

Norwegian economy

National accounts figures for the years 1991 to 2001 have now been revised. The most important data for our economic analyses – the quarterly national accounts (QNR) – have been revised from 1999, but revised QNA figures for the years prior to 1999 are not yet available. These will be produced in the period ahead on the basis of the new revised annual figures. In the following, two aspects of the revision of the figures that have a bearing on the evaluation of cyclical developments in the Norwegian economy will be discussed. First, we show preliminary calculations of the business cycle pattern in the 1990s and up to 2004 according to this report and compare this with the projections published in *Economic Survey 1/2002*.

The main feature is that the cyclical pattern is approximately the same, but that higher growth projections for mainland GDP mean that the period of strong economic expansion, which started in the second half of the 1990s, appears to have lasted longer than estimated earlier. Second, the revision of the national accounts also entails revisions of factor inputs in industries, with the result that productivity growth in the Norwegian economy has been revised upwards. The magnitude of productivity growth is a key variable when estimating the growth potential of the economy, but it is also important when evaluating the rise in factor prices that is consistent with a given rise in aggregate prices, e.g. the rise in consumer prices. Any

Macroeconomic indicators 2000-2001

Growth from previous period unless otherwise noted. Per cent

| | | | Seasonally adjusted | | | |
|--|-------|-------|---------------------|-------|-------|-------|
| | 2000 | 2001 | 01.2 | 01.3 | 01.4 | 02.1 |
| Demand and output | | | | | | |
| Consumption in households and non-profit organizations | 3.5 | 2.5 | 1.2 | 0.8 | -0.5 | 1.2 |
| General government consumption | 1.2 | 2.0 | 0.8 | 0.8 | 0.7 | 2.0 |
| Gross fixed investment | -1.5 | -4.6 | -4.1 | -3.2 | 1.9 | -3.2 |
| - Mainland Norway | 3.4 | -0.3 | 0.1 | -4.2 | 0.3 | -0.4 |
| -Extraction and transport via pipelines | -31.6 | 7.2 | -6.1 | 14.3 | 16.1 | -17.9 |
| Final domestic demand from Mainland Norway ¹ | 2.9 | 1.8 | 0.9 | -0.1 | 0.0 | 1.1 |
| Exports | 2.9 | 4.2 | -1.1 | 3.2 | 2.6 | -5.8 |
| - Crude oil and natural gas | 6.6 | 5.2 | -4.7 | 10.6 | -1.0 | -7.7 |
| - Traditional goods | 1.7 | 4.0 | 1.0 | -4.3 | 6.6 | -2.1 |
| Imports | 3.2 | 0.0 | -0.2 | -1.8 | 2.3 | -4.1 |
| - Traditional goods | 2.6 | 4.0 | 2.8 | -3.2 | 2.7 | 2.2 |
| Gross domestic product | 2.4 | 1.4 | -0.1 | 0.9 | 0.5 | -0.3 |
| - Mainland Norway | 1.9 | 1.2 | -0.3 | 0.3 | 0.8 | 1.1 |
| Labour market² | | | | | | |
| Man-hours worked | -1.1 | -1.0 | 0.8 | -0.7 | -0.8 | -1.3 |
| Employed persons | 0.4 | 0.5 | 0.2 | -0.3 | 0.7 | 0.0 |
| Labour force | 0.8 | 0.6 | 0.3 | -0.1 | 0.9 | -0.1 |
| Unemployment rate, level ³ | 3.1 | 3.3 | 3.4 | 3.6 | 3.8 | 3.7 |
| Prices | | | | | | |
| Consumer price index (CPI) ⁴ | 3.1 | 3.0 | 4.0 | 2.6 | 2.0 | 1.1 |
| CPI adjusted for tax changes and excluding energy products (CPI-A28ATE) ⁴ | .. | 2.6 | 2.6 | 2.4 | 2.6 | 2.4 |
| Export prices, traditional goods | 13.5 | -3.1 | -1.2 | -3.6 | -2.7 | -1.8 |
| Import prices, traditional goods | 4.8 | 0.4 | -2.6 | -3.3 | -1.5 | -2.4 |
| Balance of payment | | | | | | |
| Current balance, bill. NOK | 219.6 | 233.4 | 57.0 | 62.9 | 50.3 | 59.1 |
| Memorandum items (Unadjusted, level) | | | | | | |
| Money market rate (3 month NIBOR) | 6.8 | 7.2 | 7.5 | 7.3 | 6.8 | 6.5 |
| Lending rate, banks | 8.1 | 8.8 | 8.9 | 8.9 | 8.6 | 8.3 |
| Crude oil price NOK ⁵ | 252.0 | 220.1 | 250.1 | 228.3 | 173.0 | 186.1 |
| Importweighted krone exchange rate, 44 countries, 1995=100 | 103.3 | 100.2 | 100.7 | 99.5 | 98.5 | 97.2 |
| NOK per ECU/EUR | 8.1 | 8.1 | 8.0 | 8.0 | 8.0 | 7.8 |

