monetary Policy Report,* together with *Financial Stability,* is part of Norges Bank's series of reports. The report is also available on Norges Bank's website:
http://www.norges-bank.no.

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Monetary Policy Report 2/2007

The Monetary Policy Report is based on information
in the period to 21 June 2007

The monetary policy strategy in Section 1 was approved by the Executive Board on 27 June 2007

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% over time.

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. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances are not taken into account.

Monetary policy influences the economy with a lag. Norges Bank sets the interest rate with a view to stabilising inflation close to the target in the medium term. The horizon will depend on disturbances to which the economy is exposed and the effects on prospects for the path for inflation and the real economy.

The decision-making process

The main features of the analysis in the *Monetary Policy Report* are presented to the Executive Board for discussion at a meeting about two weeks before the Report is published. Themes of relevance to the Report have been discussed at a previous meeting. On the basis of the analysis and discussion, the Executive Board assesses the consequences for future interest rate developments, including alternative strategies. The decision to adopt a monetary policy strategy is made on the same day as the Report is published. The strategy applies for the period up to the next Report and is presented at the end of Section 1 in the Report.

The key policy rate is set by Norges Bank's Executive Board. Decisions concerning the interest rate are normally taken at the Executive Board's monetary policy meeting every sixth week. The analyses and the monetary policy strategy, together with assessments of price and cost developments and conditions in the money and foreign exchange markets, form a basis for interest rate decisions.

Communication of the interest rate decision

The monetary policy decision is announced at 2pm on the day of the meeting, and the Bank holds a press conference at 2:45 pm on the same day. The press release provides an account of the main features of economic developments that have been of importance for the interest rate decision and the Executive Board's assessments. The press release and the press conference are available on www.norges-bank.no.

Reporting

Norges Bank reports on the conduct of monetary policy in the *Monetary Policy Report* and the *Annual Report*. The Bank's reporting obligation is set out in Section 75c of the Constitution, which stipulates that the Storting shall supervise Norway's monetary system, and in Section 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 deliberations on the Credit Report.

Editorial

Normal times?

Inflation is low. Underlying consumer price inflation has ranged between 1% and 1½% for some time.

Through spring, forward interest rates increased markedly in other countries. This may reflect prospects for solid growth in the world economy, but it may also indicate that central banks now must increase interest rates to keep inflation at bay.

Norges Bank has raised its key policy rate gradually. The interest rate has been increased well ahead of an actual rise in inflation. We have been ahead of the curve. Expected interest rates in money and bond markets one to three years ahead have approached our projections from below.

Norges Bank's Executive Board has decided that the key policy rate should lie in the interval 4½ - 5½% in the period to the publication of the next *Report* on 31 October, conditional on economic developments that are broadly in line with projections. We expect the key policy rate to rise further in the period to summer 2008, but this will largely depend on developments in the world economy. Given the inflation target, we will be mindful of the effects of higher interest rates on the krone exchange rate when inflation is low.

After a period of unusually low inflation and unusually low interest rates, inflation and interest rates are on the rise. At the same time, the strong expansion in the Norwegian economy is expected to moderate. We are perhaps heading towards more normal times.

27 June 2007
Svein Gjedrem

1 Monetary policy assessments and strategy

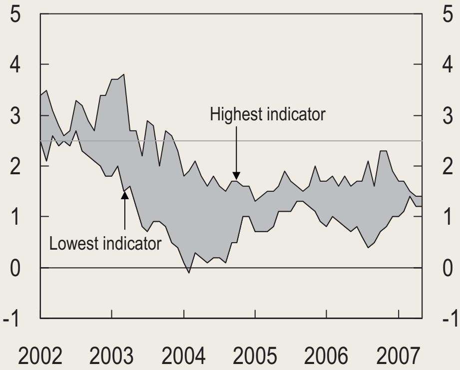
The economic situation

Consumer price inflation remains moderate even though the cyclical upturn in the Norwegian economy is in a mature phase. Underlying inflation has been fairly stable and ranged between 1% and 1½% over a longer period (see Chart 1.1). Consumer price inflation adjusted for tax changes and excluding energy products has edged up and is now in the upper end of this interval. Strong competition and high productivity growth in the business sector have restrained the rise in prices for domestically produced goods and services in spite of rising wage growth. The rise in prices for these goods and services is now nevertheless somewhat higher than projected (see Chart 1.2). Prices for imported consumer goods are still falling. Electricity prices have declined from high levels in 2006 and as a result total consumer price inflation measured by the CPI is now temporarily very low (see Chart 1.3).

Growth in the Norwegian economy has been strong. High income growth and high income expectations, combined with low interest rates, have led to brisk growth in demand in the business, household and public sectors. Several years of vigorous growth in the world economy have resulted in higher prices for Norwegian exports. Terms-of-trade gains have led to a sharp increase in Norway's disposable income (see Chart 1.4). At the same time, equity and property prices have surged. This increase in wealth has probably amplified demand growth. In addition, a more flexible loan market has facilitated a wealth-based increase in consumption. At the same time, banks have reduced their lending margins. Until recently, banks' lending rates have increased less than the key policy rate. This has dampened the effects of the interest rate hikes on households. Our projections of mainland GDP growth have been revised up by half a percentage point for 2007.

Employment is rising and entrants to the labour force have increased. Unemployment is now as low as the level recorded during the boom in the 1980s. There seems to be limited room for a further fall in unemployment, but the low level of unemployment may persist for a longer period than projected earlier. Many of the enterprises in Norges Bank's regional network report shortages of labour and certain important input factors as constraints on production growth. This may curb growth in the Norwegian economy and lead to higher wage and cost inflation. Prices for intermediate goods, capital goods and some services are rising rapidly. Wage growth is picking up.

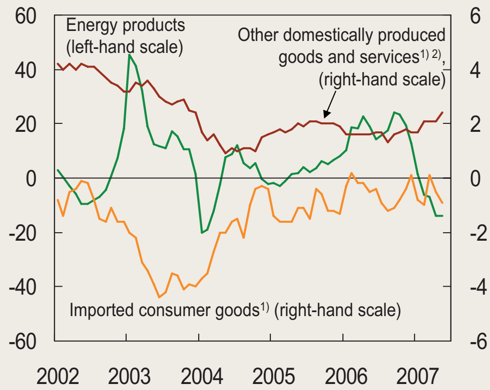
Chart 1.1 Interval of uncertainty for underlying inflation. Highest and lowest indicator. [1] 12-month change. Per cent. Monthly figures. Jan 02 – May 07



[1] Highest and lowest indicator of CPI-ATE, weighted median and trimmed mean. See box on recent price developments.

Sources: Statistics Norway and Norges Bank

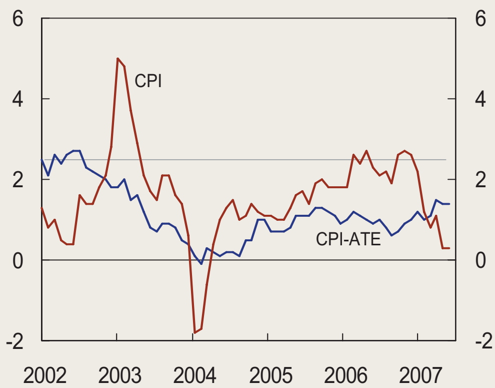
Chart 1.2 Consumer prices. 12-month change. Per cent. Monthly figures. Jan 02 – May 07



[1] Adjusted for tax changes and excluding energy products.
[2] Adjusted for the estimated effect of reduced maximum day-care rates in 2006

Sources: Statistics Norway and Norges Bank

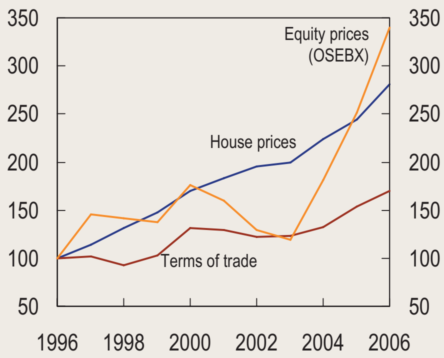
Chart 1.3 CPI and CPI-ATE[1]. 12-month change. Per cent. Monthly figures. Jan 02 – May 07



[1] CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.

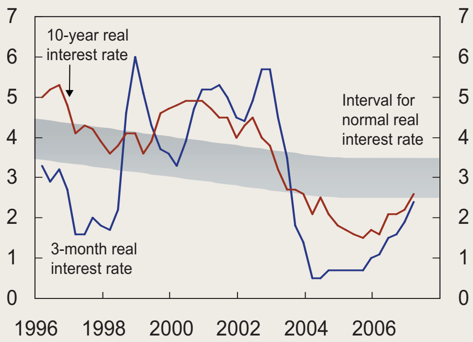
Sources: Statistics Norway and Norges Bank

Chart 1.4 Terms of trade, house prices and equity prices. Indices, 1996 = 100. Annual figures. 1996 – 2006



Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, Finn.no, ECON, Oslo Stock Exchange (Reuters (EcoWin)), Statistics Norway and Norges Bank

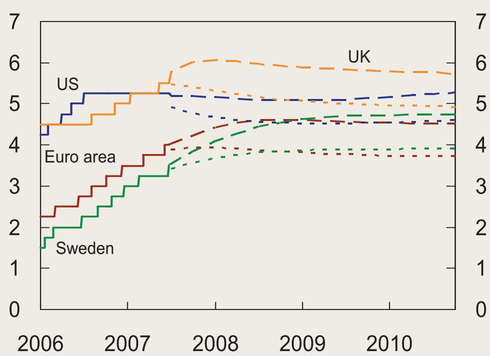
Chart 1.5 3-month real interest rate[1)], 10-year real interest rate[2)] and the normal real interest rate in Norway. Per cent. Quarterly figures. 96 Q1 – 07 Q1



[1)] 3-month money market rate deflated by the 12-quarter moving average (centred) of inflation measured by the CPI. Projections for the CPI from this report form the basis for this estimate.
[2)] 10-year swap rate deflated by the inflation target.

Source: Norges Bank

Chart 1.6 Policy rates and forward rates at 9 March 2007 and 21 June 2007.[1)] Per cent. Daily and quarterly figures. 1 Jan 06 – 31 Dec 10



[1)] Broken lines show forward rates on 21 June 2007. Dotted lines show forward rates on 9 March 2007. Forward rates are based on interest rates in the money market and interest rate swaps.

Sources: Reuters (EcoWin) and Norges Bank

After inflation subsided and interest rates were cut through 2003 and 2004, monetary policy has been geared towards bringing inflation back towards the target of 2.5%. Low interest rates have stimulated demand and output. There have been prospects for higher underlying inflation for some time. In response to this, Norges Bank has gradually increased the key policy rate over the past two years, even though actual inflation was still low. High capacity utilisation in the business sector, rising wage growth and higher prices for important intermediate goods and services are expected to push up inflation gradually to the 2.5% target. The short-term real interest rate is now estimated to be close to a normal level (see Chart 1.5).[1] The long-term real interest rate has also increased and is now at about the same level as the short-term real interest rate.[2]

Growth remains buoyant among our trading partners. Weaker growth in the US seems to have had little impact on developments in OECD countries in Europe and Asia. Economic growth has been particularly strong in emerging market economies. Developments in these countries are of growing importance for the world economy. Prices for oil and other commodities have increased further and inflation has edged up in some countries.

Official policy rates have been raised in several countries since the previous *Report* and interest rate expectations abroad have increased markedly (see Chart 1.6). The tightening cycle might last somewhat longer in European countries than expected in March. In the US, interest rates are expected to remain approximately at today's level, while interest rates were previously expected to be lowered already this year. Higher forward interest rates may reflect expectations that monetary policy will be geared towards keeping inflation at bay. The inflation outlook for the world economy is discussed further in a box in this *Report*.

The interest rate differential against trading partners has been positive since the beginning of the year. Norwegian forward rates have also risen since the previous *Report*. The increase in short-term interest rates has been somewhat smaller than among trading partners, reducing the expected interest rate differential over the next year. The krone exchange rate has been fairly stable since March (see Chart 1.7).

[1] Calculations may indicate that the normal real interest rate for Norway is currently in the lower half of the interval 2½-3½%.
[2] Ten-year swap rate deflated by the inflation target.

Baseline scenario

Monetary policy is oriented towards low and stable inflation. This is the most important contribution monetary policy can make to sound economic developments in the long term. Low and stable inflation provides businesses and households with an anchor for inflation expectations.

Monetary policy is oriented towards CPI inflation of close to 2.5% over time. Inflation in Norway decelerated markedly from the end of the 1980s to the mid-1990s and has since been low and stable, with considerably lower variability than earlier (see Chart 1.8). Over the past 5-10 years, inflation has averaged around 2%, i.e. somewhat lower than – but fairly close to – the target of 2.5%.

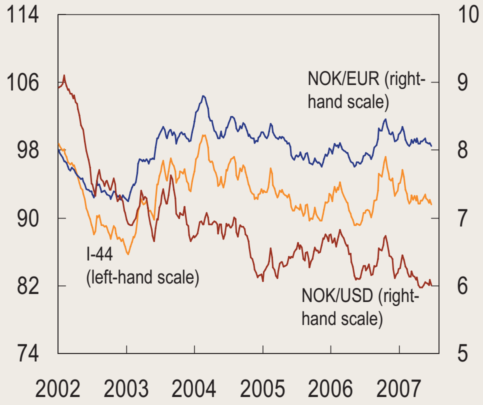
While the projections are uncertain, prospects have suggested for some time that inflation will be close to target from the end of 2008. In setting interest rates, it would not be appropriate to alter the general policy stance and aim at reaching the target significantly later. This could have influenced the stability of expectations among consumers, price-setters and market makers.

It took a long time in this upturn before inflation started to rise (see Chart 1.9). This reflects the influence of a number of positive supply-side conditions in the Norwegian economy, such as strong productivity growth, ample supply of foreign labour and a fall in prices for imported consumer goods.

Some of the driving forces that have curbed inflation may gradually lose momentum. Normally, productivity growth tapers off when the cyclical upturn is in a mature phase. The shift towards imports from low-cost countries continues, but probably to a lesser extent than observed in recent years. Producer and export prices among our trading partners have increased. As a result, there are prospects of a reversal in the fall in prices for imported consumer goods followed by a gradual pick-up. Labour markets in Sweden, Poland and the Baltic countries are tightening, which may entail slower growth in inward labour migration.

So far, there are few signs of a slowdown in the Norwegian economy. There are prospects that the strong expansion will be sustained for a longer period than previously envisaged. The growth outlook for the world economy remains favourable. In Norway, domestic demand for goods and services is still growing at a fast pace, with strong growth in household consumption. New orders in the business sector are still on the rise. The regional network reports continued solid growth in production in most sectors and petroleum

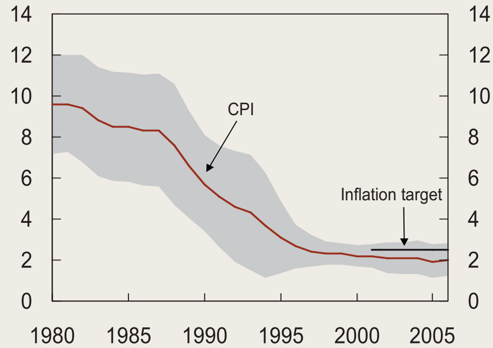
Chart 1.7 Exchange rates.[1)] The import-weighted exchange rate index (I-44), NOK/EUR and NOK/USD. Weekly figures. Week 1 2002 – Week 25 2007



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

Source: Norges Bank

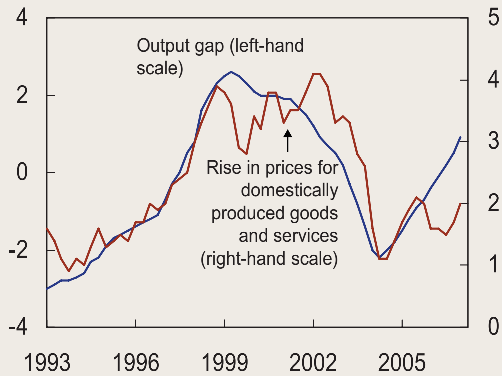
Chart 1.8 CPI. 10-year moving average[1)] and variation[2)]. Per cent. Annual figures. 1980 – 2006[3)]



1) The moving average is calculated 7 years back and 2 years ahead.
2) The band around the CPI is the variation in the CPI adjusted for tax changes and excluding energy products in the average period, measured by +/- one standard deviation.
3) Projections for 2007 and 2008 from this report form the basis for this estimate.

Sources: Statistics Norway and Norges Bank

Chart 1.9 Rise in prices for domestically produced goods and services[1)] and output gap level (lagged by 4 quarters). Quarterly figures. 93 Q1 – 07 Q1



1) Adjusted for tax changes and excluding energy products

Sources: Statistics Norway and Norges Bank

Monetary policy since the previous report

Norges Bank's projections for economic developments in *Monetary Policy Report* 1/07, which was presented on 15 March 2007, implied a key policy rate in the interval 4 - 5% in the period to 27 June. The monetary policy strategy was conditional on economic developments that were broadly in line with projections. The Executive Board's assessment was that the interest rate should be increased gradually, so that Norges Bank could assess the effects of interest rate changes and other new information. The interest rate path reflected the Executive Board's trade-off between bringing inflation up to target and stabilising developments in output and employment.

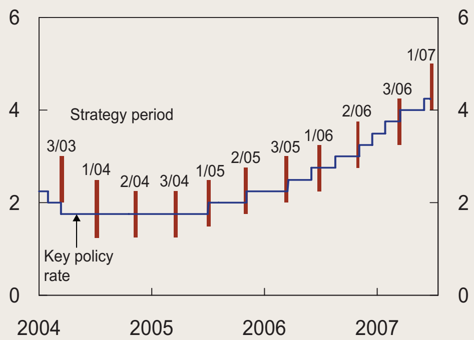
In *Monetary Policy Report* 1/07, it was pointed out that major shifts in trade patterns, stronger competition, sustained high productivity growth, weaker global growth or a stronger krone exchange rate might result in lower-than-expected inflation. It was also pointed out that high capacity utilisation or higher cost inflation might lead to higher-than-projected inflation.

The interest rate was increased by 0.25 percentage point to 4.00% at the monetary policy meeting on 15 March. The Executive Board noted that inflation, wage growth and capacity utilisation had developed broadly in line with expectations. A fall in energy prices had pushed down CPI inflation. Underlying inflation had been relatively low in recent months in line with expectations and was estimated at between 1% and 1½%. There were nevertheless several factors indicating that inflation would gradually pick up. Growth in the Norwegian economy was strong and the high level of activity might hold up somewhat longer than previously expected. Employment was rising at a faster-than-projected pace and unemployment had fallen to a low level. The Executive Board considered the alternative of leaving the interest rate unchanged at this meeting, but decided that it was appropriate to increase the key policy rate.

The key policy rate was kept unchanged at the monetary policy meeting on 25 April. The Executive Board pointed out that economic developments had been broadly in line with projections since mid-March. Consumer price inflation had been somewhat higher than projected, but the rise was driven primarily by prices that show wide monthly variations. As expected, cost inflation appeared to be on the rise. Economic developments were strong. However, new information since the previous monetary policy meeting did not on the whole provide sufficient grounds for deviating from the strategy presented in March. The Executive Board considered the alternative of increasing the interest rate at this meeting, but decided that it was appropriate to leave the key policy rate unchanged.

At the monetary policy meeting on 30 May, the Executive Board noted that consumer price inflation had varied somewhat in recent months, but the overall rate of increase had been approximately as expected. Underlying inflation was still estimated at between 1 - 1½%. Cost inflation accelerated as expected. Growth in total domestic demand was strong. Growth in household consumption was particularly strong. Employment had increased somewhat more than expected, while unemployment was approximately in line with projections. The key policy rate was raised by 0.25 percentage point to 4.25%.

Chart 1 Interval for the key policy rate at the end of each strategy period and actual developments.[1)] Per cent. Daily figures. 2 Jan 04 – 21 Jun 07



[1)] The executive board's decision on 27 June is not shown in the chart, see table p. 62

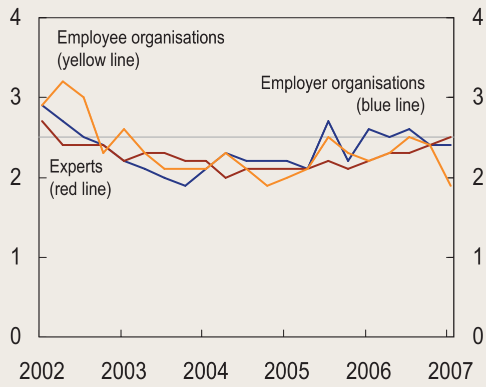
Source: Norges Bank

investment has been revised up somewhat. Fiscal policy is assumed to be somewhat more expansionary in 2007 than previously expected.

High capacity utilisation, in conjunction with a deceleration in the price fall for imported goods, is expected to lead to higher inflation ahead. Costs are rising. As productivity growth slackens, companies will have to pass on higher costs to prices to a greater extent, but the current high margins may dampen the pass-through somewhat.

Monetary policy cannot fine-tune developments in the economy, but must counter the effects of large disturbances to the economy. In some situations, it may be appropriate when assessing the monetary policy stance to guard against particularly adverse developments.

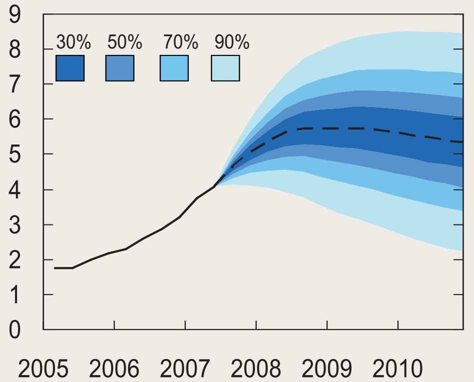
Chart 1.10 Expected consumer price inflation 2 years ahead. Employer/employee organisations and experts[1]. Per cent. Quarterly figures. 02 Q2 – 07 Q2



[1] Employees in financial industry, macroanalysts and academics.

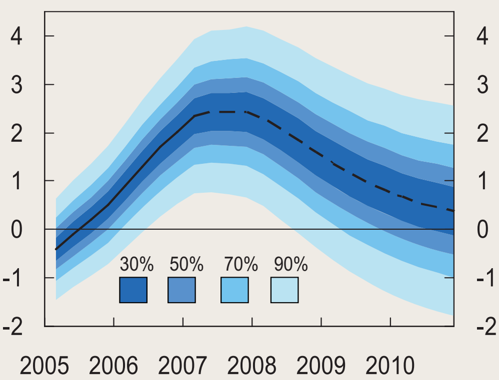
Source: TNS Gallup

Chart 1.11a Projected key policy rate in the baseline scenario with fan chart. Per cent. Quarterly figures. 05 Q1 - 10 Q4



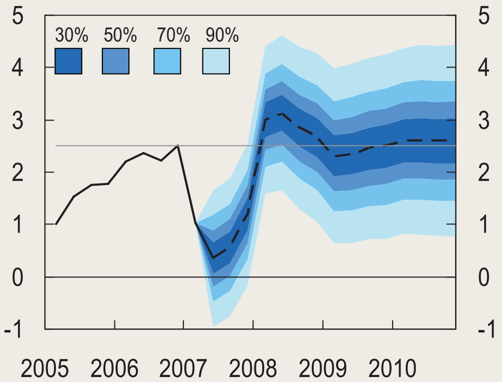
Source: Norges Bank

Chart 1.11b Projected output gap in the baseline scenario with fan chart. Per cent. Quarterly figures. 05 Q1 - 10 Q4



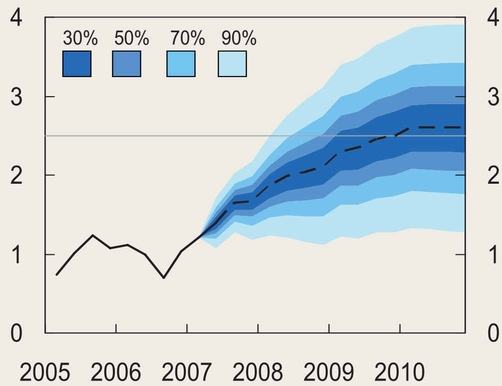
Source: Norges Bank

Chart 1.11c Projected CPI in the baseline scenario with fan chart. 4-quarter rise. Per cent. Quarterly figures. 05 Q1 - 10 Q4



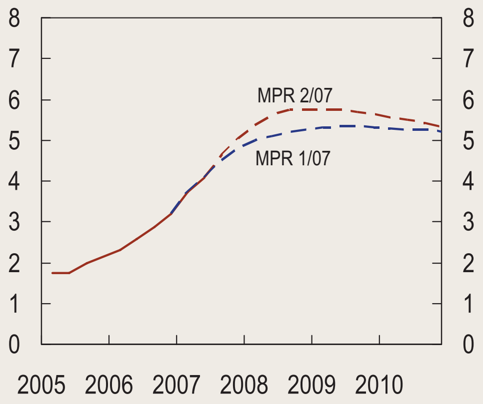
Sources: Statistics Norway and Norges Bank

Chart 1.11d Projected CPI-ATE in the baseline scenario with fan chart. 4-quarter rise. Per cent. Quarterly figures. 05 Q1 - 10 Q4



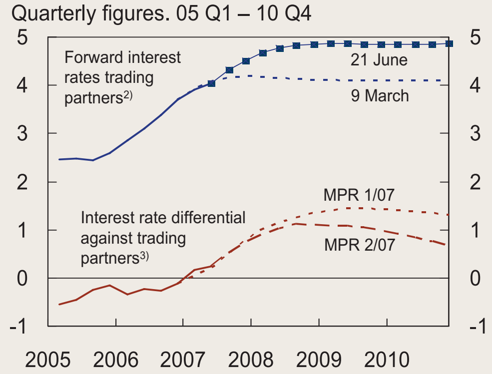
Sources: Statistics Norway and Norges Bank

Chart 1.12 Key policy rate in the baseline scenario in MPR 1/07 and MPR 2/07. Per cent. Quarterly figures. 05 Q1 – 10 Q4



Source: Norges Bank

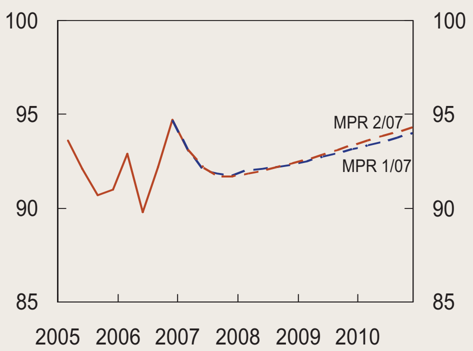
Chart 1.13 Forward interest rates for trading partners and projected interest rate differential in MPR 1/07 and MPR 2/07. Money market rates[1]. Quarterly figures. 05 Q1 – 10 Q4



[1] Money market rates are approximately 0.2 percentage point higher than the key policy rate.
[2] Weighted average of trading partners' forward rates.
[3] Interest rate differential in the baseline scenario.

Source: Norges Bank

Chart 1.14 Import-weighted exchange rate (I-44)[1] in the baseline scenario in MPR 1/07 and MPR 2/07[2]. Quarterly figures. 05 Q1 - 10 Q4



[1] A rising curve denotes a weaker krone exchange rate.
[2] The exchange rate path is based on uncovered interest rate parity.

Source: Norges Bank

The aim of preventing inflation expectations from becoming entrenched well below target was one of the main reasons behind the interest rate reductions to a very low level in 2003 and 2004. In spite of several years of low inflation, inflation expectations have held up (see Chart 1.10). According to TNS Gallup's business sentiment survey, a rising share of enterprises expect purchase and selling prices to increase at a faster pace in the period ahead. At the same time, we have received confirmation that wage growth is picking up. Continued high productivity growth or strong competition in product markets may nevertheless lead to a lower-than-projected rise in inflation, with inflation remaining at about today's level. This must be given weight when setting interest rates.

Experience shows that price and cost inflation can pick up rapidly towards the end of a cyclical upturn. The labour market is very tight. Should inflation rise significantly, interest rates will have to be increased more rapidly or to a further extent than projected in this *Report*. In order to guard against inflation becoming too high, a pre-emptive and more pronounced increase in the interest rate might, in isolation, be appropriate. This must also be given weight when setting interest rates.

The overall assessment of monetary policy ahead must be based on the fact that inflation is still low. There are prospects that consumer price inflation adjusted for tax changes and excluding energy products will move up to around 2% in the latter half of next year (see Chart 1.11d).

