

# Norwegian economy

The Norwegian economy bottomed out in the first half of 2003. According to the quarterly national accounts (QNR), mainland GDP growth was 0.5 per cent in the second quarter and 0.8 per cent in the third quarter, i.e. markedly higher than projected trend growth. The rise in unemployment came to a halt in the second quarter of the year. If this means that unemployment has peaked and is falling, the turnaround in the labour market will occur at an earlier stage than previously projected. The pronounced cyclical upswing is expected to continue through 2004, followed by a gradual moderation in growth through

2005 and 2006. Unemployment will nevertheless only fall somewhat over the next two years partly because productivity growth is expected to be high and because higher employment and lower unemployment will lead to an increase in the supply of labour.

The main driving forces behind the turnaround in the Norwegian economy have been strong growth in petroleum investment over the past year and the sharp reduction in interest rates through 2003. The decline in interest rates led to a marked upswing in private consumption through the summer and autumn, and the weaken-

## Macroeconomic indicators 2001-2003

Growth from previous period unless otherwise noted. Per cent

			Seasonally adjusted			
	2001	2002	02.4	03.1	03.2	03.3
<b>Demand and output</b>						
Consumption in households and non-profit organizations	2.6	3.6	1.3	0.0	1.2	1.0
General government consumption	2.7	3.2	-0.3	0.6	1.1	0.1
Gross fixed investment	-4.2	-3.6	7.7	-2.1	-3.4	0.3
- Mainland Norway	0.7	-4.6	2.5	-3.9	-0.3	-1.0
- Extraction and transport via pipelines	-1.0	-4.6	6.0	6.5	6.0	4.3
- Service activities incidental to extraction	..	..	..	..	..	..
Final domestic demand from Mainland Norway <sup>1</sup>	2.3	2.1	1.1	-0.5	0.9	0.4
Exports	4.1	-0.5	-1.5	-1.3	2.1	-1.2
- Crude oil and natural gas	5.2	0.2	-1.0	-1.7	0.9	-1.9
- Traditional goods	3.7	1.3	-4.3	0.0	4.3	0.6
Imports	0.9	1.7	2.1	1.6	-1.2	-1.5
- Traditional goods	2.9	4.7	2.9	-0.3	1.3	-0.2
Gross domestic product	1.9	1.0	-0.4	-0.1	-0.2	0.8
- Mainland Norway	1.7	1.3	-0.6	-0.1	0.5	0.8
<b>Labour market<sup>2</sup></b>						
Man-hours worked	-1.0	-0.9	-0.4	-0.4	-0.3	-0.1
Employed persons	0.5	0.2	-0.2	-0.3	-0.5	0.4
Labour force <sup>3</sup>	0.6	0.6	0.2	-0.3	0.0	0.4
Unemployment rate, level <sup>4</sup>	3.6	3.9	4.2	4.1	4.6	4.6
<b>Prices</b>						
Consumer price index (CPI) <sup>5</sup>	3.0	1.3	2.2	4.5	2.2	1.9
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>5</sup>	2.6	2.3	2.0	1.8	1.2	0.8
Export prices, traditional goods	-2.9	-8.7	1.1	0.6	-0.4	-0.1
Import prices, traditional goods	-0.2	-8.0	-0.6	1.2	-0.5	1.5
<b>Balance of payment</b>						
Current balance, bill. NOK	238.5	200.6	47.2	55.5	43.9	51.0
<b>Memorandum items (Unadjusted, level)</b>						
Money market rate (3 month NIBOR)	7.2	6.9	7.0	5.7	4.7	3.1
Lending rate, banks	8.8	8.4	8.7	7.7	6.9	5.2
Crude oil price NOK <sup>6</sup>	219.5	197.5	196.0	221.9	183.0	209.0
Importweighted krone exchange rate, 44 countries, 1995=100	100.2	91.6	87.7	88.7	91.9	95.7
NOK per euro	8.05	7.51	7.3	7.6	8.0	8.3

<sup>1</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.

<sup>2</sup> Figures for 2001 and 2002 are from national accounts. The quarterly figures are from Statistics Norway's Labour force survey (LFS), since the new quarterly national accounts series for employment are too short for seasonal adjustment.

<sup>3</sup> Unemployed (Labour Force Survey) and employment (NA) exclusive of sailors in foreign shipping.

<sup>4</sup> According to Statistics Norway's labour force survey (LFS).

<sup>5</sup> Percentage change from the same period the previous year.

<sup>6</sup> Average spot price, Brent Blend.

Sources: Statistics Norway and Norges Bank.

ing of the krone in the wake of the interest rate reductions has partly reversed the contractionary effects of the strong krone in 2002. Both impulses will persist in the period ahead, with particularly strong growth in private consumption. Moreover, the international cyclical upturn that appears to have taken hold will generate clear growth impulses over the next two years.

In spite of clear growth in the economy, price inflation is projected to be low in Norway and other industrial countries in the years ahead. A higher share of service and goods imports from low-cost countries is a contributory factor. It may appear difficult to attain the inflation target of 2.5 per cent in the course of the next three years, unless the key interest rate is set at such a low level that krone depreciates markedly. A very low interest rate during a consumption-led upswing may, on the other hand, lead to imbalances in the economy that will be difficult to redress in the somewhat longer term. Our projections are based on the assumption that the key rate is not reduced further and that inflation remains slightly below the inflation target throughout the projection period.

### Fiscal policy – moderate impulses

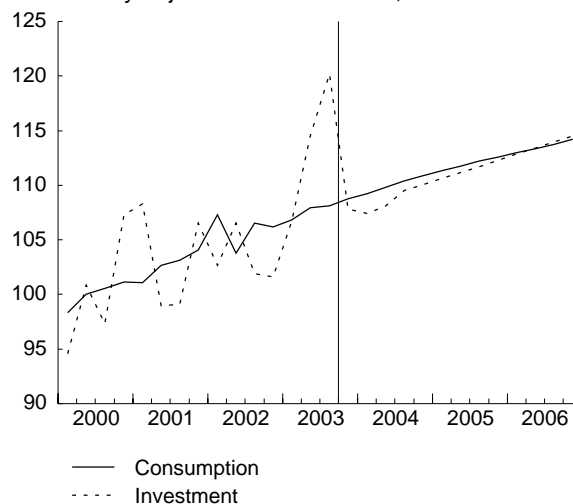
Preliminary QNR figures show somewhat higher growth in public spending on goods and services through 2003 than previously assumed and somewhat higher than projected in the National Budget for 2004. Investment activity in particular is expanding at a faster pace than previously projected. General government consumption is now estimated to grow by 1.9 per cent in 2003 and investment by close to 7 per cent.

For 2004, our projections are based on the estimates in the National Budget for 2004, which have been adjusted in line with the budget agreement between the Government and the Labour Party. These estimates imply lower growth in general government consumption of goods and services in 2004 than in 2003. For the subsequent years, we have assumed low growth in general government consumption from a historical perspective, while private sector consumption of goods and services increases primarily as a result of assumed structural changes in the public sector. As a result of differences in the occurrence of public holidays, the number of working days will increase by 3 in 2004 compared with 2003, but decrease by 1 and 2 respectively in the following years. This will push up public sector output and consumption in 2004, and push it down in 2005 and 2006.

We assume that real tax rates will remain unchanged at the 2003-level in 2004 and 2005. This means that volume rates are adjusted for inflation and that income tax rates are adjusted in line with projected wage growth. Tax and pension schemes are assumed to remain unchanged. In the September *Economic Survey*, we assumed that the fiscal rule provided room for some tax relief in 2005. The estimations in the

### General government

Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

National Budget for 2004 indicate that this is not as likely at present. It is obviously possible to reduce taxes in 2005 while adhering to the fiscal rule, but this would not leave any room for higher government expenditure on consumption and investment as social security expenditure increases more than other expenditure in real terms.

### Continued low interest rates

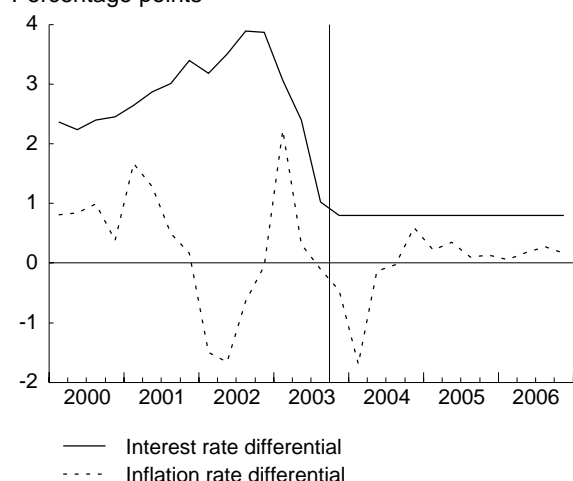
After Norges Bank cut its key interest rate by a total of 4.5 percentage points from December 2002 to September 2003, it now appears that the period of interest rate cuts is behind us. The most recent interest rate cut was on 17 September, and the key rate now stands at 2.5 per cent. The three-month money market rate was 2.8 per cent at the beginning of December.

Inflation fell sharply through 2003, and the underlying rise in prices has hovered below 1 per cent since June. The depreciation of the krone since the beginning of the year will, in isolation, push up inflation in the period ahead. The prospect of low wage growth in the years ahead as a result of higher unemployment and low imported price inflation through imports from low-cost countries such as China will have the opposite effect. We do not expect Norges Bank to increase its key rate before price inflation has shown a marked rise from the current level.