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

² Figures for 2000 and 2001 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.

³ According to Statistics Norway's labour force survey (LFS).

⁴ Percentage change from the same period the previous year.

⁵ Average spot price, Brent Blend.

Sources: Statistics Norway and Norges Bank.

variations in productivity growth by industry also play a role in this evaluation.

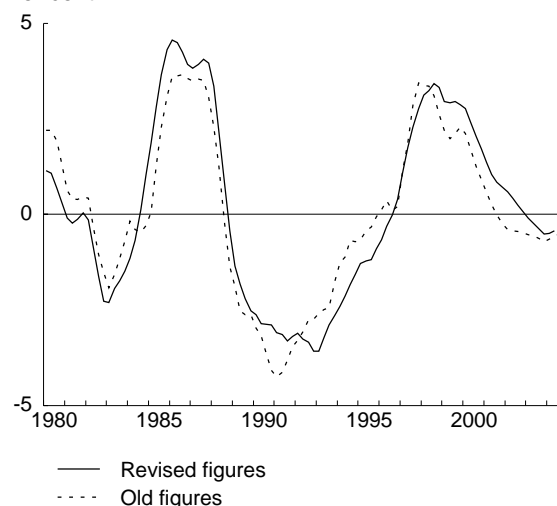
Cyclical developments

Revised QNA figures back to 1990 will be available at the beginning of next year. In order to provide a preliminary assessment of how the revision of the annual figures has influenced traditional cyclical indicators, we have adjusted the previously published QNA figures for mainland GDP from the years prior to 1999 so that they are in accord with the new annual series, while retaining the old quarterly pattern. We have then calculated the usual cyclical deviations (deviation from trend) in the series and compared them with the series that was published in *Economic Survey* 1/2002 which were based on the old national accounts figures. The chart shows that these two series are generally congruent, albeit with deviations that are worth noting. The upward revision of GDP growth in the 1990s has resulted in an extended period of strong expansion. The new series show that the Norwegian economy was still recording strong expansion at the end of last year, while the old figures showed that the period of strong expansion was over. The new figures compared with our forecasts for developments ahead show that 2002 may be a year when the level of activity is slightly above trend even though it is reduced to trend level through 2002.

New information about productivity developments

Considerable attention is focused on developments in productivity. The table shows changes in gross output at constant prices per man-hour in the 1990s for some main groups of industries in the mainland economy. Changes according to the old national accounts fig-

Output gap
Per cent



Source: Statistics Norway.

ures are compared with the figures following the revision of the national accounts. The figures for 2000 and 2001 are preliminary. The calculations show that the new national accounts figures result in higher productivity growth for mainland enterprises and that this primarily reflects higher estimates for productivity in private services. The higher estimates here apply to both labour productivity and total factor productivity. The latter has generally been revised up by 0.4 per cent per year for the period 1990-2001 for mainland enterprises. It is otherwise worth noting that growth in factor productivity in manufacturing industry was very low in both the new and revised figures and that the figures have been revised most for service industries. It is also here that the revision of the national accounts has been greatest.