The key policy rate has been raised gradually and ahead of the rise in inflation. The expected rise in Norwegian interest rates beyond that of our trading partners is already discounted in financial markets. Thus, the projections in this *Report* are expected to have limited impact on the krone exchange rate. However, it cannot be ruled out that a wider interest rate differential will lead to an appreciation of the krone. This may suggest a gradualist approach in interest rate setting. A considerably stronger krone may keep inflation at a low level. Developments in the krone exchange rate therefore have a bearing on how rapidly and to what extent the interest rate can be increased.

The outlook and the balance of risks suggest that it would be appropriate to continue raising the interest rate gradually to a little more than 5% in the course of this year and to a somewhat higher level in the period to summer 2008 (see Charts 1.11a-d). Compared with *Monetary Policy Report* 1/07, the interest rate path has been adjusted upwards by about ¼ percentage point around the end of 2007 and ½ percentage point in 2008 (see Chart 1.12).

Interest rate expectations in other countries have increased by ¾ percentage point and interest rates among trading partners are now expected to be close to 5% from the end of 2008 (see Chart 1.13). The krone exchange rate is assumed to remain virtually unchanged in the period ahead and to depreciate somewhat thereafter (see Chart 1.14).[3]

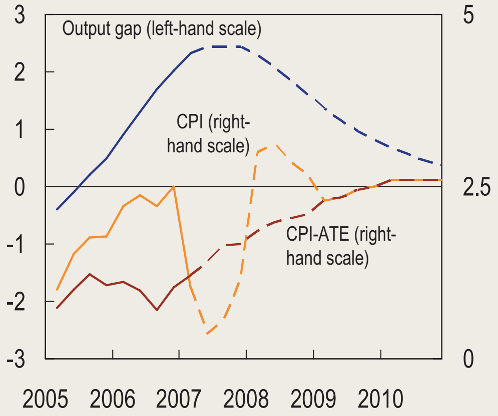
The trade-off between bringing inflation back to target and stabilising developments in output and employment is illustrated in Chart 1.15. The interest rate path in this *Report* is consistent with Norges Bank's previous response pattern. Capacity utilisation is currently at such a high level that inflation will gradually move up to 2.5%. At the same time, the increase in interest rates may lead to a gradual fall in capacity utilisation so that inflation does not become too high.

Inflation measured by the CPI is projected to pick up markedly from a very low level this year. The wide variations in the CPI reflect fluctuations in electricity prices. As a result of a sharp fall in electricity prices this year and the prospect of high electricity prices early next year, CPI inflation may exceed 3% in early 2008. Temporarily low CPI inflation this year will be followed by temporarily high CPI inflation next year. Excluding energy prices, the rise will be more gradual. The CPI adjusted for tax changes and excluding energy products (CPI-ATE) is expected to pick up to around 2% in the latter half of 2008, approximately as projected in the previous *Report*. It is still uncertain how quickly inflation will move up towards 2.5% (see below for further discussion of the uncertainty surrounding the projections).

The output gap is now estimated at 2½% in 2007, falling gradually to about ½% in 2010. With a real interest rate that gradually rises to above its normal level, it is reasonable to assume that the household saving ratio will increase and that growth in private consumption will slow. Resource shortages in the Norwegian economy may also have a dampening impact on output growth. Higher wage growth and somewhat slower productivity growth, combined with higher interest rates, will reduce corporate profitability. The projections for petroleum investment have been revised up somewhat, but investment growth for mainland Norway is expected to slacken. Weaker competitiveness and slower global growth may lead to somewhat lower export growth for mainland Norway. As a result of capacity constraints, a larger share of demand growth will have to be covered by

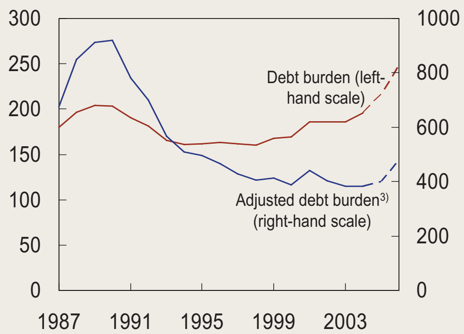
[3] The projections for the krone exchange rate are consistent with the theory of uncovered interest parity. The past appreciation of the krone and the depreciation in the years ahead reflect the expected annual interest rate differential between Norway and trading partners.

Chart 1.15 Projected inflation and output gap in the baseline scenario. Per cent.
Quarterly figures. 05 Q1 - 10 Q4



Sources: Statistics Norway and Norges Bank

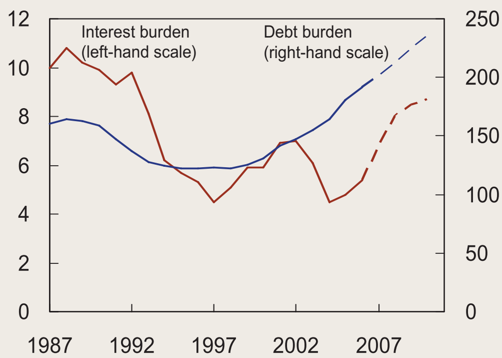
Chart 1.16 Debt burden and debt burden adjusted for general living expenses. Households with debt[1]). Per cent. Annual figures. 1987 – 2006[2])



[1]) Excluding self-employed and students.
[2]) Estimates for 2005 and 2006.
[3]) Disposable income is adjusted for general living expenses as calculated by the National Institute for Consumer Research (SIFO).

Sources: Statistics Norway, SIFO and Norges Bank

Chart 1.17 Projections of household interest burden[1]) and debt burden[2]). Per cent. Annual figures. 1987 – 2010



[1]) Interest expenses after tax as a percentage of disposable income adjusted for estimated reinvested dividends less return on insurance claims and plus interest expenses.
[2]) Loan debt as a percentage of disposable income adjusted for estimated reinvested dividends less return on insurance claims.

Sources: Statistics Norway and Norges Bank

Criteria for an appropriate interest rate path

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 interest rate setting, the forecast for future interest rate developments should satisfy the following main criteria:

1. The interest rate should be set with a view to stabilising inflation close to the target in the medium term. The horizon will depend on disturbances to which the economy is exposed and the effects on the prospects for the path for inflation and the real economy.

2. The interest rate path should provide a reasonable balance between the path for inflation and the path for capacity utilisation.

In the assessment, potential effects of asset prices, such as property prices, equity prices and the krone exchange rate on the prospects for output, employment and inflation are also taken into account. Assuming the criteria above have been satisfied, the following additional criteria are useful:

3. Interest rate developments 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. Interest rate adjustments should normally be gradual and consistent with the Bank's previous response pattern.

5. As a cross-check for interest rate setting, it should be possible to explain any substantial and systematic deviations from simple monetary policy rules.

imports for a period. All in all, mainland GDP is expected to grow at a somewhat slower pace than production capacity as from 2008, resulting in a gradual fall in capacity utilisation.

The household debt burden has increased markedly since the end of the 1990s and has reached a historically high level. High income growth is expected to continue to sustain the rise in house prices and growth in credit to households, but the rate of increase will probably moderate as a result of higher interest rates. The proportion of fixed-rate loans is low and the volume of interest-only loans is rising. Combined with a low saving ratio, this implies that many households have become more vulnerable to unexpected interest rate increases and a drop in income. On the other hand, growth in the general cost of living has been lower than income growth over the past 15 years. If disposable income is adjusted for the general cost of living, the household debt burden is considerably lower than at the end of the 1980s (see Chart 1.16). On the whole, household debt is expected to rise somewhat more rapidly than income growth in spite of higher interest rates, resulting in a further increase in the debt burden in the years ahead (see Chart 1.17). The interest burden will increase in pace with the interest rate.

Uncertainty surrounding the projections

The projections for inflation, output, the interest rate and other variables are based on our assessment of the current situation and our perception of the functioning of the economy. There is considerable uncertainty surrounding future developments in inflation and output, and hence interest rate developments. The fan charts illustrate the uncertainty surrounding our projections (see Charts 1.11a-d).[4] The wider the fan charts are, the more uncertain the projections. The width of the fan charts is based on historical disturbances.[5] The uncertainty interval around the interest rate reflects the fact that monetary policy reacts to disturbances to other variables. This increases the uncertainty surrounding future interest rates, but also reduces the uncertainty surrounding the other variables.

If economic developments are broadly in line with projections, economic agents can also expect interest rate developments to be approximately as projected. On the other hand, the interest rate path may shift in relation to that projected in this *Report* if economic prospects change or if the effects of interest rate changes on output, employment and prices are different from that projected.

[4] There is also uncertainty about the current situation (see boxes in Inflation Report 3/05 and Inflation Report 3/06)
[5] A further description of the fan charts is provided in Inflation Report 3/05.

Charts 1.19a-c show developments under two alternative scenarios for the economy. The projections in the charts are based on the assumption that Norges Bank's response pattern is known and consistent over time.[6] Interest rate setting must be assessed in the light of the reasons for and the expected duration of the disturbances. The later monetary policy responds to such disturbances, the wider the fluctuations in output and inflation will be. On the other hand, it may be difficult to distinguish between erratic statistical effects and more long-lasting disturbances. It may therefore take time before interest rate setting can be based on economic developments that differ from the projected path.

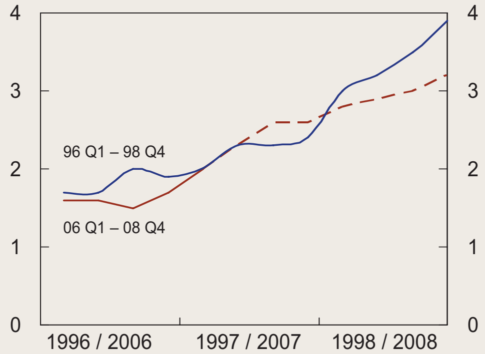
Prices for domestically produced goods and services may rise more rapidly than projected. Wage growth is picking up and the rise in prices for domestically produced goods and services has recently been somewhat stronger than projected. Prices for some input factors, including building materials, have jumped up. Unemployment is very low and is expected to remain low for a longer period than projected earlier. There are considerable labour shortages. In previous business cycles such labour market developments have often led to an abrupt change in wage and price inflation.

Chart 1.18 compares the rise in prices for domestically produced goods and services in the cyclical upturn in 1996-1998 with the rise in prices and projections for the period 2006-2008. The rise in prices for these products is now projected to reach over 3% towards the end of 2008, which is ¾ percentage point lower than at the end of 1998. There is a risk that the rise in prices will be higher than projected. Charts 1.19a-c (red lines) illustrate a path where the rise in prices for domestically produced goods and services is the same as that observed ten years ago. Consumer price inflation will – if history repeats itself – be half a percentage point higher than projected towards the end of this year. Such a profile suggests a faster interest rate increase than in the baseline scenario in order to prevent inflation from overshooting the target by a considerable margin.[7] A higher interest rate, combined with a stronger krone exchange rate, may lead to a situation where capacity utilisation gradually moves down to a lower level than in the baseline scenario. Inflation gradually edges down, but is somewhat higher than in the baseline scenario in the coming years.

[6] A further account of this is provided in Bergo, J. (2007): "Interest rate projections in theory and practice", speech at the Foreign Exchange Seminar of the Association of Norwegian Economists at Sanderstølen on 26 January 2007.

[7] As a technical assumption, the projections for the real economy are initially held constant. It is also assumed that we apply the interest rate in the baseline scenario the first months and do not react to disturbances until the end of 2007. Other market participants, households and enterprises are also uncertain whether the economy will follow a different path before that time. The background for the delayed reaction is that it may take time to realise that the economy is moving on a different path.

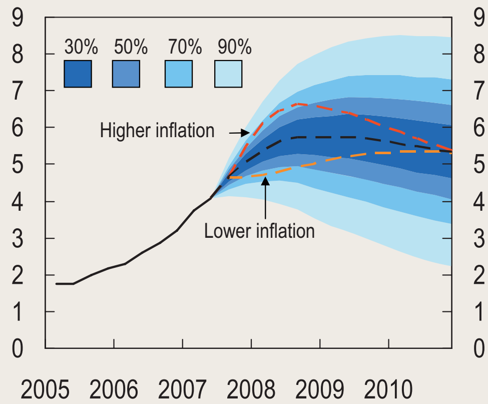
Chart 1.18 Comparison of rise in prices for domestically produced goods and services in two periods[1)]. 4-quarter rise. Per cent. Quarterly figures. 96 Q1 – 98 Q4 and 06 Q1 – 08 Q4



[1)] Adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.

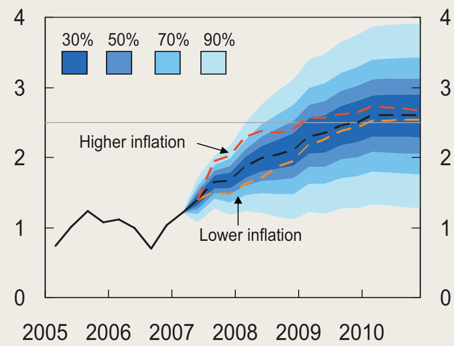
Sources: Statistics Norway and Norges Bank

Chart 1.19a Key policy rate in the baseline scenario and in the alternatives with higher and lower inflation. Per cent. Quarterly figures. 05 Q1 - 10 Q4



Source: Norges Bank

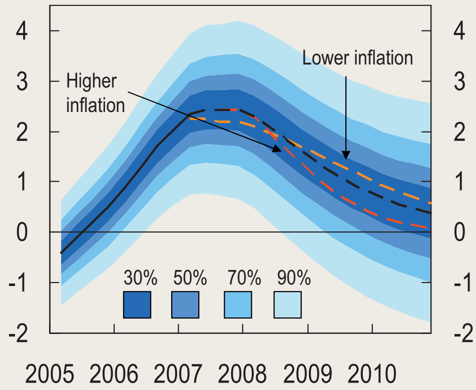
Chart 1.19b CPI-ATE[1)] in the baseline scenario and in the alternatives with higher and lower inflation. 4-quarter rise. Per cent. Quarterly figures. 05 Q1 - 10 Q4



[1)] CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.

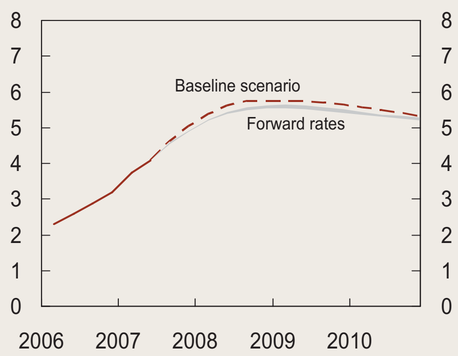
Sources: Statistics Norway and Norges Bank

Chart 1.19c Output gap in the baseline scenario and in the alternatives with higher and lower inflation. Per cent. Quarterly figures. 05 Q1 - 10 Q4



Source: Norges Bank

Chart 1.20 Key policy rate in the baseline scenario and estimated forward rates1). Per cent. Quarterly figures. 06 Q1 – 10 Q4



1) A credit risk premium and a technical difference of 0.20 percentage point have been deducted to make the forward rates comparable with the key policy rate. The grey, shaded interval shows the highest and lowest interest rates in the period 8 – 21 June 2007.

Source: Norges Bank

On the other hand, we may have underestimated the flexibility of the Norwegian economy. Productivity growth may remain high for a longer period than expected, and the supply of foreign labour may be better than expected. The economy will then be able to accommodate a higher level of production growth than projected without a pick-up in the rise in prices for domestically produced goods and services. Moreover, the shift in imports towards low-cost countries may be more pronounced than assumed, resulting in a continued low rise in prices for imported consumer goods. A lower rise in commodity prices or a stronger krone exchange rate may also have a dampening impact on inflation.

Charts 1.19a-c (yellow lines) illustrate a path where growth potential is higher than projected and where inflation does not pick up in line with expectations.[8] Under this scenario, the aim of holding up inflation expectations and bringing inflation back towards target must be given greater weight. This suggests an interest rate path that is lower than in the baseline scenario. A lower interest rate will lead to a depreciation of the krone and a gradual increase in capacity utilisation. Inflation gradually moves up but is lower than in the baseline scenario in the years ahead.

The uncertainty surrounding the projections may also be illustrated by the inherent probabilities shown in Charts 1.11d and 1.19b. The fan charts imply that the probability that consumer price inflation adjusted for tax changes and excluding energy products will exceed 3.5% two to three years ahead is somewhat lower than 15%. The probability that inflation will remain below 1.5% over an extended period is about 10%. The probability that inflation will be lower than 1.5% throughout 2008 is estimated at about 15%.

Cross-checks[9]

Forward interest rates provide a cross-check of the Bank's interest rate forecast. Under certain assumptions about risk premia, forward rates may reflect market expectations about future interest rate developments. Both long-term and short-term forward rates in Norway have risen since *Monetary Policy Report* 1/07. Forward rates may indicate that financial market participants now expect an increase in the policy rate to 5½ - 5¾% in 2008 (see Chart 1.20). Forward interest rates are now broadly in line with the interest rate forecast in this *Report*.

8 This alternative is also based on the assumption that it takes time to reveal the causes and to adjust monetary policy. The output gap is assumed to be ¼ percentage point lower than in the baseline scenario through 2007. It is further assumed that inflation will be about ¼ percentage point lower than in the baseline scenario in the course of autumn 2007.

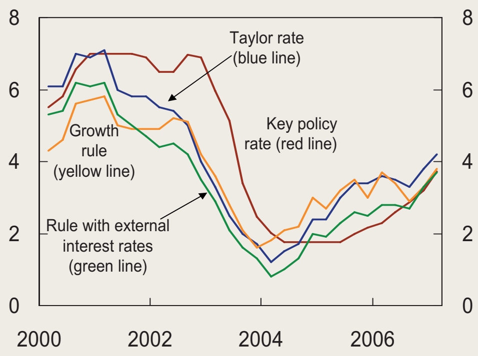
9 For an in-depth discussion of several cross-checks for interest rate setting, see Norges Bank's Annual Report 2006.

For a long period, simple monetary policy rules implied somewhat higher interest rates than Norges Bank's key policy rate.[10] Since the latter half of 2006, there have been no major differences between the key policy rate and the simple rules (see Chart 1.21). The Taylor rule applies the output gap and inflation.[11] The growth rule instead applies observed GDP growth and inflation.[12] Simple monetary policy rules do not take account of the economic outlook but focus solely on the economic situation today.

The Taylor rule and the growth rule have some limitations as a reference for a small, open economy. They do not take into account that changes in the interest rate may result in changes in the exchange rate, thereby influencing the inflation outlook. In principle, the rule involving external interest rates is better suited for a small, open economy.[13] As a result of higher interest rates among our trading partners, the rule with external interest rates has now moved up and is in the same range as the other simple rules.

Norges Bank has estimated a simple interest rate rule on the basis of the Bank's previous interest rate setting (see box in *Inflation Report* 3/04). Such a rule suggests a gradual increase in the interest rate ahead (see Chart 1.22). It is primarily as a result of high GDP growth and prospects for a higher rise in consumer prices adjusted for tax changes and excluding energy products that this interest rate rule implies higher interest rates ahead. The rule results in an interest rate in line with the baseline scenario in this *Report*.

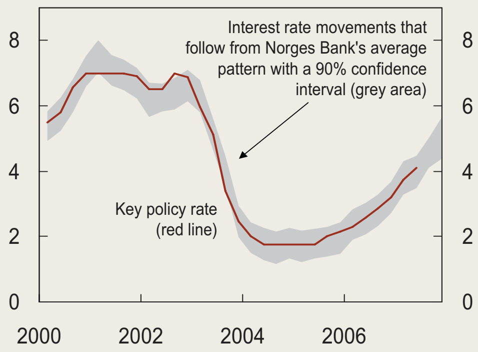
Chart 1.21 Key policy rate, Taylor rate, growth rule and rule with external interest rates.[1)] Per cent. Quarterly figures. 00 Q1 – 07 Q1



1) The CPI-ATE adjusted for the estimated effect of reduced maximum day-care rates in 2006 has been used as a measure of inflation. Other measures of underlying inflation that have been higher than the CPI-ATE would have resulted in a higher interest rate path.

Source: Norges Bank

Chart 1.22 Key policy rate and interest rate developments that follow from Norges Bank's average pattern for the setting of interest rates.[1)]. Per cent. Quarterly figures. 00 Q1 – 07 Q4



1) The interest rate movements are explained by developments in inflation, mainland GDP growth, wage growth and 3-month interest rates among trading partners. See *Inflation Report* 3/04 for further discussion.

Source: Norges Bank

10 In the calculations, we use the rise in the CPI-ATE as a measure of inflation. It is our assessment that underlying inflation has in periods been higher than shown by this indicator. Simple interest rate rules would then suggest slightly higher interest rates than shown in the chart.

11 The Taylor rule: Interest rate = inflation target + equilibrium real interest rate +1.5·(inflation – inflation target) + 0.5·output gap. See Taylor J.B. (1993): "Discretion versus policy rules in practice", Carnegie-Rochester Conference Series on Public Policy 39, pages 195-214.

12 Growth rule: Interest rate = inflation target + equilibrium real interest rate +1.5·(inflation – inflation target) + 0.5·growth gap. Athanasios Orphanides proposes to replace the output gap with the difference between actual growth and trend growth in the economy (growth gap). One reason for this is that the Taylor rule is sensitive to errors in the measurement of the output gap. See Orphanides A. (2003): "The quest for prosperity without inflation". Journal of Monetary Economics, vol. 50, no. 3, pp. 633-663.

13 The external real interest rate rule: Interest rate = inflation target + equilibrium real interest rate + 1.5·(inflation – inflation target) + 0.5·output gap + 1.0·(real interest rate among Norway's trading partners – real interest rate in Norway).

Conclusions – monetary policy strategy

The Executive Board's assessment is:

- Consumer price inflation remains moderate in spite of a prolonged cyclical upturn in the Norwegian economy. Underlying inflation has been relatively stable and ranged between 1% and 1½% for some time. There are nevertheless several factors indicating that inflation will pick up. Wage growth is rising and there are prospects that the economic expansion will last somewhat longer than previously envisaged. Employment is rising approximately as projected and unemployment is lower than during the previous expansion. There is a shortage of labour and certain important input factors in many industries. Temporarily low CPI inflation this year will be followed by temporarily high CPI inflation next year. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) will probably rise gradually, but the projections are uncertain. Higher forward interest rates abroad reflect expectations that monetary policy among our trading partners will be geared towards keeping inflation at bay.

- New information may reveal aspects of economic developments that indicate that the Norwegian economy is moving on a different path than projected. On the one hand, high capacity utilisation or higher cost inflation may lead to higher-than-projected inflation. On the other hand, sustained high productivity growth, a more pronounced shift towards imports from low-cost countries and a stronger krone exchange rate may result in lower-than-expected inflation.

The Executive Board's strategy:

- The interest rate path presented in this *Report* reflects the Executive Board's trade-off between bringing inflation up towards target and stabilising developments in output and employment. In the light of this trade-off, the interest rate will be increased gradually so that we can assess the effects of interest rate changes and other new information on economic developments. Given the inflation target, we will be mindful of the effects of higher interest rates on the krone exchange rate when inflation is low.

- The key policy rate should be in the interval 4½ - 5½% in the period to the publication of the next *Monetary Policy Report* on 31 October, conditional on economic developments that are broadly in line with projections.

Higher interest rates keep global inflation subdued

Inflation remains moderate among our trading partners (see Chart 2.1). Looking ahead, a tightening of monetary policy in industrialised countries is expected to contribute to keeping inflation low. This is supported by current indicators and various measures of inflation expectations. CPI inflation is projected to remain around 2% among our trading partners (see Table 2.1).

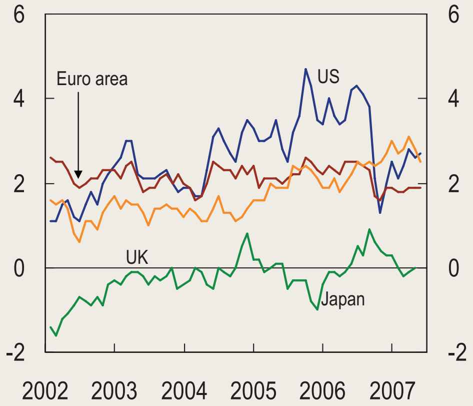
Since *Monetary Policy Report* 1/07, prices for oil and other commodities have increased from already high levels. In the US, the UK, Sweden and China, the increase in energy and food prices has contributed to a somewhat sharper rise in consumer prices than projected earlier. However, the effects on consumer prices in Germany from the increase in VAT at the beginning of 2007 were smaller than expected. In Japan, inflation has also been lower than expected.

In recent years, low long-term interest rates have contributed to higher property and securities prices and reduced credit risk premia in bond markets in large parts of the world economy. At the same time, as a result of spare production capacity and low consumer price inflation, monetary policy has been able to stimulate demand through low short-term interest rates for a long period. This has contributed to high money supply and credit growth (see Chart 2.2). Pressures on production capacity are now rising and monetary policy is being tightened internationally. Both short-term and long-term interest rates have risen markedly since the previous *Report*. However, this does not appear to reflect expectations of higher inflation to any extent. Both in the US and the euro area, the rise in interest rates has been driven by the rise in real interest rates while inflation expectations are stable (see Chart 2.3). Inflation expectations have risen somewhat in the UK. The inflation outlook for the world economy is discussed further in a box on page 41.

Market interest rates indicate that official policy rates among trading partners are expected to increase to about 4.7% in the first half of 2008, or close to ¾ percentage point higher than projected in the previous *Report*. In the US, interest rate cuts rate are no longer priced into the market. Interest rate increases are expected in most countries.

In bond markets, risk premia measured by yield differentials for bonds with different risk increased around the end of February. This was partly due to increased losses on subprime mortgages in the US, coupled with a temporary reduction in risk willingness in financial markets. Risk premia have since declined and are currently very low

Chart 2.1 Inflation. 12-month change in the CPI. Per cent. Monthly figures. Jan 02 – May 07



Sources: Reuters (EcoWin) and Norges Bank

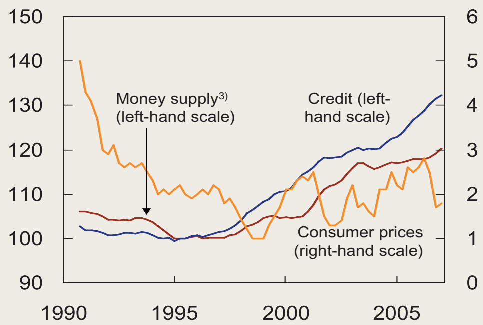
Table 2.1 Projections for consumer prices in other countries. Change from previous year.

	2007	2008	2009	2010
US	2½	2½	2¼	2¼
Japan	0	½	1¼	1¼
Germany	2	1½	1½	1½
France	1½	1¾	1¾	1¾
UK	2½	2	2	2
Sweden	2	2¼	2¼	2
China	3	3	3¼	3¼
Trading partners[1)]	2	2	2	2
Euro area[2)]	2	2	2	2

1) Import weights, 26 important trading partners
2) HICP. Weights from Eurostat (each country's share of total euro area consumption)

Sources: Eurostat and Norges Bank

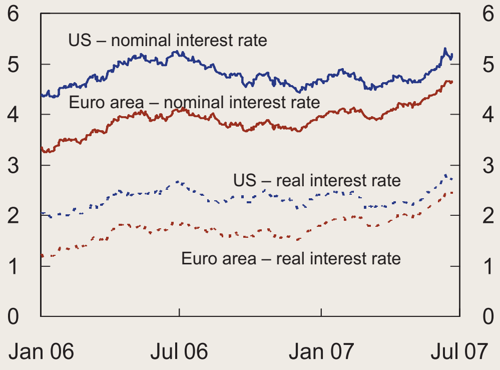
Chart 2.2 Consumer prices[1)], credit and money supply[2)] in the US, the euro area and Japan.[3)] Quarterly figures. 90 Q4 – 07 Q1



1) CPI: 12-month rise. Per cent.
2) Credit and money supply as a share of nominal GDP. Indices, 1995 = 100. Credit to private sector. Money supply: M3 for euro area and Japan, M2 for the US.
3) Weighted by GDP in 2000 and PPP exchange rates.

Source: Bank for International Settlements

Chart 2.3 Nominal and real interest rates on 10-year government bonds in the US and the euro area. Per cent. Daily figures. 2 Jan 06 – 21 Jun 07



Source: Reuters (EcoWin)

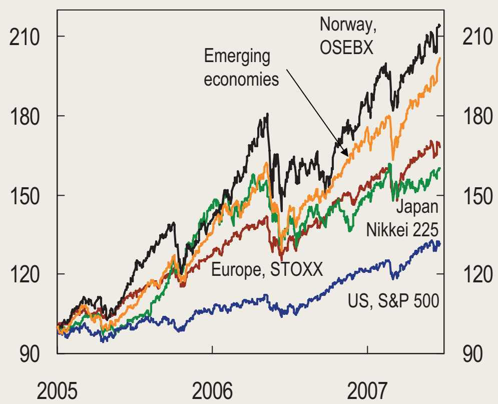
Table 2.2 Projections for GDP growth in other countries. Change from previous year.