The import-weighted krone exchange rate index depreciated by around 12 per cent through the first half of this year, partly reflecting the considerable narrowing of the interest rate differential against other countries. Since its weakest level in August, the krone has appreciated by around 4 per cent, however. A large share of the appreciation has taken place since the beginning of November. The krone has shown a particularly marked appreciation against the US dollar, by about 13 per cent since August, but has also strengthened somewhat against the euro recently. At the be-

### Interest rate and inflation differential between NOK, and the euro

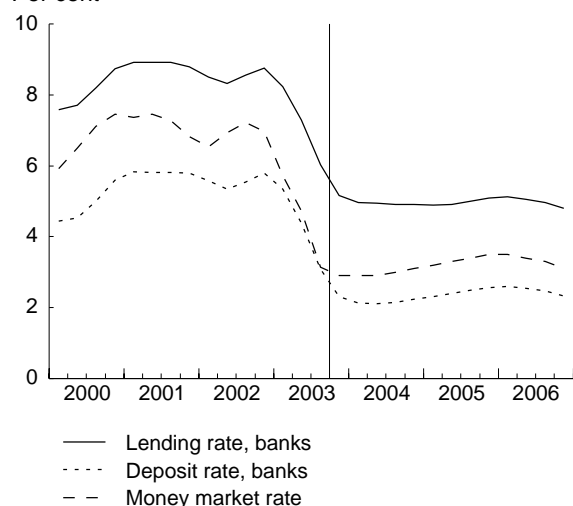
Percentage points



Sources: Norges Bank and Statistics Norway.

### Lending rate and deposit rate

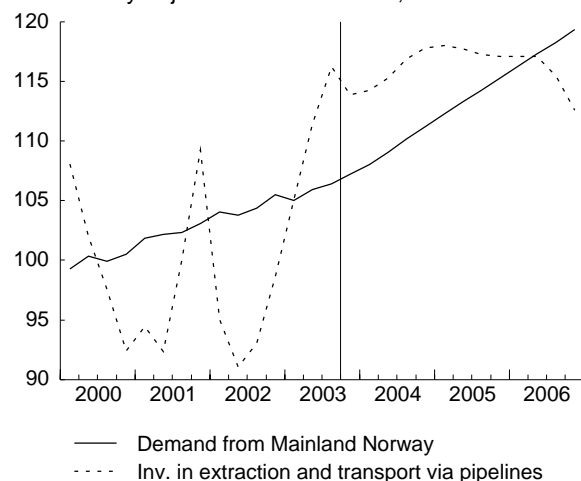
Per cent



Source: Norges Bank.

### Demand from Mainland Norway and investment in petroleum activities

Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

ginning of December, the krone stood at about 6.70 against the dollar and at about 8.10 against euro. We assume that the krone will weaken to EUR 8.20 and USD 6.90 next year, and remain virtually unchanged at this level to the end of the projection period. The import-weighted krone index is thus expected to weaken by about 3 per cent from today's level. This corresponds to a weakening to approximately the level prevailing in the third quarter. This is in line with forecasts from Consensus Forecasts.

Developments in the krone are important for the interest rate level ahead. A continued appreciation of the krone will adversely affect manufacturing and result in lower imported price inflation. This may lead to higher unemployment and make it more difficult to achieve the inflation target, and may imply that interest rates will increase at a later stage than expected. A sharp appreciation of the krone may lead to a further interest rate cut. However, the improvement in the labour market, growth in household consumption, rising house prices and prospects of a global upturn would suggest the opposite.

We assume that three-month money market rates remain virtually unchanged at the current level in the period to autumn 2004, followed by a gradual rise from the third quarter, to 3.5 per cent in the fourth quarter of 2005. A comparable increase in interest rates is assumed for the euro area, based on the assumption of a pick-up in euro-area growth next year. In 2006, Norwegian money market rates are assumed to edge down in pace with money market rates in the euro area. This path implies an interest rate differential of around 0.8 percentage point through the projection period, and implies a smaller interest rate increase in both Norway and the euro area than assumed in our previous economic report published on 12 September.

### Petroleum investment remains high in 2006 – more surprises in store?

According to preliminary national accounts figures, gross investment in extraction and pipeline transport contracted by close to 5 per cent between 2001 and 2002 (at constant prices). Seasonally adjusted QNR figures show that the decline in investment occurred in the first half of 2002. Investment has subsequently shown a steady rise. Both in the first and second quarter of this year, investment expanded by about 6 per cent compared with the previous quarter. In the third quarter, investment increased by a good 4 per cent. For 2003, the level of investment is projected to be about 18 per cent higher than in 2002. Investment is expected to increase further by about 5 per cent, annualised, in 2004. This is somewhat lower than projected in the September *Economic Survey*, and partly reflects some upward revision of this year's investment level and delays in the development of the Ormen Lange field. The delays, combined with a higher overall investment

estimate for the development of this field, have pushed up the investment estimates for 2005 and 2006. The investment level for these years is assumed to be approximately in line with the level for 2004. The upward revisions are primarily for investments in onshore installations that have a substantial impact on the Norwegian economy, and investments in pipelines with a high import share, which are thus less important for the mainland economy.

Traditionally, the projections for petroleum investment one year ahead are uncertain – not to mention projections for two to three years ahead. It now seems fairly certain that the Barents Sea will eventually be open for both exploration and production. In the first round, this may contribute to a further increase in exploration activity, but it may also entail and increase in field development. For example, the Goliath field may boost investment as early as in 2006. However, this has not been incorporated into our projections.

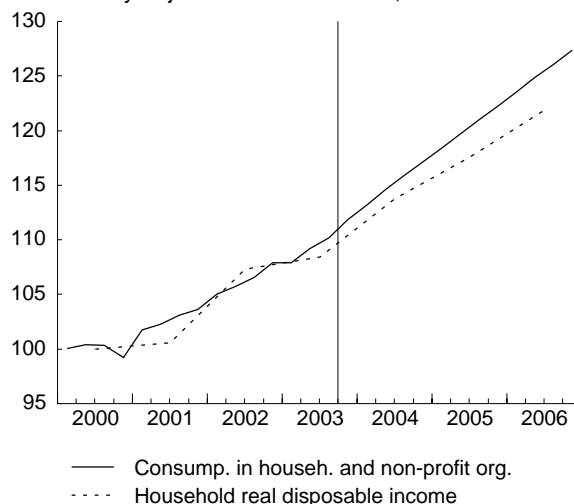
In 2002, oil prices averaged USD 25 per barrel, or about NOK 200. So far this year, oil prices have been above this level and the average oil price for 2003 is estimated at close to USD 29. Given the exchange rate assumption, this implies that the oil price in NOK will be slightly higher than in 2002. Oil prices are assumed to decline slightly in the first half of 2004, and then remain at USD 26 from the third quarter of 2004. The average price in NOK will fall to NOK 185 in 2004, and remain slightly higher than NOK 180 in both 2005 and 2006.

Preliminary, seasonally adjusted QNR figures show that the production of crude oil and natural gas remained virtually unchanged from the fourth quarter of 2002 to the first quarter of 2003. In the second quarter, production sank somewhat, followed by a slight rise in the third quarter. Production is assumed to decline by close to 1 per cent in 2003, primarily reflecting production disruptions as a result of maintenance at several fields in the second quarter. Whereas gas production has increased markedly, oil production has declined. This tendency is expected to continue. In 2004, a moderate volume increase of 0.5 per cent is expected, despite somewhat lower oil production. In 2005 and 2006, the level of production is assumed to show a small reduction. These projections are broadly in line with the estimates in the National Budget for 2004.

### Strong income and consumption growth in 2004

Seasonally adjusted QNR figures show 1.0 per cent growth in consumption for households and non-profit institutions at constant prices between the second and third quarter. In the second quarter, growth moved up to 1.2 per cent from zero growth in the preceding quarter. The pick-up in consumption growth through 2003 must be seen against the background of high

**Income and consumption in households**  
Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

income growth in 2002, the interest rate cuts in the beginning of 2003 and the fall in electricity prices through the spring. In line with developments from the end of last year, goods consumption showed the strongest growth between the second and third quarter (1.1 per cent), while growth in services consumption was more moderate (0.5 per cent). The rise in prices for consumer goods has been slightly negative over the past twelve months (-0.1 per cent), and explains why goods consumptions at constant prices has shown relatively strong growth in the period.

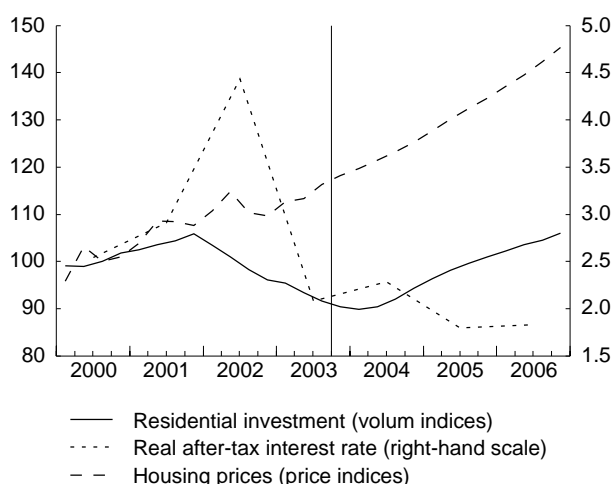
Growth in real disposable income is projected at only 1.0 per cent in 2003. An important explanation for this is higher consumer price inflation. Weak growth in wage income as a result of relatively low wage growth and a fall in employment, combined with low growth in income from self-employment is another factor, in addition to the expected reduction in dividend payments and lower net interest income.

Real disposable income is projected at 4.9 per cent in 2004, 3.4 per cent in 2005 and 3.6 per cent in 2006. Price inflation is expected to be considerably lower in 2004 than in 2003, and will therefore contribute to relatively high real income growth in 2004. In 2005 and 2006, price inflation is expected to be somewhat higher than in 2004. Growth in wage income and net capital income is important for developments in real disposable income in 2004, 2005 and 2006. Higher employment will boost growth in household wage income. Net capital income will push up growth in household disposable income next year as a result of a decline in the average lending rate from this year's level. Towards the end of the projection period, a moderate decline in interest rates is assumed, and net interest income will then push up income growth somewhat.

