NORGES BANK

Reports from the Central Bank of Norway No 4/2001

Inflation Report

3
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October

Norges Bank's Inflation Report

In accordance with the Regulation on Monetary Policy of 29 March 2001, Norges Bank's implementation of monetary policy shall be oriented towards low and stable inflation. The inflation target is set at 2½ per cent. Normally, Norges Bank will set the key rate with a view to achieving an inflation rate of 2½ per cent two years ahead.

The *Inflation Report* discusses developments in the Norwegian economy and other factors that influence the inflation outlook. In addition, the balance of risks and uncertainty associated with the inflation projections are assessed. The reports are published three times a year.

ISSN 1502-2730

Inflation Report 3/2001

The cut-off date for the *Inflation Report* was 25 October 2001

An uncertain world

The outlook for the global and Norwegian economy is marked by uncertainty following the terrorist attacks in the US on 11 September. In the period following the attacks, signs of recession in the US, Japan and other Asian countries have become steadily clearer. European economies are stagnating. A substantial easing of economic policy, particularly in the US, could lead to a pick-up in growth in the course of next year. The risk of a deeper and longer downturn in the world economy has nevertheless increased.

Until this autumn, the downturn in the world economy had only limited effects on the Norwegian economy. There is now increasing evidence that Norway is also feeling the effects of the downturn. Many Norwegian companies, in export industries and the travel industry, have been affected by growing caution among households and businesses throughout the world. Prices for important Norwegian export products have declined. Equity prices in the Norwegian stock market have fallen sharply and this may result in lower business investment.

An increased use of petroleum revenues over the central government budget will push up demand for goods, services and labour over several years ahead. Next year, fiscal policy is expected to generate a stronger stimulus than previously assumed. A marked increase in household real income could lead to high growth in private consumption. Oil prices are still at a level that supports large investments in the petroleum sector and high expectations as to Norway's future income. The increase in vacation days and low growth in the labour force will contribute to sustaining pressures on economic resources in Norway.

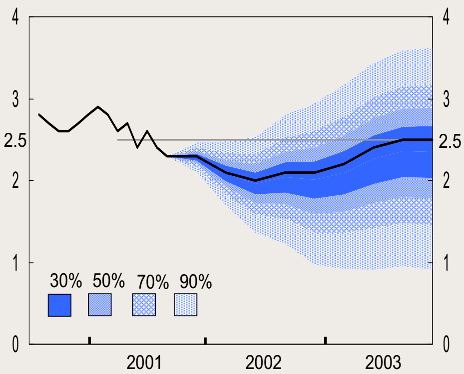
A sharp rise in labour costs over several years has contributed to weakening cost competitiveness in many industries exposed to international competition. The weak global environment will result in falling earnings and lower activity in many enterprises over the next year. However, there are labour shortages in public and private services. With increased spending of petroleum revenues over the central government budget and growth in private consumption, pressures in this segment of the labour market could be stronger than previously envisaged. Labour costs are projected to increase by 5½% in 2001 and by 5% in both 2002 and 2003. The combination of weak global developments, a tight labour market, an expansionary fiscal stance, a high cost level and continued strong cost inflation, which must be countered by a fairly tight monetary policy stance, will probably speed up and amplify the contraction of our internationally exposed industries.

Domestic conditions will contribute to sustaining the high level of price inflation for domestically produced goods and services. The rate of increase in prices in the global economy is edging down, probably with added downward pressure from an oil price that has now dropped to around USD 20 per barrel. As a result of lower commodity and producer prices, slower world consumer price inflation and a stronger krone, prices for imported consumer goods are expected to show a temporary fall. As these effects are gradually exhausted and global economic growth picks up in line with expectations, import price inflation may reach a more normal level. On balance, consumer price inflation is expected to slow next year before rising through 2003.

Adjusted for changes in real taxes and energy prices, Norges Bank projects consumer price inflation at 2½% in 2001, 2% in 2002 and 2½% in 2003. Price inflation may pass a trough in late spring next year, but is then expected to rise steadily and stabilise at 2½% towards the end of 2003. The projections are based on the technical assumption of unchanged interest and exchange rates.

In 2001, headline CPI inflation is being pushed up by very high electricity prices. Next year, petrol prices and electricity prices will probably exert some downward pressure on overall consumer price inflation. In addition, the reduction in VAT on food as from 1 July this year will, in isolation, push down the annual rise in the CPI by around half a percentage point next year. Norges Bank projects the rate of increase in the CPI at 3% in 2001, 1½% in 2002 and 2½ % in 2003.

Consumer price inflation[1)]. Projection and uncertainty. 12-month rise. Per cent



[1)] Adjusted for changes in real taxes and energy prices (CPIATE)

The bands in the fan indicate different probabilities for consumer price inflation.

Sources: Statistics Norway and Norges Bank

In addition to providing point forecasts, we attempt to analyse the uncertainty surrounding our inflation forecasts (see chart). Wage determination in Norway, which traditionally has largely reflected profitability in industries exposed to competition, may now be more heavily influenced by labour shortages in the sheltered sector. We have seen that this has resulted in sharp pay increases for certain groups. This may have triggered a wage-wage spiral. The balance of risks is nevertheless primarily marked by the uncertainty concerning international developments. Uncertainty in the household and business sector may translate into lower consumption, investment and growth in the world economy. Global developments may also result in a further decline in oil prices and other commodity prices. This would then lead to weaker-than-projected economic growth and lower price inflation in Norway as well. In the light of the balance of risks as presented in this report, it is now Norges Bank's assessment that the probability that inflation two years ahead will be lower than 2½% is greater than the probability that it will be higher.

Jarle Bergo

1 | Recent developments

1.1 Supply and demand

Downturn in the world economy

For the first time since 1974 the US, Germany and Japan are now stagnating or in a downturn at the same time. National accounts figures for the second quarter show that growth in the US and the euro area has come to a halt. In Japan, GDP has fallen (see Chart 1.1).

In the US, industrial output, private investment and exports declined through the first six months of the year. Owing to an increase in private consumption, GDP did not fall. The weak trend continued in the third quarter, with industrial output falling for the twelfth consecutive month in September. Industrial confidence indicators imply a continued decline in industrial output. In September, unemployment rose to 4.9%, the highest level since May 1997. Recent figures also show a decline in retail sales. Consumer confidence has weakened markedly (see Chart 1.2) and the household saving ratio has increased. The terrorist attacks in September have further reduced domestic demand. The aviation and travel industries have been hard hit and have announced a sharp reduction in their workforce.

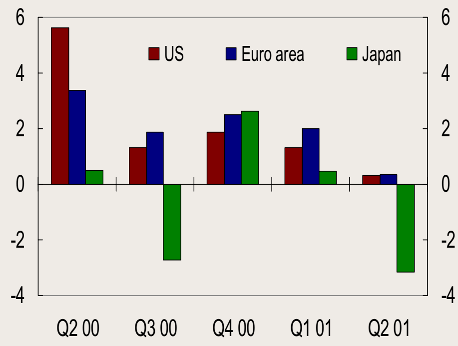
Weak developments in the US have contributed to a decrease in international trade. It is now clear that growth will be substantially weaker than assumed also in Asia and Europe. As in the US, industrial output has declined. Businesses and households have become increasingly cautious after the events in September. High oil prices and an increase in food prices have reduced growth in household real disposable income in Europe. Private consumption has shown a weaker-than-expected increase.

Share prices have shown a sharp decline over the last year (see Chart 1.3). The terrorist attacks were followed by an immediate fall in share prices, although the impact on financial markets was less pronounced than many had feared. The US and other countries implemented measures that contributed to maintaining smoothly functioning markets and a sufficient supply of liquidity. World stock markets have since picked up and were higher at end-October in most countries than before the terrorist attacks. Equity prices on the Oslo Stock Exchange have largely followed the sharp fall in world stock markets, but have not shadowed the recent pick-up to the same extent.

Lower interest rates abroad and a stronger krone

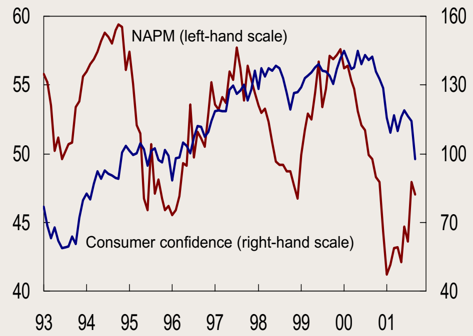
Since the June *Inflation Report,* Norges Bank has left its deposit rate unchanged at 7%. A number of countries have eased monetary policy. In the US and the euro area, key rates have been cut by 1.5 and 0.75 percentage points

Chart 1.1 GDP growth in the US, Japan and the euro area. Percentage change from previous quarter (annual rate)



Source: EcoWin

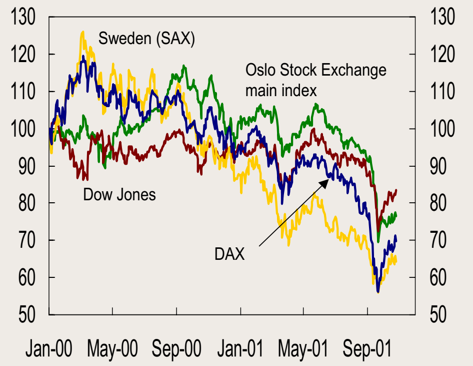
Chart 1.2 Confidence indicators in the US: Consumer and business (NAPM)[1)]



[1)] Observations up to September 2001

Source: EcoWin

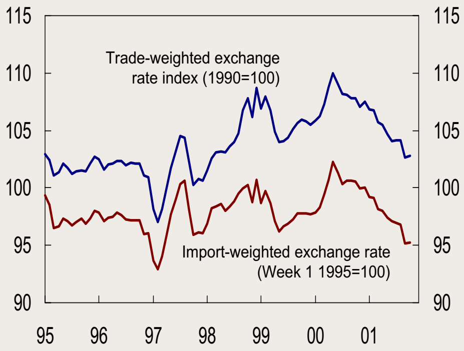
Chart 1.3 Equity prices. Indices, 3 January 2000=100[1)]



[1)] Observations up to 25 October

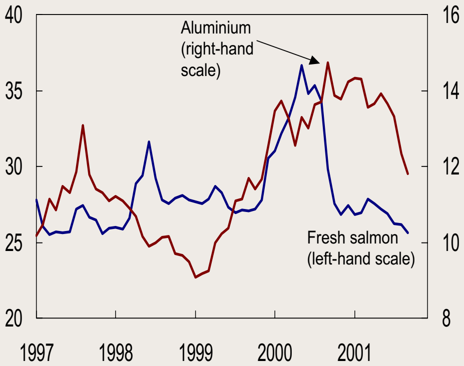
Source: EcoWin

Chart 1.4 Effective NOK exchange rates. Import-weighted exchange rate and trade-weighted exchange rate index



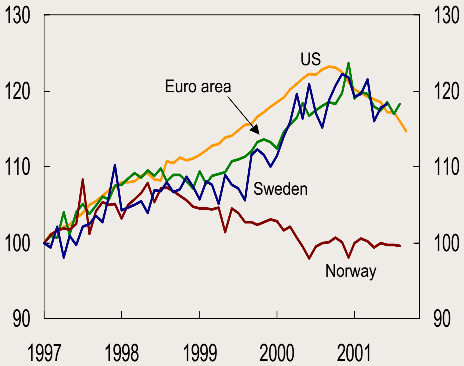
Source: Norges Bank

Chart 1.5 Prices for fresh salmon (NOK per kilo) and aluminium (1000s of NOK per tonne)



Source: Statistics Norway

Chart 1.6 Industrial output. Seasonally adjusted indices, January 1997=100



Sources: EcoWin and Statistics Norway

respectively since June this year. A high and widening interest rate differential may be one of the reasons behind the appreciation of the krone over the last year (see Chart 1.4). However, the appreciation has taken place after a corresponding weakening from the spring of 1999. The effective krone exchange rate has now returned to approximately the level prevailing in the mid-1990s.

Some Norwegian export industries have started to feel the effects of lower demand

The weak external environment has led to a fall in commodity prices and hence for many of Norway's most important export goods. Oil prices have dropped to around USD 20 per barrel. In recent months, aluminium prices have fallen from a historically very high level. Fish prices have also dropped markedly (see Chart 1.5).

Export demand remained firm during the first six months of this year after expanding sharply towards the end of 2000 and into the first quarter. However, the volume of traditional merchandise exports fell on a seasonally adjusted basis by 6.2% between the second and third quarter of 2001, especially reflecting the contraction in fish exports. It is likely that this did not only reflect lower demand. The fish farming industry has lost market shares recently. Exports of iron, steel and metal products also exhibited a sharp fall in the third quarter. Aluminium exports are still expanding.

Norwegian manufacturing did not experience the sharp expansion that took place in the ICT industry in the years to the turn of the millennium and has not been as strongly affected by the subsequent slowdown (see Chart 1.6). Manufacturing output in Norway is highly sensitive to developments in petroleum investment. Falling petroleum investment from 1998 resulted in lower activity in the supplier industry. So far this year, petroleum investment has stabilised at about the level recorded last year, which may partly explain the more stable trend in manufacturing output in Norway this year.