	2007	2008	2009	2010
US	2¼	2¾	2¾	2¾
Japan	2¼	2	1½	1½
Germany	2½	2¼	2	1½
France	2¼	2¼	2¼	2¼
UK	2¾	2½	2½	2¼
Sweden	3½	3	2¼	2
China	10½	9¾	9	9
Trading partners[1)]	3	2¾	2½	2¼
Euro area	2½	2¼	2	1¾

1) Export weights, 26 important trading partners.

Source: Norges Bank

Chart 2.4 Developments in international stock indices. 2 Jan 05 = 100. Daily figures. 2 Jan 05 – 21 Jun 07



Source: Reuters (EcoWin)

from a historical perspective. Renewed risk willingness has also led to a renewed increase in carry trade activity. The Japanese yen and the Swiss franc have depreciated, while the Australian and New Zealand dollar have appreciated. Since the previous *Report*, the US dollar has depreciated, while the euro and pound sterling have appreciated.

Equity prices also fell markedly around the end of February. The decline was relatively short-lived and equity prices have rebounded in recent months (see Chart 2.4). Solid Q1 figures for listed companies in Europe and the US, coupled with expectations of continued solid earnings, have contributed to the rise. The uncertainty in the stock market has decreased, but remains higher than before the period of unrest (see Chart 2.5).

The benefits of globalisation are still being felt. China, India and some other countries in Asia and eastern Europe are expanding sharply. At the same time, globalisation is boosting growth in industrialised countries. Product and labour markets are becoming more efficient as a result of increased competition. Employment is still on the rise among all our main trading partners and unemployment is stable or declining.

On the whole, growth forecasts for the world economy in the previous *Report*, with continued high but gradually slowing growth are largely maintained. The slowdown in the US is pronounced, but current indicators suggest somewhat more favourable developments ahead. So far, the growth pause in the US seems to have had little impact on our European trading partners (see Table 2.2 and Chart 2.6). European manufacturing is concentrated on the production of machinery and transport equipment. These products are in demand among the heavily investing growth economies in Asia and eastern Europe. At the same time, lower prices for imported goods from these countries and inward labour migration are contributing to increasing the growth potential of western Europe, while curbing price and wage inflation. Reforms in product and labour markets in recent years – especially in Germany – are also increasing the growth potential.

Higher losses on mortgages and lower house prices in the US have so far had limited ripple effects. The decline in housing investment is slowing. There are signs that growth in private consumption is easing broadly in line with expectations. Higher energy prices will also contribute to lower growth in US private consumption, and probably more so than in other OECD countries. The slowdown is still expected to be moderate partly owing to continued growth in employment and income. Capacity utilisation among our main trading partners is expected to increase this year and next, and is already above the normal level, based on OECD estimates of the output gap and potential growth.

Oil prices have increased by about USD 13 per barrel since *Monetary Policy Report* 1/07 and are now just below USD 73. Oil futures prices for delivery in December have increased by about USD 6 to USD 72. Prices for other commodities have risen substantially during the period. Developments in energy and commodity markets confirm the picture of continued strong growth in the global economy. Developments in these markets are discussed in detail in a box on page 21.

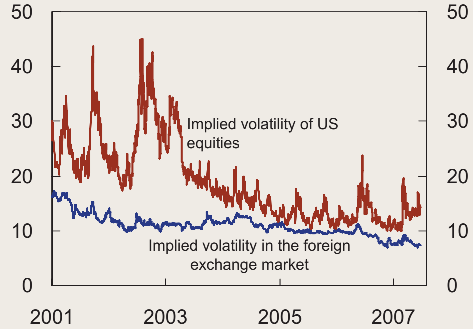
It is possible that we are underestimating the strength of the upturn in Europe and Asia. The high level of investment together with financial market reforms may lead to even higher growth in China in the years ahead than currently expected. In other Asian countries, investment may pick up from a level that has so far been low compared with the high rate of economic growth. Continued high inward labour migration from the new EU countries may lead to a higher growth potential in Europe, at the same time as exports and consumption pick up.

However, the decline in house prices and housing investment in the US may curb global economic growth more than expected. The housing supply remains very high in relation to sales and may increase further due to the rising number of homes that are repossessed by financial institutions and offered for sale (see Chart 2.7). The fall in house prices may continue for a period. This may lead to increased uncertainty, higher household saving and lower household consumption.

The US current account deficit is still large and there is still a risk that this may trigger sudden corrections in the foreign exchange market or in long-term interest rates. Recent developments, including slower growth in the US and a gradual depreciation of the US dollar, will counter and eventually reduce current account imbalances. The risk may therefore have been slightly reduced.

If the world economy is exposed to new disturbances, for example a further increase in commodity prices or a marked decline in productivity growth, there is a risk that high liquidity and growing pressures on production resources may also lead to higher labour costs and consumer price inflation. As long as such shocks are systematically countered through monetary policy, there appears to be little risk that inflation will pick up markedly (see box on page 41).

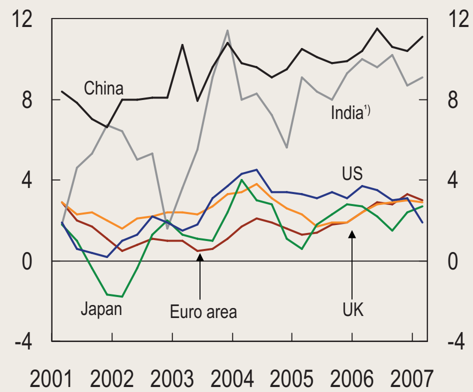
Chart 2.5 Implied volatility in the foreign exchange market[1] and the US equity market. Daily figures. 2 Jan 01 – 21 Jun 07



1) Index that describes risk in the global foreign exchange market as reflected in option prices for EUR/USD, USD/JPY and EUR/JPY.

Sources: Reuters (EcoWin) and Norges Bank

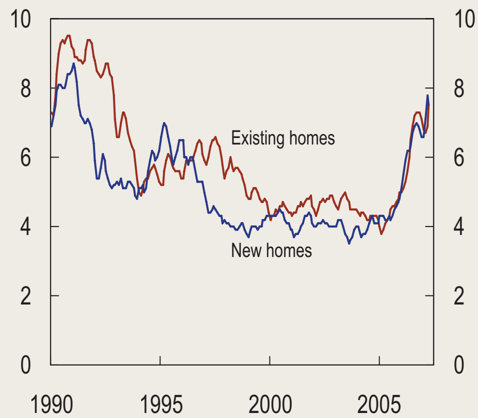
Chart 2.6 GDP. 4-quarter change. Per cent. Quarterly figures. 01 Q1 – 07 Q1



1) Measured by factor price.

Sources: Reuters (EcoWin) and Norges Bank

Chart 2.7 US – homes for sale at month-end compared with the month's sales. 3-month moving average. Monthly figures. Jan 90 – Apr 07



Sources: Reuters (EcoWin) and Norges Bank

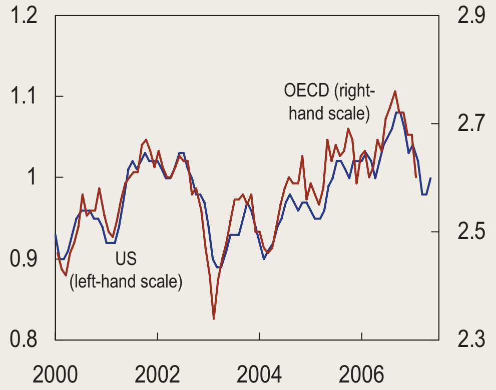
Developments in energy and commodity markets

Oil and natural gas

The price of Brent Blend oil has risen by USD 13 since *Monetary Policy Report* 1/07, and is now USD 73 per barrel. The increase can be attributed to the following:

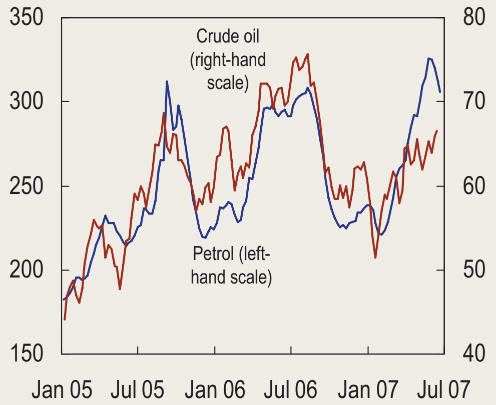
- OPEC reduced oil production from 2006 Q3 to 2007 Q1.[1] At the same time, global demand for oil increased more than the supply from non-OPEC countries. This resulted in a sharp fall in total OECD oil inventories (see Chart 1).[2] OECD crude oil inventories nevertheless remain well over the average for the past five years.
- Petrol inventories in the US dropped to an unusual extent in the first part of 2007. Total petrol inventories in the OECD fell far below the average for the past five years, reflecting a generally tight petrol market. Record high petrol prices feed back to oil prices.
- Oil prices were again affected by various supply-side factors, including recurring problems in Nigeria and unrest in the Middle East.

Chart 1 Oil inventories. In billions of barrels. Monthly figures. Jan 00 – May 07



Sources: International Energy Agency (IEA), Energy Information Agency (EIA) and Reuters (EcoWin)

Chart 2 Price of crude oil (USD per barrel) and petrol (cents per gallon) in the US. Weekly figures. Week 1 2005 – Week 25 2007



Source: Reuters (EcoWin)

At the meeting on 15 March, OPEC decided not to cut production further. After bottoming out at a level of USD 50 per barrel in mid-January, oil prices rose to just over USD 60 in early March. The organisation did point out that there was an ample supply of oil, and that inventories were still high, but added that the general market situation could change rapidly. The next ordinary meeting is on 11 September 2007. Extraordinary meetings to discuss the need for production changes were not scheduled.

OECD oil inventories are expected to increase in the second quarter, but probably not by more than the normal seasonal pattern would suggest. Inventories will probably fall again in the third and fourth quarters, unless OPEC increases production.

Table 1 compares forecasts for demand for and actual OPEC production from the International Energy Agency (IEA), the US Energy Information Administration (EIA) and OPEC:

- The IEA estimates that the increase in the need for OPEC production from the second to the fourth quarter will be appreciably higher than the growth in the cartel's production capacity in the same period. If production is increased to meet demand – fully or partly - growth in OPEC's spare capacity may come to a halt in the course of 2007 (see Chart 3). [3] At the same time, oil inventories may fall, albeit from a high level.
- The EIA also estimates that OPEC will increase output markedly from today's level in the third and fourth quarters.[4] Even given such an increase, combined OECD inventories, measured in consumption days, are expected to fall to the lowest level in the past five years at end-2007. Like the IEA, the EIA does not envisage a substan-

tial increase in spare capacity through the remainder of 2007. The EIA forecasts prices for West Texas Intermediate (WTI) in 2007 and 2008 at USD 64.1 and USD 64.8 per barrel, respectively. The forecast for 2007 is roughly in line with what actual prices and futures prices indicate, while the forecast for 2008 is somewhat lower than indicated by futures prices.

- OPEC, on the other hand, estimates that the need for OPEC production will not increase to any extent in the third and fourth quarters compared to actual production in May. OPEC forecasts both weaker growth in global demand for oil and stronger growth in the supply of oil from non-OPEC countries. This will result in higher spare production capacity in the OPEC countries.

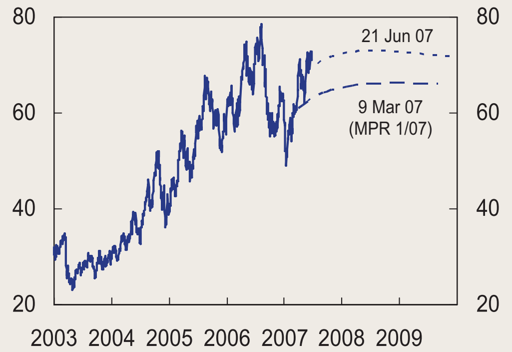
In 2007, the IEA and the EIA have repeatedly urged OPEC to increase production again. So far, OPEC has argued that the high oil price is largely due to conditions in the petrol market, including a shortage of refinery capacity and uncertainty regarding supply factors that OPEC has little control over. According to OPEC's assessment, the supply of crude oil is adequate.

The oil price path presented in this report is based, as previously, on futures prices. These prices now indicate an average oil price of USD 67 in 2007 and USD 73 in 2008, about USD 6 higher than in *Monetary Policy Report* 1/07 (see Chart 4). At the beginning of each month, Consensus Economics publishes forecasts of the most likely price for the US benchmark oil, WTI, three months and one year ahead.[5] Three months ahead, the forecast is some-

Chart 3 Spare OPEC capacity. In million barrels per day. Monthly figures. Jan 00 – May 07

Source: International Energy Agency (IEA)

Chart 4 Oil price (Brent Blend) in USD per barrel. Daily figures. 2 Jan 03 – 21 Jun 07. Futures prices from 9 Mar 07 and 21 Jun 07 (broken lines). Monthly figures. Apr 07 – Dec 09



Sources: Reuters (EcoWin) and Norges Bank

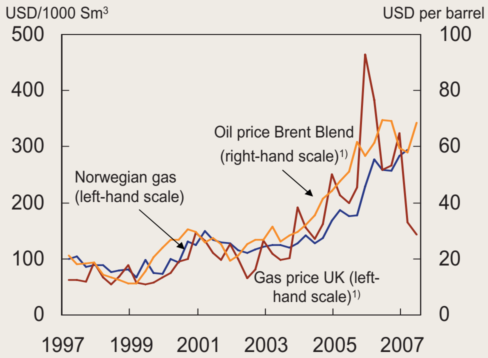
Table 1 Production of crude oil and call on OPEC in 2007, millions of barrels per day.[1), 2)] Projections in italics.

	Production[3)]		Call on OPEC			
	Q1	May	Q1[3)]	Q2	Q3	Q4
IEA	30.2	30.1	30.5	*29.8*	*31.5*	*32.3*
EIA	30.0	30.0	31.5	*30.4*	*31.6*	*32.6*
OPEC	30.0	30.0	31.1	*29.5*	*30.6*	*31.0*

1) The projections are based on the reports published by the different institutions in June.
2) Call on OPEC is the difference between global demand and non-OPEC supply. Non-OPEC supply includes crude oil, NGL (including from OPEC), condensates and oil from non-conventional sources.
3) The figures may vary as the institutions use different data sources.

Sources: Oil Market Report, International Energy Agency, June 2007; Short-Term Energy Outlook, Energy Information Administration, June 2007; Monthly Oil Market Report, OPEC, June 2007 and Norges Bank

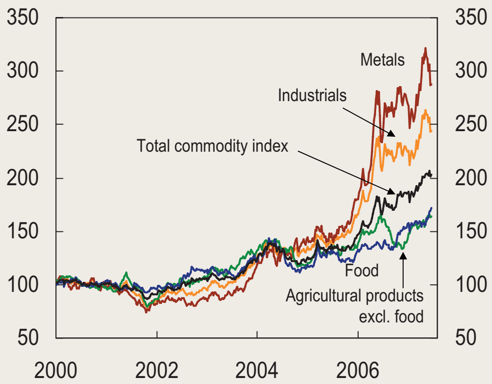
Chart 5 Average prices for crude oil (USD per barrel) and natural gas (USD per 1000 Sm³). Quarterly figures. 97 Q1 – 07 Q2



1) The figures for 07 Q2 are the average of the daily figures so far in the period

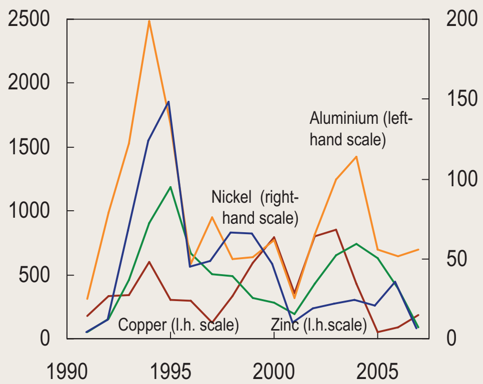
Sources: Statistics Norway, Reuters (EcoWin) and Norges Bank

Chart 6 International commodity prices in USD. Index, 2000 = 100. Weekly figures. Week 1 00 – Week 25 07



Sources: Reuters (EcoWin) and *The Economist*

Chart 7 Stocks of metals on the London Metal Exchange at year-end. In 1000s of tons. Annual figures. 1990 – 2006



Source: Reuters (EcoWin)

what lower than implied by futures prices. One year ahead, the forecast is just over USD 5 lower than implied by futures prices.

Prices for Norwegian gas are generally linked to prices for petroleum products, through indexing with a certain time lag in long-term sales contracts. A share of the gas is also sold in the UK spot market, where prices have fallen substantially (see chart 5). In the next few quarters, the price of Norwegian gas may reflect the fall in oil prices in 2006 Q4 and 2007 Q1. However, the recent rise in oil prices and stabilisation of gas prices in the UK will probably keep the average price of Norwegian gas at a high level.

Other commodities

Prices for commodities excluding energy have increased considerably since 2002 (see Chart 6). The rise in prices was particularly pronounced in spring 2006, when metal prices soared by a full 45% from March to May. Metal prices stabilised in the second half of 2006, but have increased further in 2007. Prices for food and agricultural products excluding food have also increased in recent years.

The rise in metal prices has been driven primarily by strong global economic growth, particularly in emerging economies. A number of these economies, China in particular, are in a growth phase, with rising demand for commodities (see Table 2). In recent years, investment in new production capacity has also been low, with the result that supply has not increased in pace with demand. Consumption of a number of metals has therefore been higher than production in recent years, resulting in record-low inventories (see Chart 7) and high prices. Low inventories also mean that prices are extra sensitive to changes in the market, as witnessed this winter, when fears of a recession in the US led to a sharp fall in zinc and copper prices. When fears subsided, prices for these metals rebounded.

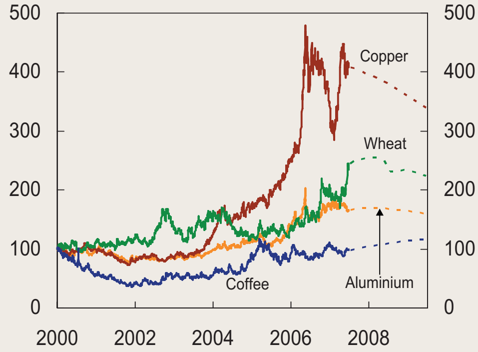
Prices for food and other agricultural products have also risen, partly as a result of higher energy prices, which have raised production costs for a number of agricultural products. In addition, increased prices for traditional energy products and measures to reduce greenhouse gas emissions have led to higher demand for biofuel. Some agricultural products are used as commodities in the production of biofuel. Income growth in emerging economies has probably also led to increased demand for meat, which requires more farmland for fodder production.

The *Economist*'s commodity price index has risen by 8% since the previous *Report*. All the sub-indices have increased during this period. The sub-index for industrial metals has risen by 8%, for non-food agriculturals 7%, and for food 10%. Production disruptions such as mining strikes in Peru, Indonesia and Canada led to a further rise in the price of metals early in the period, while new rules for trading on the London Metal Exchange have led to a sharp fall in the price of nickel in recent weeks. The rise in food prices since the previous *Report* is mainly due to adverse weather conditions, which have pushed up prices for wheat and coffee.

Growth in demand for commodities is expected to remain high in the years ahead. An increasing share of demand will come from emerging economies. China is one of a number of countries[6] that are in a growth phase with increasing demand for commodities. These countries will also play a more important part in commodity markets in the future.

The supply of commodities is also expected to increase in the years ahead as production capacity grows. An important question is whether this will be sufficient to meet growth in demand. In the past, periods of sharply rising commodity prices have tended to be followed by such a pronounced increase in capacity that prices have fallen back to previous levels. Periods of high commodity prices have thus often been of relatively short duration. Futures prices for the most important industrial metals indicate that metal prices will fall back somewhat in the years ahead (see Chart 8) but probably not to the levels recorded in 2002. Futures prices for food indicate that food prices will increase somewhat in the next few years.

Chart 8 Commodity prices. Index, 1 Jan 2000 = 100. Spot price: Daily figures. 4 Jan 00 – 21 Jun 07. Forward prices from 21 Jun 07 (broken line). Monthly figures. Jul 07 – Jul 09



Sources: Reuters (EcoWin), Chicago Board of Trade, New York Board of Trade and Norges Bank

Table 2 Consumption of raw materials in China and globally. Per cent.

	China's contribution to global consumption growth	China's share of world consumption	
	2002-2005	2002	2005
Copper	67	18	22
Aluminium	48	16	22
Nickel	87	8	15
Zink	113	19	29
Cotton	89	29	39
Rubber	45	17	22
Oil	28	6	8
Soya bean	59	13	17

Sources: UN Trade and Development Report 2006, IMF World Economic Outlook September 2006, Australian Commodity Statistics 2006 and Norges Bank

[1] OPEC decided in September and December 2006 to cut production by a total of 1.7 million barrels per day - 1.2 million barrels from November 2006, and a further 0.5 million barrels from February this year. Actual production has dropped by about 1.2 million barrels per day, i.e. less than the reduction in the quotas, according to the International Energy Agency.

[2] The fall in the first quarter of this year is the largest first-quarter fall since 1996.

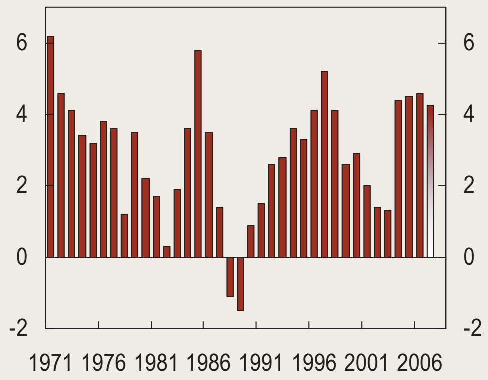
[3] In its June report, the IEA points out that growth in new capacity from the second to the fourth quarter will be around 0.7 million barrels per day. It is also pointed out that effective idle capacity is less than 4 million barrels per day, because Iraq, Indonesia, Nigeria and Venezuela cannot realistically be expected to have the capacity to increase their output beyond what they are actually producing. It is also stressed that a large share of the total effective idle capacity comprises low grade oil. Refineries still have limited capacity for refining this type of oil.

[4] Unlike the IEA and OPEC, the EIA publishes forecasts for OPEC production. They can therefore also forecast developments in oil inventories, which then form the basis for their price forecasts.

[5] The price of the US benchmark oil West Texas Intermediate has moved on a relatively weak trend recently, as a result of special regional conditions in the US. Whereas previously it was normally USD 1-2 more expensive than Brent Blend, it has at times this spring been up to USD 5 less expensive.

[6] Among them Argentina, Brazil, Chile, Egypt, the Philippines, India, Indonesia, Malaysia, Mexico, Singapore, Thailand, Turkey, Saudi Arabia and South Africa.

Chart 2.8 Mainland GDP. Annual growth in volume. Per cent. Annual figures. 1971 – 2007[1)]



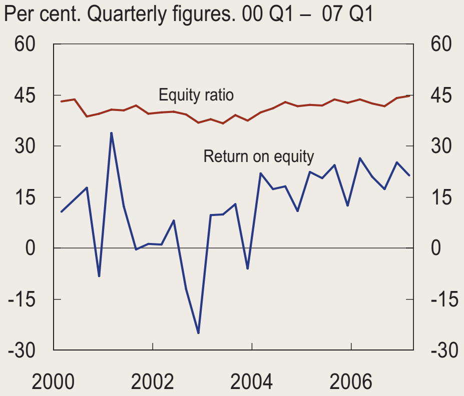
[1)] Projection for 2007.

Sources: Statistics Norway and Norges Bank

Chart 2.9 Terms of trade. Index, 1995 = 100. Annual figures. 1995 – 2006

Sources: Statistics Norway and Norges Bank

Chart 2.10 Equity and return on equity before tax for some companies listed on the Oslo Stock Exchange.[1)] Per cent. Quarterly figures. 00 Q1 – 07 Q1



[1)] Excluding financial undertakings, Statoil and Hydro.

Sources: The undertakings' quarterly reports (group) and Norges Bank

Prolonged cyclical upturn in the Norwegian economy, but gradually slower growth

The cyclical upturn in Norway continues. Mainland GDP has grown by about 4½% annually for the past three years (see Chart 2.8). As a result of high productivity growth and an ample labour supply, the growth capacity of the economy has been high. Capacity utilisation has nonetheless reached a high level as a result of strong activity growth. Improved terms of trade, low interest rates, growth in public demand and in petroleum investment and high international growth have resulted in high income growth in the household and business sectors. Moreover, low interest rates have made it more profitable to bring forward consumption. These factors have increased demand for goods and services. Rising prices for many Norwegian export goods and falling prices for imports have improved our terms of trade by almost 40% since 2002 (see Chart 2.9). The improvement for traditional goods and services is almost 11%. In addition to the contribution to the increase in actual income, the sharp improvement in the terms of trade may have raised income expectations.

So far, there are few signs of an economic slowdown. Growth in demand is still robust and investment in the petroleum sector has increased further. High growth in other countries and high prices for Norwegian goods are still generating strong positive impulses to export-oriented mainland enterprises. A number of factors are buoying up growth in household demand this year. As a result of a continued increase in employment and rising wage growth, household real disposable income is growing at a faster pace this year than in 2006. Households are optimistic regarding their own financial situation and the Norwegian economy. However, it appears that growth in housing investment may be falling back somewhat. This may reflect rising construction costs and a growing share of capacity in construction sector being used for commercial buildings.

Information from our regional network indicates sustained growth in mainland fixed investment. Statistics Norway's investment intentions survey for manufacturing and the power sector indicates a continued solid increase in investment this year. Order backlogs for commercial buildings are growing rapidly. Many enterprises are operating at capacity limits, and have to invest in order to accommodate further demand growth. At the same time, some contacts in our regional network report that planned investment projects are not being realised or are being postponed because of problems with deliveries and rising prices for capital goods.

Enterprises have recorded very solid earnings in recent years. Profits for listed companies have improved every year since 2002 (see Chart 2.10). After weak developments early in the year, the share price indices for all the main industries on the Oslo Stock Exchange have risen again, and the benchmark index has increased more than the indices in Europe and the US over the past year (see Chart 2.11). Accounts data for 2007 Q1 from listed companies in Norway may indicate slower growth in profits ahead.

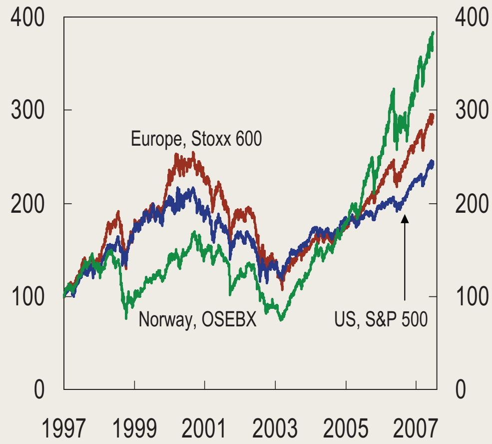
The regional network reports continued solid output growth in most sectors. Growth is particularly high in corporate services and among suppliers to the petroleum industry. Our contacts expect growth to remain buoyant in late autumn. The upturn in manufacturing output has moderated somewhat in recent months. On the other hand, order statistics point to continued solid growth. Construction activity, particularly in commercial buildings, is still on the increase. A sharp rise in imported goods indicates that an increasing portion of demand growth is being met by imports.

Projections for mainland GDP growth from various statistical models imply that growth is currently somewhat higher than previously projected, but may slow towards autumn (see Chart 2.12). The projections are based on current economic indicators and do not fully capture the effects of higher interest rates, capacity constraints and increased import shares. These factors will probably contribute to dampening growth ahead.

The labour market is tight. Employment has increased as rapidly as was the case in the years preceding the cyclical peaks in the 1980s and 1990s. Unemployment is now at a very low level, both measured by the number of registered unemployed and according to figures from Statistics Norway's Labour Force Survey (LFS) (see Chart 2.13). Enterprises report a shortage of qualified labour, and many positions are vacant. The number of vacancies per unemployed person has not been higher since the 1980s (see Chart 2.14). According to Statistics Norway's business tendency survey, the shortage of labour and intermediate goods is now greater than during the booms in the 1980s and 1990s. The regional network reports that there is a shortage of building materials.