Growth in consumption for households and non-profit institutions is projected at 3.2 per cent in 2003, mea-

### Residential investment and housing prices

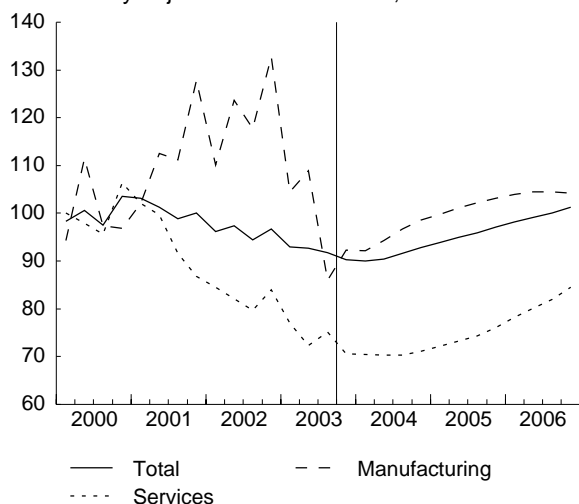
Seasonally adjusted indices, 2000=100



Source: Statistics Norway.

### Investment, Mainland Norway

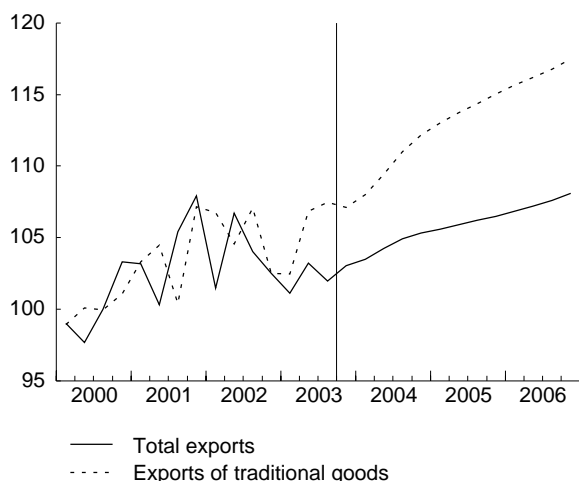
Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

### Exports

Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

sured at constant prices. Consumption growth is expected to continue to accelerate in 2004. Growth is projected at as much as 5.1 per cent in 2004. Income growth is expected to slow down somewhat in 2005 and 2006 and is projected at 4.4 per cent in 2005 and 4.3 per cent in 2006. Consumption is influenced by developments in disposable income, but also by interest rate developments. Lower interest rates reduce the incentive to save. Both nominal and real interest rates are important. Our analyses indicate that lower nominal interest rates translate into higher consumption fairly rapidly. Real interest rates have a more lagged effect, but have the same impact. Our projections for income and consumption growth imply a fall in the saving ratio from 5.0 in 2003 to 3.7 in 2006, reflecting a gradual adaptation to lower real interest rates.

### House prices have not yet bottomed out

The marked interest rate cuts at the beginning of 2003 were expected to boost housing investment towards the end of the year. This is not yet reflected in the statistics. Seasonally adjusted QNR figures show a 1.9 per cent decline in housing investment at constant prices between the second and third quarter. The estimates for housing investment are based on the number of square metres of housing starts obtained from housing start statistics. The statistics show a continued fall, particularly in the number of square metres, and housing investment is therefore unlikely to pick up before 2004.

House prices are influenced by nominal interest rates in the short term, and lower interest rates are expected to push up house prices ahead. Household income developments will have the same effect. House prices are projected to show an annual average rise of 3.7 per cent this year, and 6-7 per cent in the three subsequent years.

As mentioned, housing investment will be lower in 2003 than in 2002. Our projection shows a decline of 7.3 per cent. Higher house price inflation, lower nominal interest rates and relatively strong income growth in 2004 imply a reversal of the trend in housing investment in 2004, however. While housing investment is projected to show an annual decline of 1.4 per cent in 2004, housing investment is expected to expand by 8.6 per cent in 2005 and 5.5 per cent in 2006. Real interest rate developments also influence housing investment. The low real interest rate level underlying our projection for 2003 to 2006 imply an increase in both house prices and housing investment.

### Fall in mainland business investment comes to a halt

Mainland gross business investment has contracted for almost three consecutive years, primarily reflecting the decline in investment in service sectors. However, in the third quarter investment in these sectors appears to have edged up. Manufacturing investment, which expanded at a brisk pace in 2001 and 2002, has



**Main economic indicators 2001-2005. Accounts and forecasts**

Percentage change from previous year unless otherwise noted

		Forecasts								
Accounts		2003			2004			2005		2006
2002		SN	MoF	NB	SN	MoF	NB	SN	NB	SN
<b>Demand and output</b>										
Consumption in households and non-profit organizations	3.6	3.2	3.0	3 1/4	5.1	3.8	5	4.4	3 1/2	4.3
General government consumption	3.2	1.9	0.7	1	2.1	2.0	2	1.7	1 1/2	1.4
Gross fixed investment	-3.6	-1.2	2.0	..	1.8	2.9	..	3.2	..	3.1
Extraction and transport via pipelines <sup>1</sup>	-4.6	17.7	22.3	15	4.4	11.5	15	1.0	-5	-0.3
Mainland Norway	-4.6	-5.1	-2.5	-5	0.3	0.9	1	4.8	4 1/2	4.5
Firms	-6.4	-8.8	-4.3	..	0.3	0.2	..	4.3	..	5.1
Housing	-4.2	-7.3	-2.1	..	-1.4	1.6	..	8.6	..	5.5
General government	0.0	6.8	1.3	..	2.0	1.5	..	2.0	..	2.0
Demand from Mainland Norway <sup>2</sup>	2.1	1.5	1.6	1 1/4	3.6	3.1	3 3/4	3.7	3 1/4	3.6
Stockbuilding <sup>3</sup>	0.4	-0.5	..	..	0.0	..	..	0.0	..	0.0
Exports	-0.5	-1.1	0.0	..	2.2	1.7	..	1.4	..	1.2
Crude oil and natural gas	0.2	-1.4	-0.7	..	0.7	0.5	..	-0.7	..	-0.4
Traditional goods	1.3	0.7	0.4	1	4.9	3.3	2	3.4	3 1/4	2.1
Imports	1.7	1.9	2.4	2	4.2	3.6	5 1/4	4.3	2 1/2	4.4
Traditional goods	4.7	2.9	3.5	..	3.9	4.2	..	4.6	..	4.7
Gross domestic product	1.0	0.0	0.6	..	2.8	2.3	..	2.2	..	2.0
Mainland Norway	1.3	0.6	0.5	3/4	3.6	2.6	3	2.9	2 3/4	2.6
<b>Labour market</b>										
Employed persons	0.2	-0.8	-0.9	-1	0.2	0.0	1/4	0.7	1	0.9
Unemployment rate (level)	3.9	4.5	4.5	4 1/2	4.4	4.7	4 3/4	4.2	4 1/2	3.9
<b>Prices and wages</b>										
Wages per standard man-year	5.4	4.2	4 1/2	4 1/2	4.2	4	4 1/4	4.1	4 3/4	4.1
Consumer price index (CPI)	1.3	2.6	2 1/2	2 1/2	1.3	1 1/4	1 1/4	1.8	2	1.8
CPI adjusted for tax changes and excluding energy products (CPI-ATE)	2.3	1.1	1 1/4	1 1/4	1.5	1 3/4	2	2.1	2 1/4	2.1
Export prices, traditional goods	-8.7	-0.6	-0.8	..	6.1	-0.4	..	1.8	..	-1.5
Import prices, traditional goods	-8.0	0.9	0.1	..	4.4	1.7	..	0.3	..	-0.3
Housing prices <sup>4</sup>	4.0	3.7	..	..	6.3	..	..	7.3	..	7.3
<b>Balance of payment</b>										
Current balance (bill. NOK)	200.6	197.2	202.3	..	172.4	162.9	..	163.5	..	155.5
Current balance (per cent of GDP)	13.2	12.7	..	..	10.8	..	..	9.9	..	9.0
<b>Memorandum items:</b>										
Household savings ratio (level)	7.2	5.0	5.4	..	5.1	5.1	..	4.2	..	3.7
Money market rate (level) <sup>5</sup>	6.9	4.1	4.1	4 1/4	3.0	3.2	3	3.4	4	3.3
Lending rate, banks (level) <sup>6</sup>	8.4	6.7	..	..	4.9	..	..	5.0	..	5.0
Crude oil price NOK (level) <sup>7</sup>	197	204	200	..	186	170	..	180	..	183
Export markets indicator	0.2	4.0	..	..	6.9	..	..	5.2	..	3.4
	-8.5	1.3	..	1 1/2	2.8	..	3	-0.1	1/2	0.4

<sup>1</sup> Forecasts from MoF includes service activities incidental to extraction.<sup>2</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.<sup>3</sup> Change in stockbuilding. Per cent of GDP.<sup>4</sup> Freeholder.<sup>5</sup> NB use their sight deposit rates.<sup>6</sup> Households' borrowing rate in private financial institutions.<sup>7</sup> Average spot price Brent Blend.<sup>8</sup> Increasing index implies depreciation.

Sources: Statistics Norway (SN), Ministry of Finance, St.meld. nr. 1 (2003-2004), (MoF), Norges Bank, forecasts based on forward interest and exchange rates, Inflasjonsrapport 3/2003 (NB).

fallen sharply so far this year partly due to the phasing out of a few large investment projects, particularly in the metal industry.

As the turnaround in the Norwegian economy gains a firm footing and interest rates remain low, mainland business investment should pick up. According to our calculations, manufacturing investment will rapidly shift to moderate growth, while investment in private service industries are expected to start to pick up at a somewhat later stage next year. Considerable spare capacity in the

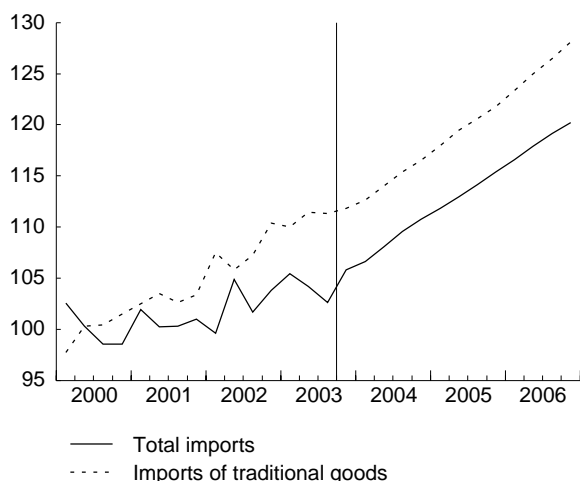
commercial building sector will, however, have a dampening impact on investment in these industries. All in all, mainland business investment is projected to fall by close to 9 per cent in 2003, but to show slightly positive growth in 2004, followed by an annual growth rate of around 4-5 per cent in 2005 and 2006.