Decomposition of annual percentage change in labour productivity (gross output per man-hour)
1991-1995, 1996-2000 and 2001

| | 1991-1995 | | | 1996-2000 | | | 2001 | | |
|-------------------------------|---------------------|---|---------------------------|---------------------|---|---------------------------|---------------------|---|---------------------------|
| | Labour productivity | Contribution from change in capital and material inputs | Total factor productivity | Labour productivity | Contribution from change in capital and material inputs | Total factor productivity | Labour productivity | Contribution from change in capital and material inputs | Total factor productivity |
| Mainland enterprises | | | | | | | | | |
| Old NA figures | 3.1 | 2.0 | 1.1 | 2.2 | 1.6 | 0.7 | 2.2 | 1.3 | 0.9 |
| New NA figures | 4.0 | 2.5 | 1.5 | 4.1 | 3.0 | 1.1 | 2.8 | 1.5 | 1.3 |
| Manufacturing total | | | | | | | | | |
| Old NA figures | 2.2 | 1.8 | 0.4 | 2.0 | 1.9 | 0.1 | 1.1 | 0.9 | 0.1 |
| New NA figures | 2.4 | 2.1 | 0.3 | 3.4 | 3.3 | 0.1 | 0.4 | 0.2 | 0.2 |
| Other goods production | | | | | | | | | |
| Old NA figures | 5.3 | 3.0 | 2.3 | 2.3 | 1.5 | 0.9 | 3.0 | 1.6 | 1.4 |
| New NA figures | 5.6 | 2.6 | 2.9 | 2.5 | 2.1 | 0.4 | 0.8 | 1.1 | -0.3 |
| Private services | | | | | | | | | |
| Old NA figures | 2.6 | 1.8 | 0.8 | 2.8 | 1.9 | 0.9 | 3.3 | 2.1 | 1.2 |
| New NA figures | 4.4 | 2.6 | 1.8 | 5.4 | 3.7 | 1.8 | 4.8 | 2.6 | 2.2 |

Source: Statistics Norway.

These revisions are interesting for several reasons. In this connection we will confine our comments to pointing out that according to the Scandinavian inflation model differences in productivity growth between internationally exposed and sheltered industries play an important role in what is often referred to as the structural component of inflation. The revision of the national accounts figures indicates that productivity growth has increased in what has traditionally been described as sheltered industries, while growth in goods-producing industries has shown little change. In isolation, this means that the structural component of inflation is now lower than estimated earlier. If these growth rates are also representative for the years ahead, it implies that economic growth may be higher than assumed earlier without necessarily being inconsistent with a given target for price inflation.

Fiscal policy

In line with the Government's proposed Revised National Budget (RNB), the Storting has planned on a fiscal policy that follows the new fiscal policy guideline with regard to the use of the real return on the Petroleum Fund. Higher tax receipts in 2001, however, have increased the scope for government budget expenditure without breaching the guideline. However, the question may be raised as to what extent the cyclical adjustment of tax revenues is sufficient given developments in the Norwegian economy. Underlying growth in government budget spending in 2002 was estimated at 2.5 per cent in the RNB. The Storting's deliberations have not changed this estimate substantially, which means that the growth rate is now noticeably higher than estimated in the supplementary proposition last year. As a result of the Storting's resolutions, our projection for growth in general government consumption in 2002 is slightly higher than the estimate in the RNB. The fiscal policy guideline, however, only refers to the structural deficit over time. Fiscal policy shall continue to be conducted with a view to stabilizing cyclical movements. To the extent one is of the view that the level of activity in the Norwegian economy is still too high, the revised orientation of fiscal policy then means that a greater burden is imposed on monetary policy for stabilization purposes.