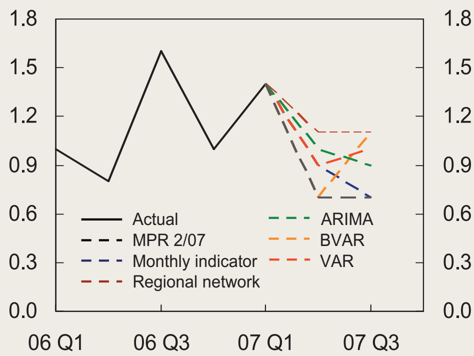
Productivity growth has been strong in recent years (see box on page 44). The high productivity growth can be partly attributed to structural factors such as increased specialisation, new technology, improved logistics and more efficient organisation of production. Our projections are based on the assumption that some of this growth represents a one-off shift. In recent years, the economic upturn has boosted productivity growth. The regional network reports that more efficient utilisation of labour and capital has contributed to productivity growth. It is assumed that this potential is now nearing its limit. The shortage of qualified labour may also be dampening productivity growth in some sectors. This is consistent with the tendency of productivity growth to fall somewhat as the cyclical peak is passed, as was the case in 1998 and 1999. On balance, productivity

Chart 2.11 Equity indices. 1 Jan 97 = 100. Daily figures. 1 Jan 97 – 21 Jun 07



Source: Reuters (EcoWin)

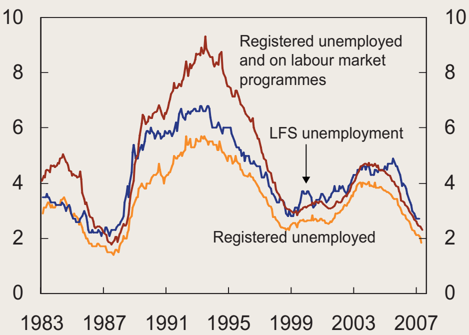
Chart 2.12 Mainland GDP. Growth on previous quarter. Seasonally adjusted. Per cent. Quarterly figures. 06 Q1 - 07 Q3[1)]



1) Projections for 07 Q2 and 07 Q3. See the box "Short-term projections for mainland GDP growth" in *Inflation Report* 2/06 for a description of the different models.

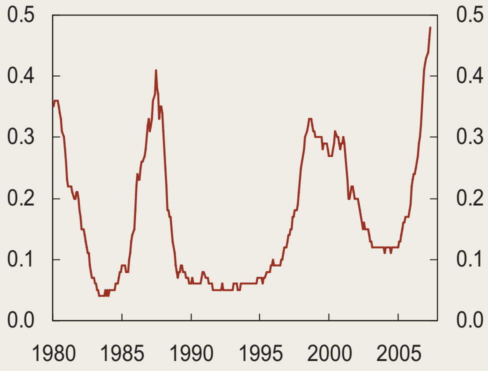
Sources: Statistics Norway and Norges Bank

Chart 2.13 Unemployed. LFS unemployment, registered unemployed and persons on ordinary labour market programmes. Percentage of labour force. Seasonally adjusted. Monthly figures. Feb 83 – May 07



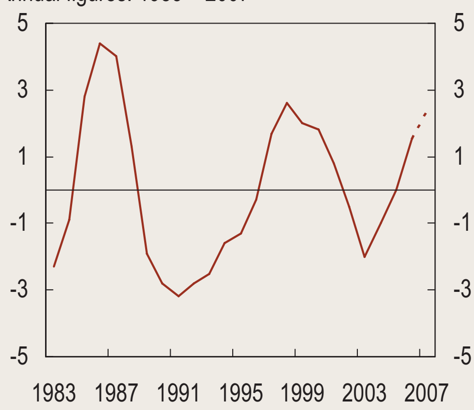
Sources: Statistics Norway, Norwegian Labour and Welfare Organisation (NAV) and Norges Bank

Chart 2.14 Number of vacancies per registered unemployed. 3-month centred moving average. Seasonally adjusted. Monthly figures.
Feb 80 – Apr 07



Sources: Norwegian Labour and Welfare Organisation (NAV) and Norges Bank

Chart 2.15 Estimates for the output gap. Per cent. Annual figures. 1983 – 2007[1)]



1) Projection for 2007.

Source: Norges Bank

growth in 2007 and 2008 is assumed to be lower than the average since the recovery started. Thereafter, growth will probably pick up again to a level just under the average for the last 10-15 years.

It is uncertain to what extent structural changes will contribute to productivity growth going forward. If productivity growth shows a more permanent change, the reduction in productivity growth may be less pronounced than we have assumed. In that case, the potential for continued high economic growth may be greater than assumed.

Strong growth in the labour supply has also boosted the growth capacity of the Norwegian economy for a number of years. Inward labour migration has increased the supply of labour. Recently, the economic expansion has also led to a marked rise in the labour force participation rate. On the other hand, the increase in average working hours has been somewhat slower than the increase in the labour supply. The working-age population will increase markedly this year, which is one of the factors behind our projection of 3¼% growth in potential mainland GDP, or approximately unchanged on 2006. Growth in the working-age population is assumed to slow as changes in age composition lead to a reduction in participation rates. The potential growth of the Norwegian economy is expected to decline gradually to 2¾% towards the end of the projection period.

The output gap reflects our assessment of overall capacity utilisation in the economy compared with a normal level. The output gap in 2007 is estimated at 2½%, or approximately the same level as in 1998 (see Chart 2.15). The cyclical peak is expected to be reached in the course of 2007. It will take somewhat longer than projected in the previous *Report* before growth slows to the extent that the output gap begins to close. Whereas a shortage of spare capacity will contribute to curbing output growth later in the year, sustained global growth, some fiscal policy stimulus, higher petroleum investment, high order backlogs in enterprises and strong growth in household consumption will contribute to continued high demand for corporate goods and services.

Increased capacity utilisation in the business sector will probably translate into somewhat higher wage and price inflation and a stronger-than-normal increase in the share of imported goods and services.

The increase in interest rates is expected to lead to slower growth in domestic demand through 2008, with a gradual easing of capacity utilisation. The output gap is expected to close gradually. Slower growth in household consumption, housing investment and investment in private enterprises will be the main factors behind slower growth in domestic demand.[1] More moderate growth in other countries will probably also reduce export growth somewhat. The number of vacancies is high and unemployment will probably remain at a low level in 2008, and then increase gradually (see Chart 2.16).

The actual profile may differ from our assumptions. Demand growth may remain buoyant for longer than expected, in which case the fall in the output gap will be pushed further out in time. In isolation, this may pave the way for stronger domestic cost growth and deteriorating competitiveness, which in turn may result in a more pronounced economic downturn. On the other hand, household debt accumulation has long been high. In the baseline scenario, net lending is negative in the period ahead. If rising interest rates lead to a substantial increase in household saving, domestic demand growth may fall appreciably. The output gap will then close more rapidly than expected.

Slower growth in labour supply ahead

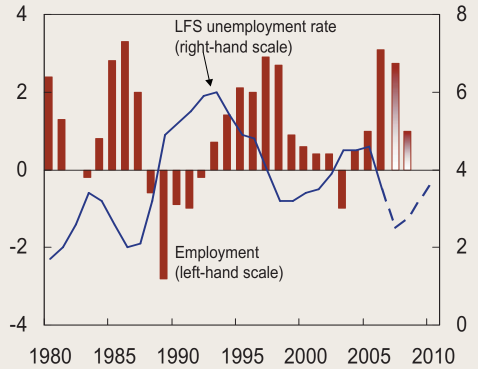
Increased demand for labour has in part been accommodated by growth in the labour supply. This reflects a flexible labour supply in Norway, so that the labour force increases substantially when demand for labour is high. Labour force participation is rising, and it now appears to be approaching the record levels in the years around the turn of the millennium (see Chart 2.17). Adjusted for the 1.5 percentage point increase in the share of the working-age population on disability benefit or contractual early retirement schemes since 2000, these participation rates imply limited available resources in the economy.

The number of available person-weeks from the underemployed may be an untapped reserve in a tight labour market. However, cyclical conditions have had little influence here. This may imply that the actual reserves represented by these person-weeks are limited.

In recent years, the working-age population (aged 15-74) is projected to increase by just over 1% annually (see Table 2.3). The youngest and oldest age groups, which feature low participation rates, will comprise a growing share of the population, thereby dampening growth in the labour supply. The impact will depend on factors such as whether older age groups choose work or leisure. The tendency towards increased labour force participation among older age groups has increased recently, but the number of person-hours provided by these workers is probably fairly low. Past experience also indicates that labour force participation falls relatively rapidly among older workers when demand for labour declines. The labour force is projected to grow by about ½% annually towards the end of the period.

[1] Developments in the individual demand components are described in more detail further on in the report.

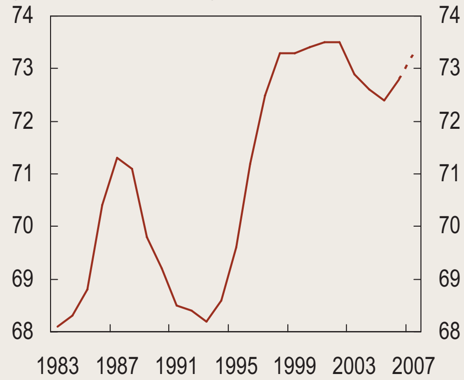
Chart 2.16 Change in employment on previous year (per cent) and LFS unemployment as a percentage of the labour force. Annual figures. 1980 – 2010[1)]



1) Projections for 2007 - 2010.

Sources: Statistics Norway and Norges Bank

Chart 2.17 Labour force participation rate for persons aged 16 to 74. Annual figures. 1983 – 2007[1)]



1) Projections for 2007.

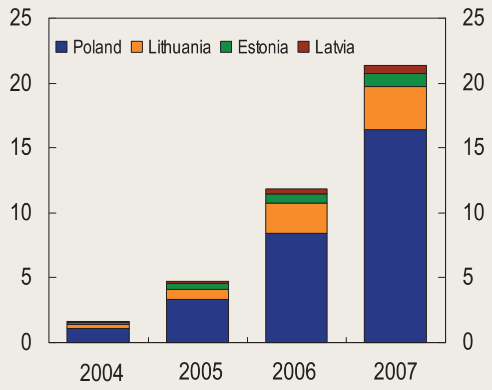
Sources: Statistics Norway and Norges Bank

Table 2.3 Population and labour force growth

	2007	2008	2009	2010
Population growth in the age group 15-74 years	1,2	1,1	1,1	1,0
Contribution from change in population composition	-0,2	-0,3	-0,4	-0,4
Cyclical contribution	0,7	0,2	-0,2	-0,2
Labour force growth	1,7	1,0	0,5	0,4

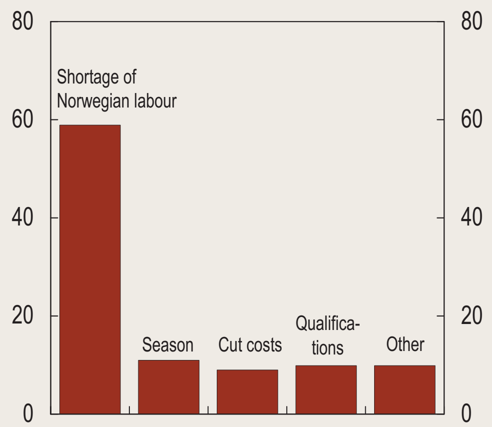
Sources: Statistics Norway and Norges Bank

Chart 2.18 Registered employees from new EU countries. 1000s of persons in the period Jan – May



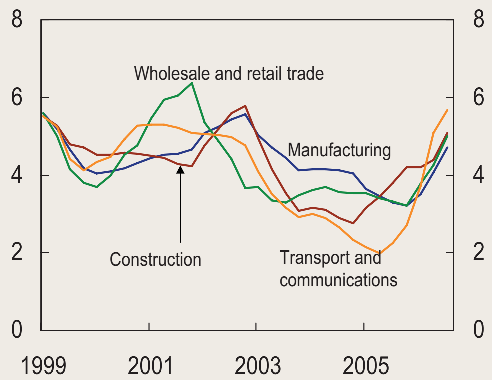
Source: Central Office - Foreign Tax Affairs

Chart 2.19 Reasons for use of foreign labour. Per cent



Source: Norges Bank

Chart 2.20 Average monthly earnings. Wage indices. 4-quarter change. 3-quarter centred moving average. Per cent. 99 Q2 – 06 Q4



Source: Statistics Norway

For the past three years, inward labour migration, particularly from the new EU countries, has increased the supply of labour. In 2006, the inflow of persons from the new EU countries to Norway on short-term assignments was probably about 15 000 higher than the previous year. This is equivalent to an additional labour supply increase of about ½ percentage point in excess of growth in the traditional labour force of 1.6%. So far this year, inward labour migration has continued to rise (see Chart 2.18). There appears to be a tendency for workers to stay for longer periods. A growing share is taking up residence in Norway, which is contributing to strong population growth. Our projection for growth in the labour force implies that this tendency will continue over the next few years.

Although a number of workers from the new EU countries choose to remain in Norway on a more permanent basis, the number of persons on short-term assignments is still growing. Demand for labour is now increasing in their home countries. This may curb inward labour migration in the period ahead. The number of foreigners on short-term assignments is still assumed to increase by about a further 15 000 in 2007. According to the regional network, 42% of enterprises responded that they are using foreign labour in 2007, or 12 percentage points higher than in 2006. The most common reason is the shortage of Norwegian labour (see Chart 2.19).

Tight labour market and high real wage growth

Wage growth has picked up slowly during the current expansion. High inward labour migration and the scope for relocating portions of production abroad have led to increased competition in the labour market and probably curbed wage growth. However, the wage settlement for 2007 confirms that wage growth is gathering pace.

The tight labour market will probably lead to higher wage drift. Pay demands are increasing and wages are being bid up for particularly sought-after labour in both private and public enterprises. Statistics Norway's quarterly wage statistics show that wages are rising rapidly in many industries (see Chart 2.20). Some of the wage growth may be due to high bonus payments, but monthly salaries are also rising rapidly. Wage growth estimates from our regional network have gradually been revised upwards through the year. These indicators imply that wage drift is increasing somewhat faster than projected in the previous *Report*. Overall growth in labour costs this year may therefore approach 5½% when the costs of mandatory occupational pensions are included. With a projected rise in consumer prices of ¾%, real wage growth will be 4¾% in 2007.

According to our projections, unemployment will remain low up to next year's wage settlement, with the result that nominal wage growth will remain at a high level (see Chart 2.21). Consumer price inflation varies somewhat from year to year due to large fluctuations in electricity prices. These fluctuations are not likely to be fully reflected in nominal pay increases. Nominal wage growth is projected at 5½% in 2008, while real wage growth will edge down. Real wage growth for 2007 and 2008 combined is projected at an annual 3½ % (see Chart 2.22). As resource utilisation in the economy declines and unemployment edges up through 2009 and 2010, wage growth is likely to moderate.

Increased wage growth and a higher rise in prices for a number of goods and services that are used in production may erode corporate profitability. The wage share in enterprises, which has fallen in recent years, will probably increase somewhat again. However, the wage share is not likely to be as high as in previous upturns (see Chart 2.23).

The wage settlement in 2008 is a main settlement, where conditions other than pay increases can be negotiated. There are prospects that a new framework for the contractual early retirement scheme will be an issue in this wage settlement. This makes it particularly difficult to anticipate wage and cost inflation prior to the next spring settlement.

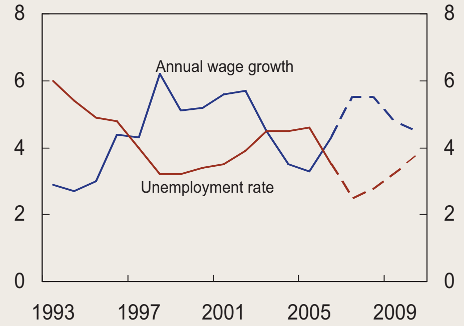
Labour shortages and high wage demands may result in higher-than-projected wage growth. On the other hand, foreign competition and the scope for relocating production may lead to a lower-than-projected rise in wages.

Low, but rising inflation

The rise in consumer prices measured by the consumer price index (CPI) was close to the inflation target through most of 2006, but in recent months inflation has slowed markedly. This is because electricity prices have been substantially lower this year than at the same time last year. In 2006, electricity prices were unusually high as a result of low precipitation, while in recent months electricity prices have been at the lowest seasonal level since 2002.

Inflation adjusted for tax changes and excluding energy products has gradually picked up since late summer 2006, but in the light of the economic situation, underlying inflation remains low. Our assessment is that underlying inflation is now in the interval 1 - 1½%. Different indicators of underlying inflation all lie within this interval, and the difference between the various indicators is now smaller than it has been in recent years (see Chart 2.24). Recent price developments are discussed in detail in a box on page 31.

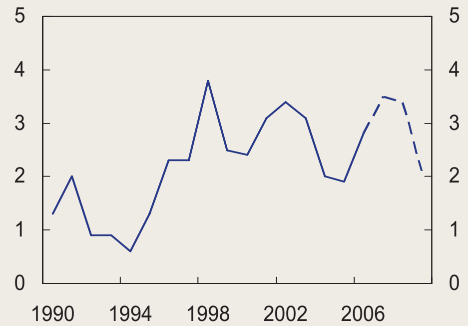
Chart 2.21 Annual wage growth[1)] and LFS unemployment. Per cent. Annual figures. 1993 – 2010[2)]



[1)] Average for all groups. Including estimated costs of increase in number of vacation days and introduction of mandatory occupational pension.
[2)] Projections for 2007 - 2010.

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

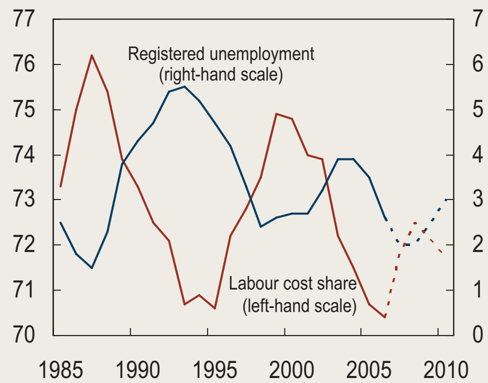
Chart 2.22 Annual wage growth[1)] deflated by the CPI[2)]. Per cent. Annual figures. 1990 – 2009



[1)] Average for all groups. Including estimated costs of increase in number of vacation days and introduction of compulsory occupational pension. Projections for 2007 - 2009.
[2)] 3-year centred moving average. CPI projections for 2007 - 2010.

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

Chart 2.23 Labour costs as a share of factor income in mainland Norway and registered unemployment. Per cent. Annual figures. 1985 – 2010[1)]

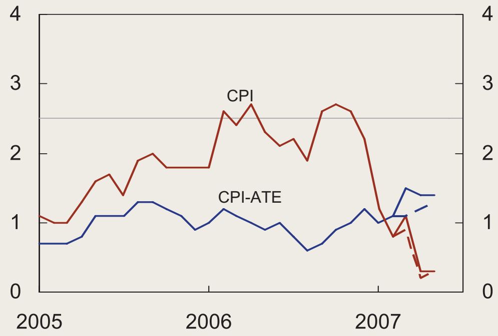


[1)] Projections for 2007 - 2010.

Sources: Statistics Norway, Norwegian Labour and Welfare Organisation (NAV) and Norges Bank

Recent price developments

Chart 1 CPI and CPI-ATE[1]). 12-month rise. Projections from MPR 1/07 (broken line) and actual. Per cent. Monthly figures. Jan 05 – May 07



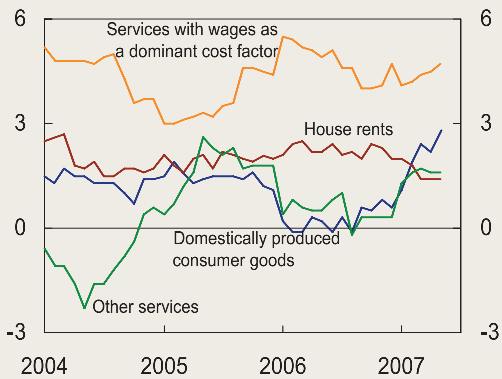
[1]) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.

Sources: Statistics Norway and Norges Bank

Chart 2 Electricity prices. Nord Pool. NOK/MWh. Monthly figures. Jan 02 – May 07. Forward prices (broken line) from 07 Q3

Sources: Nord Pool and Norges Bank

Chart 3 Domestic supplier sectors in the CPI-ATE[1]). 12-month change. Per cent. Monthly figures. Jan 04 – May 07



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

Sources: Statistics Norway and Norges Bank

The 12-month rise in the consumer price index (CPI) has slowed markedly in recent months, in line with the projections in *Monetary Policy Report* 1/07 (see Chart 1). This is largely because electricity prices have been much lower this year than at the same time in 2006. In May, electricity prices in the CPI were 27.5% lower than in May 2006. The 12-month rise in the CPI was 0.3%. In the last few months of 2006, the year-on-year rise in the CPI was around 2.5%.

Inflation excluding electricity, other energy products and tax changes (CPI-ATE) has gradually risen since late summer last year. In May, the year-on-year rise in the CPI-ATE was 1.4%. However, other indicators of underlying inflation have declined compared with 2006. The year-on-year rise in May was 1.2% measured by both the trimmed mean and the weighted median.

Low electricity prices

Low electricity prices are attributable to unusually high inflows to water reservoirs since autumn 2006. At the same time, the mild winter contributed to relatively low electricity consumption. Electricity prices in Norway have also been pushed down by a fall in prices for CO_2 emission permits and for other energy products. In May, the spot price for electricity on the Nord Pool power exchange was the lowest since 2002 (see Chart 2). However, there are prospects of considerably higher electricity prices in early 2008, partly because prices for CO_2 allowances in 2008 appear to be much higher than this year. It is not possible to transfer allowances for 2007 to 2008.[1]

Increasing domestic inflation

The 12-month rise in the CPI-ATE has picked up in recent months, reflecting in particular the accelerating rise in prices for domestically produced goods and services. In May, prices for goods and services produced in Norway were 2.4% higher than in May 2006. This was the highest rate of inflation measured since December 2003. The year-on-year rise in prices for domestically produced goods and services in 2006 was 1.6% after adjusting for the estimated effect of the introduction of maximum day-care rates as from January 2006.

It is primarily the rise in prices for domestically produced consumer goods that has gathered pace since the previous *Report* (see Chart 3). In May, prices for goods and services produced in Norway were

2.8% higher than in May 2006. Prices for products for home maintenance and repair have shown a particularly strong rise. The year-on-year rise in prices for these products was 8.3% in May, up from 2.3% in January. This must be viewed in the light of the strong rise in prices for building materials generally. The rise in prices for various household articles, furniture and some food and beverages has also gathered pace.

Prices for services where wages are the dominant cost factor, such as services related to home and car maintenance services, are also rising rapidly. However, the 12-month rise in prices for services has remained stable at around 2.5% in recent months, curbed partly by a continued fall in prices for telecommunications services. A slow rise in insurance prices is also contributing to dampening the overall rise in prices for services.

The rise in house rents has abated, largely because of a slower increase in the estimated housing costs of owner-occupiers. Estimates of these costs are based on price developments in the rental market. Movements in estimated housing costs are normally closely related to the rise in actual house rents, but since the computation method was changed in August last year, estimated housing costs have risen less than house rents.

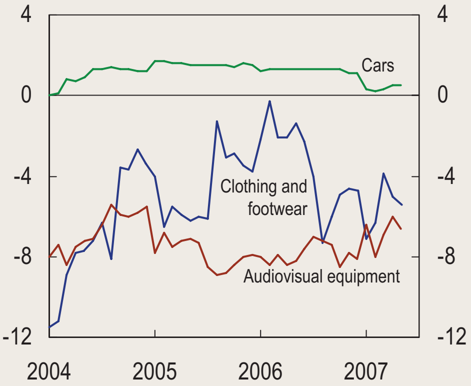
Variable rise in prices for imported consumer goods
The year-on-year rise in prices for imported consumer goods has varied substantially from month to month recently. In March, for example, prices for imported consumer goods were 0.1% higher than in the same month the previous year, whereas the twelve-month change had fallen to -0.9% in May. The large variations in the rise in prices for imported consumer goods may reflect increased sales activity, for example for clothing, and problems in measuring the rise in prices for certain types of goods, for example mobile telephones.

The rise in prices for imported consumer goods is still being pushed down by a fall in prices for audiovisual equipment and clothing and footwear (see Chart 4). In May, prices for both product groups were about 6% lower than in the same month in 2006. Since the beginning of the year, the twelve-month rise in prices for new cars has also been somewhat lower than in 2006 and 2005.

Other price indicators
The producer price index and the price index for first-hand domestic sales measure price developments at the production stage. In 2006, these indices showed a sharp rise in prices, but since the beginning of 2007, the year-on-year change in both indices has been negative with respect to the domestic market (see Chart 5). This development is attributable to the fall in prices for energy products. If energy prices are excluded, both indices have exhibited an upward trend in recent years. In recent months, producer prices for intermediate and investment goods have risen substantially. The rise in the construction cost index for dwellings has also accelerated sharply (see Chart 5). The rise in construction costs primarily reflects a rise in building material costs.

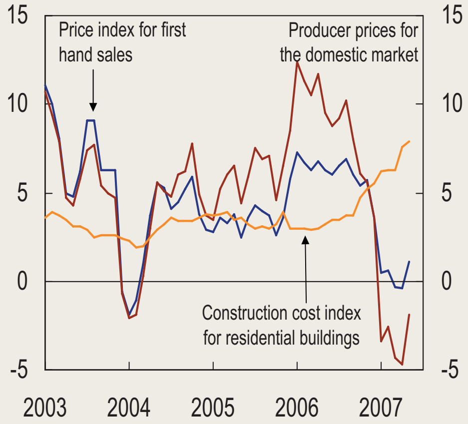
[1] Much of the power produced in continental Europe entails CO_2 emissions, and prices for CO_2 allowances will therefore influence electricity prices on the continent. As Norway is an integral part of the European power market, prices for CO_2 allowances also affect electricity prices in Norway.

Chart 4 Prices for product groups in the CPI that are largely imported. 12-month change. Per cent. Monthly figures. Jan 04 – May 07



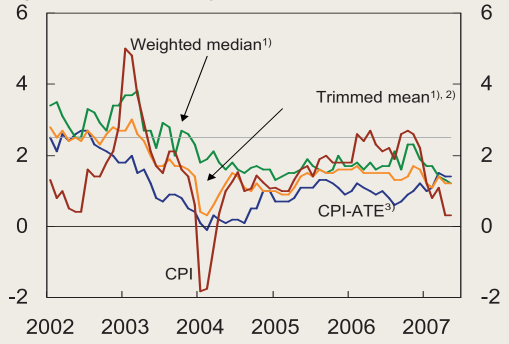
Source: Statistics Norway

Chart 5 Different price indices. 12-month change. Per cent. Monthly figures. Jan 03 – May 07



Source: Statistics Norway

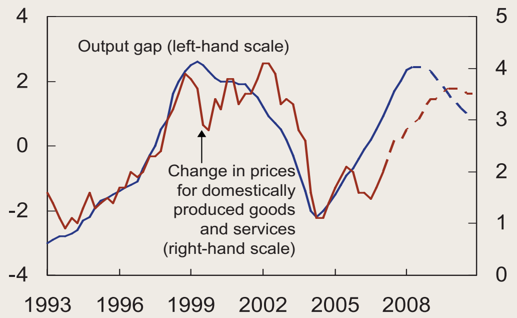
Chart 2.24 CPI and indicators of underlying inflation. 12-month change. Per cent. Monthly figures. Jan 02 – May 07



1) Estimated on the basis of 146 sub-groups of the CPI-AT.
2) Price changes accounting for 20 per cent of the weighting base are eliminated.
3) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.

Sources: Statistics Norway and Norges Bank

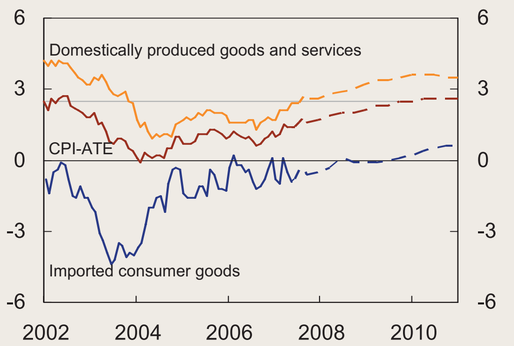
Chart 2.25 Change in prices for domestically produced goods and services measured by the CPI-ATE1) (4-quarter change) and output gap level (lagged by 4 quarters). Quarterly figures. 93 Q1 – 10 Q42)



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.
2) Projections for period 07 Q2 – 10 Q4.