### Exports on the rise – but trade balance continues to weaken

Measured in terms of the trade-weighted index, the Norwegian krone has depreciated markedly in 2003

### Imports

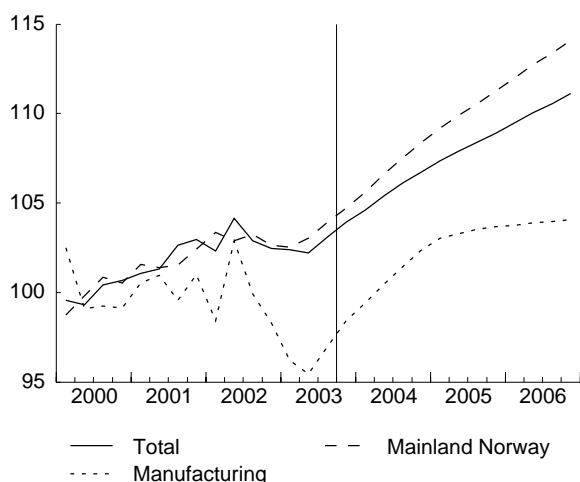
Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

### Gross domestic product

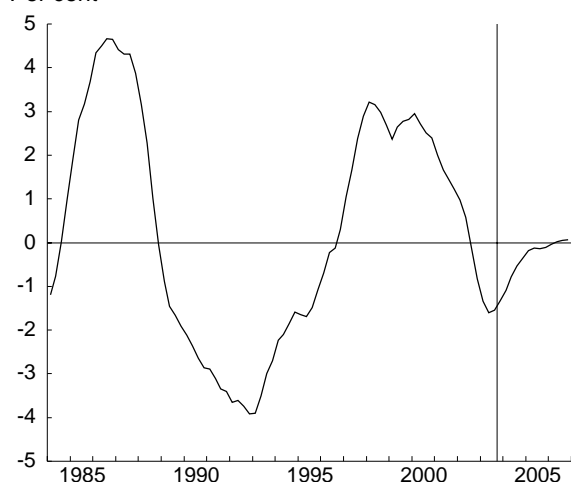
Seasonally adjusted volume indices, 2000=100



Source: Statistics Norway.

### Output gap

Per cent



Source: Statistics Norway.

compared with 2002. The depreciation was particularly pronounced in the first six months. In the third quarter, the manufacturing industry's effective krone exchange rate had reverted to the same level prevailing in the third quarter of 2001. The krone depreciated against the euro in particular. The krone has appreciated somewhat against the US dollar compared with 2002. This means that the krone has appreciated against Asian currencies as these currencies are broadly stable against the US dollar. Traditional merchandise imports from Asia have increased by 10.6 per cent, and exports to Asia fell by 6.7 per cent compared with the same period last year.

Over time, a depreciation of a country's currency tends to boost the volume of exports, while the volume of imports falls. This has a favourable impact on the trade balance. In the short term, however, a weaker krone may have the opposite effect, the so-called J-curve effect. In the short run, a weaker krone will not influence the volume of imports/exports to any significant extent. However, the price of imports measured in NOK will increase, while the price of exports in NOK will remain stable. The result is that the value of overall imports increases, while the value of overall exports remains unchanged. The trade balance for traditional goods (exports of traditional goods less imports of traditional goods) was 18 per cent weaker for the first three quarters of 2003 compared with the same period in 2002. At current prices, traditional goods imports expanded by 5.9 per cent in the third quarter compared with the same period one year earlier. At constant prices, traditional goods imports grew by 3.7 per cent. Seasonally adjusted, import prices for traditional goods increased by 1.5 per cent between the second and third quarter, while the volume of imports fell by 0.2 per cent.

Compared with the same period in 2002, there is still marked growth in the volume of imports of many consumer goods such as textiles, clothing and footwear (up 4.0 per cent) and food and beverages (up 8.5 per cent). Imports of these goods now seem to be moderating, however. Seasonally adjusted imports of textiles, clothing and footwear fell from the second to the third quarter.

Import growth is expected to hold up in the period ahead. At constant prices, our projections imply 3.9 per cent growth in traditional goods imports in 2004 and 4.6 per cent in 2005. With strong growth in consumption in this period, import growth is expected to be relatively low, however.

At current prices, total exports expanded by 1.9 per cent between the third quarter of 2002 and the third quarter of 2003. At constant prices, exports contracted by 2.2 per cent in the same period, primarily reflecting a fall in exports of petroleum-related products. At current prices, exports of traditional goods grew by 1.9

per cent between the third quarter of 2002 and the third quarter of this year. At constant prices, exports of these goods increased by 0.4 per cent. The trend seems to be positive. Between the second and third quarter, the volume of traditional goods exports rose by a seasonally adjusted 0.6 per cent.

Between the third quarter of 2002 to the third quarter of 2003, metal exports (up 8.0 per cent) and paper and pulp (up 9.9 per cent) made a considerable positive contribution to overall export growth. In the same period, the volume of exports for the engineering industry fell by 4.3 per cent. Exports of engineering products picked up by a seasonally adjusted 4.5 per cent from the second to the third quarter, while growth in metal exports appears to have flattened out.

We expect brisk growth in traditional goods exports ahead despite continued loss of market shares. At constant prices, growth is projected at 4.9 per cent in 2004 and 3.4 per cent in 2005. The growth figure for 2004 partly reflects the effects of the krone depreciation in 2003 and the global cyclical upswing. We assume that our trading partners will reach a renewed cyclical peak in 2005, with a subsequent slowdown in export growth.

### **Cyclical turnaround and high output growth**

Total GDP (seasonally adjusted and at constant 2000 prices) reached a peak level in the first half of 2002 and subsequently fell to the end of the second quarter of this year. However, preliminary QNR figures for the third quarter of 2003 show a clear increase in total GDP and a halt in the decline in value added for oil activity and shipping. Mainland GDP fell from the beginning of 2002 to the beginning of 2003, but has since picked up. In the second quarter, growth approached trend growth for the mainland economy, while growth was clearly higher than trend in the third quarter. The cyclical trough was passed in the first or second quarter of 2003 (see chart). With low interest rates in Norway and abroad, combined with a global upswing and rising petroleum investment in Norway, the stage is set for a broad-based upturn in the Norwegian economy in the period ahead.

The downturn in the Norwegian economy through 2002 was fairly pronounced and affected almost all industries. A share of the decline in total production reflects reduced electricity production as from the winter 2002/2003, but the near-term production potential has shown little change. Consequently, weak GDP growth in 2003 is attributable to a temporary supply shock and is not a normal cyclical phenomenon. The cyclical downturn was particularly pronounced for manufacturing industry, but recent figures indicate that the decline may have come to a halt in this industry. Growth was also weak or negative in service sectors through 2002 and into 2003. Value added in the public sector fell through 2002, while growth was fairly flat for private services. However, this is to some extent

ascribable to institutional changes. QNR figures for 2003 show solid growth in private services production, but it should be noted that the data are weaker than for most other production sectors. Rising growth in household consumption is the main factor behind the upswing in the service sector.

Our projections now show zero growth in total GDP between 2002 and 2003, in line with the projections in the September *Economic Survey*. Mainland growth is now projected at 0.5 per cent in 2003, while value added in manufacturing may fall by as much as 3 per cent. Both projections are in line with earlier projections. Through 2003 the figures show, as mentioned above, clear underlying growth in the economy which means that 2004 will begin with a marked, positive carry-over, unlike the situation one year earlier.

In the same way that the past economic downturn was broad-based and adversely affected most industries, the upturn will have a favourable impact on most private industries in the Norwegian economy. High growth in household consumption in 2004 will boost production, particularly in service industries. Rising international growth, in conjunction with a weaker krone compared with 2002 and the beginning of 2003, will increase growth in internationally exposed industries. Increased petroleum investment will also increase production in offshore-related industries, of which there are now a fairly large number. Even if we do not expect a pronounced investment upswing in the mainland economy in 2004, there is reason to expect that this will occur in 2005 and 2006. This will be noticeable in the building and construction industry. Household income growth will also contribute to relatively high consumption growth in 2005 and 2006. On balance, production in most private mainland industries is thus expected to increase in the years ahead.

Mainland GDP growth is now projected at 3.6 per cent between 2003 and 2004, which is marginally higher than previously projected. Total GDP will probably continue to grow at slower pace than mainland GDP for many years ahead, as the petroleum production peak seems to have been reached. Oil production is on a gentle downward slope, while gas production will continue to increase ahead. Manufacturing production is expected to show a pronounced increase through 2004 and approach the 2002-level. Several factors come into play here. The global cyclical upswing is one factor. Higher oil investment is of considerable importance for some manufacturing sectors and large aluminium production installations will finally be in full operation in the course of the year. In 2005, the contribution from these factors will abate, but still generate some impulses. A possible international slowdown at the end of 2005 and into 2006 will restrain growth in manufacturing, but not to the extent that the sector will not continue to expand.



### Labour force, employment and number of man-weeks

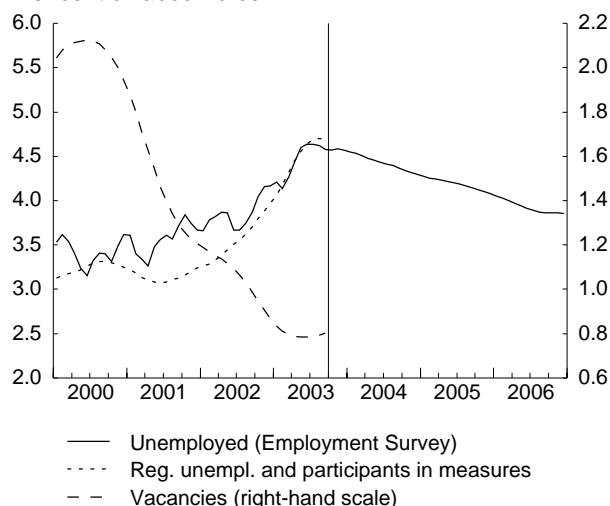
Millions. Seasonally adjusted and smoothed indices



Source: Statistics Norway.