Mainland GDP expanded by a seasonally adjusted 0.3% between the first and second quarter of this year after growing by 0.7% the preceding quarter. A fall in electricity production pushed down growth. Adjusted for this, growth was a little more than 0.5% in the second quarter or 2.2% annualised. Growth was particularly strong in service industries.

Household expectations remained virtually unchanged through the summer

In Norway, consumer confidence did not weaken through the summer unlike the situation in the US and much of

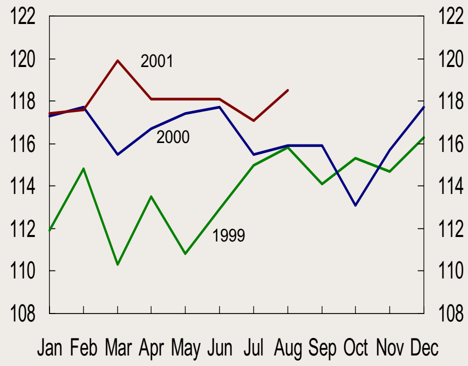
Europe. This partly reflects continued low unemployment, high wage growth and a household sector that is only affected to a limited extent by stock market developments. Consumer spending showed renewed growth towards the end of last year and into the beginning of 2001 after falling in the summer and autumn of last year (see Chart 1.7). Goods consumption remained relatively stable through the spring and summer, partly reflecting the increase in interest rates in 2000 and the temporary jump in price inflation in the first half of the year. However, goods consumption picked up again in August. Figures for retail sales and car sales would suggest a slight fall in goods consumption in September.

Growth in credit to the household sector was 11.0% at the end of August. At the same time, construction activity is high. During the first eight months of this year, housing starts came to 16 000, or an increase of close to 20% on the same period last year.

Labour market remains tight

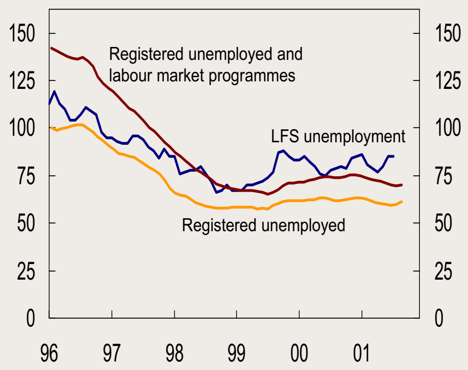
In the aftermath of the terrorist attacks in September, the aviation and travel industries have announced job cuts. Demand in some segments of the ICT industry has declined. Manufacturing in the Grenland area is expected to be scaled back. Employment is still growing, especially in the public sector and construction industry. Registered unemployment has remained steady at about 2.5% since the beginning of 1998.

Chart 1.7 Goods consumption index. 1995 = 100. Seasonally adjusted volume



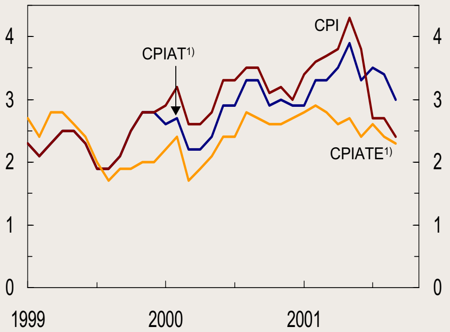
Source: Statistics Norway

Chart 1.8 Number unemployed (LFS), number of registered unemployed and persons participating in labour market programmes. In thousands. Seasonally adjusted



Sources: Statistics Norway and the Directorate of Labour

Chart 1.9 Consumer prices (CPI). Total and adjusted for changes in real taxes and energy prices.
12-month rise. Per cent

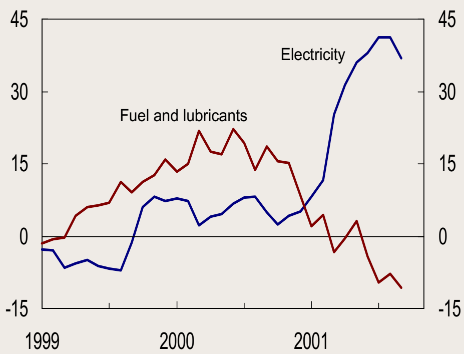


CPIAT: CPI adjusted for changes in real taxes
CPIATE: CPI adj. for changes in real taxes and energy prices

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

Sources: Statistics Norway and Norges Bank

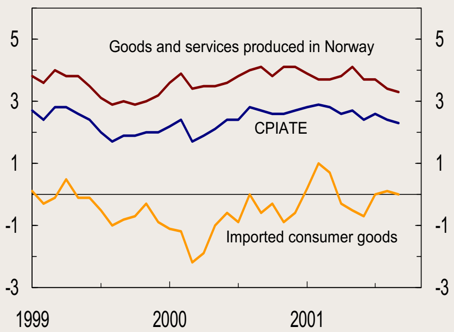
Chart 1.10 Consumer prices. Energy-related products1). 12-month rise. Per cent



1) Electricity accounts for 3.3% of the total CPI. Fuel and lubricants account for 4.2% of the total CPI

Sources: Statistics Norway and Norges Bank

Chart 1.11 Consumer prices adjusted for changes in real taxes and energy prices (CPIATE). Total1) and broken down into imported and domestically produced goods and services2). 12-month rise. Per cent



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

2) Norges Bank's estimates

Sources: Statistics Norway and Norges Bank

1.2 Consumer price developments

Lower indirect taxes have pushed down consumer price inflation

Consumer price inflation exhibited a sharp rise at the beginning of this year. The year-on-year rise in the consumer price index moved up from 3.0% in December last year to 4.3% in May, but slowed to 2.4% in September (see Chart 1.9). So far this year, the CPI has shown an average rate of increase of 3.4%.

CPI inflation has been heavily influenced by the changes in VAT and some excise duties. The general VAT rate was increased from 23% to 24% as from 1 January 2001. In addition, electricity taxes were increased while petrol taxes were reduced. With effect from 1 July, VAT on food was reduced from 24% to 12%, the base for VAT on services was broadened and petrol taxes were reduced further.

Electricity prices have also had a substantial impact on price inflation. Increased demand for electricity and lower electricity production have exerted upward pressure on electricity prices. Electricity prices have remained fairly stable in recent months, but in September the level was 37% higher than in the same month one year earlier (see Chart 1.10).

After rising sharply last year, prices for fuels and lubricants have on average exerted downward pressure on consumer price inflation this year. Prices fell through the summer and were about 11% lower in September compared with one year earlier.

High rise in prices for domestically produced goods and services

On 10 October, Statistics Norway published a new measure of underlying price inflation, i.e. the CPI adjusted for changes in real taxes and energy prices (CPIATE) (see separate box). According to this measure, price inflation was 2.3% in September while price inflation so far this year has been 2.6%. The year-on-year rise has exhibited a weak falling trend so far this year, primarily reflecting lower price inflation for services, particularly transport services. Higher fuel prices as a result of the increase in oil prices pushed up the rise in prices for transport services last year. The effects on the year-on-year rate of increase are now being exhausted.

Labour shortages have contributed to sustaining the high level of wage inflation over several years. This has resulted in a persistently high rate of increase in service prices where wages are a dominant cost factor. Adjusted for changes in

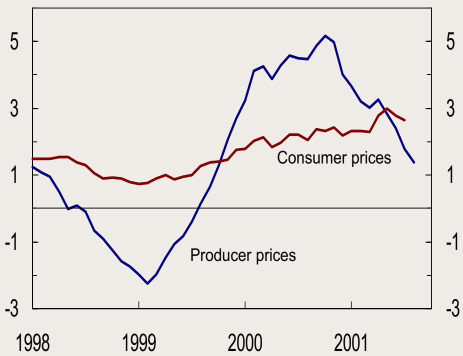
Consumer price inflation adjusted for changes in real taxes and energy prices

Norges Bank orients monetary policy with a view to achieving consumer price inflation of 2½% over time. Monetary policy's effects are associated with considerable and variable lags. Current inflation does not provide an adequate basis for determining the level at which interest rates should be set today. On the other hand, the current inflation rate may provide a measure of the monetary policy that has been conducted. Besides being influenced by the interest rate, inflation is often affected by temporary disturbances that cannot be influenced by monetary policy and have little relevance to inflation over time. Historically, changes in real taxes and sharp fluctuations in energy prices, in particular, have had such temporary effects on the CPI. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account in the implementation of monetary policy.

On 10 October, Statistics Norway published new measures of underlying price inflation: the rise in the CPI adjusted for changes in real taxes (CPIAT) and the rise in the CPI adjusted for changes in real taxes and energy prices (CPIATE). Norges Bank has previously published corresponding indices. The year-on-year rise in the CPIATE has been calculated back to August 2000. There have generally been small differences between the year-on-year rise in the CPIATE and the rate using Norges Bank's method of calculation. For example, both indices show average price inflation of 2.6% so far this year. Norges Bank's *Inflation Report* will hereafter base its analysis on the rise in the CPIATE as published by Statistics Norway.

real taxes and energy prices, the rate of increase in prices for Norwegian-produced goods and services has averaged about 3.8% this year (see Chart 1.11). In September, the rise in prices for this domestic component of consumer prices was 3.3%.

Chart 1.12 Producer and consumer prices for Norway's trading partners. 12-month rise. Per cent



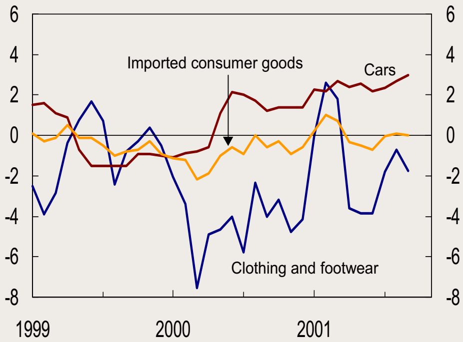
Sources: Statistics Norway and the OECD

Continued low rise in prices for imported consumer goods

Global producer prices rose sharply last year, primarily as a result of the steep rise in oil prices. This also contributed to higher price inflation internationally (see Chart 1.12). The effects of oil price increases on consumer prices have now been exhausted. As expected, price inflation on a global basis is falling.

The sharp rise in world producer prices has on the whole had little effect on the rise in prices for imported consumer goods in Norway (see Chart 1.13). Imported consumer goods are dominated by cars, clothing and footwear. Car prices have picked up this year, contributing to higher import price inflation. This probably reflects the sharp increase in producer prices last year. On the other hand, prices for clothing and footwear have shown a pronounced fall, which has pushed down externally generated price inflation. Adjusted for changes in real taxes, prices for imported consumer goods have remained unchanged so far this year compared with the same period one year earlier. In 2000, prices fell by 1%.

Chart 1.13 Consumer prices. Cars, clothing and footwear and imported consumer goods. 12-month rise. Per cent

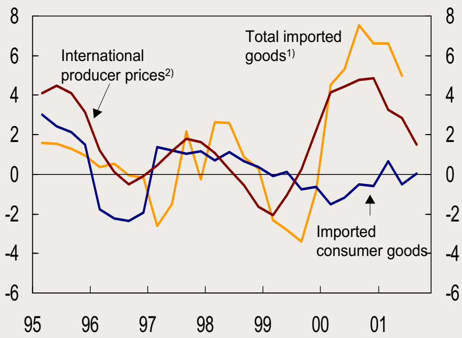


Sources: Statistics Norway and Norges Bank

Why has the rise in prices for imported consumer goods been low?

The increase in prices for imported consumer goods, as measured in the Norwegian consumer price index, has been low in recent years. Imported consumer goods have a weight of just below 30% in the consumer price index.

Chart 1 Prices for imported goods and trading partners' producer prices. Rise on same quarter previous year. Per cent



[1)] Imports excluding ships, oil platforms and crude oil. The aggregate consists of 2/3 intermediate goods and 1/3 consumer goods and other finished goods

[2)] Q3 consists only of July and August.

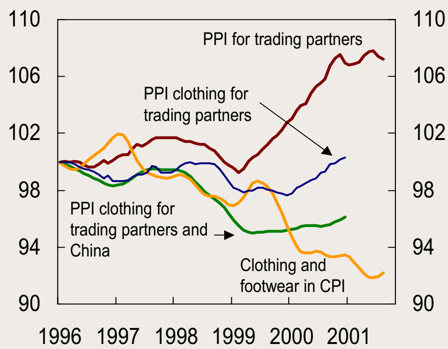
Sources: Quarterly National Accounts and CPI, Statistics Norway, Datastream and EcoWin

There is a clear relationship between developments in world producer prices and the overall rise in prices for imported goods, as measured in the national accounts. Historically, there has also been a correlation between developments in world producer prices and prices for imported consumer goods in the consumer price index. In recent years, this correlation has been less clear (see Chart 1). Between June 1999 and June 2001, producer prices rose by 7.4% and prices for imported goods, as measured in the national accounts, increased by 10.6%, while prices for imported consumer goods in the CPI fell by 0.5%. There are probably two main reasons for these differences:

- Producer prices are calculated on the basis of a composition of goods which differs from that of consumer goods included in the CPI
- Norway is increasing its imports of consumer goods from a number of countries that are not among our traditional trading partners. The shift in imports from high-price countries to low-price countries results in lower import price inflation than that captured by the producer price index.