Sources: Statistics Norway and Norges Bank

Chart 2.26 CPI-ATE.1) Total and by supplier sector2). 12-month change. Per cent. Monthly figures. Jan 02 – Dec 103)



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.
2) Norges Bank's estimates.
3) Projections for June 2007 – December 2010.

Sources: Statistics Norway and Norges Bank

High cost inflation is reflected in prices for domestically produced goods and services …

There are probably several reasons why the rise in prices for domestically produced goods and services has picked up somewhat later in this cyclical expansion than the historical relationship between the rise in these prices and capacity utilisation would imply (see Chart 2.25). Productivity growth in many industries has been high, while wage growth has been moderate. It is likely that the subdued rise in prices for imported processed intermediate goods may also have exerted downward pressure on prices for domestically produced goods and services. Intensified competition in several product markets in recent years has probably also contributed to curbing inflation.

Since autumn 2006, the rise in prices for goods and services produced in Norway has gathered pace. In May, the year-on-year rise in prices for domestically produced goods and services was 2.4%. The accelerating rise in prices for goods and services produced in Norway is primarily attributable to a faster rise in prices for food and other domestically produced consumer goods. Prices for building materials, in particular, have increased sharply in recent months.

Because of rising labour costs and high capacity utilisation, the rise in prices for goods and services produced in Norway will continue to increase gradually in our baseline scenario (see Chart 2.26). Productivity growth is also expected to be somewhat lower than in recent years. Increased competition and a slow rise in prices for imported intermediate goods may continue to curb inflation, but probably to a lesser extent than previously.

Norges Bank recently conducted a survey on price-setting in Norwegian firms (see box on page 48). When asked what the main reasons for price increases have been, the firms pointed in particular to increased supplier prices and higher labour costs. Wage growth is now on the rise, and producer prices for many goods are climbing rapidly. Since the end of 2006, the rise in both the producer price index and the price index of first-hand domestic sales have been pushed down by the fall in energy prices, but the rise in the indices excluding energy products has nevertheless gathered pace in recent years.

Other surveys also point to rising inflation in the period ahead. According to TNS Gallup's quarterly survey, a growing share of business leaders expect the rise in their firm's selling prices to be higher in the next twelve months than in the twelve previous months. Regional network contacts also signal prospects of somewhat higher price increases ahead, particularly in building and construction and corporate services.

... and the fall in import prices is coming to a halt

As a result of trade liberalisation, low global inflation and a shift towards imports from low-cost countries, prices for imported consumer goods, measured in foreign currency, have broadly fallen since the mid-1990s. In 2006, prices for these goods rose for the first time since 2001 (see Chart 2.27). This reflected the strong rise in prices for oil and other major commodities, which pushed up prices for export goods among our traditional trading partners. The import shift in 2006 was also less pronounced than in the preceding years. The appreciation of the krone through 2004 and 2005 nevertheless contributed to a further fall in prices for imported consumer goods in the CPI in 2006, but the price fall was more moderate than in the preceding years.

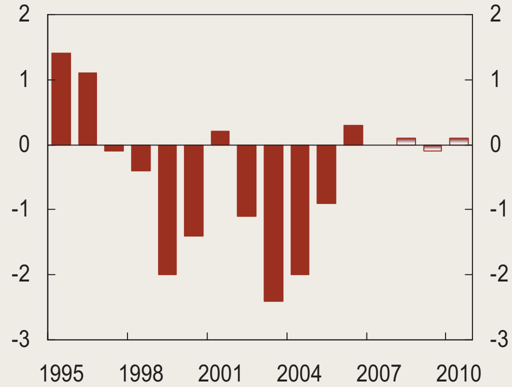
The fall in prices for imported consumer goods has continued in 2007, but the pace has shown considerably monthly variations. This may be attributable to more extensive sales activity than previously and problems in measuring price changes for some types of goods, such as mobile phones.

In the period ahead it is assumed that prices for oil and other commodities will remain at a high level, but prices are not expected to rise at the same pace as in recent years. The shift in imports is expected to abate gradually. On balance, we assume that prices for imported consumer goods, measured in international currency, will remain approximately unchanged in the next few years. A relatively stable krone exchange rate in recent years implies that past movements in the krone exchange rate will not have any material effect on developments in prices for imported goods ahead. Higher domestic price and cost inflation is expected to feed through gradually to selling prices, also via imported consumer goods. The fall in prices for imported consumer goods may continue through 2007. For the next couple of years, the price level for imported consumer goods will probably remain broadly unchanged, before the rise in prices begins to edge up to a more normal level.

On balance, there are prospects that consumer price inflation adjusted for tax changes and excluding energy products will gradually rise to about 2½% over the next three years. As the key policy rate gradually increases, growth in demand and employment will slow and wage growth will ease again. This will contribute to stabilising inflation around the target.

Overall consumer price inflation will probably move on a more variable path. Temporarily low CPI inflation this year may be followed by temporarily high inflation in 2008. Forward electricity prices indicate that electricity prices will remain low through summer. This will also keep CPI inflation at a low level. However, there are prospects of

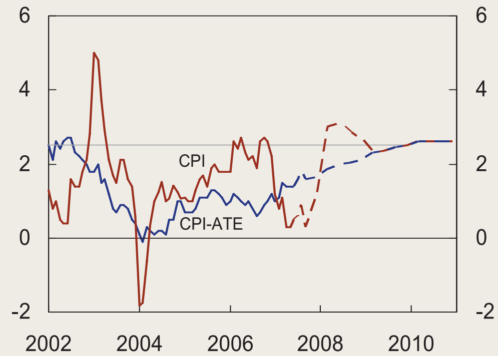
Chart 2.27 Indicator of external price impulses to imported consumer goods measured in foreign currency. Per cent. Annual figures. 1995 – 2010[1)]



1) Projections for 2007 – 2010.

Source: Norges Bank

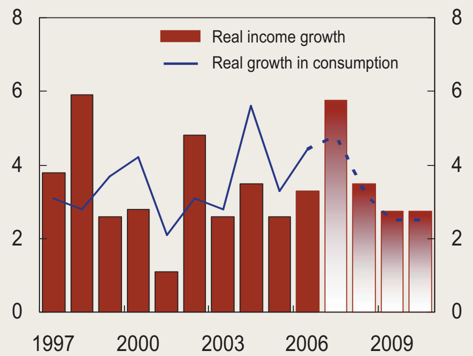
Chart 2.28 CPI and CPI-ATE[1)]. 12-month change. Per cent. Monthly figures. Jan 02 – Dec 10[2)]



1) CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.
2) Projections for June 2007 – December 2010.

Sources: Statistics Norway and Norges Bank

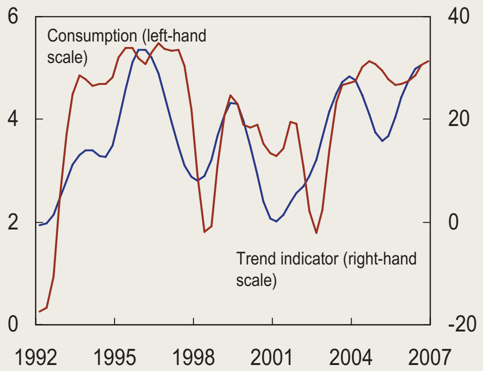
Chart 2.29 Household real disposable income[1)] and consumption. Annual rise. Per cent. Annual figures. 1997 – 2010[2)]



1) Adjusted for estimated reinvested share dividends for 2000 - 2005.
2) Projections for 2007 – 2010.

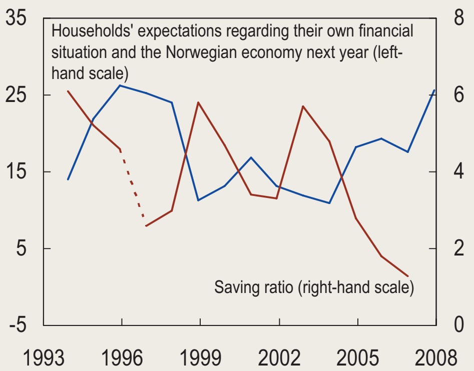
Sources: Statistics Norway and Norges Bank

Chart 2.30 Household trend indicator (seasonally adjusted diffusion index) and trend in private consumption (4-quarter growth). Quarterly figures. 92 Q3 – 07 Q2



Sources: Statistics Norway, TNS Gallup and Norges Bank

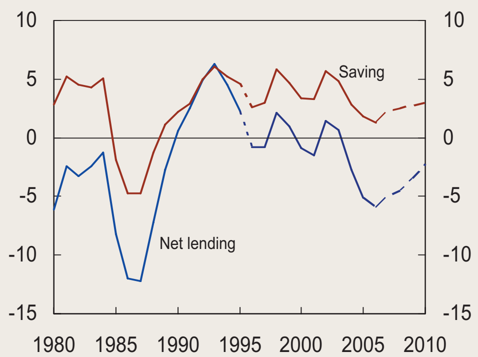
Chart 2.31 Household expectations and saving ratio[1, 2]. Annual figures. 1993 – 2007[3]



[1] There is a break in the series between 1995 and 1996.
[2] Adjusted for estimated reinvested share dividends for 2000 – 2005.
[3] Figures for household expectations for 07 H1.

Sources: Statistics Norway, TNS Gallup and Norges Bank

Chart 2.32 Household saving and net lending as a share of disposable income.[1,2] Annual figures. 1980 – 2010[3]



[1] There is a break in the series between 1995 and 1996.
[2] Adjusted for estimated reinvested share dividends for 2000 – 2005.
[3] Projections for 2007 - 2010.

Sources: Statistics Norway and Norges Bank

higher electricity prices next year. As a result, CPI inflation may increase faster than the rise in the CPI-ATE (see Chart 2.28). CPI inflation may exceed 3% in the first half of 2008. Uncertain variables such as temperature and precipitation levels will have a considerable impact on electricity prices, and hence on developments in the CPI. Our projections for the CPI are therefore shrouded in uncertainty. Towards the end of the projection period, energy prices are assumed to rise approximately in pace with other prices. After a period, CPI inflation and CPI-ATE inflation are expected to converge and stabilise near the inflation target.

Domestic demand

Higher interest rates lead to slower growth in household demand

Growth in household demand is still strong. Growth in private consumption is projected to increase from 4.4% in 2006 to 4¾% this year. Several forces have been driving growth in recent years. Household real disposable income is expected to increase by almost 6% from last year to this year because of high employment and real wage growth (see Chart 2.29). The job security offered by a tight labour market may also have generated optimism as to income growth ahead in the household sector (see Chart 2.30). It is likely that the improved terms of trade, which influence both household income and job prospects, have also boosted earnings expectations. The rise in asset prices is probably another factor behind growth in household consumption. Asset price movements may be driven by some of the same factors that are behind growth in household consumption. New loan products have facilitated households' scope for drawing on housing and financial wealth to increase borrowing and consumption.

An upward revision of income expectations will normally lead to a preference to increase consumption today. Saving is temporarily reduced (see Chart 2.31). The low interest rate level in recent years has also made it less attractive to postpone consumption. The strong growth in consumption is reflected in a falling household saving ratio. In the four quarters to 2007 Q1, households saved approximately 1% of disposable income. This is the lowest household saving ratio over a four-quarter period since the late 1980s.

The interest rate level is rising. Growth in household interest expenses has been moderate, despite strong debt accumulation and the increases in the key policy rate. So far, banks' lending rates have risen less than Norges Bank's key policy rate, partly owing to strong competition, adaptation to new capital adequacy requirements and low credit risk. The lending margin was fairly high at the outset. Further ahead, we expect the increase in the key policy rate to be passed on to lending rates to a greater extent. The rise in household interest expenses will increase accordingly, and towards the end of the projection period the interest rate burden will be at the highest level since the early 1990s (see Chart 1.17 in Section 1). Higher interest expenses and higher inflation will gradually curb growth in household purchasing power. The higher interest rate level will also make saving more attractive. As lower demand growth dampens activity in the economy, slower employment and wage growth will further reduce growth in household purchasing power. In our baseline scenario, growth in household demand slows further out in the projection period, and the saving ratio increases somewhat (see Chart 2.32).

Activity in the housing market is expected to remain high this year, but capacity constraints, higher building costs and higher interest rates are expected to lead to a moderate decline in housing investment further ahead. House prices are still rising fairly rapidly, but the rate of increase has abated somewhat in recent months (see Chart 2.33). With an increased supply of new dwellings and higher interest rates, the rise in house prices may be somewhat slower ahead than in recent years.

Growth in household borrowing has been high for a long period, but has slowed somewhat through the past year. On balance, we expect credit growth to ease gradually through the projection period, and net lending to increase somewhat, but to remain negative in 2009-2010.

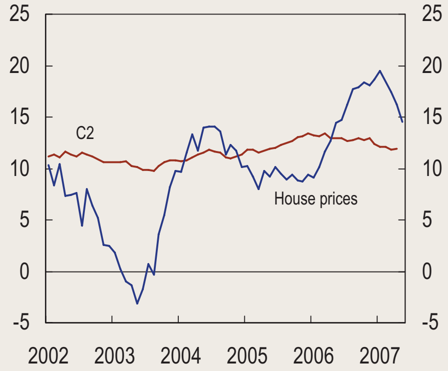
Expansionary fiscal policy

The central government accounts for 2006 show a surplus before capital transactions of NOK 311bn. In 2007, the surplus is projected at NOK 263bn in the Revised National Budget for 2007. Adjusted for petroleum revenues and capital income from the Government Pension Fund - Global, there was a deficit of NOK 44bn last year, while the deficit this year is estimated at NOK 39bn.

The cyclical upturn is boosting tax revenues and reducing spending on unemployment benefits. The Ministry of Finance has estimated that these factors have contributed to strengthening the budget by NOK 45bn or about 3% of trend mainland GDP from 2004 to 2006. The Ministry expects cyclical developments to strengthen the budget by an additional NOK 6.5bn in 2007. However, this estimate is based on slower growth in the mainland economy than projected in this *Report*. The reduction of purchasing power over the central government budget due to strong growth makes an important contribution to smoothing fluctuations in Norwegian economy.

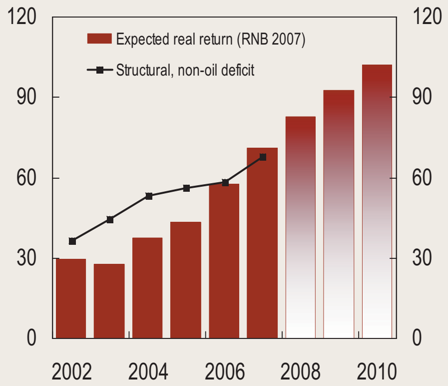
Government policy is based on a gradual increase in the use of petroleum revenues and capital income from the Government Pension Fund – Global. As a reference, the

Chart 2.33 House prices and credit to households (C2). 12-month change. Per cent. Monthly figures. Jan 02 – May 07



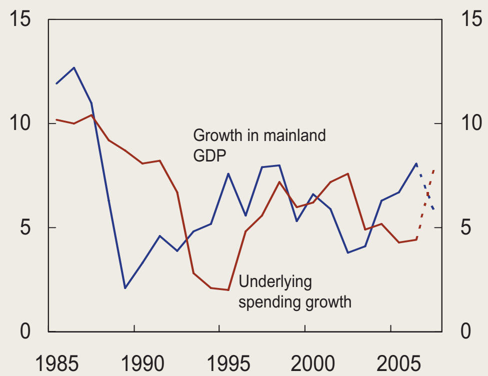
Sources: Norwegian Association of Real Estate Agents, Association of Real Estate Agency Firms, FINN.no, ECON and Statistics Norway

Chart 2.34 Expected real return on the Government Pension Fund - Global. In billions of 2007 NOK. Annual figures. 2002 – 2010



Source: Ministry of Finance (Revised National Budget 2007)

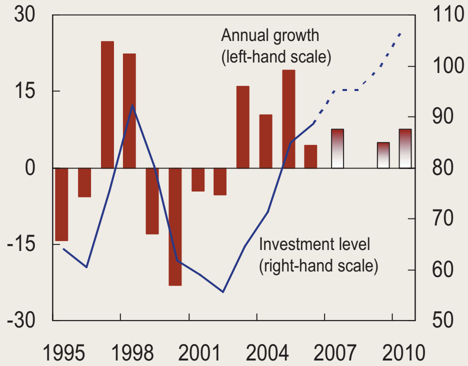
Chart 2.35 Underlying spending growth in the government budget and nominal growth in mainland GDP. Per cent. Annual figures. 1985 – 2007[1)]



[1)] Projections for 2007 from the Ministry of Finance.

Sources: Ministry of Finance (RNB 2007) and Statistics Norway

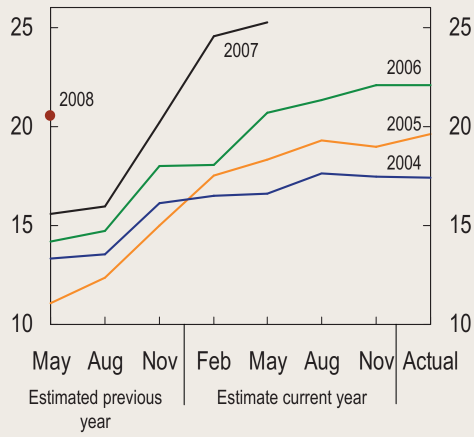
Chart 2.36 Investment in oil and gas production including pipeline transport. Investment level in billions of NOK (constant 2004-prices) and annual growth (per cent). Annual figures. 1995 – 2010[1)]



1) Projection for 2007 – 2010.

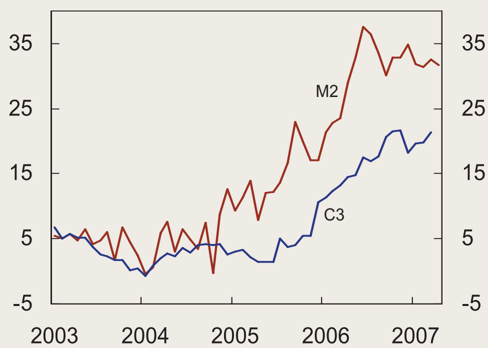
Sources: Statistics Norway and Norges Bank

Chart 2.37 Investment statistics for manufacturing. Estimated and actual investment (current prices). In billions of NOK



Source: Statistics Norway

Chart 2.38 Credit to enterprises[1)] and enterprises' liquid assets[2)]. 12-month change. Per cent. Jan 03 – Apr 07



1) Total debt non-financial enterprises mainland Norway (C3).
2) Non-financial enterprises' liquid assets (M2).

Source: Statistics Norway

annual government budget deficit, excluding these revenues and adjusted for cyclical fluctuations in some revenues and expenditure, should be the equivalent of the expected real return on the Fund, i.e. 4%. This structural deficit was 4% in 2006 and is expected to be 3.8% this year (see Chart 2.34). As the Fund's capital is rising sharply, the structural deficit will still increase by 0.6 percentage point as a share of mainland GDP from 2006 to 2007 after having been relatively stable in the previous two years. By this measure, fiscal policy is stimulating activity in the Norwegian economy this year. This is also reflected in underlying public spending growth, which is estimated at 7.8% this year, compared with 4.4% last year (see Chart 2.35).

In 2006, growth in local government revenues was at its strongest in 20 years, with total nominal revenue growth at 9.5%. Strong revenue growth reflected both higher government budget transfers and higher tax revenues than assumed earlier. As a result of unexpectedly high tax revenues in 2006, revenue growth will be low this year as compared with 2006. According to the Revised National Budget, nominal revenues will increase by more than 4%.

In the next few years, the structural non-oil budget deficit is projected to be somewhat smaller than the expected real return on the Government Pension Fund – Global. Public sector activity will continue to stimulate total demand and production through the period.

Continued high petroleum investment ahead

High petroleum investment has made a strong contribution to activity growth in the Norwegian economy over the past few years. Activity on the Norwegian continental shelf has now reached a very high level (see Chart 2.36). The large Snøhvit and Ormen Lange projects have contributed to the high level of investment. In the course of the year, these two large projects will be completed and production will begin. This will dampen investment growth.

However, investment is expected to remain high in the period ahead. Oil prices remain high and both futures prices and forecasts indicate that prices may remain high for a long period. A number of smaller fields are being developed and old fields are being upgraded. According to the investment intentions survey for oil and gas operations, there are plans to increase investment in the Ekofisk, Troll and Valhall fields.

The number of exploration wells is rising sharply. As a result of rig shortages, not all planned exploration drilling is being carried out. Exploration investment may rise later in the projection period when the supply of rigs increases.

High, but gradually slower growth in fixed investment

Corporate investment has increased by nearly 10% annually over the past three years. Growth in fixed investment will probably remain at a high level again this year. Manufacturing investment statistics point to continued buoyant investment activity (see Chart 2.37). According to the business tendency survey and our regional network, business leaders believe that the market outlook is favourable. Many enterprises are operating at capacity limits and need to expand their production capacity. Favourable export prices, low interest rates and cost efficiency measures have contributed to solid corporate profitability. Credit growth is high, but the money supply is growing even faster (see Chart 2.38). The financial position of enterprises is solid and liquidity is high. This increases the probability that enterprises will realise their investment plans.

So far this year, commercial building starts have increased swiftly (see Chart 2.39). Employment in the service sector is rising rapidly and a number of international retail chains are being established in Norway. This points to continued investment growth in the commercial building industry. However, growth may be curbed by capacity constraints in the building industry.

The regional network reports somewhat slower investment growth one year ahead. Following a period of high investment growth, the need for further investment will normally decline. A higher interest rate level and increased costs may reduce corporate profitability and thereby curb growth in production and investment. Investment normally fluctuates in pace with the level of economic activity, with wider fluctuations through the business cycle (see Chart 2.40). Further out in the projection period, lower capacity utilisation will also contribute to dampening investment.

Export growth will gradually ease

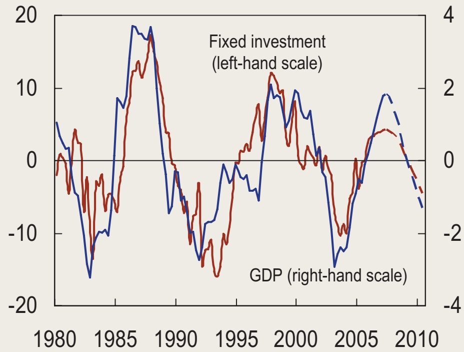
Robust growth in global markets has resulted in strong growth in demand for traditional Norwegian export goods and services. Since spring 2003, prices have risen by about 25%. In particular, metal prices have increased markedly (see Chart 2.41). A sharp rise in turnover, coupled with high productivity growth, has led to solid profitability in parts of the export industry. As a result of continued global economic growth, export prices are expected to remain at a high level in the years ahead.

In the next few years, export growth will probably be restrained by somewhat lower growth among our trading partners. Capacity constraints in some export industries may also dampen growth in the short term. In the longer term, investment and the re-opening of temporarily closed production facilities may lead to somewhat higher capacity, while weak competitiveness may contribute to dampening export growth.

Chart 2.39 Commercial building starts. In 1000 m^2. 12-month moving average. Jan 02 – Apr 07

Sources: Statistics Norway and Norges Bank

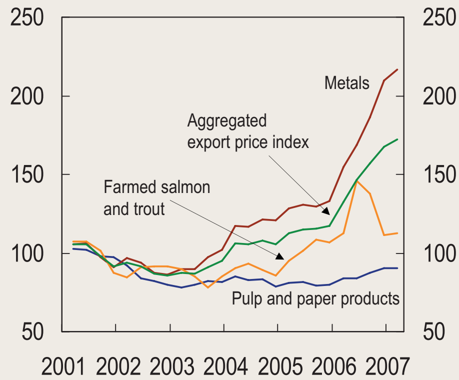
Chart 2.40 GDP and fixed investment. Mainland Norway. Percentage deviation from trend.[1)] Quarterly figures. 80 Q1 – 10 Q2[2)]



1) Trend calculated using Hodrick-Prescott filter. See *Staff Memo* 2005/2 (www.norges-bank.no) for further details.
2) Based on annual projections for 2007 - 2010.

Sources: Statistics Norway and Norges Bank

Chart 2.41 Price indices[1)] for Norwegian exports in NOK. 2001 = 100. Quarterly figures. 01 Q1 – 07 Q1



1) Norges Bank's estimates based on world market prices.

Sources: Reuters (EcoWin), Statistics Norway and Norges Bank

Boxes

Is global inflation on the rise?

Developments in productivity growth

How often do firms change their prices?

Projections in *Monetary Policy Report* 1/07 and *Monetary Policy Report* 2/07

Is global inflation on the rise?

Historically, high inflation has been triggered by price shocks, which for various reasons were not counteracted by a tightening of monetary policy. One example is the reaction to the oil price shock in 1973-1974, illustrated by developments in the US in Chart 1. In spite of the surge in inflation, the real interest rate was generally negative through the latter half of the 1970s. From the beginning of the 1980s, monetary policy was tightened considerably in industrialised countries, which eventually brought down inflation.

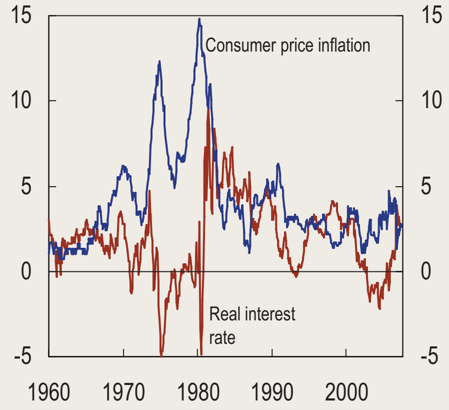
We have once again experienced a cyclical upturn accompanied by a sharp increase in commodity prices. There was substantial spare capacity in industrialised countries when commodity prices started to rise, unlike the situation prevailing around the two previous oil prices shocks (see Charts 2 and 3). Against the backdrop of spare production capacity and low consumer price inflation, monetary policy has for a long period been able to stimulate demand through low short-term interest rates. At the same time, low long-term interest rates have stimulated credit growth and the rise in securities and property prices in many regions of the world. There is again growing pressure on production resources.

Against this backdrop, the question can be raised as to whether we are headed towards a period of rising global inflation.

Inflation in the OECD area has been kept at a low level by positive supply-side factors. Prices for many imported goods from China and other emerging economies have fallen. Cheaper imports have probably also contributed to intensified competition and more efficient product and labour markets. Productivity growth has been high in many industries, while wage growth has been low and wage shares have fallen. It may seem that the effects of these factors are now losing momentum.

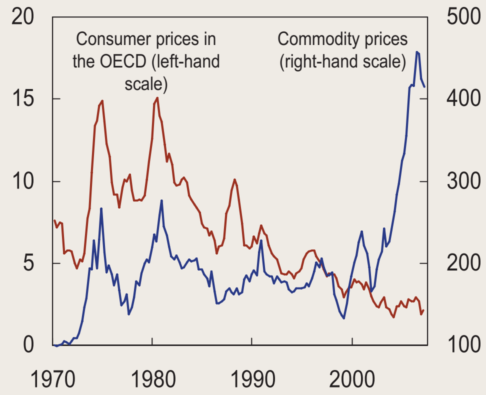
A large share of the population in emerging economies is still underemployed or employed in low-productive jobs, particularly in agriculture. This suggests that these countries can continue to deliver strong growth and many, new competitive products to the world market. In the short run, however, the supply of available resources may

Chart 1 Consumer prices (year-on-year rise) and real interest rate in the US. Per cent. Monthly figures. Jan 60 – May 07



Sources: Reuters (EcoWin) and Norges Bank

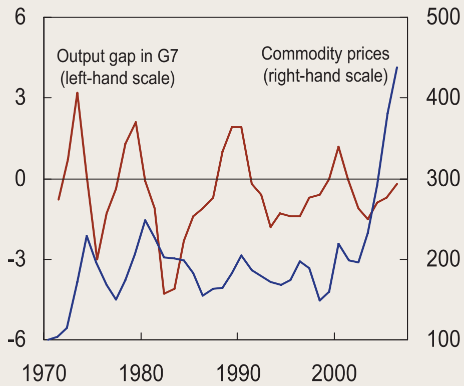
Chart 2 Commodity prices[1)] (index, 1970 = 100) and consumer prices in the OECD (4-quarter rise) Per cent. Quarterly figures. 70 Q1 – 07 Q1



[1)] Goldman Sachs commodity index

Source: Reuters (EcoWin)

Chart 3 Commodity prices[1)] (index, 1970 = 100) and output gap in the G7 countries (per cent). Annual figures. 1970 – 2006



[1)] Goldman Sachs commodity index

Sources: OECD and Reuters (EcoWin)

be limited because a large share of the labour has already migrated and further inflows of labour may necessitate a substantially higher increase in real wages than in income in agriculture. Moreover, bottlenecks may result in price increases linked among other thing to shortages of infrastructure and commodities. Available statistics from these countries are not always reliable, but existing figures still indicate that wage growth is high (see Chart 4).