### Unemployed and number of vacancies

Per cent of labour force



Sources: The Directorate of Labour and Statistics Norway.

Consumption growth will contribute to sustaining brisk growth in private services through the period and employment growth will pick up in these “sheltered” sectors and contribute to pushing down unemployment. The margin of manoeuvre in fiscal policy is limited. The orientation of economic policy would imply that public sector activity will make only a moderate contribution to growth during the projection period.

### Brighter labour market outlook

After five years of gradually rising unemployment, the peak may have been reached. According to Labour Force Survey (LFS) figures, the unemployment rate, seasonally adjusted and calculated as a three-month moving average, has remained virtually unchanged after reaching 4.6 per cent in May 2003. According to figures from the Directorate of Labour, the number of registered unemployed peaked in September and fell close to 1000 at the end of November, adjusting for normal seasonal variations. The number of persons

participating in ordinary labour market programmes remained virtually unchanged. At the same time, the number of advertised vacancies has shown some increase, albeit from a very low level.

QNA employment figures are not seasonally adjusted, but a weaker fall in employment from the third quarter of 2002 to the third quarter of 2003 compared with the period from the second quarter of 2002 to the second quarter of 2003 may indicate that the labour market is improving. QNA also shows growth in employment in the distribution sector since the third quarter of 2002. However, for the past year as a whole, the labour market can still be characterised as weak. In the period, manufacturing employment fell by 14 000, and the overall reduction in the number of employed is 21 400.

The labour market is expected to continue to improve into 2004. An upswing in production will increase employment growth in the years ahead. According to unadjusted LFS figures, the number of unemployed stood at 112 000 in the third quarter of this year. Adding the number of persons that want employment, but have not been actively seeking employment, and all the part-time employees who want longer working hours, the number of persons that wanted (more) employment was as high as 364 000 in the third quarter. The increase in employment will most likely be spread across all these groups. As a result, the fall in unemployment is assumed to be less pronounced than the increase implied by LFS figures. Unemployment is projected to fall from 4.5 per cent in 2003 to 4.4 per cent in 2004, 4.2 per cent in 2005 and 3.9 per cent in 2006.

Owing to demographic developments, the labour force will continue to expand in the years ahead. In addition, the improvement in the labour market will, in isolation, boost labour force participation among the various age groups. The average labour force participation rate is, nevertheless, expected to edge down from an estimated 73.4 per cent in 2003 as a result of the ageing of the population. Labour force participation rates are lower than average for older age groups. The labour force participation rate is projected to fall to 72.5 per cent in 2006.

### Persistent moderate wage growth

After many years of high wage growth, this year's interim settlement resulted in moderate pay increases across the board. In the central and local government sector, no pay increases were awarded, but a considerable carry-over from last year, in addition to the pay increases for the local government sector agreed in the 2002 settlement, imply that wage growth for public employees will be in line with that of other groups. The moderation in wage growth reflects the gradual weakening of labour market conditions over recent years and the profitability problems in the Norwegian manufacturing sector. As usual, income policy cooper-

ation has strengthened in pace with the rise in unemployment so that the deterioration in profitability in the manufacturing sector has contributed to lower wage growth also in other sectors of the economy.

Pay increases in the manufacturing sector are expected to make a modest contribution of about 0.5 percentage point to annual wage growth this year. With a relatively sizeable carry-over from last year, wage growth is nevertheless put at a good 4 per cent from 2002 to 2003. This picture is confirmed by Statistics Norway's wage statistics. The statistics include developments in monthly earnings for full-time employees including bonuses, commissions and non-negotiated increases, but do not include overtime pay. According to the wage statistics, monthly earnings for full-time employees in the manufacturing sector rose by 4.2 per cent between the third quarter of 2002 and the third quarter of this year. At the same time last year, annual wage growth was 6.4 per cent, and in the second quarter wages were 5.4 per cent higher than in the second quarter of 2002. Wage growth in the manufacturing sector has thus fallen markedly so far this year.

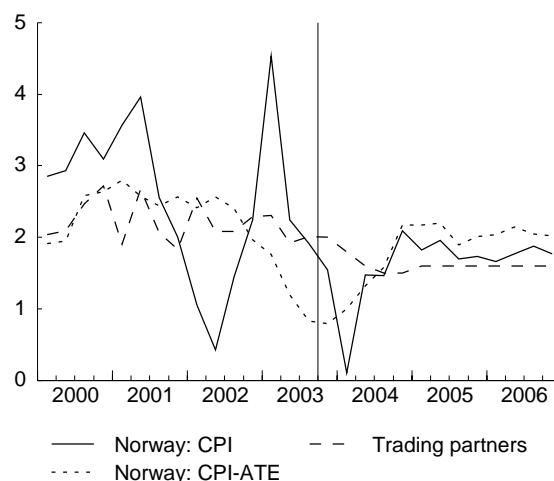
The wage statistics also show a clear decline in wage growth in other industries. In the construction industry, wages rose by only 2.9 per cent from the third quarter of 2002 to the third quarter of 2003, down from an annual wage growth of 5.2 per cent in the second quarter. Wage growth has also moderated in the distribution sector and the business services industry. Annual wage growth for full-time employees in the banking and insurance industry is estimated to rise by 4.6 per cent between 2002 and 2003, down from 5.8 per cent in the preceding year. In addition, the wage statistics show a decline in overtime pay in the financial services industry and in property management and business services industry of 10.3 and 17.3 per cent, respectively. It would appear that overtime pay has also declined in other industries, but the wage statistics only include overtime pay for employees in these industries.

The wage statistics indicate that wage growth in many service industries appears to have fallen to a level that is well below that projected earlier and below the level implied by the negotiated pay increases in addition to normal wage drift. The reason seems to be that wage drift in these industries is very low because of a sharp decline in overtime pay, bonuses and the like. All in all, we now project average growth in wages per normal man-year at 4.2 per cent between 2002 and 2003.

Small pay increases in all industries, combined with moderate wage drift in the private service sector, will result in an overall low carry-over into 2004. The contribution to wage growth is estimated to be well below 1 percentage point in 2004. Normal wage drift and projected average growth in wages per normal man-year of 4.2 per cent in 2004 are based on the

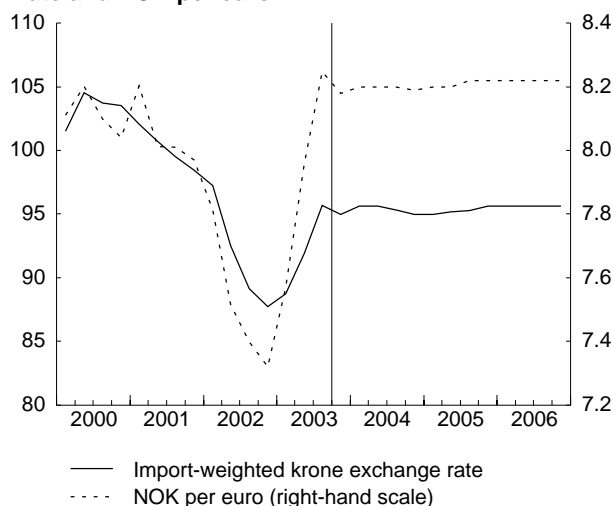
### Consumer price indices

Percentage growth from the same quarter previous year



Sources: Statistics Norway and Norges Bank.

### Development in import-weighted krone exchange rate and NOK per euro



Source: Norges Bank.

assumption of average pay increases of almost 4 per cent in the main settlement in 2004. Because the pay increases take effect several months into the year and because wage drift in service industries is likely to normalise next year, the carry-over into 2005 will be relatively high. With relatively moderate increases in the interim settlement in 2005, wage growth is also projected to be moderate in 2005 at 4.1 per cent.

In 2006, average growth in wages per normal man-year is also projected at 4.1 per cent. Owing to the considerable carry-over into years with interim negotiations and a moderate carry-over into years with main settlements, wage growth is assumed to be virtually unchanged throughout the projection period 2003-2006. Despite the economic upswing, wage growth will not edge up in the years ahead. This is because wage growth reacts with a considerable lag to changes in the economy. Therefore, wage growth is a suitable gauge of pressure tendencies in the economy, but

### What is required to achieve the inflation target?

Norges Bank's operational objective is an inflation rate of 2.5 per cent. The most important instrument Norges Bank has to achieve the target is the Bank's key rates. Norges Bank has emphasized that since it takes some time for the effects of a change in interest rates to feed through, two years is a «reasonable time horizon» for achieving the inflation target.

In our baseline scenario we have assumed a constant interest rate differential between Norway and other countries and a krone exchange rate that is weaker than the current level. On the basis of these assumptions, our projections show that inflation, measured by the CPI-ATE, will be 2.1 per cent in 2006, i.e. below the inflation target of Norges Bank.

What interest rate should Norges Bank set for achieving the inflation target of 2.5 per cent towards the end of 2006? We have carried out shift calculations in which Norwegian interest rates are reduced by 0.5 percentage point in the first quarter of 2004 and held constant thereafter.

We assume that the exchange rate will react to this change in interest rates in accordance with our model with modified purchasing power parity. In this model, a reduction in interest rates will result in a weaker exchange rate in the short term, while the exchange rate in the long term is determined by relative inflation between Norway and among our trading partners (see further description in *Economic Survey 3/2003*). With an interest rate that is 0.5 percentage point lower than the current level, the krone exchange rate will depreciate by 2.6 per cent in the period to 2006 compared with the baseline scenario.

Lower interest rates have several effects. Consumption growth rises from 4.4 to 4.9 per cent in 2005 and from 4.3 to 4.9 per cent in 2006. Moreover, a weaker krone results in a slight increase in traditional goods exports. In 2005, export growth edges up from 3.4 to 3.6 per cent. GDP growth rises by 0.4 percentage point in 2005 and 0.3 percentage point in 2006. The unemployment rate declines by 0.2 percentage point to 3.7 per cent in 2006. This brings wage growth up from 4.1 to 4.4 per cent in 2006. The weaker krone also results in higher import prices. The last factor in particular makes a considerable contribution to Norwegian inflation. The overall effect is that inflation, measured by the CPI-ATE, reaches 2.5 per cent in the second quarter of 2006, and remains at the inflation target through 2006.