Norwegian imports of typical consumer goods are dominated by two groups of goods: imports of vehicles (cars, motorcycles and accessories) and clothing and footwear. The rise in prices for clothing and footwear in particular has been low in Norway. Since 1996, prices for clothing and footwear in the CPI have fallen (see Chart 2). Increased competition in the world market for textiles, partly as a result of lower customs duties, is pushing down prices. In order to find a more comparable aggregate for producer prices, we have calculated an indicator for the producer price index for clothing and textiles for important trading partners[1]. We observe, however, that prices for clothing and footwear in the Norwegian consumer price index have fallen more than the level implied by corresponding producer prices among these traditional trading partners.

Chart 2 Prices for clothing and footwear in CPI and producer prices of trading partners, incl. and excl. China. Indices, January 1996=100. Monthly figures



Sources: Statistics Norway, Datastream, EcoWin and Norges Bank

Norway is importing an increasing share of consumer goods from countries that are not among our traditional trading partners[2]. This applies to a number of countries in eastern Europe and Asia, particularly China. In August 2001, 26.5% of total clothing imports came from China, compared with a little more than 19% in 1994 (see table).

[1] Data for Austria, Canada, Finland, France, Germany, Greece, Hungary, Italy, the Netherlands, Spain, Switzerland, Sweden, Taiwan, Thailand, the UK and the US have been used. These countries account for about 30% of Norway's total clothing imports.

[2] China is not among the 25 largest trading partners. As a result, the producer price index (measured in the traditional manner by the 25 largest trading partners) does not capture developments in prices in China.

By including China in the calculations, we obtain an indicator of producer prices for clothing and textiles, which more closely reflects developments in Norwegian clothing prices.

However, the producer price index, as measured here, does not capture the effect of a shift in imports from a country where a product is costly to a country where the same product costs considerably less. The index only weighs changes in prices in the different countries. The effect of this composition may be considerable in periods when importers change their trading patterns. It is difficult to estimate the magnitude of this effect as we have not found figures for absolute price levels in China. It is likely, however, that the level of prices in China is considerably lower than in many other countries.

Table Imports of clothing and accessories. Share of total. Per cent

	1994	1995	1996	1997	1998	1999	2000	2001
Estonia	0.0	0.0	0.0	0.6	0.7	1.0	1.1	1.2
Hong Kong	7.0	6.8	6.5	5.4	4.3	3.4	3.4	3.1
India	3.8	3.6	2.6	2.2	2.1	1.7	2.0	2.4
Indonesia	0.8	0.9	1.1	1.2	1.3	1.4	1.4	1.4
China	19.2	19.5	19.6	21.6	22.3	25.4	28.1	26.5
Lithuania	0.0	0.0	0.0	0.8	1.6	2.1	2.5	2.2
Romania	0.2	0.3	0.2	0.3	0.8	1.0	1.4	1.6
Turkey	1.4	1.8	2.4	3.2	3.9	3.8	4.3	4.9
Trading partners[1]	61.3	60.2	60.4	57.5	55.0	52.1	47.1	47.4

[1] The 25 largest trading partners

Source: Statistics Norway

Table 2.1 Key aggregates for Norway 2001-2003. Percentage change from previous year

	2001	2002	2003
Mainland demand	1¾	2	2¼
Private consumption	2	2¾	2¾
Public consumption	2½	2¼	2½
Fixed investment	0	-1½	¼
Enterprises	-1¾	-4½	¾
Dwellings	8½	2	0
General government	-2¼	4¾	0
Traditional exports	2¾	-1	3½
Imports	0	¼	3¼
GDP	1½	2¼	1¾
Mainland GDP	1¼	1½	1¾
Employment	½	¼	½
LFS unemployment[1]	3½	3½	3½

[1] Percentage of labour force

Source: Norges Bank

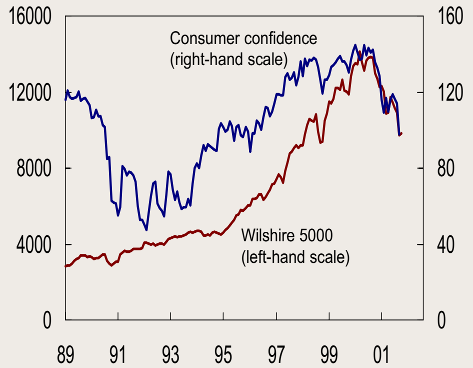
Table 2.2 GDP estimates. Percentage change from previous year

	2000	2001	2002	2003
US	4.1	1	1	3
Japan	1.5	-1	-¾	1
Germany	3.0	¾	1	2¼
France	3.4	2	1½	2½
UK	2.9	2	1½	2½
Sweden	3.6	1¼	1½	2½
Norway's trading partners[1]	3.5	1¼	1¼	2½
Euro area[2]	3.5	1½	1½	2½

[1] Weighted by export weightings
[2] Weighted by the IMF's GDP weightings adjusted for purchasing power

Source: Norges Bank

Chart 2.1 Consumer confidence indicator and the US stock markets



Source: EcoWin

Global economic growth is expected to be low over the next year. This will have a negative impact on export industries in Norway. Weaker earnings in the business sector, lower equity prices and increased uncertainty may result in a pronounced decline in investment. An expansionary fiscal policy and brisk growth in household income will contribute to continued growth in domestic demand. As a result of the increase in vacation days and low growth in the labour force, the labour market will remain tight. Mainland GDP is projected to expand by 1½% in 2002 and by 1¾% in 2003, or approximately in line with the growth potential.

2.1 The international environment

US economy was vulnerable

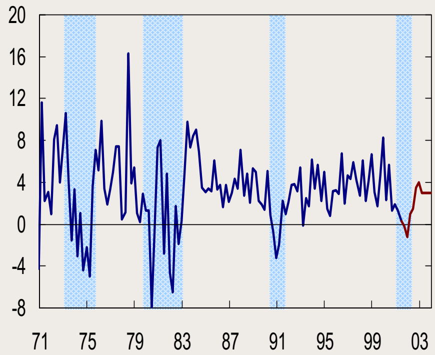
During the summer several factors led to a deterioration in the prospects for a rapid upswing in the US. An increase in unemployment, combined with a sustained fall in the value of household equity wealth, weakened the basis for continued growth in private consumption (see Chart 2.1). Demand for US exports slowed as a result of weaker growth in Europe, Asia and Latin America, which led to a marked reduction in capacity utilisation in manufacturing industry. Combined with lower profitability in the business sector and a fall in equity prices, this contributed to a continued decline in investment.

The terrorist attacks occurred at a time when the economy was already very vulnerable. Assessments of the economic consequences of the terrorist attacks are highly uncertain. Higher unemployment in industries affected by the events and the fear of new terrorist actions will, in isolation, have a negative impact on consumer confidence and thereby restrain private consumption and economic growth. The uncertain environment could also adversely affect business investment. A more expansionary monetary and fiscal policy will gradually have the opposite effect. In the US, the key rate has been reduced by a total of 4 percentage points so far this year. Since the terrorist attacks, fiscal policy has generated a stimulus equivalent to about 1 per cent of GDP, with further impetus provided by the approved tax reductions.

On an uncertain basis, we assume that GDP in the US will decline in the second half of this year. However, the expansionary monetary and fiscal stance is expected to boost GDP growth almost up to trend growth in production capacity in the course of 2002. With this scenario, the record long expansion of the 1990s will be followed by two years of relatively sluggish growth (see Chart 2.2). Even if growth picks up from the second half of next year, the weak trend towards the end of this year will result in low annual growth between 2001 and 2002.

There is substantial uncertainty as to the effects on household and business demand ahead. This will partly depend on whether new events take place that influence confidence in the future. If the slowdown in the US economy corresponds to the situation during the Gulf War in 1990-1991, growth will be negative in the US in 2002. Relatively low oil prices and monetary and fiscal policy stimulus are the main reasons why we expect the effects on demand to be moderate this time. Nevertheless, there is a clear risk of a prolonged period of sluggish growth in the US. Following several years of low saving, both households and enterprises may now want to consolidate their financial position. The sharp growth in business investment has increased the capital stock. A change in the outlook may induce enterprises to reduce investment. It may take time before an attendant adjustment of capital stock takes place.

Chart 2.2 US GDP. Quarterly growth, annualised rate. Projections 2001-2003



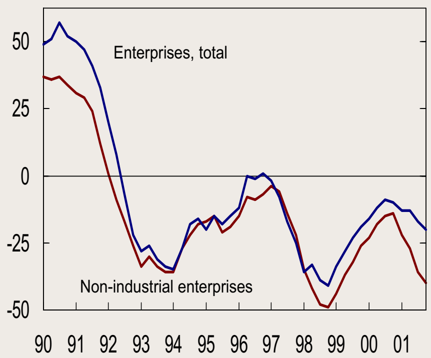
The shaded areas mark previous downturns in the US.

Sources: EcoWin and Norges Bank

Low growth in the US weakens global growth prospects

The decline in the US will reduce exports in the rest of the world. In addition, growing uncertainty following the terrorist attacks may lead to lower household and business demand outside the US. Our projections are based on the assumption that global developments will virtually shadow the path in the US, with weak growth through the remainder of the year and first half of 2002. Growth is then expected to pick up also outside the US. However, widely varying conditions between countries and regions have an influence on our projections.

Chart 2.3 Business sentiment in Japan. Diffusion indices[1)]

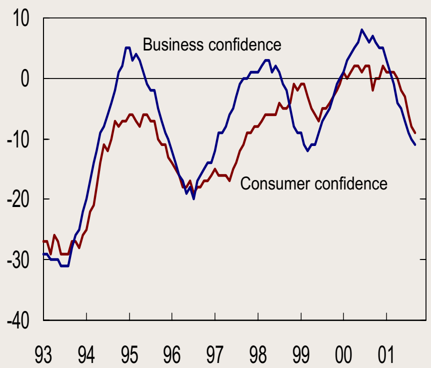


[1)] An index below 0 implies that a majority of business leaders expect a weaker trend in the next quarter.

Source: EcoWin

In Asia, several emerging economies have been hit by a decline in the ICT sector and export demand. Evidence suggests that this situation will continue over the next months. Japan will feel the effects of slow growth in Asia. At the same time, negative wealth effects, uncertainty about banks' financial position, rising unemployment and falling incomes will have a further dampening impact on private consumption and housing investment. High public debt, sizeable budget deficits and low nominal interest rates imply limited leeway for the authorities to conduct a more expansionary economic policy. With higher growth in global demand next year and a slightly more positive trend in the ICT sector, exports are expected to pick up somewhat but not to the extent that this will result in positive GDP growth next year.

Chart 2.4 Confidence indicators in the euro area. Diffusion indices[1)]



[1)] An index below 0 implies that a majority of business leaders and possibly households expect a weaker trend in the next quarter.

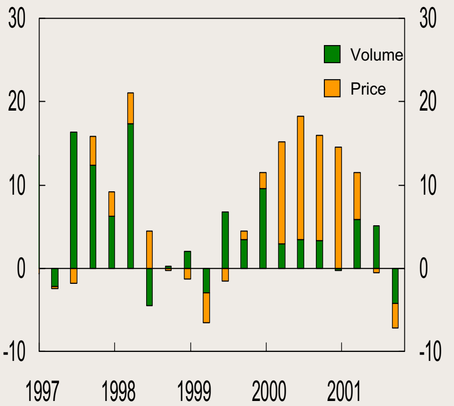
Source: EcoWin

In Europe, high oil prices, livestock diseases, and lower demand in the US have resulted in slower growth this year. In countries such as Germany, Sweden and Finland, GDP growth has exhibited a sharp fall, while the decline in France and the UK has been more moderate thanks to stronger growth in domestic demand. The terrorist attacks have reduced demand in the aviation and travel industries and intensified the decline in confidence indicators in Europe (see Chart 2.4). The reductions in key rates and taxes in many European countries are expected to counter the sluggish trend in the period ahead, with GDP growth picking up from the summer of 2002. Low growth this year and in the first quarter of next year is nevertheless expected to result in subdued growth between 2001 and 2002.

The forecasts for global economic growth have been lowered substantially compared with the June *Inflation Report*. All in all, GDP growth among trading partners is projected at 1¼% in both 2001 and 2002, and 2½% in 2003.