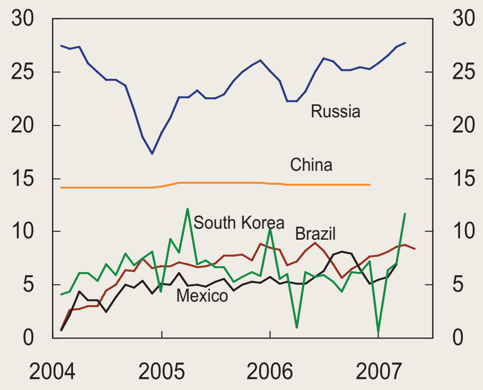
Furthermore, productivity growth may taper off once the first benefits of globalisation have been reaped. Chinese export prices for certain labour-intensive products have increased for a period (see Chart 5). Recently, the price rises seem to have broadened to include more groups of goods, and the rate of increase has picked up. Consumer price inflation has moved up in China, India and Brazil. This may be an indication that improved productivity is not fully counterbalancing the increase in wages and energy and commodity prices.

During this cyclical upturn, productivity growth has been high, particularly in the US (see Chart 6), which has led to considerable profitability gains in the business sector and low price and cost inflation. As the upturn moves into a more mature phase, productivity growth will normally slow, while wage growth may accelerate as a result of labour shortages. Productivity growth is now slackening in the US and the UK, while it is picking up in the euro area.

There are still no clear signs of rising inflation. Unlike in the 1970s, monetary policy in the OECD countries is now being tightened. Information from financial markets, inter alia bond yields, does not indicate a considerable increase in inflation expectations. The inflation outlook for the OECD countries is around the monetary policy objectives. It seems that market participants are confident that inflation will be kept in check. The increase in energy prices and signs of pressures on production resources are pushing up interest rates, not inflation expectations (see Chart 7).

Even though the rise in prices for Chinese exports is edging up, the low general level of prices for Chinese goods will push down inflation in industrialised countries. China's total share of world

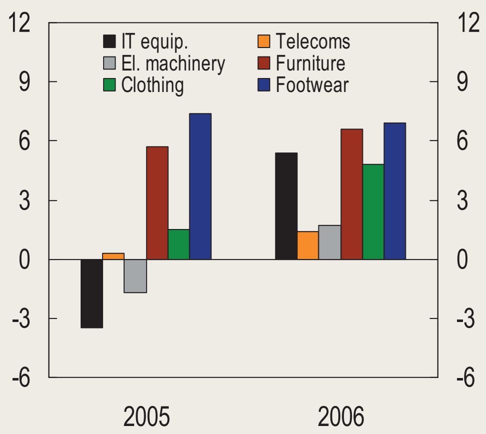
Chart 4 Wage growth in emerging economies. 12-month growth. 3-month moving average. Per cent. Monthly figures[1]. Jan 04 – May 07



[1] Annual figures for China

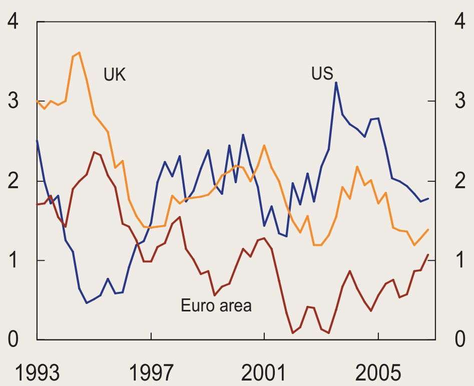
Sources: Reuters (EcoWin) and Norges Bank

Chart 5 Chinese export prices. Annual rise. Per cent. 2005 and 2006



Sources: CEIC and Norges Bank

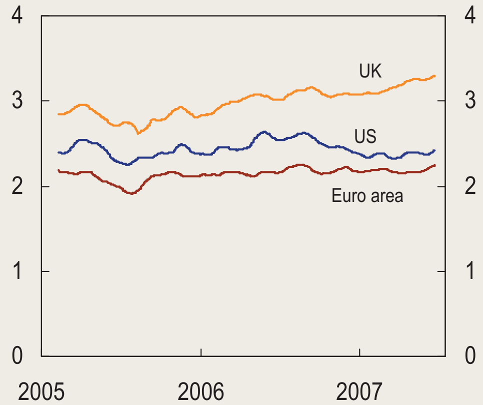
Chart 6 Productivity. Growth on previous quarter. Annualised rate[1]. Per cent. Quarterly figures. 93 Q1 – 06 Q4



[1] 8-quarter moving average

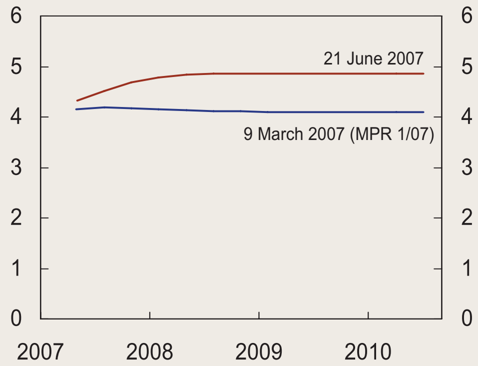
Sources: OECD and Norges Bank

Chart 7a Long-term inflation expectations. Based on inflation-indexed bonds. 30-day moving average. Daily figures. 10 Feb 05 – 21 Jun 07



Sources: Reuters (EcoWin) and Norges Bank

Chart 7b Forward rates among trading partners.[1] Money market rates.[2] Per cent. Quarterly figures. 07 Q3 – 10 Q4

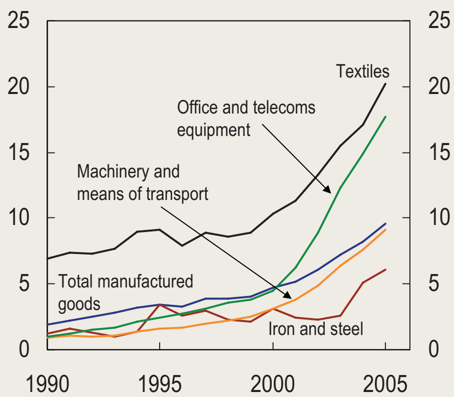


1) Weighted average

2) Money market rates are approximately 0.2 percentage point higher than the key policy rate.

Sources: Reuters (EcoWin) and Norges Bank

Chart 8 China's share of total global exports within different product groups. Per cent. Annual figures. 1990 – 2005



Sources: WTO International Trade Statistics 2006 and Norges Bank

textile exports was 20% in 2005 (see Chart 8). In comparison, China's share of Norwegian textile imports was close to 40% in 2006. There is probably still some potential for a shift towards increased imports from China and other emerging economies, but most likely not at the same pace as earlier.

On the whole, it may seem that the particularly favourable impulses on the supply side, which have marked developments in industrialised countries in recent years – import price fall, high productivity growth and low cost growth – are fading. This has contributed to higher interest rates, but has so far not resulted in a pronounced increase in inflation. Should the world economy be exposed to new shocks, for example a further increase in commodity prices or a marked fall in productivity growth, there is a risk that high liquidity and lower resource availability on the supply side may also result in rising labour cost growth and consumer price inflation. As long as such shocks are systematically countered by higher interest rates in the major industrialised countries, the risk of markedly higher inflation still seems limited.

Developments in productivity growth

The growth potential of the Norwegian economy has been high in recent years, reflecting increased use of foreign labour and strong productivity growth. Because developments in productivity also have a bearing on price and wage inflation, projections of productivity growth are a key factor in assessing the outlook ahead.

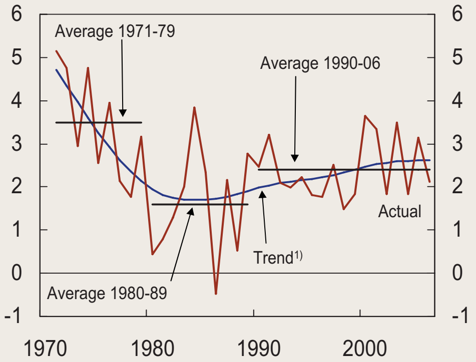
There are several different measures of productivity. In this box, we use the measure GDP per person-hour, which is also referred to as labour productivity and is an important and relatively simple productivity measure.[1] Labour productivity depends on factors such as organisation, logistics, incentives, use of technology, labour skills and the stock and quality of real capital. It is also influenced by the degree of capital and labour utilisation.

Estimations of labour productivity are normally based on national accounts figures. The figures for labour productivity are uncertain and prone to significant revision over time. Among other things, there is considerable uncertainty linked to the measurement of GDP at constant prices, particularly in services.[2] According to the figures, productivity growth shows wide annual variations. Underlying productivity growth can be estimated using trend calculations or an average for a longer period. Such calculations are uncertain, particularly at the end of a time series.

Growth in labour productivity was high at the beginning of the 1970s (see Chart 1). The closing of the technological gap against the US through increased economic integration was probably an important factor. Unstable macroeconomic conditions, high inflation and inefficient investment probably led to low and variable productivity growth as from the mid-1970s.

Trend productivity growth in mainland Norway has edged up since 1990. Productivity growth in Norway seems to have been somewhat higher than among many of our main trading partners (see Chart 2). For example, labour productivity in Norway has increased at a somewhat faster pace than in Sweden and the US, which are often cited as countries with high productivity growth as a result of wide use of information technology and relatively high production of such products. Even though some indicators suggest relatively limited innovation in Norwegian companies compared with other countries, it would appear that Norway has been quick to integrate new technology and reap the associated benefits.[3] The development of free capital markets, the discontinuation of the low interest rate policy of the 1980s, the EEA Agreement and the 1992 tax reform may also have boosted productivity growth in Norway through more efficient investment. Low productivity growth in the euro area since the beginning of the 1990s probably reflects relatively low growth, limited adaptability and a low degree of flexibility in product markets and labour markets.

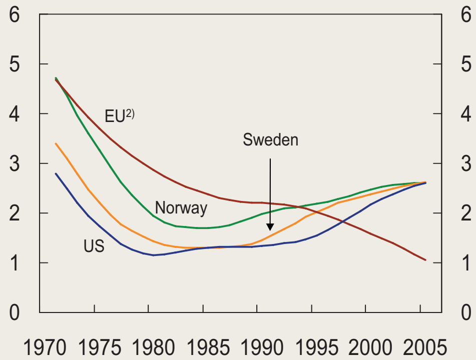
Chart 1 Mainland GDP per person hour. Actual and trend[1)]. Annual growth. Per cent. Basis value. 1971 – 2006



1) Trend calculated using Hodrick-Prescott filter.

Sources: Statistics Norway and Norges Bank

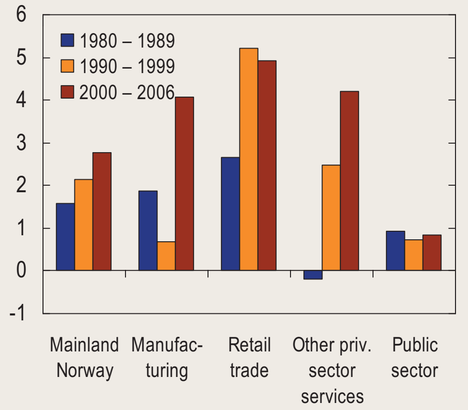
Chart 2 Mainland GDP per person-hour. Trend[1)]. Annual growth. Per cent. 1971 – 2005



1) Trend calculated using Hodrick-Prescott filter.
2) EU-15 excluding Greece, Luxembourg, Portugal and Austria.

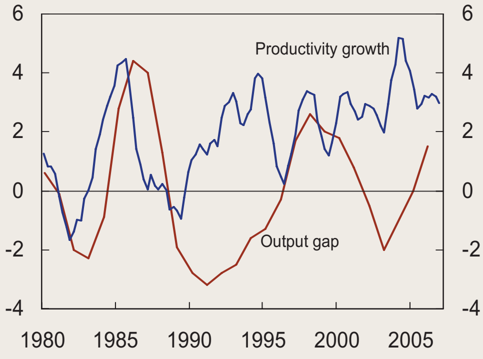
Sources: Statistics Norway, OECD and Norges Bank

Chart 3 Average annual growth in Mainland GDP per person-hour. Per cent



Sources: Statistics Norway and Norges Bank

Chart 4 Output gap and growth in labour productivity[1)].
Productivity growth in quarterly figures. 80 Q1 – 06 Q4. Output gap in annual figures. 1980 – 2006



1) Moving 5-quarter average. Excluding the public sector, housing services and power production.

Sources: Statistics Norway and Norges Bank

The private service sector has made a considerable contribution to higher productivity growth since 1990 (see Chart 3). In retail trade, this partly reflects structural changes as a result of chain cooperation and the introduction of ICT. Productivity growth in retail trade was about 5% annually in the period 1990-2006. Other services, including financial services, have also shown higher productivity growth. This can be seen in connection with efficiency measures at banks in the wake of the banking crisis and increased use of IT technology in banking and payment services. Productivity growth in the postal and telecommunications sector was also high during this period, thanks in part to deregulation, successful restructuring, rationalisation, automation and technological advances.

It is particularly difficult to estimate productivity growth in the public sector. Even though we have some information about resource input and costs in the public sector, information on production and quality is limited because public services are generally not traded.[4] In the national accounts, productivity growth in the public sector is estimated on a discretionary basis by Statistics Norway. On a technical basis, the estimate implies that the public sector has contributed to pushing down mainland productivity growth.

Productivity growth in manufacturing was low in some periods of 1990s as a result of low productivity growth in sectors that were largely sheltered from foreign competition. In particular, productivity growth was pushed down because the productivity level in the food and beverage industry was about the same at the end of the 1990s as at the end of the 1980s. In pace with growing global competition, however, productivity growth has picked up sharply in manufacturing since the turn of the millennium. Intensified competition and a high cost level have led to closures of companies with low productivity and an increase in the need for and opportunities to replace in-house intermediate inputs with supplies from Norwegian and foreign subcontractors. Increased specialisation has resulted in higher productivity growth.

Cyclical conditions also influence productivity growth. In the recovery phase, companies can normally increase production using existing capital and labour. As the recovery gathers momentum, companies increase employment and productivity growth slows. Similarly, productivity growth tapers off when the cyclical peak is passed.[5] Chart 4 shows that such cyclical conditions may have had a significant impact on productivity growth in the 1980s and at the beginning of the 1990s. However, the figures indicate that the relationship between productivity growth and the output gap has weakened over the past 10-15 years.[6] This may be because the increase in underlying productivity growth has made it more difficult to identify cyclical movements in productivity. Nevertheless, in this period we find that there were cyclical movements in productivity growth when there was a turnaround in 1998-1999 and 2003.

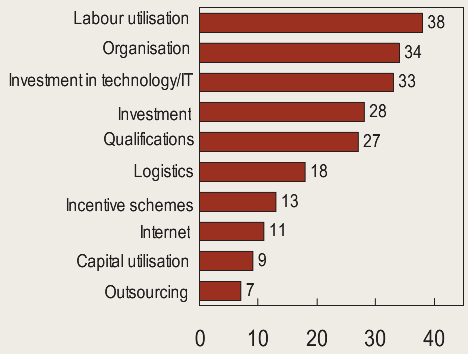
In order to gain insight into the factors that have driven productivity growth in recent years and possible developments ahead, we have interviewed 245 enterprises in our regional network. We asked them what they considered to be the most important factors behind changes in productivity over the past few years and the factors considered to be important in the years ahead. The companies were asked to specify the expected direction of productivity developments ahead. The survey was conducted in April and May 2007.

A relatively high number of companies responded that increased productivity growth over the past few years was related to more efficient use of labour (see Chart 5). Some companies also reported a more efficient use of existing capital. These two factors may be an indication that cyclical conditions have made a substantial contribution to productivity growth in recent years. Among the factors that may have contributed to a more permanent increase in productivity, many companies cited investment in new technology, other investments, enhanced organisation, more highly qualified labour, various employee incentive schemes and improved use of the Internet. Some companies pointed to increased use of domestic and foreign subcontractors as a factor behind productivity growth. Among the companies that had recorded slower productivity growth, one of the factors cited was a reduction in workforce qualifications.

The companies reported that the driving forces behind productivity growth ahead will be broadly the same forces that have driven growth over the past few years (see Chart 6). Companies indicated that there were still some gains to be achieved through more efficient utilisation of labour and existing capital. Improved use of labour is however expected to be of somewhat lesser importance ahead than over the past few years. Among the companies that expect slower productivity growth, problems in recruiting qualified labour were highlighted.

A majority of companies expect productivity growth to remain virtually unchanged ahead (see Chart 7). In all sectors excluding the public sector, however, more companies expect productivity growth to increase than those expecting it to slow. All in all, 34% of companies expected productivity growth to increase, while 22% anticipated slower productivity growth. 43% in manufacturing and 41% retail trade expect productivity growth to increase. In the construction sector, 66% expect productivity growth to remain unchanged. In services, 30% expect a fall in productivity growth.

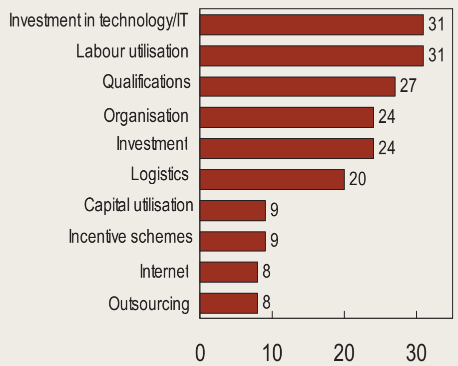
Chart 5 Factors behind high productivity growth. Per cent[1)]



1) Each enterprise can list several factors. The percentages therefore add up to more than 100.

Source: Norges Bank

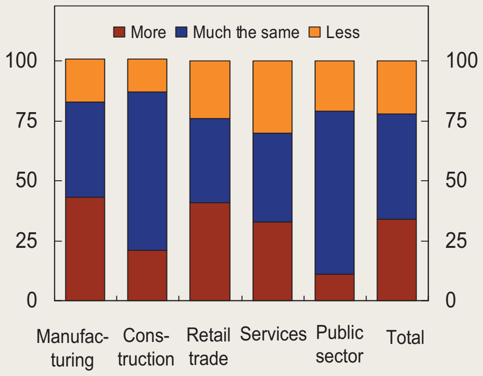
Chart 6 Factors behind productivity growth ahead. Per cent[1)]



1) Each enterprise can list several factors. The percentages therefore add up to more than 100.

Source: Norges Bank

Chart 7 Expected developments in productivity growth in the period ahead. Per cent



Source: Norges Bank

However, productivity growth for the Norwegian economy as a whole may differ from that indicated by a survey of existing Norwegian companies. In an upturn, new companies are established. These companies can be expected to have higher productivity than average productivity in the economy, partly because they can integrate the most modern technology. It is likely that there will be fewer new entrants as the cycle shifts than has been the case in recent years. Productivity growth may then be weaker in the period ahead than indicated by the network.

Productivity growth in the mainland economy slowed somewhat between 2005 and 2006. Our projections are based on the assumption of a somewhat further slowing of productivity growth in 2007 and 2008. Our projections indicate that the cyclical peak will be passed towards the end of 2007, which should result in a fall in productivity growth in line with previous experience. Productivity growth may be pushed down by a shortage of qualified labour and an increase in the number of employees who change jobs. Recruitment is now likely to require more resources and entail higher training costs than earlier. Some companies in our network also point out that cyclical conditions may have a dampening impact on productivity growth. Relatively few companies reported scope for using existing capital equipment more efficiently. Towards the end of the projection period, productivity growth is assumed to follow underlying productivity growth in the economy. Productivity growth is projected to be somewhat lower than the average for the period 1990-2006, partly because a portion of productivity growth since 1990 probably reflects a one-off shift in the productivity level that to some extent can be linked to structural changes.

Productivity growth ahead may prove to be stronger than projected. High investment growth in the business sector, partly as a result of labour shortages, may imply that productivity growth may remain high in the period ahead. The responses from the companies in the network may also indicate that productivity growth may be higher than projected. The potential for sustained high growth in the economy may then be greater than assumed.

[1] Other productivity measures can in principle provide a better indication of technological advances, but are based among other things on assumptions about production structure and competitive conditions in the economy. See, for example, ”Measuring productivity”, OECD Manual (2001).
[2] See appendix 4 in NOU 1996:4 and Skoczylas and Tissot ”Revisiting Recent Productivity Developments Across OECD Countries”, BIS Working Paper No 182 (2005) for a further discussion of measurement problems.
[3] See OECD country report on Norway for 2007.
[4] In Norway and internationally, extensive work is in progress to obtain better information on public services production. In Norway, the KOSTRA system provides information on local government services, and quality indicators in this system were published in March this year.
[5] For a further discussion of procyclical productivity, see Fernald and Basu, ”Why Is Productivity Procyclical? Why Do We Care?”, International Finance Discussion Papers, June 1999, Board of Governors of the Federal Reserve System.
[6] For a more formal analysis using Norwegian data, see Husebø and Wilhelmsen, ”Norwegian Business Cycles”, Norges Bank Staff Memo 2005/2.

How often do firms change their prices?

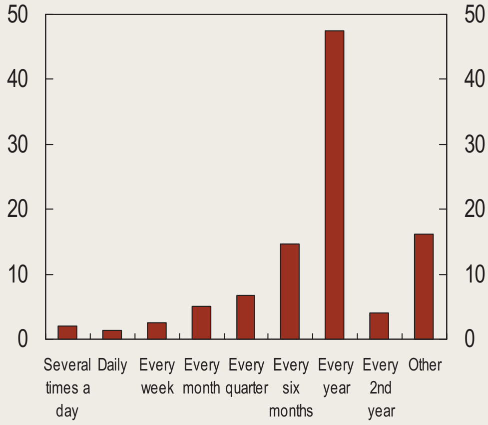
It is the overall rise in prices in the economy that is of importance in the conduct of monetary policy. The overall rise in prices is the sum of changes in individual prices. In order to obtain a good understanding of how monetary policy influences the overall rise in prices, it is useful to have information about the factors that determine prices in individual firms. This information may also be of importance for how monetary policy should react to changes in the economic situation. Normally, price developments are analysed using overall measures of prices, for example the consumer price index. Such overall measures can often provide a good understanding of price developments, but may also mask relevant information about price-setting in individual industries or firms. By studying the behaviour of economic agents we can arrive at stable relationships between macro variables such as capacity utilisation and inflation. The frequency of firms' price changes and the factors underlying a price increase or reduction are key questions.

This past winter Norges Bank conducted a survey of price-setting in Norwegian firms and received responses from a good 700 firms. We are also working on analysis of individual prices that are included in the calculation of the Norwegian consumer price index (CPI), i.e. micro data.[1] In this box we present some of the results of these studies.[2] Similar studies have been conducted by central banks in the euro area.[3]

The studies show that there is a certain time span that elapses between changes in prices for individual goods and services. The most common response from firms is that the price of the firm's main product is changed once a year (see Chart 1). The analysis of the underlying data included in the CPI also shows that the individual price is on average constant for almost one year at a time.

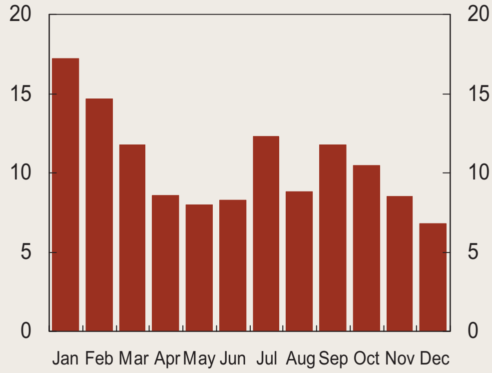
Moreover, there seems to be a fairly clear seasonal pattern in price-setting. Of the firms that respond that they only change their prices once a year, about half report that they usually change prices in January. According to the data included in the calculation of the CPI, most price changes occur in January, but many price changes also occur in February and March (see Chart 2). This result is reflected in the distribution of the overall rise in

Chart 1 How frequently are prices changed? Results of survey. Per cent



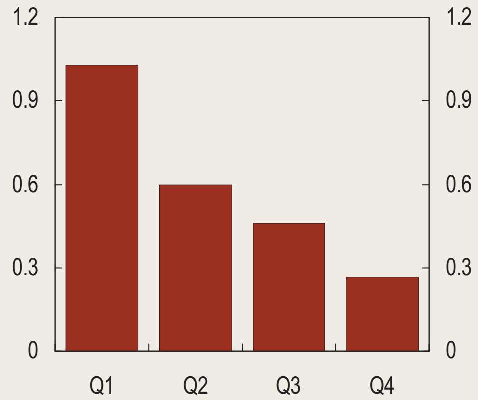
Source: Norges Bank

Chart 2 Price changes as an average share of the total number of price observations per month. Results from data underlying the CPI. Per cent. Jan 99 - Dec 04



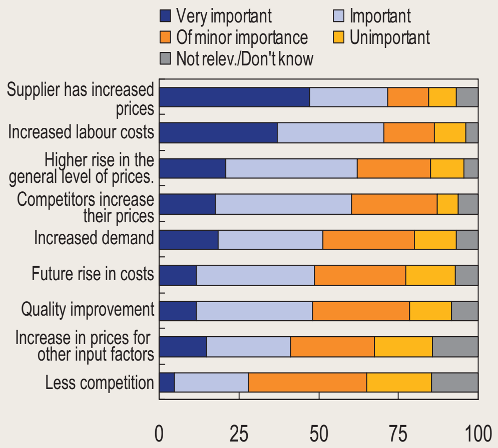
Sources: Statistics Norway and Norges Bank

Chart 3 Changes in prices for domestically produced goods and services in the CPI-ATE. Overall monthly rise per quarter. Per cent. Average 1993 -2006



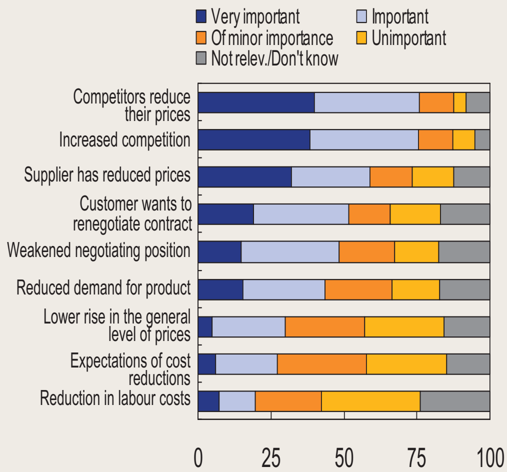
Sources: Statistics Norway and Norges Bank

Chart 4 Which factors are important in connection with price rises? Survey results. Per cent



Source: Norges Bank

Chart 5 Which factors are important in connection with price reductions? Survey results. Per cent



Source: Norges Bank

prices of domestically produced goods and services through the year. Since the early 1990s, prices for domestically produced goods and services showed on average the largest rise in the first quarter. The rate of increase through the remainder of the year has gradually abated from quarter to quarter (see Chart 3).

It can also be observed that firms usually change prices to a fairly large extent when they actually decide to change prices. A majority of firms that participated in the survey reported that the most common price increase ranged between 3% and 10%. The data underlying the calculation of the CPI also show that many of the price increases are clearly higher than the overall rise in consumer prices. Moreover, the micro data show that about 40% of the observed price changes in the period 1999-2004 were price reductions. In the euro area, the average price increase in the micro data was 8% while the average price reduction was 10%. This is broadly in line with what we have found in the Norwegian micro data.

The survey shows that different factors have had a bearing on price increases and price reductions in recent years. Cost factors such as higher labour costs and price increases by suppliers are the most important explanatory factors behind price increases (see Chart 4). Market conditions such as increased competition and price reductions by competitors are the main explanatory factors behind price reductions (see Chart 5). The surveys in euro-area countries also showed that cost increases are considered to be the main factor behind prices increases, while changes in market conditions predominate when prices are reduced. Wage growth in Norway is on the rise and the rate of increase in prices for many goods at the producer level is high. These factors, which the firms cite as important factors behind price increases, may indicate that the rate of increase in consumer prices is moving up.

[1] These data are not available to the public. Norges Bank has access to the data subject to an agreement with Statistics Norway, providing for the supply of such data for research purposes.
[2] The projects are in progress. Further findings will be published as more in-depth analyses are completed.
[3] See, for example, Altissimo, F., M. Ehrmann and F. Smets (2006): "Inflation persistence and price-setting behaviour in the euro area - a summary of the IPN evidence", ECB Occasional Paper No. 46.