Should then Norges Bank reduce its interest rates in 2004 in order to achieve the inflation target? As discussed elsewhere in this report, the low level of inflation in our baseline scenario is due in part to low imported price inflation and in part to low wage growth as a result of low profitability and high unemployment. A lower interest rate will also result in higher credit growth and have an effect on asset prices. For example, our simulation indicates that with a 0.5 percentage point lower interest rate compared with the current level, the saving ratio will fall from 3.7 to 2.6 per cent in 2006, while house price inflation will rise from 7.6 per cent to 9.7 per cent. Our calculations also show that households' net financial assets will fall by 3.9 per cent at the end of 2006 compared with the baseline scenario, and that investments in financial assets will fall as a share of income. An increased risk of financial imbalances in the private sector may be the cost of holding up Norway's price inflation.

largely reflects the activity level in earlier years (see ES 4/2001). In the same way that solid profitability in manufacturing industry and the decline in unemployment through the previous expansion resulted in high wage growth up to and including 2002, low profitability and high unemployment will restrain wage growth in the period ahead.

### Continued low inflation

After falling for close to a year, underlying inflation has been stable over the past five months. The twelve-month rise in the consumer prices index adjusted for tax changes and excluding energy products (CPI-ATE) has remained within the interval 0.7-0.9 per cent. In October, CPI-ATE inflation was 0.8 per cent. For the year as a whole, CPI-ATE inflation is projected at 1.1 per cent, while CPI inflation is projected at 2.6 per cent partly reflecting high electricity prices.

Movements in the krone, particularly the appreciation of the krone through the first half of 2002, have been an important factor behind developments in the underlying rise in prices over the past year. According to QNR figures, prices for traditional import goods fell by as much as 9.1 per cent from second quarter of 2001 to the second quarter of 2002. The annualised, quarterly fall in import prices has since moderated, and in the third quarter of 2003 this trend was reversed to an increase of 2.1 per cent. Adjusted for normal seasonal variations, import prices rose by 1.5 per cent between the second and third quarter. However, there is a considerable lag before changes in import prices feed fully through to retail prices. It took time before consumers could fully benefit from the price effects of the strong krone in 2002, and it takes time before they will see the full effects of a weaker krone. In May 2002, the CPI's price index for imported consumer goods for households showed a decline of only 0.9 per cent on the same month one year earlier. The decline in prices for these goods continued at a faster pace up to June this year, when the rate of decline was 4.5 per cent, slowing to 4.2 per cent in October.

With a krone value at today's level or weaker, the negative price impulses from imported consumer goods will steadily weaken and gradually reverse. As the effects of the krone depreciation fade, low international inflation and a persistent shift in imports towards low-cost countries will have a renewed dampening impact on the rise in prices for imported consumer goods. Overall externally generated inflationary impulses are not confined to imported consumer goods. A larger or smaller share of inputs is directly or indirectly imported in all industries. Import price developments will thus influence price developments for all consumer groups, but for many groups other factors will dominate developments.

Developments in electricity prices have been behind the pronounced movements in the twelve-month rise in

the CPI in recent years. In January 2003, electricity prices for households, including taxes and grid rent, were as much as 82.5 per cent higher than twelve months earlier. Through the first six months, electricity prices fell sharply, and in July electricity prices were only 20.6 per cent higher than in the same month last year. In August and September, electricity prices rose again, followed by a renewed decline in October. Utility companies have since announced price increases. Annualised, the electricity price index in the CPI is estimated to be about 36 per cent higher than in 2002. Electricity prices for 2004 to 2006 are estimated based

on forward prices at the beginning of December. It appears that electricity prices for households will continue to rise into next year. Compared with prices in 2003, it now seems that prices will be markedly lower in the first quarter, but higher in the second quarter. As an annual average, it would appear that electricity prices will fall by 5-6 per cent in both 2004 and 2005 and remain virtually unchanged from 2005 to 2006. The uncertainty surrounding the electricity price projections for 2004-2006 is substantial. Should weather conditions prove to be considerably milder or precipitation levels higher than normal, electricity prices may be

### Is China making it difficult to achieve the inflation target?

The low level of inflation in the Norwegian economy is due to several factors. First, unemployment has risen in recent years and the after-effects of this will influence wage determination for some time ahead even though unemployment will decline moderately. Second, Norwegian manufacturing has recorded deteriorating competitiveness over several years, and weak profitability in internationally exposed enterprises will exert pressures on wage growth. Moreover, the effective krone exchange rate has appreciated markedly due to the depreciation of the US dollar and affiliated currencies. And, finally, external inflationary impulses have been limited, partly as a result of the global downturn and partly as a result of strong competition due to increased economic globalization.

Some of these factors are transitory and in the short term will probably contribute to pushing up inflation in the period ahead. This primarily relates to the after-effects of the depreciation of the krone through 2003, and the assumption of a sharper rise in prices for industrial raw materials as a result of the global recovery that is now under way. The other factors will make more long-lasting contributions. The model we use in our forecasting work will capture the direct effects of continued high unemployment and weak profitability. The effects of globalization, on the other hand, must be based on estimates outside the model, and are also more difficult to quantify.

Globalization entails increasing competition from low-cost countries, and includes product, labour and capital markets. The deregulation of capital markets has taken place for more than 30 years but only gained momentum at the beginning of the 1990s. The shift of international goods production to low-cost countries is a long process, but one that has probably gathered momentum as a result of the inclusion of China – with a little more than 1/5 of the world's population – in the World Trade Organization, WTO, in December 2001. India appears to play a similar role in the production of services. The globalization of the labour market is probably more limited, but a high inflow of labour was undoubtedly an important factor when the US experienced both strong economic growth and subdued inflation in the 1990s. With the enlargement of the EU in May next year, Norway may, through the EEA Agreement, gradually experience a similar inflow of labour.

This analysis will be confined to examining potential consequences of China's full participation in international trade, based on Norwegian data. From 1998 to 2001, China's share

of Norwegian imports rose steadily from 0.5 per cent to a good 3 per cent. If we look at traditional goods (i.e. excluding ships and platforms), China's share of Norwegian imports was 3.1 per cent in 2001 and 3.6 per cent in 2002. In January-October 2003, the share increased to 4.4 per cent and may easily reach 4.5 per cent for the year as a whole. This means that through each of the past two years the share has risen by 0.9 percentage point per year, compared with a steady increase of 0.1 percentage point through each of the previous 13 years. In other words, a trend break appears to have occurred.

The change as from 2002 must be seen in connection with China's membership in the WTO on 11 December 2001. Membership has resulted in a strong expansion of China's export industries, and it is likely that China's share of Norwegian imports will continue to increase markedly for several years ahead as China's range of goods is expanded further. If, as an experiment, we assume that prices for Chinese products are half the level of prices for products they directly or indirectly displace, and also assume that the import share for Chinese goods gradually rises by 0.9 percentage point, the shift to Chinese goods will contribute to reducing import prices in Norway by 0.5 per cent.

It must be emphasised that the example is stylized. First, some of the improved competitiveness is due to the pegging of the Chinese yuan to the US dollar. If the Chinese yuan were to appreciate considerably, some of the price effects would disappear. Second, Chinese products will to some extent displace products from what was previously looked upon as low-cost countries. This will also limit the price effects. On the other hand, the effect of China may have long-term consequences. A natural response from earlier low-cost countries in e.g. South-east Asia will be to shift production to products that are today supplied by industrial countries, i.e. the low level of Chinese prices may gradually have consequences for «all» products imported by Norway.

Indirect effects via prices for other countries' imports come in addition.<sup>1</sup> Lower imported price inflation among our traditional trading partners may result in lower import prices for Norway also for direct imports from these countries. With a full feed-through from Chinese import prices to our trading partners' export prices, the overall contribution will be to push down Norway's imported price inflation by 0.9 percentage point. If the feed-through to other countries' export prices is only half this level, the overall contribution will be 0.7.<sup>2</sup>

<sup>1</sup> Strictly speaking, this will not come fully in addition since lower prices for non-Chinese goods reduce the contribution of shifting from non-Chinese to Chinese goods.

<sup>2</sup> Note that we can also argue that the feed-through will be substantially stronger as a result of attempts to counter the increased Chinese response. If the supply of goods from China had been infinitely elastic and comprised all goods, prices throughout the world would fall to the Chinese level!



... cont.

On this basis, we have calculated the effects for the years 2004-2010 of a 0.7 percentage point slower rise (on an annual basis) in Norwegian import prices. There is reason to assume that pressures for lower prices will be seen for processed imported goods and not for industrial raw materials (metals, paper and pulp, industrial chemicals, refined products, oil and gas, electricity).<sup>3</sup> If the overall contribution to Norwegian import prices is to be 0.7 per cent, the rise in prices for consumer goods and other processed products must be reduced by a little less than one percentage point.

The effects on selected macroeconomic variables are shown in the table. In the calculations, interest rates and the exchange rate are kept unchanged. The table shows that if the fall in import prices is of the magnitude shown, the rise in Norwegian consumer prices will slow by between 0.2 and 0.4 percentage point in relation to the baseline scenario. Increased competition results in lower export growth and lower wage growth, but note that Norwegian consumption actually increases through the period. The return on capital in Norway will also rise inasmuch as the real interest rate increases (nominal interest rates are held constant while inflation falls).

It is important to note that the effect here comes through a shift in trade weights between our trading partners. By shifting from «high-cost countries» to «low-cost countries» we achieve a fall in import prices. But this effect will only be «temporary». Sooner or later the import shares from low-cost countries will stabilize. And over time it is unlikely that the rise in prices for imports from China will deviate markedly from what we have seen for other countries. However, in the actual transitional phase, while trade from low-cost countries is being phased in, the price impulses, as our simple example shows, may be considerable.