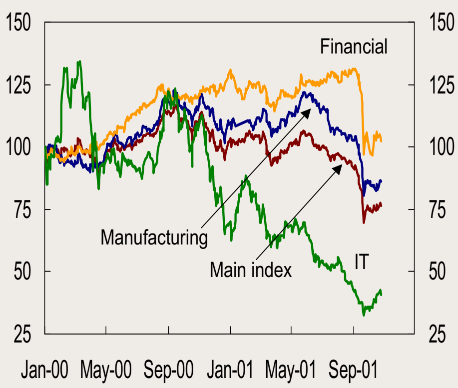
2.2 Domestic demand

Chart 2.5 Traditional merchandise exports according to *External Trade Statistics*. 12-month rise. Per cent



Source: Statistics Norway

Chart 2.6 Developments in some indices on the Oslo Stock Exchange. Daily figures, 01.01.00 -25.10.01. Indices, January 2000 = 100



Source: EcoWin

Some export industries in Norway have started to feel the effects of reduced demand and lower prices on the world market (see Chart 2.5). The impact of the world economic slowdown has also come through a sharp decline in share prices on the Norwegian stock market (see Chart 2.6). The drop in equity prices and uncertainty concerning future developments are expected to influence the investment climate in Norway. Lower share prices may induce enterprises to postpone planned investment projects. It will become more difficult to raise equity. Highly leveraged companies may face higher borrowing costs and may experience problems in refinancing loans.

The international downturn will also have implications for companies with relatively extensive international operations or with businesses in many countries. Weak profits in one region lead to job cuts and postponed investment in the entire business. As a result, the international downturn may also have an impact on industries that traditionally have been relatively sheltered.

Furthermore, the appreciation of the krone could have an impact on activity in Norway. Over the last year, the Swedish krona has depreciated by 15-20% against NOK. This has intensified competitive pressures in retail trade and other services in Eastern Norway and further along the Swedish border. This could increase the trade leakage to Sweden and reduce investment in Norway. All in all, mainland business investment is expected to fall by close to 5% next year, which is a substantial downward revision compared with the June *Inflation Report*.

Manufacturing is now being influenced by the situation in the global economy

The most export-oriented manufacturing industry in the Norwegian economy is the processing industry, which accounts for more than 50% of merchandise exports. In most of the capital-intensive portion of manufacturing industry, capacity utilisation has been high and profitability solid over a longer period. Several large aluminium companies are currently expanding and have launched sizeable investment projects, such as those in Sunndalsøra and Mosjøen. An increasing share of aluminium is sold using long-term price agreements to reduce the vulnerability of producers to a temporary price fall. A gradual substitution of iron and steel with aluminium is taking place in new areas of application such as buildings, cars and ships. Recently, however, aluminium prices have declined. The market situation has also deteriorated for Norwegian producers of ferroalloys.

Norwegian technology companies, including the engineering industry, are more labour-intensive than the processing industry and produce more for the domestic market than is usually the case in many other countries. Two-thirds of production is supplied to the domestic market and the petroleum sector. In addition, this sector is characterised by niches, with little mass production and few large companies with extensive operations in other countries. These factors may make this sector somewhat less sensitive to international cyclical developments.

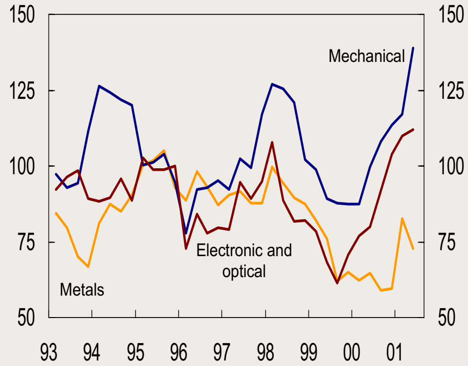
In labour-intensive manufacturing sectors, the order backlog in parts of the engineering industry increased up to the second quarter (see Chart 2.7). The metal products industry recorded a small fall in unfilled orders. The removal of shipyard support as from January of this year resulted in a sharp rise in unfilled orders in this sector at the end of last year (see Chart 2.8). Sluggish growth in the world economy and the current climate of uncertainty will probably reduce new orders in the second half of this year and may also entail the cancellation or postponement of existing orders. For example, an order for an apartment ship from Fosen Shipyard in Trøndelag worth NOK 2.6 billion has been postponed.

Export growth will probably be substantially lower than previously assumed as a result of lower growth in global demand, particularly in Europe. Europe is Norway's most important export market. The turnaround in Europe came later than in the US, which means that the effects on Norwegian manufacturing will gradually increase. Traditional merchandise exports are now estimated to fall by 1% next year. Export prices are also expected to edge down, which will reduce profitability in some industries.

Manufacturing industry faces structural challenges

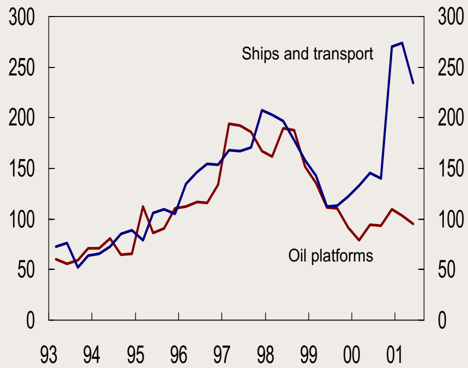
If growth in the global economy picks up in the course of next year, both Norwegian exports and export prices may edge up in 2003. Even if the economic situation improves, Norwegian manufacturing is facing structural

Chart 2.7 Unfilled orders in the technology industry. Value indices



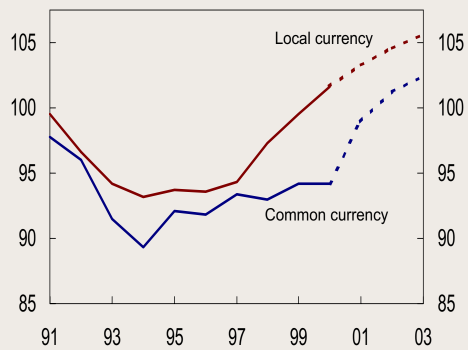
Source: Statistics Norway

Chart 2.8 Unfilled orders ships and platforms Value indices



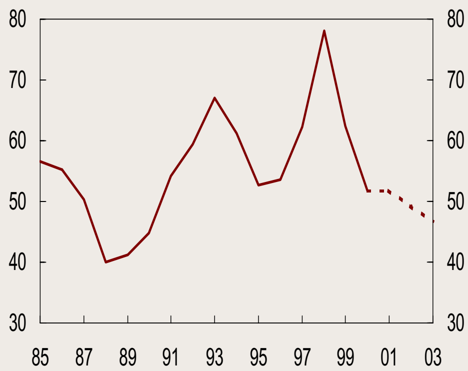
Source: Statistics Norway

Chart 2.9 Relative labour costs in Norwegian manufacturing compared with trading partners. Index, 1990=100



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

Chart 2.10 Gross investment in petroleum activities. In billions of NOK. Constant 1997 prices



Sources: Statistics Norway and Norges Bank

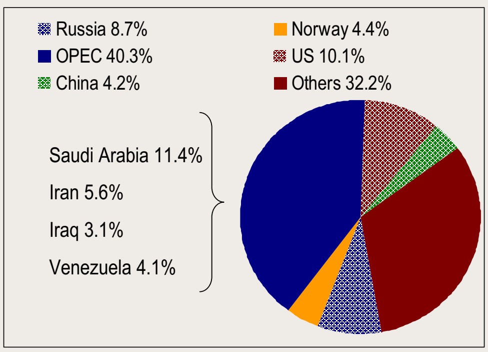
challenges in the medium term. The rise in costs in Norwegian manufacturing has been higher than among most of our trading partners for a longer period (see Chart 2.9). In labour-intensive industries many enterprises have moved a share of production to countries with lower costs. Given the projection of continued higher cost inflation than among trading partners, this trend will persist and may intensify.

In addition, demand in the petroleum sector for goods and services from the supplier industry is likely to edge down in the period ahead. With an oil price at about the level assumed in this report, petroleum investment is expected to decline somewhat over the next two years (see Chart 2.10). Should the oil price fall to a level that is markedly lower than assumed in this report, this may have additional effects on petroleum investment. The first-round effects will come in the form of a reduction in small investment projects that are not subject to a licensing requirement and exploration investment. If oil prices remain low over a longer period, large, planned investment projects may also be shelved. This would also have an impact on the supplier industry, as was the case in the autumn of 1998 when oil prices were close to USD 10 per barrel.

Uncertain oil prices and pressure on OPEC

Since the terrorist attacks on the US in September, the price of oil has fallen considerably while uncertainty about future prices has risen sharply. The decline in prices reflects weaker developments in the world economy. The growing uncertainty is due partly to the tense international situation and partly to OPEC's conflicting interests as swing producer in the world oil market. The question is whether OPEC, perhaps in cooperation with other oil exporting countries, is able and willing to adjust the oil supply to lower demand.

Chart 1 Global oil production Q1 2001



Sources: Norges Bank and International Energy Agency

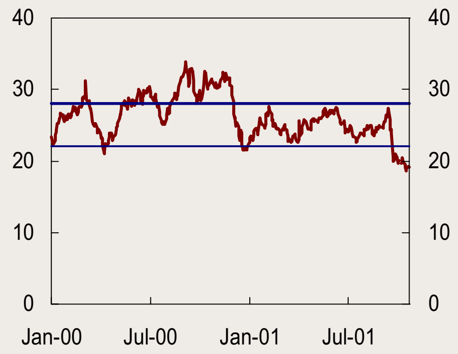
Lower economic growth is reducing the demand for oil. Historically, there has been a close correlation between growth in global GDP and global oil demand[1]. As a result of the less favourable outlook for the global economy and the effects of the terrorist attacks on the aviation sector, the International Energy Agency estimates that the increase in oil demand in 2001 will be the lowest since 1984. The projected increase in oil demand next year is also well below the average for the last 25 years.

Growth in the oil supply from non-OPEC countries in the fourth quarter of 2001 and in 2002 now appears to be higher than growth in global demand for oil. So far this year, OPEC has cut production three times, by a total of 10%. If OPEC's ambition is to stabilise the oil price at USD 22-28, it may have to reduce production further.

[1] The correlation coefficient has been about 0.6 since 1985.

Since the price of oil fell below USD 10 at the end of 1998, solidarity within OPEC has been strengthened. Member countries have had both the will and the ability to keep oil prices high, partly due to financial needs in some member countries. Commentators in the oil market point out that this applies not least to Saudi Arabia, which is the largest OPEC producer. Petroleum revenues in this country account for about 90% of export earnings and 70% of government revenues. Population growth has increased considerably since 1980, with petroleum revenues per capita showing a sharp decline. Saudi Arabia has run a government budget deficit and a balance of payments deficit for many years. The dramatic decline in oil prices in 1998-1999 caused considerable economic problems. Observers are of the view that Saudi Arabia is probably dependent on an oil revenues at approximately the current level to achieve balanced public sector budgets[2]. In the short term, the price has little impact on demand for oil. A further fall in prices is therefore likely to translate fairly directly into lower oil revenues. On the other hand, the country may also record a substantial loss of revenues if it on its own must assume the role of swing producer during a downturn.

Chart 2 OPEC oil price and price band. USD per barrel



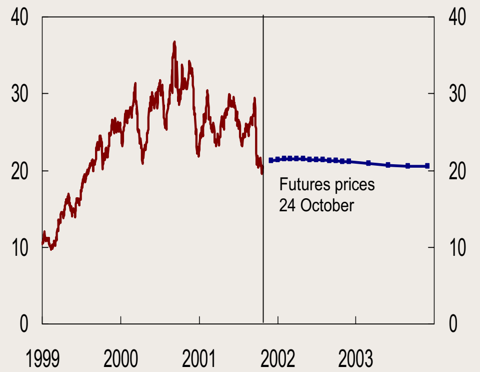
Sources: Reuters and Norges Bank

Until the beginning of October, OPEC had kept the oil price within the band USD 22-28 per barrel for one and a half years. Since then, however, OPEC's reference price (which on average is a good USD 1 below the Brent Blend price) has been less than USD 22 for one month. OPEC's earlier declarations imply that production quotas would normally be cut by 500 000 b/d when the oil price has been below the USD 22 dollar per barrel limit for 10 days. However, observers point out that conditions are not normal:

- With a tense international situation and the risk of a recession in the world economy, OPEC will probably hesitate to introduce measures that could increase the uncertainty in the oil market
- OPEC currently has considerable idle production capacity, which could undermine quota discipline. The cartel is producing considerably more than the production quotas
- OPEC has sought to stabilise the oil price, but at the same time has lost market shares

Regardless, it takes some time for OPEC countries to adapt to a new quota and for oil-importing countries to feel the effects of the production cut. The most recent quota reduction was introduced on 1 September 2001, less than two weeks before the terrorist attacks on the US. Finally, there is uncertainty about Iraq's oil exports.