Projections in *Monetary Policy Report* 1/07 and *Monetary Policy Report* 2/07

New information that has emerged since March affects both the picture of the current economic situation and the outlook for the years ahead. On balance, new information points to a somewhat higher path for the interest rate than that presented in *Monetary Policy Report* 1/07.

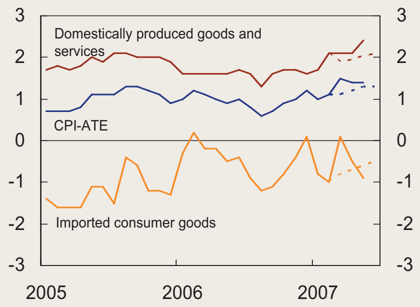
News since Monetary Policy Report 1/07

- Interest expectations internationally have risen appreciably recently. The krone exchange rate has been fairly stable since March.
- Inflation measured by the CPI-ATE has been approximately as projected in recent months. Inflation for domestically produced goods and services excluding energy products has risen somewhat faster than expected, while the fall in prices for imported consumer goods has continued (see Chart 1). There are signs that wage growth is now picking up somewhat faster than previously projected.
- Current statistics indicate that growth in mainland GDP will be somewhat higher than expected in the first half of 2007. Employment has increased more than expected, and a number of surveys point to a shortage of labour and intermediate goods.
- At the same time, the labour supply appears to be increasing more in 2007 than assumed in the previous *Report*, so that potential output is probably somewhat higher than forecast at that time. On balance, capacity utilisation is now estimated to be somewhat higher than expected (see Chart 2).
- Projections for petroleum investment ahead are somewhat higher than in the previous *Report*. Fiscal policy will have a somewhat stronger expansionary effect in 2007. Growth among our trading partners remains buoyant. Prices for oil and other commodities have risen further.

Effects on the interest rate path

The interest rate path has been revised upwards by ¼ percentage point at end-2007 and ½ percentage point in 2008 compared with *Monetary Policy Report* 1/07 (see Chart 3).

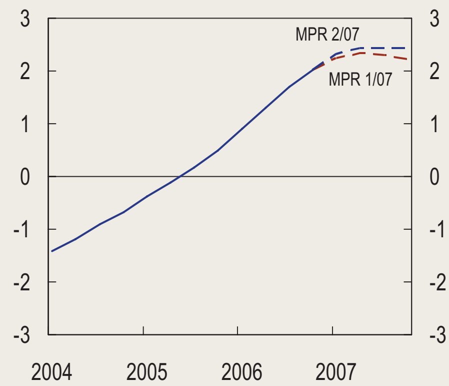
Chart 1 CPI-ATE.[1)] Total and by supplier sector[2)]. Projections from MPR 1/07 (broken line) and actual developments. 12-month rise. Per cent. Monthly figures[3)]. Jan 05 – May 07



[1)] CPI-ATE: CPI adjusted for tax changes and excluding energy products. A further adjustment is made for the estimated effect of reduced maximum day-care rates in 2006.
[2)] Norges Bank's estimates.
[3)] Quarterly figures for projections by supplier sector

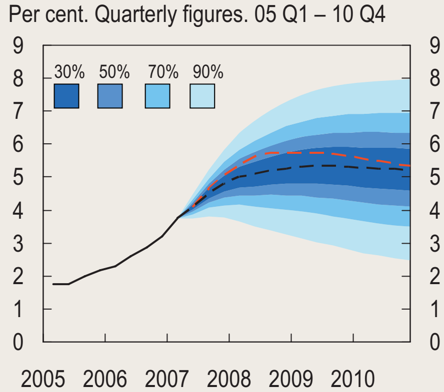
Sources: Statistics Norway and Norges Bank

Chart 2 Output gap estimates in the baseline scenario in MPR 1/07 and 2/07. Per cent. Quarterly figures. 04 Q1 – 07 Q4



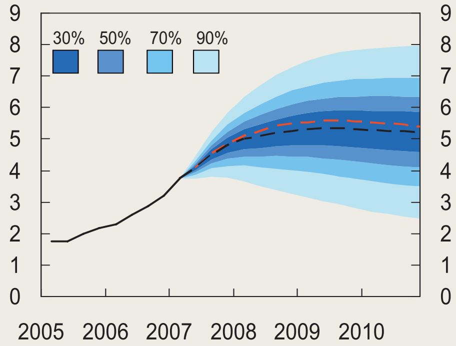
Source: Norges Bank

Chart 3 Key policy rate in the baseline scenario in MPR 1/07 with fan chart and key policy rate in the baseline scenario in MPR 2/07 (red line). Per cent. Quarterly figures. 05 Q1 – 10 Q4



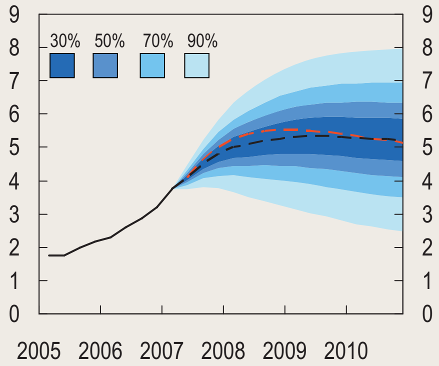
Source: Norges Bank

Chart 4 Key policy rate in the baseline scenario in MPR 1/07 with fan chart and the isolated effect of higher interest rates abroad (red line). Per cent. Quarterly figures. 05 Q1 – 10 Q4



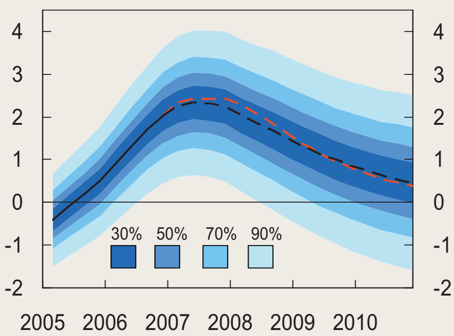
Source: Norges Bank

Chart 5 Key policy rate in the baseline scenario in MPR 1/07 with fan chart and the isolated effect of higher capacity utilisation (red line). Per cent. Quarterly figures. 05 Q1 – 10 Q4



Source: Norges Bank

Chart 6 Estimated output gap in the baseline scenario in MPR 1/07 with fan chart and output gap in the baseline scenario in MPR 2/07 (red line). Per cent. Quarterly figures. 05 Q1 – 10 Q4



Source: Norges Bank

Both inflation and the krone exchange rate have moved approximately in line with the projections in the previous *Report*. In isolation, these factors point to an unchanged interest rate path compared with the previous *Report*.

The increase in interest rate expectations abroad reflects continued robust growth in the world economy, but may also indicate that underlying inflationary pressures have been stronger than assumed earlier by market participants. Higher interest rate expectations abroad also point to a higher interest rate path in Norway (see Chart 4).

At the same time, growth in the Norwegian economy has been stronger than expected, and there are prospects that the upturn may last somewhat longer than previously envisaged. These factors also point to a higher interest rate path than in the previous *Report* (see Chart 5).

Changes in the projections

The projections in this *Report* are based on the assumption that the interest rate will follow a path which, in the Executive Board's view, provides a reasonable balance between the objectives of monetary policy. Section 1 provides a more detailed account of assessments and interest rate developments ahead.

In this *Report*, growth in mainland GDP is projected to be somewhat higher than in *Monetary Policy Report* 1/07. At the same time, projected potential output for mainland Norway for 2007 and 2008 has been revised up. On balance, this implies a somewhat higher output gap in 2007 and 2008 than previously projected (see Chart 6).

Employment growth is expected to be higher next year than projected in the previous *Report*, while the labour market is expected to remain relatively tight for a somewhat longer period. Somewhat lower unemployment will contribute to a small increase in the wage growth projection for this year and next.

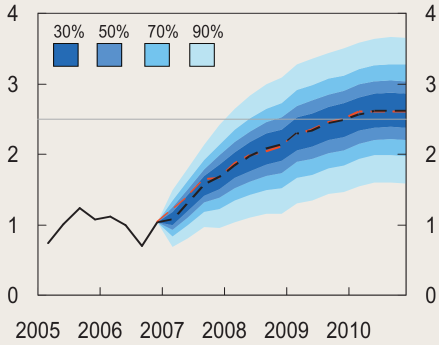
Total mainland demand has also been revised upwards. Higher employment growth and wage growth are contributing to stronger growth in household disposable income, which leads to somewhat higher projections for private consumption in 2007 and 2008 than in the previous *Report*. Against the background of high growth in many emerging economies and high prices for a number of our most important export goods, the projections for export growth are higher for this year and next. Higher projections for export growth and domestic demand push up import growth in relation to the projections in the March *Report*.

Inflation measured by the CPI is projected to rise markedly from a very low level this year. A sharp fall in electricity prices this year and prospects of high prices early in 2008 will result in a temporarily low rise in the CPI this year followed by a temporarily high rise in 2008. Inflation excluding energy prices is expected to rise more gradually. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) is expected to edge up to around 2% from the second half of 2008, approximately as projected in *Monetary Policy Report* 1/07 (see Chart 7). In isolation, higher-than-expected capacity utilisation and wage growth at the beginning of the period are pushing up inflation somewhat. On the other hand, a somewhat stronger rise in interest rates will contribute to somewhat faster reduction in capacity utilisation than previously projected.

Forecasts from other institutions

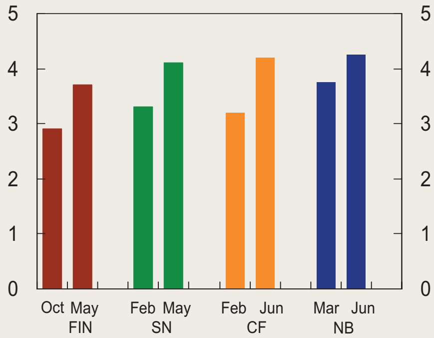
Norges Bank's projections for economic growth in 2007 are still a little higher than those of the Ministry of Finance and Statistics Norway and the average Consensus forecast, but the difference between the projections has narrowed recently (see Chart 8). Norges Bank projects mainland growth of 4¼% in 2007. When Statistics Norway published its forecasts at the end of May, mainland GDP growth in 2007 was forecast at 4.1%, up on its February forecast of 3.3%. In the Revised National

Chart 7 Projected CPI-ATE in the baseline scenario in MPR 1/07 with fan chart and CPI-ATE in the baseline scenario in MPR 2/07 (red line). 4-quarter rise. Per cent. Quarterly figures. 05 Q1 – 10 Q4



Sources: Statistics Norway and Norges Bank

Chart 8 Mainland GDP. Projections for 2007 published before MPR 1/07 and 2/07. Percentage growth



Sources: National Budget 2007, Revised National Budget 2007, *Economic Survey* 1/2007 and 2/2007, *Consensus Forecasts* February and June 2007, *Monetary Policy Report* 1/07 and 2/07

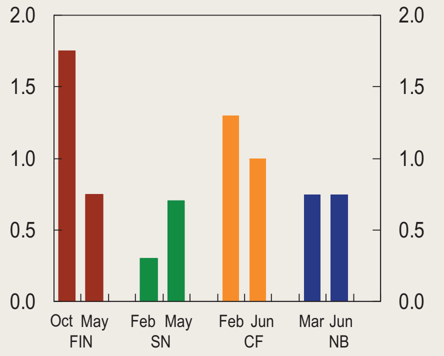
Table 1 Projections for main macroeconomic aggregates in *Monetary Policy Report* 2/07. Change from projections in *Monetary Policy Report* 1/07 in brackets

	2007		2008		2009		2010	
Mainland demand	4½	(½)	3	(¼)	2¼	(0)	2¼	(0)
GDP mainland Norway	4¼	(½)	2½	(¼)	2	(0)	2¼	(¼)
Employment	2¾	(½)	1	(¾)	0	(0)	0	(0)
LFS unemployment (rate)	2½	(-¼)	2¾	(-¼)	3¼	(-¼)	3¾	(0)
CPI-ATE[1)]	1½	(0)	2	(0)	2½	(0)	2½	(0)
CPI	¾	(0)	3	(½)	2½	(0)	2½	(0)
Annual wage growth[2)]	5½	(¼)	5½	(¼)	4¾	(0)	4½	(¼)

[1)] CPI adjusted for tax changes and excluding energy products.
[2)] Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations. The projections include estimated costs in 2007 related to the introduction of mandatory occupational pensions.

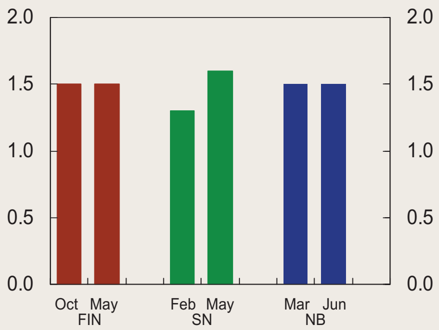
Source: Norges Bank

Chart 9 CPI. Projections for 2007 published before MPR 1/07 and 2/07. Percentage rise



Sources: National Budget 2007, Revised National Budget 2007, *Economic Survey* 1/2007 and 2/2007, *Consensus Forecasts* February and June 2007, *Monetary Policy Report* 1/07 and 2/07

Chart 10 CPI-ATE.[1] Projections for 2007 published before MPR 1/07 and 2/07. Percentage rise



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

Sources: National Budget 2007, Revised National Budget 2007, *Economic Survey* 1/2007 and 2/2007, *Monetary Policy Report* 1/07 and 2/07

Budget, the Ministry of Finance puts GDP growth at 3.7% in 2007. In the National Budget that was submitted last autumn, the projection was 2.9%. The average forecast for GDP growth from *Consensus Forecasts* has also been revised upwards from 3.2% in February to 4.2% in June.

On balance, there are very small differences in inflation projections for the current year. In this *Report*, Norges Bank projects CPI inflation at ¾% this year (see Chart 9). The Ministry of Finance now also projects CPI inflation of ¾%, i.e. one percentage point lower than forecast in October 2006. Since February, Statistics Norway has raised its projection for CPI inflation in 2007 by 0.4 percentage point to 0.7%. The average Consensus forecast for CPI inflation has also been revised downwards from 1.3% in February to 1.0% in June. Both Norges Bank and the Ministry of Finance project the rise in prices measured by the CPI-ATE at 1½% in 2007 (see Chart 10). None of the institutions has changed this projection since the last round. Since February, Statistics Norway has raised its projection for CPI-ATE inflation in 2007 by 0.3 percentage point to 1.6%. Consensus Economics does not compile projections for CPI-ATE inflation.

The Ministry of Finance's projections were published on 6 October 2006 and 15 May this year. Statistics Norway published its projections on 22 February and 31 May 2007, while Consensus Economics compiled its forecasts on 12 February and 11 June. As the institutions publish projections at different times, the information on which the projections are based will differ.

Boxes 2002-2007

2 / 07:
Is global inflation on the rise?
Developments in productivity growth
How often do firms change their prices?

1 / 07:
Will the global economy be affected by a slowdown in the US?
Uncertainty surrounding wage growth ahead
Competition and prices
Evaluation of Norges Bank's projections for 2006

3 / 06:
Output gap

2 / 06:
Money, credit and prices – a monetary cross-check
Foreign labour in Norway
Short term forecasts for mainland GDP in Norway

1 / 06:
Choice of interest rate path
Productivity growth in Norway
The yield curve and economic outlook in the US
Evaluation of Norges Bank's projections for 2005

3 / 05:
Uncertainty surrounding future interest rates developments
Accuracy of short-term interest rate expectations
Output gap uncertainty
Increased imports from low-cost countries
The Effects of high oil prices on the global economy

2 / 05:
Developments in the krone exchange rate

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
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?
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 the development in the krone exchange rate
Output gap
Imported price inflation and the exchange rate - the UK experience
Evaluation of Norges Bank's projections for 2001 and 2002

3 / 02:
The Scandinavian model of inflation-revisited

2 / 02:
Why has the krone 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?

Annex I
Regional network

Norges Bank's regional network

Norges Bank's regional network was established in autumn 2002 and consists of enterprises, local authorities and regional health enterprises throughout Norway. Five times a year, we interview business and community leaders concerning developments in their enterprises and industries. Each round includes interviews with about 290 contacts. The selection of contacts reflects the production side of the economy, both in terms of industry and geographic area. The network comprises approximately 1500 contacts who are interviewed about once 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 provides us with information earlier and more frequently than available official 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 provides us with insight into the effects of specific events and enables us to study relevant issues. Official statistics will continue to form the main 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, provides a basis for Norges Bank's projections as presented in the *Monetary Policy Report* and other published material.

We have divided Norway into seven regions. For six of them we have engaged regional research institutions who are responsible for the network in their respective regions and have meetings with contacts on behalf of Norges Bank. The following institutions have been selected:

Region North (Nordland, Troms, Finnmark)	Kunnskapsparken Bodø
Region Central Norway (Nord- og Sør-Trøndelag)	Center for Economic Research at the Norwegian University of Science and Technology
Region North-West (Møre og Romsdal, Sogn og Fjordane)	Møreforsking Molde
Region South-West (Rogaland and Hordaland)	International Research Institute of Stavanger
Region South (Aust- og Vest-Agder, Telemark, Vestfold)	Agderforskning
Region Inland (Hedmark and Oppland)	Østlandsforskning
Region East (Buskerud, Akershus, Oslo, Østfold)	Covered by Norges Bank

Summary of contact rounds since *Monetary Policy Report 1/07*

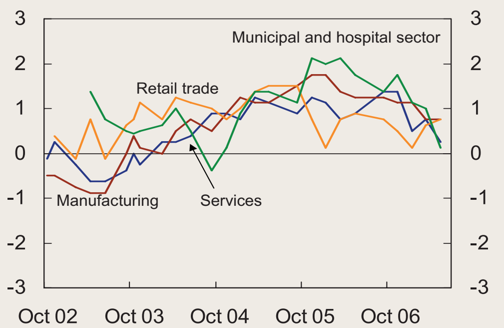
Since the publication of *Monetary Policy Report* 1/07, approximately 570 regional network contacts have been interviewed in the survey conducted in March and May. A national summary and a summary from each region from the May round are published on Norges Bank's website. The summary below is based on regional reports from the institutes responsible for the various regions and does not necessarily represent Norges Bank's view of economic developments.

Demand, output and market outlook

Companies in the regional network report continued solid growth. Growth has remained at a stable high level since the end of last year. Companies' expectations for the next six months indicate that growth will remain buoyant, albeit somewhat slower than earlier. A lack of spare capacity and labour shortages in most industries are important factors behind companies' expectations of somewhat slower growth.

Domestically oriented manufacturing reports solid growth in all regions and in many different industries. Suppliers to the building and construction industry report solid to strong growth, as observed over a long period. However, a number of contacts report that a lack of spare capacity is limiting further growth. In addition, growth is solid for suppliers to the petroleum, offshore and fish farming industries, and for producers of consumer durables such as furniture and boats. Newspapers and media firms are experiencing vigorous growth, particularly as a result of high advertising demand, particularly for job vacancy advertising. *The export industry* reports continued solid growth in demand and output. Growth is solid to strong across the country. There has been a gradual, but moderate slowdown in growth among export industries since the end of last year. The fish farming industry reports sustained favourable developments, although prices for salmon have decreased slightly. Global demand for Norwegian salmon is solid. The picture is more varied in the fishing industry as a result of raw material supply problems among some producers. The processing industry, engineering industry and suppliers to offshore/shipping also report solid growth.

Chart 1 Norges Bank's regional network. Planned investment growth next 12 months. Index[1). Oct 02 – May 07



1) The scale runs from -5 to +5, where -5 indicates a sharp decline and +5 indicates strong growth. See article "Norges Bank's regional network" in *Economic Bulletin 3/05* for further information

Source: Norges Bank

Suppliers to the petroleum industry report continued high activity and buoyant growth in many areas. Growth is strong in shipping services and machinery and ship's gear deliveries. Some shipyards also report strong growth due to the shipping industry's renewal of its supply fleet. However, growth is being curbed by capacity constraints and delayed hull and ship's gear deliveries. The major projects Snøhvit and Ormen Lange will soon be completed, but growth among suppliers to the petroleum industry is expected to remain solid ahead. Many smaller projects for smaller listed companies, both Norwegian and global, and for national oil companies operating in Arctic regions and deep waters, are expected to become important for growth ahead.

Growth remains high in *building and construction*. The extremely high activity level is still creating considerable capacity problems in the building and construction sector in various parts of the country. A number of enterprises have deliberately decided to be restrictive about taking on new orders. This can be viewed in relation to both a lack of qualified labour and a shortage of building materials. Several regions now report that residential construction is levelling off, but that growth is solid in the private and public commercial building sector. The construction sector is also experiencing robust growth.

Growth is solid and increasing in *retail trade* compared with previous years. Growth is buoyant across the country and particularly strong in region South-West. Sales of household goods such as building materials, brown and white goods, furniture and home furnishings are high. Growth rates are high for sales of clothing, footwear and sporting goods.

Corporate services are experiencing buoyant growth, and this is the sector with the highest growth rate after suppliers to the petroleum industry. Growth is strongest in Regions East and South-West, but is also solid in the other regions. In particular, commercial and financial services are pushing up growth, as has been the case for a period. High activity in manufacturing and the business sector generally is resulting in high demand for staffing services, auditing, management consulting, legal services, transport and accommodation. Many companies are also investing in new, upgraded IT systems, resulting in solid growth in the IT sector. *Household services* report somewhat lower growth than corporate services. Growth in lending to the retail market is reported to be solid. Estate agents, restaurants and travel agencies also report buoyant growth.

Capacity utilisation, the labour market and investment

The labour market remains tight and capacity utilisation remains high. 63% of companies report that they would have some or considerable difficulty in accommodating an increase in demand, while 53% report that the supply of labour would limit production if demand increased. These shares are approximately the same as in the November round. More than half of the contacts in all regions report that they will have some or considerable problems in accommodating an increase in demand.

In general, labour supply is the bottleneck, but also in part production capacity, warehouse capacity and the supply of factor inputs. The supply of materials and building products are cited as bottlenecks in building-related manufacturing and construction. There is a particular shortage of engineers in manufacturing and construction, but there is also a shortage of project managers, craftsmen, skilled workers, drivers, economists, auditors, architects, IT personnel, chefs, pilots and personnel in the tourism and hotel industries. In the municipal sector, there is an increasing shortage of labour for technical agencies, the healthcare sector and schools.

All industries report moderate growth in planned investment over the next 12 months (see Chart 1). All industries apart from retail trade are planning somewhat slower investment growth one year ahead than last autumn. A number of reasons for this are reported. Some industries have invested heavily for a long period and therefore have smaller investment needs at present. Others are postponing investment due to shortages of equipment among suppliers and high building costs. Investment growth is expected to be strongest in manufacturing.

Employment

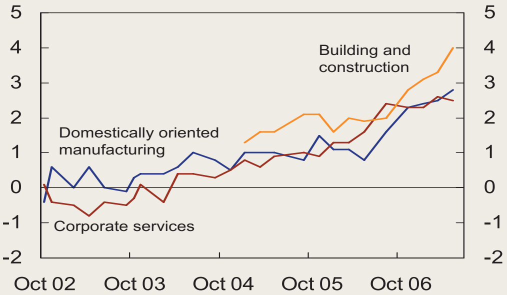
Employment is still on the rise and companies are planning a further increase in employment in the next 3 months, but to a lesser extent than earlier. Several companies are now qualifying their plans for employment depending on whether they are able to find the skills needed. Employment has increased most in the service industry, followed by manufacturing and building and construction. It is also these sectors that are planning the largest increases ahead.

Costs and prices

Expectations concerning annual wage growth in 2007 are higher than earlier this year. Annual wage growth is expected to average 5%. Expectations vary between 4.5% and 5.5% in different industries. The building and construction and service industries have the highest expectations, while retail trade has the lowest.

The rise in prices quickened throughout last year and has accelerated further this year. The rise in prices is now the strongest that has been registered since the start of the regional network in autumn 2002. In building and construction and domestically oriented manufacturing, the rise in prices is clearly accelerating (see Chart 2). In the next 12 months, 52% of our contacts expect prices to remain unchanged, 26% expect a higher rise in prices, while 22% expect a lower rise in prices. Expectations of a sharper rise in prices are somewhat lower at present than previously this year. Various markets, for instance metals, have seen a period of a considerable rise in prices and companies do not expect prices to rise at the same pace ahead. The number of contacts expecting a higher rise in prices is the highest in the building and construction industry and corporate services. In retail trade, the majority of our contacts expect prices to remain unchanged.