What consequences will this development in import prices have for the possibility of achieving the inflation target? In the period

<sup>3</sup> This is an indication that Norway will benefit from China's participation in world trade because they supplement our resources: they have ample labour, we are capital intensive and have abundant raw materials.

#### Effects of 0.7 percentage point lower rise in prices for traditional goods imports

Deviation from baseline scenario	Deviation in annual rise		Deviation in level	
	2004	2005	2006	2010
Import prices, traditional goods	-0,7	-0,7	-0,7	-4,9
Export prices, traditional goods	-0,2	-0,3	-0,4	-3,0
Consumer prices	-0,2	-0,3	-0,3	-2,4
Wages	-0,1	-0,2	-0,2	-1,8
Household real disposable income	0,1	0,2	0,1	0,8
Private consumption	0,0	-0,1	0,0	0,3
Exports, traditional goods	-0,2	-0,1	-0,1	-0,8
Manufacturing output	-0,3	-0,2	-0,3	-2,1
Mainland GDP	-0,1	-0,1	-0,1	-0,3
Unemployment rate (level)	0,0	0,1	0,1	0,1

1996-2001, the average rise in prices for traditional goods imports was 0.4 per cent. In 2005-2006 (after the effect of a weaker krone has generally unwound), our estimate in the baseline scenario is 0 per cent, but this is influenced by a projected cyclical decline in prices for industrial raw materials. One may then ask whether our estimates have sufficiently taken into account the contribution of rising imports from China. There is naturally considerable uncertainty surrounding this. However, it is not unreasonable to assume that the risk associated with import prices is on the downside of that assumed in the baseline scenario. And the baseline scenario implies a rise in the CPI-ATE of 2.1 per cent in 2006, i.e. already below the current inflation target.

The calculations thereby underscore the problems that monetary policy appears to be facing in coming years in achieving the inflation target without a noticeable reduction in interest rates and subsequent depreciation of the krone exchange rate. For a period, low import prices may make it difficult to achieve an inflation rate of 2.5 per cent in Norway.

markedly lower than today's forward prices would imply. Abnormally cold temperatures and low precipitation levels will lead to higher prices.

According to our calculations, underlying inflation will be fairly low in the years ahead. Labour costs are projected to rise by a little more than 4 per cent, and with productivity growth of around 2.5 per cent for the private mainland economy excluding electricity production, the cost impulses from Norwegian production should be modest. Low interest rates would imply that the rise in housing rents will also be moderate. Falling energy prices will not only push down overall CPI inflation, but curb underlying inflation through the attendant negative cost impulses to all industries. As mentioned, inflationary impulses from imported goods are expected to push up inflation for a period ahead. The intensity and duration of this impact will, however, largely be determined by exchange rate developments. CPI-ATE inflation is projected at 1.1 per cent in 2003, 1.5 per cent in 2004 and 2.1 per cent in both 2005 and 2006.

#### Balance of payments

Preliminary balance-of-payments figures show a current account surplus of NOK 150.3 billion from January to September of this year, i.e. a decline of NOK 3.1 billion compared with the same period one year earlier. This is primarily attributable to a decline of NOK 161.2 billion in the trade surplus in the first three quarters of 2002 to NOK 158.3 billion this year. The deficit on the interest and transfers balance was about NOK 8 billion in this period in both years.

On an annual basis, the current account surplus is estimated at NOK 197.2 billion in 2003, i.e. a decrease of a good NOK 3 billion compared with 2002. Deteriorating terms of trade, a loss of market shares and cyclically-determined high Norwegian imports are behind a marked weakening of the current account in the years ahead. The drop in oil prices in NOK contributes to reducing the surplus on the trade balance and the current account balance. The current account surplus is estimated at NOK 163.5 billion in 2005 and 155.5 billion in 2006.



**National accounts: Final expenditure and gross domestic product**

At fixed 2000-prices. Million kroner

	Unadjusted		Seasonally adjusted						
	2001	2002	02.1	02.2	02.3	02.4	03.1	03.2	03.3
Final consumption exp. of housh. and NPISHs .....	641 829	664 700	164 164	165 268	166 472	168 663	168 650	170 599	172 232
Household final consumption expenditure .....	615 225	638 102	157 573	158 672	159 918	161 791	161 668	163 550	165 102
Goods .....	342 546	356 706	88 478	88 747	88 736	90 696	90 083	92 275	93 279
Services .....	263 866	270 251	67 044	67 180	67 853	68 396	67 942	68 218	68 558
Direct purchases abroad by resident househ. ....	27 131	28 901	6 643	7 302	7 548	7 167	7 851	7 499	7 662
Direct purchases by non-residents .....	-18 317	-17 755	-4 593	-4 557	-4 218	-4 468	-4 209	-4 442	-4 396
Final consumption exp. of NPISHs .....	26 605	26 598	6 592	6 595	6 554	6 872	6 983	7 049	7 130
Final consump. exp. of general government .....	288 592	297 914	75 448	72 971	74 890	74 666	75 117	75 915	76 017
Final consump. exp. of central government .....	115 101	161 052	40 596	39 700	40 396	40 386	41 036	41 522	41 774
Central government, civilian .....	88 521	133 445	33 705	32 767	33 519	33 481	34 054	34 489	34 747
Central government, defence .....	26 579	27 606	6 891	6 933	6 877	6 904	6 982	7 034	7 027
Final consump. exp. of local government .....	173 491	136 862	34 852	33 271	34 493	34 280	34 081	34 393	34 243
Gross fixed capital formation .....	261 191	251 728	60 976	65 777	60 187	64 843	63 481	61 311	61 511
Extraction and transport via pipelines .....	54 837	52 312	13 160	12 610	12 884	13 654	14 546	15 426	16 092
Service activities incidental to extraction .....	-797	5 427	69	4 256	-11	1 113	517	-241	-302
Ocean transport .....	10 886	6 663	887	1 485	1 330	2 961	3 155	1 011	1 038
Mainland Norway .....	196 265	187 326	46 860	47 427	45 983	47 116	45 262	45 115	44 683
Mainland Norway ex. general government .....	156 189	147 269	36 867	37 059	36 065	37 229	34 880	33 974	32 984
Manufacturing and mining .....	21 163	22 614	5 138	5 772	5 496	6 198	4 873	5 081	4 012
Production of other goods .....	16 070	16 790	3 945	4 242	4 273	4 216	4 544	4 523	4 320
Dwellings .....	49 475	47 395	12 316	12 022	11 706	11 445	11 364	11 128	10 912
Other services .....	69 481	60 469	15 468	15 023	14 590	15 369	14 100	13 241	13 741
General government .....	40 077	40 058	9 993	10 368	9 919	9 886	10 382	11 141	11 699
Changes in stocks and stat. discrepancies .....	27 193	29 954	8 708	8 634	7 641	4 466	9 163	3 058	4 665
Gross capital formation .....	288 384	281 682	69 684	74 411	67 827	69 310	72 644	64 369	66 176
Final domestic use of goods and services .....	1 218 805	1 244 296	309 297	312 649	309 189	312 639	316 411	310 884	314 424
Final demand from Mainland Norway .....	1 126 687	1 149 940	286 473	285 665	287 345	290 445	289 029	291 629	292 931
Final demand from general government .....	328 668	337 972	85 441	83 339	84 808	84 552	85 499	87 056	87 716
Total exports .....	713 743	709 868	173 800	182 790	178 214	175 559	173 235	176 824	174 687
Traditional goods .....	222 201	225 163	57 125	55 938	57 283	54 846	54 827	57 165	57 501
Crude oil and natural gas .....	322 590	323 206	75 353	85 956	81 522	80 743	79 411	80 131	78 599
Ships and oil platforms .....	15 716	9 941	3 460	3 287	2 043	1 151	2 354	3 052	1 352
Services .....	153 236	151 558	37 861	37 610	37 366	38 818	36 643	36 476	37 234
Total use of goods and services .....	1 932 548	1 954 164	483 097	495 440	487 402	488 198	489 646	487 708	489 111
Total imports .....	435 146	442 534	107 383	113 030	109 590	111 912	113 673	112 332	110 630
Traditional goods .....	282 860	296 144	73 837	72 667	73 644	75 793	75 560	76 548	76 431
Crude oil .....	1 852	1 021	294	330	324	83	730	148	47
Ships and oil platforms .....	14 365	11 171	766	6 615	1 538	2 252	3 897	2 727	1 041
Services .....	136 068	134 198	32 485	33 417	34 084	33 784	33 487	32 909	33 111
Gross domestic product .....	1 497 402	1 511 630	375 713	382 410	377 812	376 286	375 973	375 376	378 481
Mainland Norway (market prices) .....	1 119 859	1 134 208	284 531	283 335	284 300	282 628	282 297	283 691	285 955
Petroleum activities and ocean transport .....	377 543	377 422	91 182	99 075	93 512	93 658	93 675	91 685	92 526
Mainland Norway (basic prices) .....	971 575	982 397	246 800	245 450	246 072	244 754	244 671	245 071	247 717
Mainland Norway ex. general government .....	754 528	765 297	191 283	192 208	191 680	190 609	190 780	190 991	193 683
Manufacturing and mining .....	145 143	144 126	35 525	37 133	36 061	35 483	34 714	34 445	34 857
Production of other goods .....	100 576	102 110	25 883	25 293	25 928	24 995	24 396	24 514	24 715
Service industries .....	508 808	519 061	129 875	129 783	129 690	130 131	131 669	132 033	134 111
General government .....	217 047	217 100	55 517	53 241	54 392	54 144	53 891	54 080	54 034
Correction items .....	148 284	151 811	37 731	37 885	38 229	37 874	37 627	38 619	38 238

Source: Statistics Norway.