Fiscal policy's scope for manoeuvre in 2003 will primarily be determined by developments in the Norwegian economy, but also by the projected size of the Petroleum Fund at the end of 2002. It is actually the size of the Fund that determines the expected return in 2003 and hence the structural budget deficit that can be planned according to the guideline. At this stage there is considerable uncertainty with regard to the size of the Petroleum Fund six months ahead. This is not only because current investment in the Fund depends on developments in the crude oil price, which in itself is an uncertain and volatile variable. In

addition, the krone exchange rate is very volatile. Even though it has been possible to stabilize the inflation rate to a large extent so far (adjusted for energy products and taxes), the krone exchange rate is still very unstable.

In the RNB for 2002, the Government estimated that the Petroleum Fund would amount to NOK 776 billion at the end of 2002, while the estimate was NOK 838 billion in the supplementary proposition in December last year. The estimate in the RNB was based on exchange rates and equity prices prevailing at the end of the first quarter of 2002. Since then, the Norwegian krone has appreciated considerably and equity prices have fallen. The strengthening of the krone exchange rate over the last two months alone will reduce the value of the Petroleum fund by about NOK 50 billion, and thereby fiscal scope for manoeuvre by NOK 2 billion in 2003 if the krone remains at its current level until the end of the year. The fall in global equity prices may further reduce the Fund's value at the end of 2002, but this is difficult to forecast and equity prices may also change substantially through the remainder of 2002. A monetary policy that results in a krone appreciation via higher interest rates or expectations concerning this will therefore, through the formulation of the fiscal policy guideline, also result in a tightening of fiscal policy if the guideline is followed slavishly. Viewed in this way, the change in policy rules in spring 2001 entailed a link between monetary and fiscal policy that did not apply earlier.

Given fiscal policy commitments for 2003 that have already been approved – particularly the removal of the investment tax and higher labour costs in the public sector as a result of the wage settlement – there is probably little scope for further spending increases or tax reductions financed by the return on the Petroleum Fund. Moreover, a majority in the Storting has recently concluded an agreement concerning an expansion of day-care coverage and higher government support for operations in order to reduce day-care rates. The effect on revenues can be roughly estimated at NOK 1 billion in 2003. We have otherwise assumed unchanged real indirect tax rates in 2003, but lower day-care rates will in isolation reduce CPI inflation by 0.1 percentage point in 2003.

The fiscal programme for 2004 has not been clarified to any extent, but the agreement on expanded day-care coverage and further rate reductions may have a revenue effect of about NOK 3 billion and a direct impact on CPI inflation of –0.4 percentage point in 2004. In the RNB for 2002 it is estimated that the structural budget deficit may rise by NOK 7 billion in 2004. There may be scope for an additional use of the return on the Petroleum Fund, but the implementation of already approved reforms implies that in reality a large portion of the expected higher financial return has already been used.

Effects of a stronger Norwegian krone with unchanged interest rates

Between May 2000 and the beginning of June 2002, the Norwegian krone has appreciated gradually by altogether 14 per cent, either measured by the trade-weighted exchange rate index or by the import-weighted krone exchange rate. Just since the beginning of this year the krone has appreciated by almost 9 per cent. Even though we assume that the appreciation has been exaggerated, this raises the question of how an appreciation of the krone affects the Norwegian economy. For pedagogical reasons, we will discuss the case in which the entire appreciation takes place instantaneously instead of gradually as has actually been the case. It will then be easier to follow the dynamics of the effects over a longer period.

In the calculations, the krone is assumed to appreciate against all other currencies by 10 per cent. Interest rates are kept unchanged. It is assumed that the stronger krone immediately results in lower prices measured in krone terms for products whose prices are determined by the international price level, such as the oil price. In the model a one-off appreciation of 10 per cent feeds through to import prices in the course of the first year so that the impact is complete as early as the second year. A reservation must be made, however, as to how quickly the appreciation affects different prices inasmuch as changes in exchange rates in part of the time period used to quantify the model often consisted of explicit, announced devaluations of the krone. It may be the case that such announced changes in the exchange rate have a swifter impact on prices measured in krone terms than a more gradual and purely market-driven appreciation.

Because prices for Norwegian enterprises' competing products decline, export prices also fall, but the impact takes longer here. The partial impact on exposed enterprises' prices means that they lose market shares to foreign competitors, which reduces exports and deliveries to the domestic market. The result is lower production and employment. The calculations show that the number employed in manufacturing industry is quickly reduced by a good 10 000.