Chart 3 Oil price, Brent Blend. USD per barrel

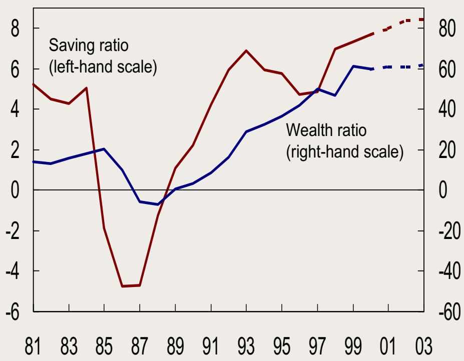


Sources: International Petroleum Exchange and Norges Bank

We have assumed that the oil price will remain at around USD 20 per barrel the next two years. This is in line with prices for future oil contracts. Calculations based on option prices in the oil market indicate that market operators believe there is a strong possibility that the oil price will be in the range USD 16-24 one year ahead. At the same time, the probability of both very low oil prices (under USD 10) and high oil prices (over USD 30) has increased. Uncertainty has increased the last few months. The market considers the probability that the oil price will be lower than we have assumed to be the same as the probability that it will be higher.

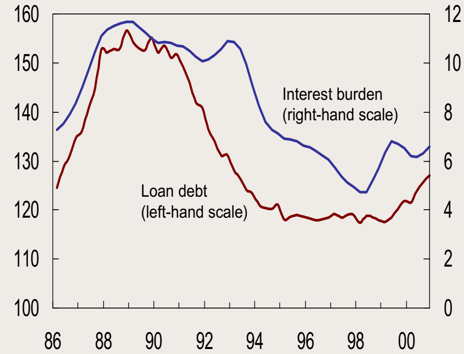
[2] Source: "OPEC Revenues Fact Sheet", March 2001, Energy Information Administration, US.

Chart 2.11 Household saving and net financial wealth. Percentage of disposable income



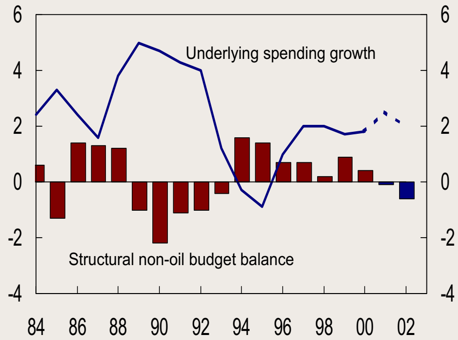
Sources: Statistics Norway and Norges Bank

Chart 2.12 Household loan debt as a percentage of disposable income and household interest expense after tax as a percentage of cash income



Source: Norges Bank

Chart 2.13 Change in structural non-oil budget balance and real underlying spending growth in the central government budget[1)]



[1)] The budget balance is the change on the previous year, expressed as a percentage of trend mainland GDP. Spending growth is the percentage change on the previous year.

Source: National Budget 2002, Ministry of Finance

Growth in household real income will underpin domestic demand

There is a clear risk that the global downturn and general uncertainty may have a negative impact on consumer confidence, as we have witnessed in the US and Europe. During the crisis in the financial markets in the autumn of 1998, Norwegian household expectations fell sharply. The fall in expectations at that time must, however, be seen in the light of a very low oil price, a weak krone exchange rate and an increase of 4.5 percentage points in interest rates in the course of a few months.

Even though Norwegian households have invested an increasing share of their wealth in equities and securities funds in recent years, these only accounted for about 10% of total household wealth last year. Dwellings still account for the largest portion of household wealth. In addition, household equity wealth is especially concentrated in high-income groups. Consequently, the fall in share prices has probably had limited direct effects on household consumption.

The financial position of the household sector as a whole is solid. The household saving ratio in Norway has increased the last 5-6 years. This probably reflects a rise in the portion of the population in age groups that traditionally save a high share of their income. Last year, households saved nearly 8% of their income (see Chart 2.11). Compared with the situation in the mid-1980s, the debt-servicing burden is moderate for the household sector as a whole (see Chart 2.12).

Private consumption accounts for about half of total domestic demand in Norway. Evidence suggests that households will continue to fuel demand growth in the Norwegian economy. The combination of tax cuts, some employment growth and continued high wage growth points to high growth in real income over the next two years. Growth will be especially high next year due to a reduction in excise duties and low consumer price inflation. The saving ratio is projected to edge up in 2002. Private consumption may rise by about 2¾% in both 2002 and 2003.

Increased use of petroleum revenues entails an expansionary fiscal policy

On 29 March this year, the Government proposed new guidelines for fiscal policy, which imply a use of petroleum revenues equivalent to the expected real return on the Government Petroleum Fund. The Government also emphasised the importance of using fiscal policy to smooth fluctuations in the economy. A clear parliamentary majority supported the Government's long-term strategy for the use of petroleum revenues. The guidelines imply that the non-oil deficit will increase in the years ahead. This will stimulate the Norwegian economy each year. The central government budget, which was presented on 11 October, is the first budget based on the new guidelines.

We have based our projections for 2002 on estimates for government spending and taxes in the central government budget. The structural, non-oil budget deficit will increase by NOK 6bn, or 0.6% of trend GDP growth, compared with this year's budget. This increase is somewhat larger than Norges Bank assumed earlier. The Government has proposed reducing recorded taxes by about NOK 3bn. Underlying central government spending growth is estimated at 2% from 2001 to 2002.

There are elements in the central government budget that may imply a more expansionary fiscal stance than indicated by the structural non-oil budget deficit. The reduction in accrued taxes is more than double the reduction in recorded taxes. The State Housing Bank's lending limits have been increased by approximately NOK 2bn. The allocation of subsidised loans to municipalities for the maintenance of school buildings will also have an expansionary effect. In connection with the hospital reform, the central government will take over responsibility for debt linked to the specialist health service. NOK 13.4bn in county debt will be cancelled as a direct result of the state takeover of hospitals. Another NOK 2.3bn in debt will be cancelled to take into account that some counties may have little hospital debt due to a high equity portion in investments and/or short debt repayment schedules.

Experience shows that the National Budget has a tendency to underestimate growth in public consumption. The underestimation is probably due to local government adjustments and underestimated local government revenues. Local government consumption may be higher than estimated in the National Budget again next year. Favourable borrowing schemes for the local government sector and sharp reductions in debt may affect municipalities' financial adjustments.

For 2003, National Budget estimates and the guidelines for fiscal policy indicate an increase in the use of petroleum revenues of slightly more than NOK 7bn. This means that fiscal policy will be somewhat more expansionary than was assumed in the last *Inflation Report*. For 2003, we have based our projections on a technical assumption that the increase in the budget deficit will be spread fairly equally between public spending and tax cuts for the household and enterprise sectors.

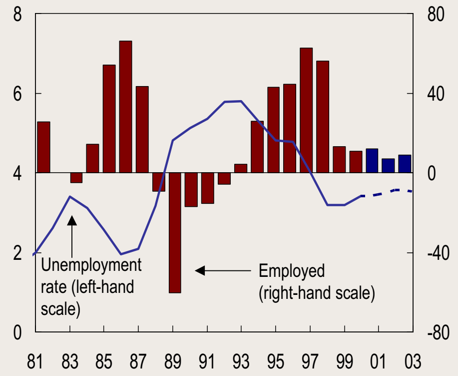
National Budget estimates for the structural budget balance in 2003 are based on the assumption that the Government Petroleum Fund will amount to about NOK 860bn at the end of 2002. This estimate partly depends on an expected oil price of NOK 200 per barrel (about USD 23 per barrel at the current NOK/USD exchange rate) in 2002. If the oil price falls substantially below this, the guidelines imply a reduction in the use of petroleum revenues compared with the estimates in the National Budget.

2.3 Employment and output

Continued moderate growth in total employment…

With 2¾ % growth in private consumption and an increase in public spending in excess of trend growth in the economy, demand for labour will continue to be strong in public and private services. Public sector investment in schools and residential construction through interest-free loans to municipalities and the State Housing Bank's increased lending limits will stimulate demand in the construction sector.

Chart 2.14 Change in number employed from previous year (in thousands) and LFS unemployment rate

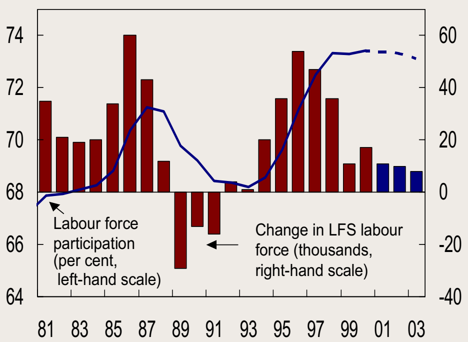


Sources: Statistics Norway and Norges Bank

Many companies in the most labour-intensive and least specialised manufacturing sectors have transferred part of their production to low-cost countries. This trend will probably continue and intensify in the next few years. Sluggish growth in the world economy may also affect new orders and profitability in some export-oriented industries fairly rapidly. Combined with lower petroleum investment, this will probably lead to a reduction in manufacturing employment.

This may ease labour market pressures for public and private services. A trend decline in the number employed in the agricultural sector will also contribute to this. On the other hand, the mismatch between the qualifications required in the sheltered sector and the skills offered by the unemployed may increase. Experience from 1998-1999, when employment in offshore-oriented industries declined, shows that the labour market absorbs available labour relatively quickly. Therefore, employment growth may be as low as ¼ % next year. Employment growth is projected at ½% in 2003. Unemployment is estimated to remain at about 3½%.

Chart 2.15 Change in labour force from previous year, and labour force as a percentage of population aged 16-74 (labour force participation rate)



Sources: Statistics Norway and Norges Bank

…but low growth in the effective labour supply contributes to a continued tight labour market

During the 1990s, the percentage of the working-age population that was either employed or seeking employment reached a record-high level (see Chart 2.15). During the last couple of years, labour force participation rates have been stable. It is highly unlikely that the labour force will grow much faster than the rate implied by demographic factors.

Various measures such as the early retirement scheme and cash grants to families with small children have provided an incentive to withdraw from the labour force in recent years. However, the most significant factor has been an accelerating increase in the number of disability pensioners. Norway currently has nearly 300 000 disability pensioners, or nearly 15% of the labour force. Demographic trends indicate that the number of disability pensioners will continue to rise somewhat. If the share that exits the labour force due to rehabilitation and early retirement and the share of non-employed remain at current levels, the labour force might grow by 0.3 - 0.4% annually the next few years.

Growth in the effective labour supply measured in person-hours will probably be negative this year and next due to the introduction of two additional vacation days in both 2001 and 2002. This means that the growth potential of the mainland economy is limited in the years ahead. Productivity growth in the mainland economy is expected to be at its historic average rate, around 1¾ %. Mainland GDP is projected to grow by 1½ % in 2002 and 1¾ % in 2003. Our projections thus imply growth approximately in line with the growth potential (see separate box).

Growth potential of the Norwegian economy

Labour supply developments have an influence on the growth potential of the Norwegian economy. The labour supply is primarily influenced by demographic factors and labour force participation rates. Measured in persons, the labour force grew by an average 1.4% in the period 1996-2000, which was considerably higher than demographic growth. In 2000, 81% of the population in the age group 16-66 were economically active. Historically, this is a record-high level, also by international standards. In the future, however, the labour force is not expected to grow faster than the rate implied by demographic factors unless labour immigration increases. With unchanged labour force participation rates for all age groups, Statistics Norway's population projections indicate that the labour force will expand by about 0.6-0.7% annually.

Several factors suggest that the supply of labour will grow at a much slower rate than this. The average age of the labour force will increase. The age group 55-66 will account for virtually the entire share of population growth. A large share of this age group exits the labour market either as a result of early retirement or disability. This contributes to reducing the labour force. The ratio for new disability pensioners declined somewhat in the beginning of the 1990s, but the number has since risen sharply. We assume that the ratio for disability pensioners will hover around the average for the 1990s[1]. We also assume that the exit from the labour force due to rehabilitation, early retirement and cash grants to families with young children will remain at the current level. All in all, this will contribute to reducing the number of persons in the labour force by 0.3% each year.

The supply of labour in terms of person-hours is also influenced by the working time of each employee. Over the last 30 years, there has been a trend decline in the average working time, partly due to a reduction in normal working hours, an increase in part-time employment and increased sickness absence. In the period 1996-2000, the average working time for an employee in the mainland economy was reduced by an average 0.4% annually. It is assumed that the average working time will show some decrease in the period ahead, albeit a much smaller decline than previously. In addition, the negotiated increase in the number of vacation days in 2001 and 2002 will contribute to reducing the average working time by an estimated 0.5% in both years.

On balance, demographic developments and changes in the average working time imply *a fall* of 0.3% in the effective labour supply in 2001 and 2002. In the absence of new working time reforms, our assumptions imply 0.3% *growth* in the effective labour supply in 2003. Combined with productivity growth in the mainland economy equal to the average for the last 20 years, the growth potential of the mainland economy can be estimated at 1½% in 2001 and 2002 and 2% in 2003. This is somewhat lower than trend growth over the last 20 years, which is estimated at 2-2¼%.

[1] This implies a smaller increase in disability pensioners than assumed by, for example, the Sandman Commission, see NOU 2000:27.