**National accounts: Final expenditure and gross domestic product**

At fixed 2000-prices. Percentage volume change from previous period

	Unadjusted		Seasonally adjusted						
	2001	2002	02.1	02.2	02.3	02.4	03.1	03.2	03.3
Final consumption exp. of housh. and NPISHs .....	2.6	3.6	1.4	0.7	0.7	1.3	0.0	1.2	1.0
Household final consumption expenditure .....	2.6	3.7	1.6	0.7	0.8	1.2	-0.1	1.2	0.9
Goods .....	2.8	4.1	1.9	0.3	0.0	2.2	-0.7	2.4	1.1
Services .....	2.4	2.4	0.6	0.2	1.0	0.8	-0.7	0.4	0.5
Direct purchases abroad by resident househ. ....	-1.1	6.5	3.8	9.9	3.4	-5.0	9.6	-4.5	2.2
Direct purchases by non-residents .....	-3.8	-3.1	-2.5	-0.8	-7.4	5.9	-5.8	5.5	-1.0
Final consumption exp. of NPISHs .....	1.7	0.0	-2.3	0.1	-0.6	4.8	1.6	1.0	1.1
Final consump. exp. of general government .....	2.7	3.2	3.1	-3.3	2.6	-0.3	0.6	1.1	0.1
Final consump. exp. of central government .....	2.5	39.9	39.8	-2.2	1.8	0.0	1.6	1.2	0.6
Central government, civilian .....	4.5	50.7	50.5	-2.8	2.3	-0.1	1.7	1.3	0.7
Central government, defence .....	-3.7	3.9	3.8	0.6	-0.8	0.4	1.1	0.7	-0.1
Final consump. exp. of local government .....	2.8	-21.1	-21.0	-4.5	3.7	-0.6	-0.6	0.9	-0.4
Gross fixed capital formation .....	-4.2	-3.6	-6.3	7.9	-8.5	7.7	-2.1	-3.4	0.3
Extraction and transport via pipelines .....	-1.0	-4.6	-13.0	-4.2	2.2	6.0	6.5	6.0	4.3
Service activities incidental to extraction .....	..	..	-104.3	..	-100.3	..	-53.5	-146.5	25.5
Ocean transport .....	-40.0	-38.8	-68.8	67.3	-10.4	122.7	6.5	-67.9	2.7
Mainland Norway .....	0.7	-4.6	-3.8	1.2	-3.0	2.5	-3.9	-0.3	-1.0
Mainland Norway ex. general government .....	0.1	-5.7	-3.9	0.5	-2.7	3.2	-6.3	-2.6	-2.9
Manufacturing and mining .....	13.6	6.9	-13.8	12.3	-4.8	12.8	-21.4	4.3	-21.1
Production of other goods .....	-2.2	4.5	0.7	7.5	0.7	-1.3	7.8	-0.4	-4.5
Dwellings .....	3.7	-4.2	-2.3	-2.4	-2.6	-2.2	-0.7	-2.1	-1.9
Other services .....	-5.1	-13.0	-2.6	-2.9	-2.9	5.3	-8.3	-6.1	3.8
General government .....	2.9	0.0	-3.6	3.8	-4.3	-0.3	5.0	7.3	5.0
Changes in stocks and stat. discrepancies .....	-22.4	10.2	355.8	-0.8	-11.5	-41.5	105.2	-66.6	52.5
Gross capital formation .....	-6.3	-2.3	4.0	6.8	-8.8	2.2	4.8	-11.4	2.8
Final domestic use of goods and services .....	0.4	2.1	2.4	1.1	-1.1	1.1	1.2	-1.7	1.1
Final demand from Mainland Norway .....	2.3	2.1	0.9	-0.3	0.6	1.1	-0.5	0.9	0.4
Final demand from general government .....	2.7	2.8	2.3	-2.5	1.8	-0.3	1.1	1.8	0.8
Total exports .....	4.1	-0.5	-6.0	5.2	-2.5	-1.5	-1.3	2.1	-1.2
Traditional goods .....	3.7	1.3	-0.4	-2.1	2.4	-4.3	0.0	4.3	0.6
Crude oil and natural gas .....	5.2	0.2	-9.6	14.1	-5.2	-1.0	-1.7	0.9	-1.9
Ships and oil platforms .....	51.5	-36.7	-35.2	-5.0	-37.8	-43.7	104.5	29.7	-55.7
Services .....	-1.0	-1.1	-2.4	-0.7	-0.6	3.9	-5.6	-0.5	2.1
Total use of goods and services .....	1.7	1.1	-0.8	2.6	-1.6	0.2	0.3	-0.4	0.3
Total imports .....	0.9	1.7	-1.4	5.3	-3.0	2.1	1.6	-1.2	-1.5
Traditional goods .....	2.9	4.7	4.0	-1.6	1.3	2.9	-0.3	1.3	-0.2
Crude oil .....	2.5	-44.9	-44.6	12.2	-2.1	-74.4	782.4	-79.7	-68.3
Ships and oil platforms .....	-45.4	-22.2	-81.1	763.6	-76.7	46.4	73.1	-30.0	-61.8
Services .....	6.0	-1.4	-2.5	2.9	2.0	-0.9	-0.9	-1.7	0.6
Gross domestic product .....	1.9	1.0	-0.6	1.8	-1.2	-0.4	-0.1	-0.2	0.8
Mainland Norway (market prices) .....	1.7	1.3	0.9	-0.4	0.3	-0.6	-0.1	0.5	0.8
Petroleum activities and ocean transport .....	2.7	0.0	-5.0	8.7	-5.6	0.2	0.0	-2.1	0.9
Mainland Norway (basic prices) .....	1.6	1.1	0.8	-0.5	0.3	-0.5	0.0	0.2	1.1
Mainland Norway ex. general government .....	1.8	1.4	0.6	0.5	-0.3	-0.6	0.1	0.1	1.4
Manufacturing and mining .....	0.5	-0.7	-2.5	4.5	-2.9	-1.6	-2.2	-0.8	1.2
Production of other goods .....	-3.2	1.5	2.9	-2.3	2.5	-3.6	-2.4	0.5	0.8
Service industries .....	3.2	2.0	1.0	-0.1	-0.1	0.3	1.2	0.3	1.6
General government .....	1.0	0.0	1.6	-4.1	2.2	-0.5	-0.5	0.4	-0.1
Correction items .....	2.1	2.4	1.3	0.4	0.9	-0.9	-0.7	2.6	-1.0

Source: Statistics Norway.

**National accounts: Final expenditure and gross domestic product**

Price indices. 2000=100

	Unadjusted		Seasonally adjusted						
	2001	2002	02.1	02.2	02.3	02.4	03.1	03.2	03.3
Final consumption exp. of households and NPISHs .....	102.4	103.1	102.1	102.5	103.3	104.2	105.7	104.8	105.3
Final consumption exp. of general government .....	107.3	111.6	108.6	111.1	113.2	113.0	114.4	114.3	114.9
Gross fixed capital formation .....	103.6	103.0	103.4	104.3	104.4	99.8	101.5	104.8	105.4
Mainland Norway .....	103.4	103.5	103.4	104.1	104.5	102.0	102.2	103.6	104.8
Final domestic use of goods and services .....	103.7	104.9	101.9	106.0	106.1	105.6	105.0	107.3	108.4
Final demand from Mainland Norway .....	103.8	105.3	104.0	105.0	106.0	106.1	107.4	107.1	107.7
Total exports .....	97.7	88.8	90.7	88.4	85.8	90.4	95.7	86.9	89.1
Traditional goods .....	97.1	88.7	91.3	90.3	86.2	87.2	87.7	87.4	87.3
Total use of goods and services .....	101.5	99.1	97.9	99.5	98.7	100.1	101.7	99.9	101.5
Total imports .....	100.0	93.8	96.2	94.5	92.6	92.2	92.8	93.9	96.5
Traditional goods .....	99.8	91.9	94.5	92.0	90.7	90.2	91.3	90.9	92.2
Gross domestic product .....	102.0	100.6	98.4	101.0	100.4	102.4	104.3	101.7	103.0
Mainland Norway (market prices) .....	103.8	106.4	103.4	107.3	106.6	108.1	106.7	108.8	108.4

Source: Statistics Norway.

**National accounts: Final expenditure and gross domestic product**

Price indices. Percentage volume change from previous period

	Unadjusted		Seasonally adjusted						
	2001	2002	02.1	02.2	02.3	02.4	03.1	03.2	03.3
Final consumption exp. of households and NPISHs .....	2.4	0.7	-0.3	0.4	0.8	0.9	1.5	-0.8	0.5
Final consumption exp. of general government .....	7.3	4.0	-1.0	2.3	1.8	-0.1	1.2	0.0	0.5
Gross fixed capital formation .....	3.6	-0.6	1.3	0.8	0.1	-4.4	1.7	3.2	0.6
Mainland Norway .....	3.4	0.1	0.4	0.7	0.4	-2.3	0.1	1.4	1.2
Final domestic use of goods and services .....	3.7	1.1	-2.3	4.0	0.1	-0.5	-0.6	2.2	1.0
Final demand from Mainland Norway .....	3.8	1.5	-0.4	0.9	1.0	0.1	1.2	-0.3	0.6
Total exports .....	-2.3	-9.1	0.6	-2.5	-3.0	5.4	5.9	-9.2	2.5
Traditional goods .....	-2.9	-8.7	-1.5	-1.1	-4.4	1.1	0.6	-0.4	-0.1
Total use of goods and services .....	1.5	-2.4	-1.1	1.7	-0.9	1.5	1.6	-1.8	1.6
Total imports .....	0.0	-6.2	-1.7	-1.8	-1.9	-0.4	0.7	1.1	2.8
Traditional goods .....	-0.2	-8.0	-2.2	-2.6	-1.4	-0.6	1.2	-0.5	1.5
Gross domestic product .....	1.9	-1.3	-0.9	2.7	-0.6	2.0	1.9	-2.6	1.3
Mainland Norway (market prices) .....	3.8	2.5	-1.8	3.8	-0.7	1.4	-1.3	2.0	-0.4

Source: Statistics Norway.

**Technical comments on the quarterly figures**

*Quarterly calculations:* The calculations are made on a less detailed level than the calculations for the annual national accounts, and are based on more simplified procedures.

*Base year and chain linking of the data:* In the quarterly national accounts (QNA) all volume measures are currently calculated at constant 2000 prices using weights from that year. The choice of base year influences the constant price figures and thus the annual rates of change in volume (growth rates). For the sake of comparison, all tables present growth rates with 2000 as the base year (common year of recalculation). The recalculation of prices is carried out at the sectoral level of the quarterly national accounts.