Chart 2 Norges Bank's regional network. Changes in selling prices over the past 12 months. Index[1]. Oct 02 – May 07[2]



[1] The scale runs from -5 to +5, where -5 indicates a sharp decline and +5 indicates strong growth. See article "Norges Bank's regional network" in *Economic Bulletin 3/05* for further information
[2] Building and construction from January 2005

Source: Norges Bank

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

A.B Jürgensen AS
Abeo AS
AC Nielsen Norge AS
Adecco Region Øst
Adecco Trondheim
Adresseavisen ASA
Advanced Production and Loading AS
Advokatfirmaet Schjødt AS
Ahlshell Norge AS
Air Products AS
Airlift AS
Ait Trykk Otta AS
Aker Kværner ASA
Aker Kværner MH AS
Aker Kværner Offshore Partner AS
Aker Kværner Pusnes AS
Aker Kværner Verdal AS
Aker Seafoods Finnmark AS
Aker universitetssykehus HF
Aker Yards Aukra AS
Akershus fylkeskommune
Akershus Universitetssykehus
Aksel L. Hansson AS
Akva Group ASA
Albert E. Olsen AS avd. Bodø
Alexandra Hotel AS
Alléen Auto AS
Amfi Drift AS
Applica AS
APS Norway AS
Arbor-Hattfjelldal AS
Arena Treningssenter AS
Arendal kommune
Arne Rustand AS
Arvid Bøckmann AS
AS Nesseplast
Asker kommune
Askim kommune
ASKO Agder AS
Asplan Viak AS, Stavanger
Asplan Viak Trondheim AS
Atlantic Auto AS
Aukra Midsund Offshore AS
Avinor AS Værnes
Ballstad Slip AS
Bartok AS
Bautas AS
Bekk Consulting AS
Bergen Kino AS
Bergen kommune
Bergene Holm AS
BergHansen Reisebyrå Vestfold AS
Berg-Hansen, Stavanger
Berle Fisk AS
BeWi Produkter AS
Birkenes kommune
Bjørn Bygg AS
BKK AS
Block Berge Bygg AS
Block Watne AS
BN entreprenør AS
Bodø kommune
Bodø Sildoljefabrikk AS
Bodø Transport & Caravan AS
Bohus Bomøbler AS
Boliden AS
Borealis Arkitekter AS
Bragerhaug & Beitostølen AS
Brødrene Røsand AS
Brødrene Sperre AS
Buer Entreprenør AS
Bunnpris
Bussen Trafikkselskap AS
Bygg og Maskin AS
Byggma ASA
Byggmester Grande AS
Byåsen Bakeri AS
Bø kommune
Bølgen og Moi AS
CC Mart'n Gjøvik Drift AS
Celsa Armeringsstål AS
Christie og Opsahl AS
Clarion Hotel Ernst AS
Clear Channel Norway AS
Coop Haugaland BA
Coop Inn-Trøndelag BA
Coop Midt-Troms BA
Coop Nordfjord og Sunnmøre BA
CTM Utvikling AS
Dale Bruk AS
Dale of Norway AS
Dale og Bang kommunikasjon
DDB Oslo AS
Deloitte Norge AS
Demex AS
Den Norske Bank ASA
Destinasjon Skeikampen AS
Diakonhjemmet
Dinamo Norge AS
Diplom-Is AS
DnB NOR Næringsmegling
Dokka Fasteners AS
Domstein ASA
Domaas og Jensen AS
Drag Industrier AS
Drammen kommune
Drytech AS
EFD Induction AS
EFG Hov Dokka AS
Egil Kristoffersen & Sønner AS
Eidsvaag AS
Eiendomsmegler 1 AS
Eigersund kommune
Einar Valde AS
Elektro Team AS
Elektrotema Agder AS
Elkem Aluminium ANS
Elkem ASA Materials
Elkem ASA Salten Verk
Elkjøp Stormarked Skien
Elkjøp Stormarked Tromsø
Eltek Energy AS
Elvemo og Hjertås Bygg AS
Emma EDB AS
Ernst & Young AS
Euronics Norge AS
Eurosko Norge AS
Ewos AS avd. Halsa
Falkanger Sko AS
Fame fotografene AS
Farstad Shipping AS
Farveringen AS
Ferner Jacobsen AS
Findus Norge AS
Finnmark Reiseliv AS
Finny Sirevaag AS
First Hotel Victoria
First Securities ASA
Fjellpulken AS
Fjord 1 MRF AS
Fjordkjøkken AS
Fjällräven AS
FMC BioPolymer AS
Fokus Bank avd. Tromsø
Fokus Krogsveen Tromsø AS
Forum Eiendom AS
Fosnavaag Seafood AS
Franzefoss Pukk AS
Fresenius Kabi Norge AS
Fritjof Kristiansen AS
Fru Haugans Hotell AS
Fuglefjellet AS
Fugro Oceanor AS
Fundator AS
Fundo Wheels AS
Gausdal kommune
GE Health Care AS
Geelmuyden Kiese As
Geoservice AS
Gilde Bøndernes Salgslag BA
Gilstad Trelast AS
Gjensidige Forsikring Trondheim
Gjesdal kommune
Glava AS
Glava AS, Stjørdal
Godstrafikk og Bilspedisjon AS
Grenland Framnæs AS
Gunnar Karlsen AS
Gunnar Klo AS
Gyldendal ASA
H. & O. Bernhardsen AS
H.J Økelsrud AS
Hafjell Alpinsenter AS
Halliburton AS
Hamar kommune
Handelsbanken Trondheim
Hansa Borg Bryggerier ASA
Harila Tromsø AS
Harstad kommune
Hatteland Display AS
Haugesunds Avis AS
Havkrefter AS
Hedalm Anebyhus AS
Hedmark Eiendom AS
Helgeland Sparebank
Helly Hansen Spesialprodukter AS
Helse Finnmark HF
Helse Fonna HF
Helse Midt-Norge HF
Helse Nordmøre og Romsdal HF
Herlige Stavanger AS
Hi-Fi Center kjeden AS Bodø
Hi-Fi Klubben Grimstad
Hitra kommune
Holm Grafisk AS
Hordaland fylkeskommune
Hotell Refsnes Gods AS
Hovden Møbel AS
HRG Nordic
Hunter Douglas Norge AS
Hurtigruten Group ASA
Hydro Aluminium AS
Hydro Aluminium Profiler AS
Hydrolift AS
Hydrotech Gruppen AS
Høie AS
Hå kommune
Hårek AS
I. P. Huse AS
IKEA AS
IKEA Åsane
IKM gruppen AS
Ikon AS
InMedia AS
Innoventi Reklamebyrå AS
Intersport Lillehammer AS
Intra AS
ISS Facility Services AS
ISS Norge AS
ISS Renhold AS Region Vest
It Connect AS
IT Partner AS
Itab Industrier AS
Iver Bil AS
JC Jeans & Clothes AS
Jernia ASA
Jiffy Products International AS
Johansen Th & Sønner AS
Jærentreprenør AS
Jøtul ASA
K. Haneseth AS
Kanstad Trelast AS
Kappahl AS
Karmsund Maritime Service AS
Kewa Invest AS
Kino1 Stavanger AS
Kiwi Norge AS
KL Regnskap Hitra
Klausengruppen AS
Kleive Betongbygg AS
Klingenberg Hotel AS
Klæbu kommune
Kongsberg Automotive ASA
Kongssenteret
Kosberg Arkitektkontor AS
KPMG AS avd. Tromsø
KPMG AS avd. Stavanger
KPMG AS avd. Trondheim
Kran og Industriservice Nord AS
KremDesign AS
Kristiansand Cementstøperi AS
Kristiansand Næringsforening
Kruse Smith AS
Kvestor Eiendomsmegling AS
Kynningsrud AS
Landteknikk Fabrikk AS
Lefdal Elektromarked AS Lade
Leiv Sand Transport AS
Leonhard Nilsen & Sønner AS
Lerøy Midnor AS
Lillesand produkter AS
Lillrent AS
Lindesnes kommune
Link Signatur AS
Lundal Nord AS
Løvenskiold-Fossum
Løwini Bodø AS
M. Peterson & Søn AS
Madla handelslag
Madsen Bil AS
Mandal kommune

Manpower AS avd. Bodø
Manpower AS avd. Møre og Romsdal
Maritech AS
Maritime Hotell Flekkefjord
Martin M.Bakken AS
Maske Gruppen AS
Meca Norway AS
Melbu Systems AS
Meløy Notbøteri AS
Mercur shoppingsenter
Mesta AS
Mezina AS
Midsund Bruk AS
Minera AS
Mjøsplast AS
Moelven Østerdalsbruket AS
Moi Rør AS
Molde kommune
Mona Abelsen Store AS
Monet AS
Montér
Mosjøen Kulde og Klimaservice AS
Moxy Engineering AS
MTU Telecom AS
MyTravel Norge
Møller Bil Haugesund AS
Møre Båtservice AS
MøreTre AS
Nannestad kommune
Naper Informasjonsindustri AS
Narud Stokke Wiig AS
Narvik kommune
NAV Sør-Trøndelag
NAV Telemark
NAV Vest-Agder
Nera Networks AS
Nerland Granitindustri AS
Net transe services AS
Neumann bygg AS
Nexans Norway AS
NHO Trøndelag
Nidar AS
Nor- Dan AS
Nordbohus Vinstra AS
Nordek AS
Nordlandssykehuset HF
Norengros Johs Olsen AS
Norges Handels- og Sjøfartstidende AS
Norgesvinduet Svenningdal AS
Norlense AS
Norplasta AS
Norsik AS
Norske Skogindustrier ASA Skogn
Nortrans Touring AS
Nortroll AS
Nortura BA
Notar Eiendom Ålesund AS
Notodden Mur- og Entreprenør-forretning AS
Nova Sea AS
Novagroup AS
Nycomed Pharma AS
Nysted AS
Næringsforeningen i Trondheim
Næringsråd i Arendal kommune
Oasen Storsenter
Odfjell ASA
Offshore Simulator Centre AS
Ole K. Karlsen Entreprenør AS
Oljedirektoratet
Oppland Entreprenør AS
Oras Trondheim AS
Os kommune
Oslo Entreprenør AS
Osram AS
Otta Sag og Høvleri AS
Owens Corning Fiberglas Norway AS
P4 Radio Hele Norge ASA
PA Consulting Group AS
Pallin AS
Pareto Securities AS
Partner Reisebyrå AS
PDC Tangen AS
Peab AS
Peder S. Fjetland AS
Pedersens Lastebiltransport AS
Personalservice AS
Petoro
PipeLife Norge AS
Plastal AS
Polarkonsult AS
Polimoon AS
Pon Power AS
Powel ASA
PriceWaterhouseCoopers DA
Procter & Gamble Norway AS
Proffice AS
Profil Lakkering AS
Profilhuset Meny AS
Profilteam AS
Prosafe SE
Protech AS
Proxll AS
På Håret AS
Quality Hotel Sogndal
Rambøl Unico AS
Rambøll Norge AS Lillehammer
Ramsvik Frisør AS
Rapp Hydema AS
Rasmuss Tallaksen
Rasmussen K A AS
Rauma kommune
REC ScanWafer AS
Reinertsen AS
REMA 1000 Norge AS Region Vest
Remvik & Standal AS
Remøy Shipping AS
Restco AS
Revisorgruppen Viken AS
Rica Hotel Hamar
Rica Hotels AS Norge
Rica Hotels Midt-Norge AS
Rica Maritim Hotel
Rieber & Søn ASA
Rieber & Søn ASA Elverum
Riibe Mynthandel AS
Ring Mekanikk AS
Ringnes AS
Ringsaker kommune
Ringside Rørleggerbedrift AS
Risa AS
Rissa kommune
Rockwool AS
Rofiskgruppen AS
Rolfsen AS
ROM Eiendom AS
Romerike Trelast AS
Romsdal Budstikke AS
Rosenborg Malerforretning AS
Ruukki Norge AS
Rygge kommune
Rød Tråd AS
Rørteknikk og bademiljø AS
Saga Boats AS
Saint Gobain Ceramic Materials AS
Saipem Norvegia
Samarbeidende Revisorer AS
Sandnes Garn AS
Sandnes Sparebank
Sandnessjøen Verkstedsenter AS
Scandic Hotell Kristiansand
Scandic Hotell Tromsø
ScanPartner AS
ScanRope AS
Schenker Linjegods AS
Schlumberger Norge AS
SEB Kort Norge
Securitas AS
Sentrum Kiropraktikk og Helse AS
Servi Cylinderservice AS
SG Equipment Finance
SG Finans AS Brumunddal
Siemens AS
Sig. Halvorsen AS
Sintef MRB
Sjøvik AS
Sjåtil og Fornæss AS
Skagen Fondene, Skagen As
Skanska Norge AS, avd Arendal
Skanska Norge AS, avd Rogaland
Skanska Norge AS, avd Tønsberg
Skeidar AS
Skipsplast AS
Skretting AS
Slatlem & Co AS
Slipen Mekaniske AS
Smurfitt Norpapp AS
Solhaug Entreprenør AS
Solstad Shipping AS
Solstrand Hotel & Bad AS
Sortland Reisebyrå AS
Spar Kjøp AS
Sparebank 1 Nord-Norge avd. Bodø
Sparebank 1 SR-Bank
Sparebanken Hedmark
Sparebanken Sør
Sparebanken Volda Ørsta
Sparebanken Øst
Sperre Støperi AS
Spice AS
Sport 1 Gruppen AS
Sporten Sletten Senter AS
Sportshuset AS
Sportshuset Tromsø AS
St. Olavs Hospital
Stabburet AS
Stansefabrikken Lillesand AS
Stantek Kongsvinger AS
Star Tour Norge
Stavanger kommune
Steertec Raufoss AS
Steinsvik Hus AS
Stordal kommune
Stormoa AS
Storvik AS
Studentsamskipnaden i Agder
Sundvolden Hotel
Sunnmørsposten AS
Surnadal Transport AS
Swix Sport AS
Sykehuset Innlandet HF
Sykehuset Telemark HF
Syljuåsen AS
Sylteosen Betongvarefabrikk AS
Sørlandet sykehus HF
Sørra Byggsenter AS
Sør-Trøndelag fylkeskommune
T. Stangeland Maskin AS
Team Trafikk AS
Tema Eiendomsselskap AS
Timpex AS
Tine Meieriet Øst BA
Titania AS
Topp Auto AS
Torgkvartalet kjøpesenter
Torpa Bilruter AS
Toten Transport A/L
Totens Sparebank
Toyota Hell Bil As
Toyota Nordvik AS
Toyota Norge AS
Trelleborg Viking AS
Trioving AS
Triplex AS
Tromsø kommune
Trondheim kommune
Trondheim Stål AS
Trondheim Torg
Trysilfjellet BA
TV 2 Gruppen AS
Tvedestrand kommune
Tyrholm & Farstad AS
Tysfjord Turistsenter AS
Ulstein Verft AS
Umoe Catering AS
Umoe IKT AS
Umoe Mandal AS
UNIFAB AS
Valle sparebank
Varden AS
Vefsn kommune
Veidekke ASA
Velvære grossisten AS
Ventelo Norge AS
Veolia Transport Sør AS
Vestbase AS
Vesterâls-Revisjon AS
Vestre Toten kommune
Vestvik Reklame AS
Vetco Aibel AS
Veøy AS
VIBO Entreprenør AS
Vikeså Glassindustri AS
Vikomar AS
Vital næringseiendom AS
Vizrt ASA
Vokks Installasjon AS
Våler Bygg AS
Våler kommune
Wennberg Trykkeri AS
Widerøe Internet AS
Widerøes Flyveselskap ASA
Wiersholm Mellbye & Bech Adv. AS
Xerox As
X-Partner Nord AS
XXL Sport & Villmark AS, Forus
Yara International ASA
Yara Norge AS Glomfjord Fabrikker
YIT Building Systems AS
Øveraasen AS
Øyer kommune
Åge Nilsen AS
Ålesund kommune
Ålesund Storsenter AS
Aarbakke AS
Årdal Stålindustri AS
Åsane Byggmesterforretning AS
Aasen Bygg AS
Åsen og Øvrelid AS

Annex II
Statistics, charts and detailed projections

Monetary Policy Meetings in Norges Bank

with changes in the key policy rate

Date	Sight deposit rate[1)]	Change
Future meetings		
31 October 2007		
26 September 2007		
15 August 2007		
Previous monetary policy meetings		
27 June 2007	4.5	+0.25
30 May 2007	4.25	+0.25
25 April 2007	4	0
15 March 2007	4	+0.25
24 January 2007	3.75	+0.25
13 December 2006	3.50	+0.25
1 November 2006	3.25	+0.25
27 September 2006	3	0
16 August 2006	3	+0.25
29 June 2006	2.75	0
31 May 2006	2.75	+0.25
26 April 2006	2.5	0
16 March 2006	2.5	+0.25
25 January 2006	2.25	0
14 December 2005	2.25	0
2 November 2005	2.25	+0.25
21 September 2005	2	0
11 August 2005	2	0
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

[1)] The sight deposit rate is Norges Bank's key policy 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
	1998	2.7	4.1	2.8	3.4	9.4	22.2	6.5	8.8
	1999	2.0	2.6	3.7	3.1	0.2	-13.0	3.5	-1.6
	2000	3.3	2.9	4.2	1.9	-1.4	-22.9	4.6	2.0
	2001	2.0	2.0	2.1	4.6	3.9	-4.6	0.2	1.7
	2002	1.5	1.4	3.1	3.1	2.3	-5.4	-1.7	1.0
	2003	1.0	1.3	2.8	1.7	-3.6	15.9	2.1	1.4
	2004	3.9	4.4	5.6	1.5	9.3	10.2	4.8	8.8
	2005	2.7	4.5	3.3	1.8	9.1	19.1	6.7	8.6
	2006	2.8	4.6	4.4	3.3	8.0	4.4	9.8	8.2
2006[2]	Q1	0.8	0.9	1.7	2.0	-6.5	-10.4	2.7	-1.3
	Q2	0.1	0.8	1.5	0.6	8.4	3.3	3.1	4.4
	Q3	1.7	1.6	0.9	0.7	-4.1	9.2	2.1	0.4
	Q4	0.3	1.0	1.0	0.6	7.2	-0.7	2.9	3.0
2007	Q1	0.7	1.4	2.9	1.3	-1.2	-5.9	5.6	0.6
2006 level, in billions of NOK		2152	1563	874	418	286	95	384	610

Source: Statistics Norway

[1] Extraction and pipeline transport.
[2] Sesonally adjusted quarterly figures.

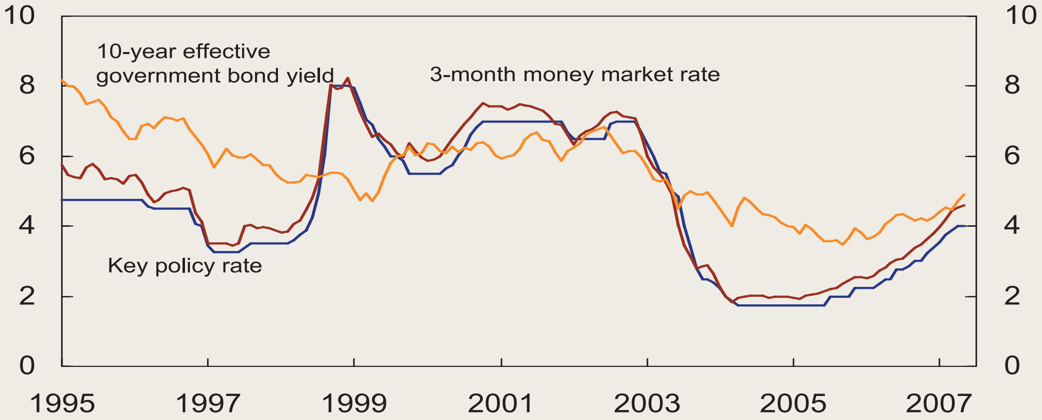
Table 2 Consumer prices

Twelve-month rise. Per cent		CPI	CPI-ATE[1]	CPI-AT[2]	CPI-AE[3]	HICP[4]
1998		2.3			2.9	2.0
1999		2.3			2.3	2.1
2000		3.1			2.3	3.0
2001		3.0	2.6	3.2	2.4	2.7
2002		1.3	2.3	2.2	1.6	0.8
2003		2.5	1.1	2.5	1.0	1.9
2004		0.4	0.3	0.0	0.8	0.6
2005		1.6	1.0	1.2	1.4	1.5
2006		2.3	0.8	2.0	1.0	2.5
2007	Jan	1.2	1.0	1.1	1.1	1.2
	Feb	0.8	1.1	0.6	1.3	0.8
	Mar	1.1	1.5	0.9	1.7	1.3
	Apr	0.3	1.4	0.0	1.5	0.5
	May	0.3	1.4	0.1	1.5	0.6

[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.

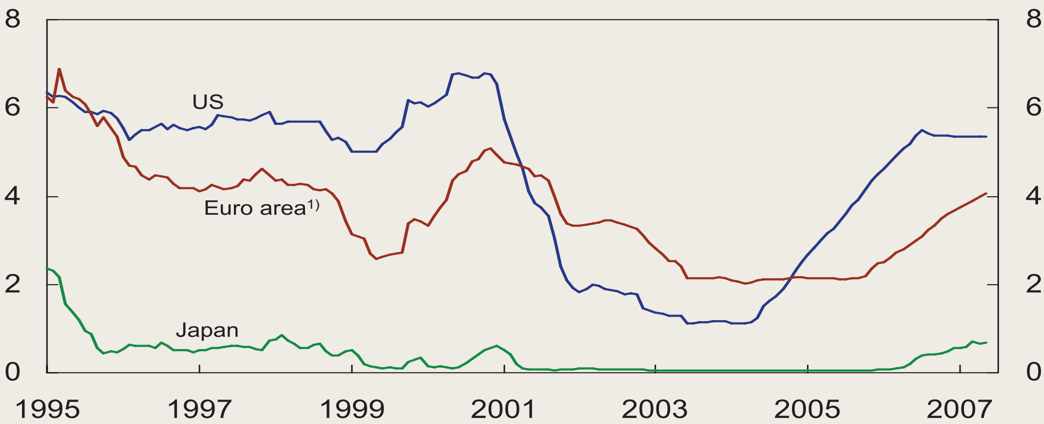
Source: Statistics Norway

Chart 1 Norwegian interest rates. 3-month money market rate, key policy rate and 10-year government bond yield.
Per cent. Monthly figures. Jan 95 – May 07



Source: Norges Bank

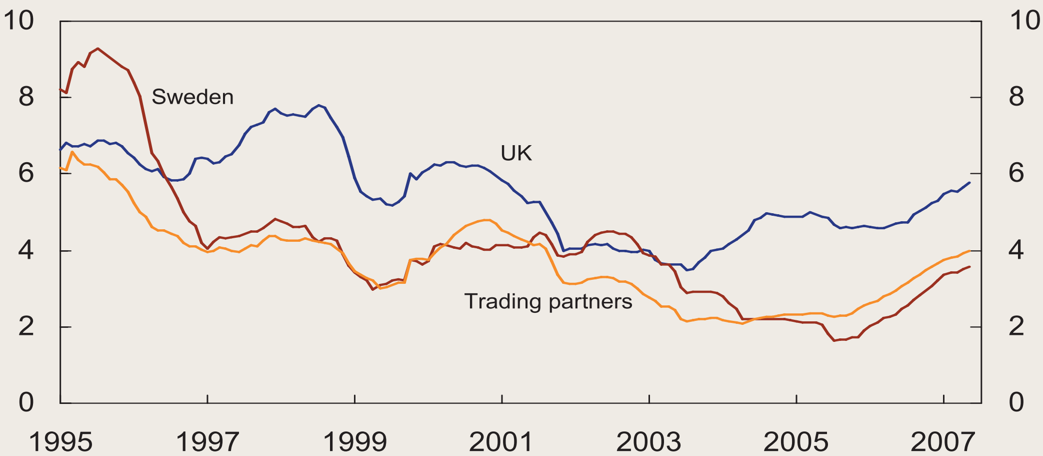
Chart 2 3-month interest rates in the US, the euro area and Japan.
Per cent. Monthly figures. Jan 95 – May 07



1) Theoretical ECU rate up to and including December 98

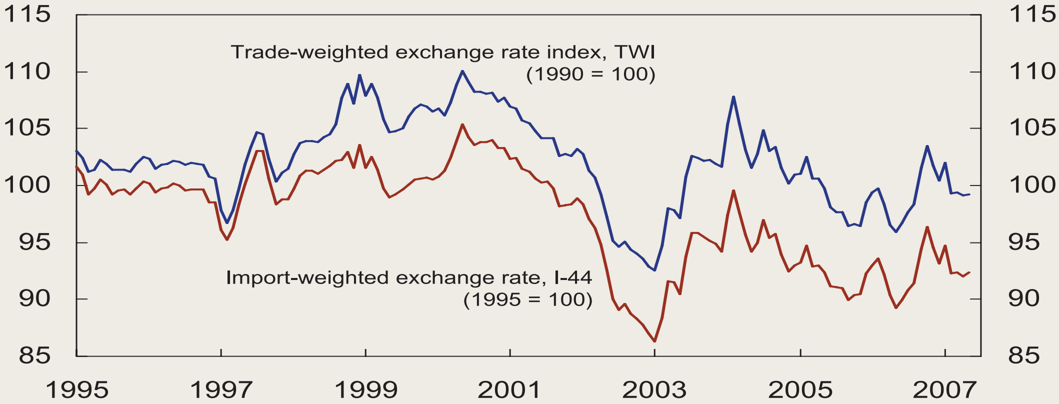
Source: Reuters (EcoWin)

Chart 3 3-month interest rates in the UK, Sweden and among Norway's trading partners. Per cent. Monthly figures. Jan 95 – May 07



Sources: Reuters (EcoWin) and Norges Bank

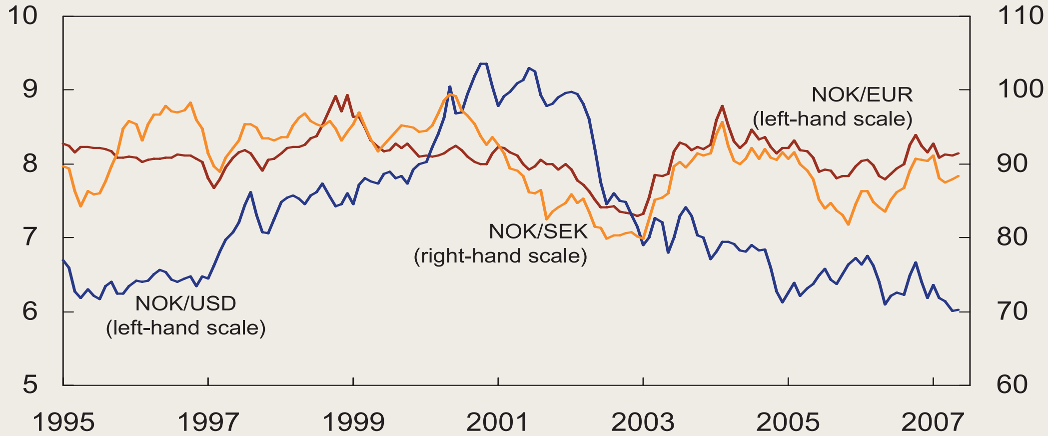
Chart 4 Trade-weighted exchange rate index (TWI) and import-weighted exchange rate.[1)] Monthly figures. Jan 95 – May 07



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

Source: Norges Bank

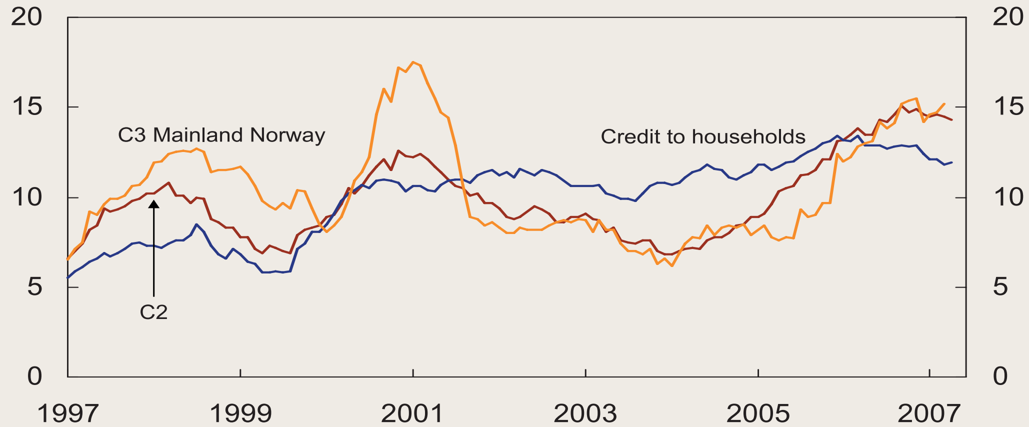
Chart 5 Bilateral exchange rates[1)]. Monthly figures. Jan 95 – May 07



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

Source: 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. Monthly figures. Jan 97 – Apr 07



Source: Statistics Norway

Table 3 GDP growth in other countries

Percentage change from previous year
Projections for 2007 – 2010

	US	Japan	Germany	France	UK	Sweden	Trading partners[1)]	Euro area
2006	3.3	2.2	2.8	2.2	2.8	4.2	3.6	2.7
Projections								
2007	2¼	2¼	2½	2¼	2¾	3½	3	2½
2008	2¾	2	2¼	2¼	2½	3	2¾	2¼
2009	2¾	1½	2	2¼	2½	2¼	2½	2
2010	2¾	1½	1½	2¼	2¼	2	2¼	1¾

1) Export weights, 26 important trading partners

Sources: Reuters (EcoWin) and Norges Bank

Table 4 Consumer prices in other countries

Percentage change from previous year
Projections for 2007 – 2010

	US	Japan	Germany	France	UK	Sweden	Trading partners[1)]	Euro area[2)]
2006	3.2	0.2	1.8	1.9	2.3	1.4	1.8	2.2
Projections								
2007	2½	0	2	1½	2½	2	2	2
2008	2½	½	1½	1¾	2	2¼	2	2
2009	2¼	1¼	1½	1¾	2	2¼	2	2
2010	2¼	1¼	1½	1¾	2	2	2	2

1) Import weights, 26 important trading partners
2) Weights from Eurostat (each country's share of total euro area consumption)

Sources: Reuters (EcoWin) and Norges Bank

Table 5 Main macroeconomic aggregates

	In billions of NOK	Percentage change (unless otherwise stated)				
			Projections			
	2006	2006	2007	2008	2009	2010
Real economy						
Mainland demand[1)]	1574	4.5	4½	3	2¼	2¼
- Private consumption	874	4.4	4¾	3¼	2½	2½
- Public consumption	418	3.3	3	3	.	.
- Fixed investment[2)]	283	6.6	6	2¾	.	.
Petroleum investment[3)]	95	4.4	7½	0	5	7½
Traditional exports	384	9.8	8¼	5¼	.	.
Imports[2)]	606	7.5	7¼	4½	.	.
GDP[4)]	2152	2.8	3¼	3½	1¾	1½
Mainland GDP[4)]	1563	4.6	4¼	2½	2	2¼
Potential mainland GDP		3¼	3¼	3	2¾	2¾
Output gap, mainland Norway[5)]		1½	2½	2	1	½
Labour market						
Employment		3.1	2¾	1	0	0
Labour force, LFS		1.6	1¾	1	½	½
LFS unemployment (rate)		3.4	2½	2¾	3¼	3¾
Prices and wages						
CPI		2.3	¾	3	2½	2½
CPI-ATE[6)]		1.0	1½	2	2½	2½
Annual wage growth[7)]		4.3	5½	5½	4¾	4½
Interest rate and exchange rate						
Sight deposit rate (level)		2.7	4½	5¾	5¾	5½
Import-weighted exchange rate (I-44)[8)]		92.4	92¼	92	93	94

1) Private and public consumption and mainland gross fixed investment
2) The projections do not include the import of two frigates in 2006, and the import of one frigate in each year in the period 2007-2009. Each frigate is estimated to cost NOK 3.5 billion.
3) Extraction and pipeline transport.
4) Fluctuations in electricity production are excluded from the GDP estimates.
5) The output gap measures the percentage deviation between mainland GDP and projected potential GDP.
6) CPI-ATE: CPI adjusted for tax changes and excluding energy products. In addition, it is adjusted to take into account that the reduction in maximum day-care rates pushes down the rise in the CPI-ATE by an estimated 0.2 percentage point in 2006.
7) Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations. The projections include estimated costs in 2006 and 2007 related to the introduction of mandatory occupational pensions.
8) Level. The weights are estimated on the basis of imports from 44 countries, which comprise 97% of total imports.

. No projections available

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

B-blad/Economique

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