Table Growth potential of the Norwegian economy. Percentage change from previous year

	2001	2002	2003
Demographic growth in the labour force (persons)	0.6	0.6	0.7
- Disability, early retirement	-0.3	-0.3	-0.3
= Real labour force (persons)	0.3	0.3	0.4
- Working hours	-0.1	-0.1	-0.1
- Holiday	-0.5	-0.5	0
= Effective labour supply (in hours)	-0.3	-0.3	0.3
+ Productivity	1¾	1¾	1¾
= Growth potential of the mainland economy	1½	1½	2

Sources: Statistics Norway and Norges Bank

3 | Inflation projections

3.1 Domestic inflationary impulses

Domestically generated inflationary impulses are expected to remain strong in the years ahead. Several factors point to high wage growth in 2002 and 2003. Demand for labour is high in some business sectors and in public services. Unemployment is low, the number of lay-offs has declined and the level of vacancies is high. A limited labour supply will contribute to continued labour shortages the next few years. An increased shortage of labour in the sheltered sector of the economy will exert further pressure on the traditional wage-bargaining model, in which the financial results of exposed manufacturing sectors have had a substantial influence on wage growth. Productivity, and hence profitability, in wage-leading manufacturing sectors have shown relatively strong growth over the past year. While profitability has been weak in the food and beverage industry and in publishing and printing, it has been solid in export-oriented manufacturing sectors (see Chart 3.3).

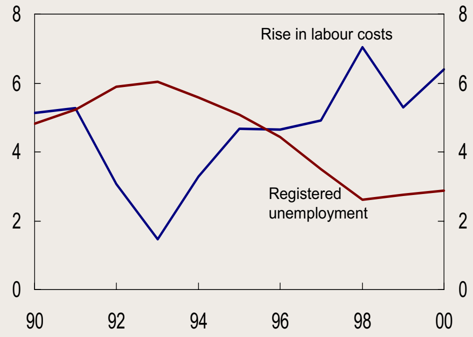
On the other hand, some factors point to lower wage growth in the period ahead. High cost inflation over a period of several years has contributed to eroding competitiveness in many enterprises. In manufacturing, labour costs over the past five years have risen about 10 percentage points faster than in manufacturing industry among our trading partners. The high level of costs has made labour-intensive manufacturing sectors more vulnerable to a global downturn. Earnings are likely to be lower in the short term.

All in all, the most likely scenario is that the rise in labour costs will slow somewhat but remain higher than the average of our trading partners. The rise in labour costs is now estimated at 5½% in 2001 and 5% in both 2002 and 2003. For 2001, the projection includes the costs associated with the increase in vacation days. An extraordinary pay increase of NOK 15 000 for school principals and teaching staff with effect from 1 January and 1 August 2002 will, in isolation, contribute to increasing overall wage growth in 2002.

3.2 External inflationary impulses

The sharp rise in oil prices had an effect on consumer price inflation both internationally and in Norway last year, but has also influenced price inflation this year. We now assume that this effect has been exhausted. The oil price has dropped to around USD 20 per barrel. Coupled with low growth in the global economy, this is contributing to dampening consumer price inflation in most trading partner

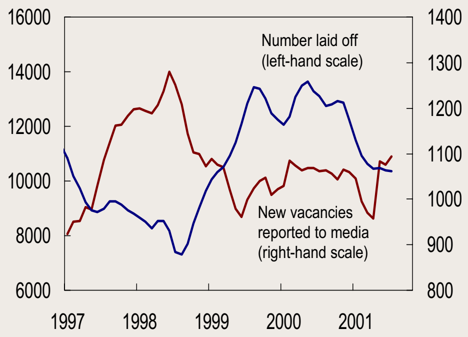
Chart 3.1 Rise in labour costs[1] and registered unemployment rate. Per cent



[1] Rise in hourly labour costs in mainland Norway, including costs of extra vacation days

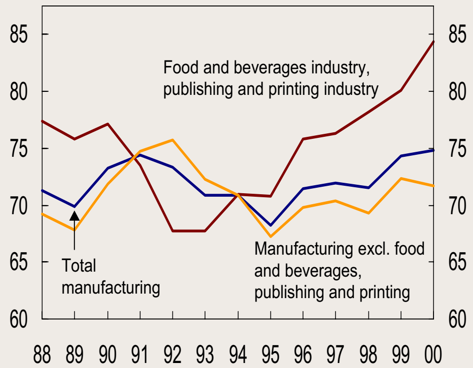
Sources: Statistics Norway and the Directorate of Labour

Chart 3.2 Number laid off and new vacancies reported to media (per business day). Seasonally adjusted figures (3-month moving average)



Source: Directorate of Labour

Chart 3.3 Wage shares. Labour costs as a percentage of gross product



Source: Statistics Norway

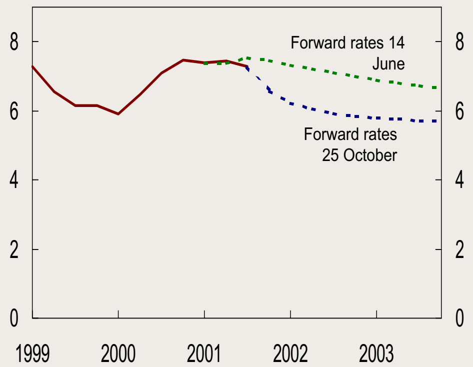
Table 3.1 Consumer prices.
Percentage change from previous year

	2000	2001	2002	2003
US	3.4	3	2	2¼
Japan	-0.6	-¾	-1	¼
Germany	2.1	2½	1¼	1½
France	1.8	1¾	1¼	1½
UK	2.1	2¼	2¼	2½
Sweden	1.3	2¾	2¼	2
Norway's trading partners[1)]	2.0	2½	1¾	2
Euro area[2)]	2.4	2½	1½	1¾

[1)] Import weights
[2)] Eurostat weights (country's share of euro area's consumption)

Source: Norges Bank

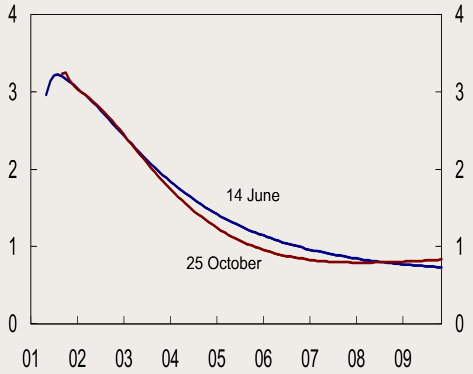
Chart 3.4 Expectations on the short-term money market rate[1)]. Per cent



[1)] 3-month money market rates up to 25 October. Three-month forward rates are estimated using four money market rates and five government bond yields with different maturities as observed on 25 October.

Source: Norges Bank

Chart 3.5 Forward rate differentials against Germany. Percentage points



Source: Norges Bank

countries. Commodity prices, world producer prices and prices for imported intermediate goods are also falling. At the same time, the krone has appreciated. Overall, this points to lower prices for imported consumer goods over the next year. We now project a 1% drop in prices for imported consumer goods next year, which is a considerable downward adjustment from previous reports.

A slight rise in international producer and consumer prices, and also in prices for our imported consumer goods, can be expected when growth in the global economy picks up again and the effects of the appreciation of the krone and lower commodity prices fade. The rise in prices for imported consumer goods is expected to gradually move up to a more normal level of around 1% at the end of 2003. The average rise in prices for imported consumer goods is estimated at ½% in 2003.

3.3 Inflation expectations

According to the October survey by Consensus Economics Inc., selected market observers have long-term expectations of an inflation rate in line with Norway's inflation target of 2½%. Market observers expect consumer price inflation of 3.2% this year and 2.0% in 2002. The forecasts for consumer price inflation in 2002 vary widely. The October forecasts are somewhat higher for 2001 and somewhat lower for 2002 than the June forecasts.

Forward rates, calculated using the yield curve in money and bond markets, may provide an indication of expected short-term interest rates in the years ahead, plus any risk premia. Forward rates in Norway have fallen for the next few years. This may reflect market expectations of somewhat lower interest rates. In the long term, up to 10 years ahead, the forward rate differential between Norway and Germany may reflect differences in expected inflation, plus a risk premium for investing in Norwegian bonds. This risk premium may reflect exchange rate risk and risk associated with low liquidity in the Norwegian bond market. Chart 3.5 shows that the level of the long-term forward rate differential against Germany is about the same as in June. The positive differential of about 1 percentage point is probably due to Norway's inflation target, which is higher than the ECB's target, and a reasonable estimate for the risk premium on investments in Norway.

3.4 The inflation outlook

Inflation during the next two years will reflect the economic outlook as described in section 2. On the one hand, an expansionary fiscal policy, growth in private consumption and a continued high rise in labour costs will contribute to a marked rise in prices for domestically produced goods and services. On the other hand, prices for imported consumer goods will show a temporary fall as a result of lower commodity and producer prices, a slower rise in world consumer prices and a stronger krone. As these effects wane, and if global economic growth picks up in line with expectations, import price inflation may rise to a more normal level. On balance, we are therefore expecting a scenario where consumer price inflation slows next year before rising again through 2003. Changes in excise duties will amplify this path.

CPIATE inflation, i.e. consumer price inflation adjusted for changes in real taxes and energy prices, is projected at 2½% in 2001, 2% in 2002 and 2½% in 2003. The projections are based on the technical assumption of unchanged interest and exchange rates. The projected path for import price inflation indicates that inflation may pass a trough in late spring next year. Price inflation is then expected to rise steadily. Towards the end of 2003, price inflation is expected to pick up to 2½% (see Chart 3.6).

This year and in 2002, headline CPI inflation will be influenced by changes in excise duties and pronounced changes in electricity prices. This year, price inflation is being pushed up by very high electricity prices. In 2002, both petrol and electricity prices will probably contribute to a slight decline in price inflation. In isolation, reduced VAT on food as from 1 July 2001 will reduce CPI inflation by about ½ percentage point next year. Taking account of these factors, the CPI is projected to rise by 3% this year, 1½% in 2002 and 2½% in 2003 (see Chart 3.7).

3.5 Risks to the inflation outlook

The effects of the terrorist attack on the US represent a new source of uncertainty. The risk of a more pronounced and protracted downturn in the global economy has increased. If the downturn turns out to be deeper and more protracted than currently envisaged, international price inflation over the next couple of years may be lower than we have assumed. The oil price may also fall, which would push down import price inflation. Demand for Norwegian export goods may be weaker than assumed, resulting in lower activity in the Norwegian economy and a less tight labour market.

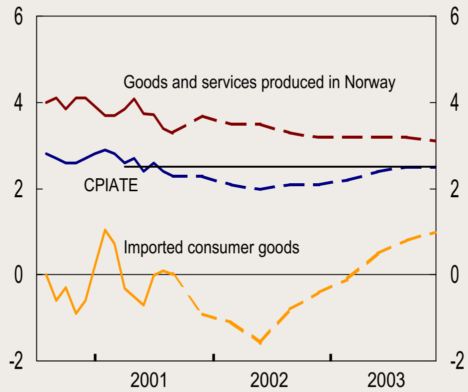
Table 3.3 CPI and factors contributing to CPI inflation. Percentage change on previous year

	2001	2002	2003
Annual wages + costs of additional vacation days	5½	5	5
Productivity[1]	1¾	1¾	1¾
Import prices, consumer goods[2]	0	-1	½
CPI	3	1½	2½
CPIATE	2½	2	2½

[1] Mainland Norway
[2] Adjusted for changes in real taxes

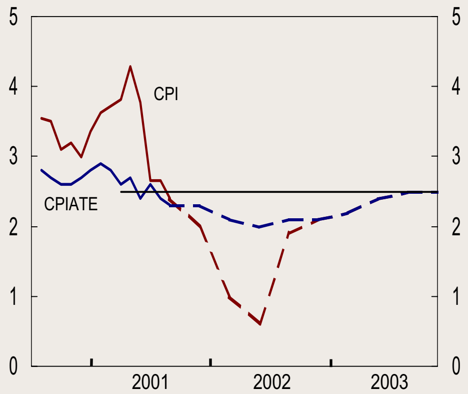
Source: Norges Bank

Chart 3.6 Consumer prices adjusted for changes in real taxes and energy prices (CPIATE). Total and broken down into imported and domestically produced goods and services. 12-month rise. Per cent



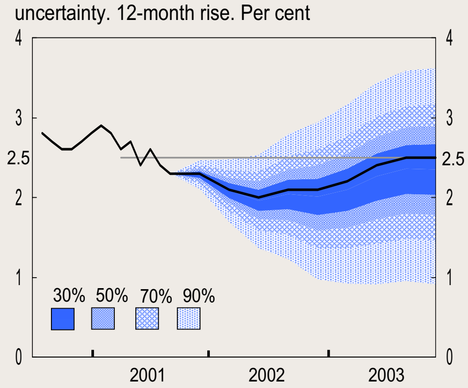
Sources: Statistics Norway and Norges Bank

Chart 3.7 Consumer prices (CPI). Total and adjusted for changes in real taxes and energy prices (CPIATE). 12-month rise. Per cent



Sources: Statistics Norway and Norges Bank

Chart 3.8 Consumer price inflation[1]). Projection and uncertainty. 12-month rise. Per cent

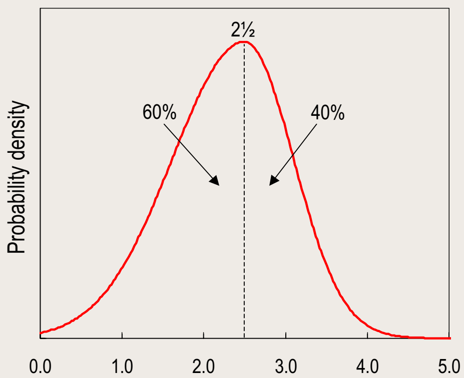


1) Adjusted for changes in real taxes and energy prices (CPIATE)

The bands in the fan indicate different probabilities for consumer price inflation.

Sources: Statistics Norway and Norges Bank

Chart 3.9 Evaluation of risk around the inflation projection at end-2003



Source: Norges Bank

During the past year, the Swedish krona has depreciated 15-20% against NOK. The depreciation of the Swedish krona may imply stronger competition from Swedish enterprises, at least along the border. This may contribute to curbing the rise in prices in retail trade and service industries. There is also a risk that overall private domestic demand may be weaker than currently estimated. Sluggish global developments observed so far, and the sharp fall in stock markets may have a more negative impact on business fixed investment in both manufacturing and service industries than projected in this report. At the same time, the unstable global situation, coupled with the drop in share prices in Norway and lower oil prices, may lead to a higher-than-projected temporary increase in household saving.

The assumption that the exchange rate remains at the average for the past three months implies that the krone will appreciate by 1¼% from this year to next. In the short term, the outlook for the Norwegian economy, compared with the outlook for our trading partners, suggests that the krone will continue to appreciate. The interest rate differential against other countries has widened further in recent weeks. The fall in the oil price may have the opposite effect. Market expectations, as reflected in option prices in the foreign exchange market, indicate that the upside and downside risks to our assumption are balanced.

We have based our assessment of fiscal policy on the central government budget for 2002 and a use of petroleum revenues that is in line with the new guidelines for fiscal policy. The fiscal stimulus generated by the new guidelines may be either stronger or weaker than assumed.

Domestic inflationary impulses remain strong. Some manufacturing sectors are experiencing profitability problems as a result of a high cost level. Demand for labour in the sheltered sector is strong. Increased strains in the labour market are exerting pressure on the traditional wage determination process. There is a risk that competitiveness will receive less emphasis than in the past.

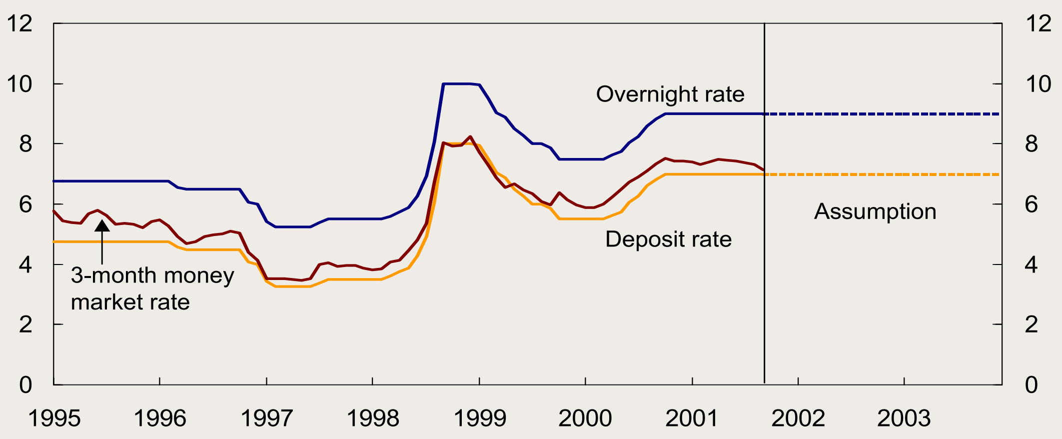
The uncertainty surrounding the inflation projection is illustrated in Charts 3.8 and 3.9. All in all, the risks are weighted mainly towards conditions that may lead to lower-than-projected consumer price inflation in 2003. Against this background, and given the assumptions underlying the projections in this report, the probability that inflation two years ahead will be lower than 2½% is greater than the probability that it will be higher.

Statistical annex

Table 1 Interest rates

		Norges Bank's key rates (average)		Money market rates NIBOR[1]			Yield on-government bonds[2]
		Deposit rate	Overnight lending rate	1-week	3-month	12-month	10-year
1995		4.8	6.8	5.5	5.5	5.9	7.4
1996		4.5	6.5	5.0	4.9	5.1	6.8
1997		3.4	5.4	3.6	3.7	4.1	5.9
1998		5.5	7.5	5.9	5.8	5.6	5.4
1999		6.4	8.4	6.9	6.5	6.0	5.5
2000		6.2	8.2	6.6	6.7	7.1	6.2
2000	Jan	5.5	7.5	5.8	5.9	6.1	6.4
	Feb	5.5	7.5	5.9	5.9	6.3	6.3
	Mar	5.5	7.5	5.9	6.0	6.5	6.1
	Apr	5.6	7.6	6.1	6.2	6.7	6.1
	May	5.8	7.8	6.2	6.5	7.0	6.3
	Jun	6.1	8.1	6.5	6.7	7.2	6.1
	Jul	6.3	8.3	6.5	6.9	7.5	6.2
	Aug	6.6	8.6	6.9	7.1	7.5	6.2
	Sep	6.8	8.8	7.1	7.3	7.7	6.3
	Oct	7.0	9.0	7.3	7.5	7.8	6.4
	Nov	7.0	9.0	7.3	7.4	7.5	6.2
	Dec	7.0	9.0	7.6	7.4	7.3	6.0
2001	Jan	7.0	9.0	7.4	7.4	7.2	6.0
	Feb	7.0	9.0	7.3	7.3	7.2	6.0
	Mar	7.0	9.0	7.3	7.4	7.4	6.0
	Apr	7.0	9.0	7.6	7.5	7.4	6.2
	May	7.0	9.0	7.3	7.5	7.5	6.5
	Jun	7.0	9.0	7.3	7.4	7.6	6.6
	Jul	7.0	9.0	7.3	7.4	7.5	6.7
	Aug	7.0	9.0	7.1	7.3	7.3	6.5
	Sep	7.0	9.0	7.1	7.1	7.0	6.4
2001	23 Sep	7.0	9.0	7.1	7.0	6.8	6.4
	30 Sep	7.0	9.0	7.1	7.0	6.7	6.4
	07 Oct	7.0	9.0	7.2	6.9	6.6	6.2
	14 Oct	7.0	9.0	7.3	7.0	6.7	6.2
	21 Oct	7.0	9.0	7.2	7.0	6.7	6.1

1) NIBOR = Norwegian interbank offered rate, average of daily quotations
2) Effective yield of representative 10-year government bond. Average of daily quotations. The yield is calculated by weighting one or two government bonds with the residual maturity.



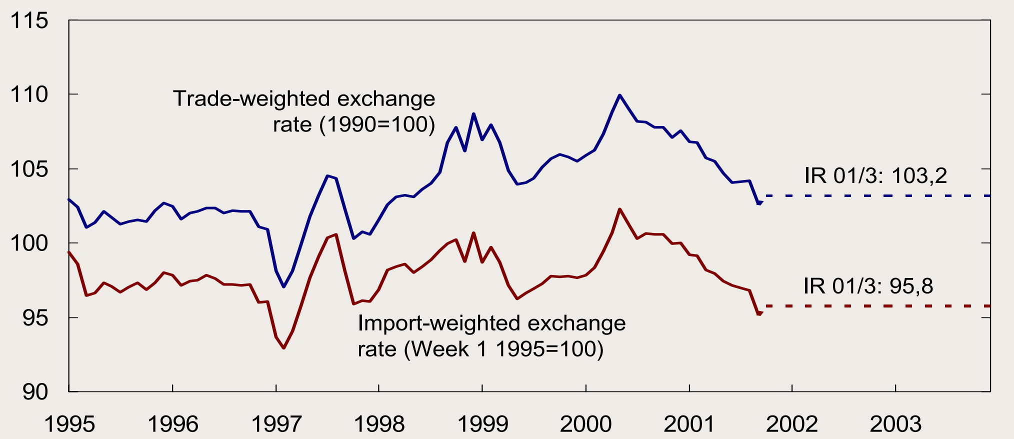
Source: Norges Bank

Table 2 Exchange rates

		Effective exchange rates		Bilateral exchange rates		
		Import-weighted exchange rates[1)]	Trade-weighted-exchange rate index[2)]	NOK/EUR	NOK/USD	NOK/SEK
1995		97.4	101.8		6.34	88.9
1996		97.2	102.0		6.46	96.3
1997		96.7	100.9		7.07	92.6
1998		98.9	104.6		7.55	94.9
1999		97.7	105.6	8.32	7.80	94.4
2000		100.2	107.8	8.11	8.80	96.1
2000	Jan	97.8	105.9	8.12	8.01	94.5
	Feb	98.3	106.3	8.10	8.24	95.2
	Mar	99.4	107.3	8.11	8.41	96.7
	Apr	100.7	108.8	8.15	8.61	98.6
	May	102.3	110.0	8.20	9.05	99.5
	Jun	101.3	109.0	8.24	8.68	99.1
	Jul	100.3	108.2	8.18	8.70	97.3
	Aug	100.7	108.2	8.10	8.96	96.5
	Sep	100.6	107.8	8.03	9.21	95.4
	Oct	100.6	107.8	8.00	9.36	93.9
	Nov	99.9	107.1	8.00	9.34	92.7
	Dec	100.0	107.6	8.13	9.07	93.9
2001	Jan	99.2	106.8	8.24	8.78	92.5
	Feb	99.2	106.8	8.21	8.91	91.5
	Mar	98.2	105.7	8.16	8.97	89.4
	Apr	98.0	105.5	8.12	9.09	89.0
	May	97.4	104.7	8.00	9.14	88.2
	Jun	97.1	104.1	7.93	9.30	86.2
	Jul	97.0	104.2	7.97	9.26	86.1
	Aug	96.8	104.2	8.06	8.95	86.5
	Sep	95.2	102.6	8.00	8.78	82.7
2001	23 Sep	94.2	101.8	7.98	8.63	81.6
	30 Sep	95.3	102.8	8.05	8.77	81.7
	07 Oct	95.7	103.4	8.08	8.82	83.0
	14 Oct	94.9	102.6	8.00	8.77	83.1
	21 Oct	95.1	102.6	7.96	8.81	84.0

1) Weights are calculated on the basis of imports from 44 countries, which cover 97% of total imports. Weights are based primarily on shares for the years 1996 to 1998.

2) Nominal effective krone exchange rate calculated on the basis of exchange rates for NOK against the currencies of Norway's 25 most important trading partners (geometrical average weighted with the OECD's competition weightings)

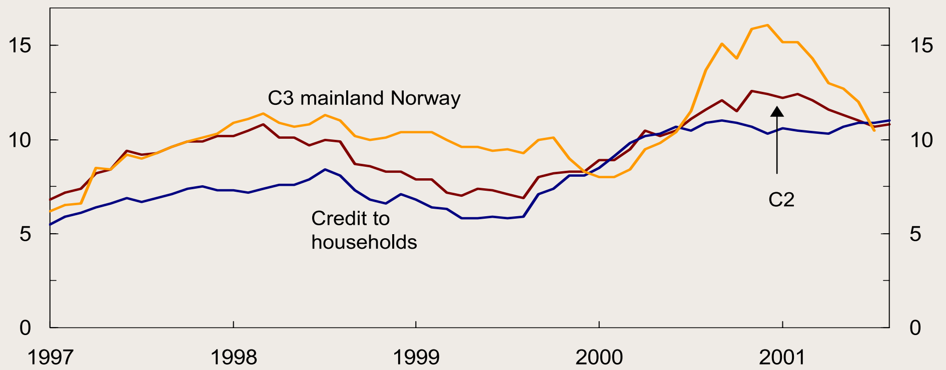


Source: Norges Bank

Table 3 Monetary aggregates

Twelve-month rise. Per cent		Money supply M2	Domestic credit (C2) Total	To households	To non-financial enterprises	Total credit (C3) Total	To mainland Norway
Dec 1995		5.7	4.9			5.2	
Dec 1996		6.4	6.2	5.3	7.6	5.4	5.2
Dec 1997		2.5	10.2	7.3	16.8	10.0	10.3
Dec 1998		4.6	8.3	7.1	11.0	12.2	10.4
Dec 1999		10.9	8.3	8.1	8.8	7.8	8.3
Dec 2000		9.0	12.4	10.3	14.9	11.5	16.1
2000	Jan	8.4	8.9	8.5	9.6	7.6	8.0
	Feb	10.0	8.9	9.1	9.3	7.3	8.0
	Mar	10.2	9.5	9.8	9.4	7.7	8.4
	Apr	11.0	10.5	10.2	11.5	8.1	9.5
	May	12.0	10.2	10.3	10.4	7.4	9.8
	Jun	10.6	10.5	10.7	11.4	8.0	10.4
	Jul	9.5	11.1	10.5	13.3	8.5	11.5
	Aug	10.2	11.6	10.9	13.9	10.6	13.7
	Sep	12.7	12.1	11.0	14.5	11.6	15.1
	Oct	8.5	11.5	10.9	13.0	11.1	14.3
	Nov	10.7	12.6	10.7	15.4	11.8	15.9
	Dec	9.0	12.4	10.3	14.9	11.5	16.1
2001	Jan	10.9	12.2	10.6	14.0	10.7	15.2
	Feb	10.7	12.4	10.5	14.2	11.0	15.2
	Mar	10.1	12.1	10.4	13.7	10.1	14.3
	Apr	8.6	11.6	10.3	12.4	10.4	13.0
	May	10.0	11.3	10.7	11.2	11.1	12.7
	Jun	8.6	11.0	10.9	10.1	10.7	12.0
	Jul	8.5	10.7	10.9	9.3	9.5	10.5
	Aug	8.0	10.8	11.0	9.1		
Levels last month In billions of NOK		771	1562	867	571	1979	1772

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



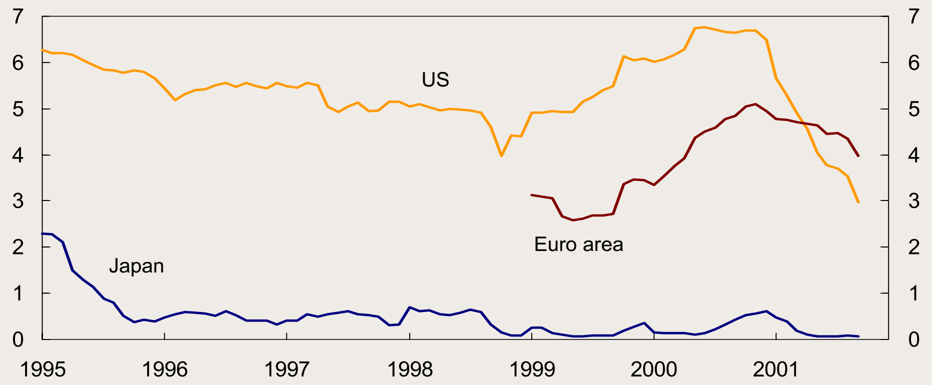
Source: Norges Bank

Table 4 International interest rates

		Short-term interest rates[1] for key currencies in the Euromarket						Interest rate[2] differential	Yields on government bonds[3]	
		USD	JPY	EUR	GBP	SEK	Trading-partners		US	Germany
1995		6.0	1.2		6.6	8.7	6.1	-0.7	6.9	6.7
1996		5.4	0.5		6.0	5.9	4.5	0.3	6.3	6.5
1997		5.2	0.5		6.8	4.2	4.1	-0.5	5.7	6.4
1998		4.8	0.5		7.3	4.2	4.2	1.6	4.6	5.3
1999		5.4	0.2	3.0	5.5	3.3	3.3	3.1	4.6	5.9
2000		6.5	0.3	4.4	6.1	4.0	4.4	2.2	5.3	6.1
2000	Jan	6.0	0.2	3.3	6.1	3.6	3.8	2.0	6.8	5.6
	Feb	6.0	0.1	3.5	6.1	4.0	3.9	1.9	6.4	5.6
	Mar	6.2	0.1	3.8	6.2	4.1	4.1	1.8	6.3	5.4
	Apr	6.3	0.1	3.9	6.2	4.1	4.2	2.0	6.1	5.3
	May	6.7	0.1	4.4	6.2	4.0	4.4	2.0	6.4	5.4
	Jun	6.8	0.1	4.5	6.2	4.0	4.5	2.1	6.2	5.2
	Jul	6.7	0.2	4.6	6.1	4.2	4.6	2.2	6.1	5.3
	Aug	6.7	0.3	4.8	6.2	4.1	4.7	2.3	5.9	5.3
	Sep	6.6	0.4	4.9	6.1	4.0	4.8	2.5	6.0	5.3
	Oct	6.7	0.5	5.0	6.1	4.0	4.8	2.6	6.0	5.3
	Nov	6.7	0.6	5.1	6.0	4.0	4.8	2.5	5.9	5.3
	Dec	6.5	0.6	4.9	5.9	4.1	4.7	2.6	5.6	5.0
2001	Jan	5.7	0.5	4.8	5.8	4.1	4.5	2.8	5.7	4.9
	Feb	5.3	0.4	4.8	5.7	4.0	4.5	2.7	5.6	4.9
	Mar	4.9	0.2	4.7	5.5	4.0	4.4	2.9	5.2	4.8
	Apr	4.6	0.1	4.7	5.3	4.0	4.3	3.1	5.2	4.9
	May	4.0	0.1	4.6	5.2	4.0	4.2	3.1	5.4	5.1
	Jun	3.8	0.1	4.5	5.2	4.3	4.2	3.2	5.3	5.1
	Jul	3.7	0.1	4.5	5.2	4.4	4.2	3.1	5.3	5.1
	Aug	3.5	0.1	4.4	4.9	4.3	4.1	3.2	5.1	4.9
	Sep	3.0	0.1	4.0	4.6	4.1	3.7	3.3	4.9	4.9
2001	23 Sep	2.7	0.1	3.8	4.5	3.9	3.6	3.4	4.9	4.8
	30 Sep	2.6	0.1	3.7	4.4	3.8	3.4	3.5	4.9	4.7
	07 Oct	2.5	0.1	3.6	4.4	3.8	3.4	3.4	4.8	4.6
	14 Oct	2.4	0.1	3.6	4.4	3.8	3.4	3.5	4.7	4.7
	21 Oct	2.4	0.1	3.6	4.4	3.8	3.4	3.5	4.7	4.7

1) 3-month rates, average of daily quotations
2) 3-month interest rate differential against Norway's 18 most important trading partners (geometrical average weighted with the OECD's competition weightings)
3) Yields on government bonds with a residual maturity of 10 years. Average of daily quotations.

3-month rates in the US, the euro area and Japan



Sources: EcoWin and Norges Bank

Table 5 GDP growth in other economies

GDP growth in other economies. Percentage change from previous year

	US	Japan	Germany	France	UK	Sweden	Trading-partners[1)]	Euro area[2)]
1995	2.7	1.6	1.7	1.9	2.9	3.7	2.7	2.3
1996	3.6	3.5	0.8	1.1	2.6	1.1	2.2	1.5
1997	4.4	1.8	1.4	1.9	3.4	2.1	3.0	2.4
1998	4.3	-1.1	2.0	3.5	3.0	3.6	3.1	2.9
1999	4.1	0.8	1.8	3.0	2.1	4.1	3.0	2.6
2000	4.1	1.5	3.0	3.4	2.9	3.6	3.5	3.5
Projections								
2001	1	-1	¾	2	2	1½	1¼	1½
2002	1	-¾	1	1½	1½	1½	1¼	1½
2003	3	1	2¼	2½	2½	2½	2½	2½

1) Export weights
2) GDP weights from IMF adjusted for purchasing power

Sources: OECD and Norges Bank

Table 6 Consumer prices in other economies

Consumer prices in other economies. Percentage change from previous year

	US	Japan	Germany	France	UK[1)]	Sweden	Trading partners[2)]	Euro area[3)]
1995	2.8	-0.1	1.7	1.8	2.8	2.9	2.2	2.8
1996	2.9	0.1	1.2	2.1	3.0	0.8	1.8	2.4
1997	2.3	1.7	1.5	1.3	2.8	0.9	1.7	1.7
1998	1.6	0.6	0.6	0.7	2.7	0.4	1.2	1.2
1999	2.2	-0.3	0.7	0.6	2.3	0.4	1.2	1.2
2000	3.4	-0.6	2.1	1.8	2.1	1.3	2.0	2.4
Projections								
2001	3	-¾	2½	1¾	2¼	2¾	2½	2½
2002	2	-1	1¼	1¼	2¼	2¼	1¾	1½
2003	2¼	¼	1½	1½	2½	2	2	1¾

1) RPIX
2) Import weights
3) Eurostat weights (country's share of euro area consumption)

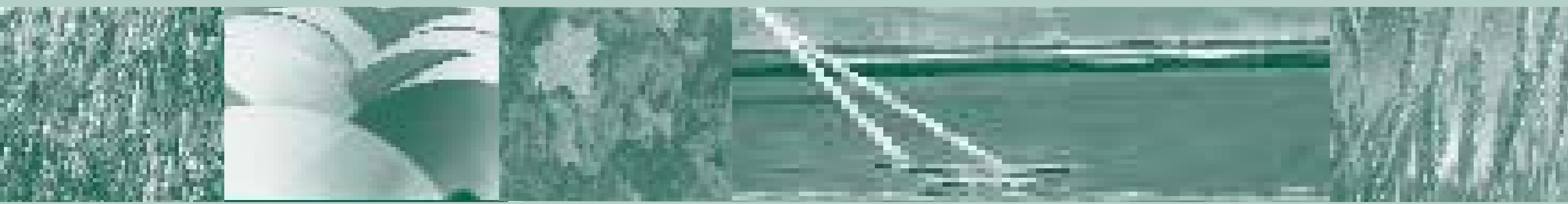
Sources: OECD and Norges Bank

Table 7 Main macroeconomic aggregates

	In billions kroner	Percentage change from previous year unless otherwise stated			
	2000	**2000**	**2001**	**2002**	**2003**
Real economy					
Private consumption	608.0	2.4	2	2¾	2¾
Public consumption	271.0	1.4	2½	2¼	2½
Total gross investment	282.1	-1.1	0	-2	-¾
- Petroleum activities	58.9	-17.1	0	-5	-5
- Mainland Norway	206.3	1.4	0	-1½	¼
Enterprises	128.8	1.8	-1¾	-4½	¾
Dwellings	37.1	12.2	8½	2	0
General government	40.4	-7.9	-2¼	4¾	0
Mainland demand[1)]	1085.3	1.9	1¾	2	2¼
Total domestic demand[2)]	1144.2	0.8	1¾	1½	2
Exports	663.6	2.7	2¾	2¼	2¾
- Crude oil and natural gas	306.6	6.4	4	6	2
- Traditional goods	212.1	2.1	2¾	-1	3½
Imports	433.5	2.5	0	¼	3¼
- Traditional goods	274.4	1.7	1	¼	3¼
GDP	1423.9	2.3	1½	2¼	1¾
- Mainland Norway	1054.5	1.8	1¼	1½	1¾
Labour market					
Employment		0.5	½	¼	½
Labour force, LFS		0.7	½	½	½
Registered unemployed (rate)		2.7	2½	2¾	2¾
LFS unemployment (rate)		3.4	3½	3½	3½
Prices and wages					
CPI		3.1	3	1½	2½
CPIATE[3)]		2.1	2½	2	2½
Annual wages[4)]		4½	4¾	5	5
Annual wages + costs of additional vacation days[5)]		5¼	5½	5	5
Import prices, consumer goods[6)]		-1.0	0	-1	½
Export prices, traditional goods		13.8	-1	-1½	½
Resale home prices[7)]		14.4	4½	4	4
External account[8)]					
Trade surplus, NOKbn (level)		230.1	220	180	180
Current account surplus, NOKbn (level)		203.6	200	170	170
Current account surplus, % of GDP		14.3	14	11	11
Memorandum item					
Household saving ratio		7.7	8	8½	8½
Technical assumptions					
Norges Bank's sight deposit rate (annual average)[9)]		6.2	7.0	7.0	7.0
Import-weighted exchange rate[10)]		2.5	-3	-1¼	0
Real rise in public spending		1	2¾	2½	2½
Oil price in USD/barrel		29	25	20	20

1) Private and public consumption and mainland gross fixed investment
2) Private and public consumption, mainland gross fixed investment and petroleum investment
3) Consumer price index adjusted for changes in real taxes and energy prices
4) Annual wage growth is based on the Technical Reporting Committee on Income Settlements' definitions and calculations. According to Statistics Norway, wages per normal person-year increased by 4.3% in 2000
5) Costs associated with additional vacation days are estimated at 0.8 percentage point in both 2000 and 2001
6) Adjusted for changes in real taxes
7) ECON's house prices index with Norges Bank's weighting set
8) Current prices
9) The sight deposit rate is assumed to remain unchanged in the projection period
10) Annual percentage change. Positive figures denote a depreciation of NOK. The import-weighted exchange rate includes 44 countries

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



Inflation Report No. 3 - October - 2001