Domestic prices also fall (in relation to the baseline scenario) as a result of the stronger krone exchange rate and thereby reduced import prices. The effect on the CPI is 3 per cent the first year, and the effect increases gradually towards 5 per cent after three years. Lower prices push down wages, but do not prevent real wages from increasing the first year. This is followed by a fall in relation to the baseline scenario beginning with the third year. Higher real wages in the first year result in a slight increase in consumption that year.

However, the far most important contractionary effect of the appreciation on production and employment in the first few years comes through the sheltered sector of the economy. This is due to the assumption of unchanged interest rates. With lower domestic price inflation the first few years,

the real after-tax interest rate rises considerably. According to the model, this has a strong negative impact on prices for existing homes, a factor that results in an equivalent and strong decline in housing investment (in relation to the baseline scenario). A pronounced rise in unemployment has a similar effect, both for house prices and housing investment. Lower house prices also result in reduced household wealth and hence reduced private consumption. Household saving increases markedly, and this affects a number of sheltered sectors. Moreover, the loss of market shares for internationally exposed enterprises reduces production in sheltered industries, through lower material inputs. All in all, employment in industries, excluding manufacturing, is reduced by 25 000 after three years.

The result is that even though manufacturing activity is affected the most severely (lower housing investment will also have an impact on the building materials industry) and for the longest time, other industries will also be noticeably affected by the appreciation the first few years. Mainland GDP falls by 2¼ per cent (in relation to the level in the baseline scenario) over the first two years and employment is reduced by 1½ per cent.

Unemployment rises by a little more than half a percentage point as an average over the first three years and the labour force contracts. However, as the effects of lower inflation on real interest rates are gradually exhausted, domestic demand again picks up. The effect on unemployment starts to be reversed as early as the third year, and the decline in real wages thereafter comes to a halt and manufacturing industry's cost competitiveness starts to stabilize.

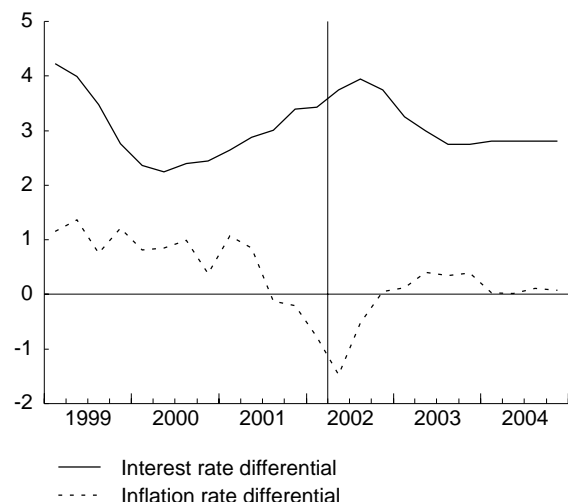
| Pct. deviation from baseline | 1 year | 2 year | 3 year |
|------------------------------|--------|--------|--------|
| Private consumption | 0.2 | -2.5 | -0.9 |
| Mainland gross investments | -1.2 | -5.3 | -5.0 |
| Housing | -2.1 | -14.6 | -13.2 |
| Enterprises | -1.2 | -3.8 | -3.8 |
| Dom. demand m. Norway | -0.1 | -2.3 | -1.3 |
| Exports trad. goods | -1.7 | -1.4 | -2.3 |
| Imports trad. goods | 0.3 | -2.5 | -1.8 |
| Mainland GDP | -0.8 | -2.3 | -1.7 |
| Manufacturing | -3.5 | -4.0 | -4.0 |
| Employment | -0.7 | -1.4 | -1.6 |
| Unemployment (pp) | 0.5 | 0.8 | 0.6 |
| Labour force | -0.2 | -0.6 | -1.0 |
| Wages | -1.9 | -4.2 | -5.5 |
| Consumer prices | -2.9 | -4.2 | -5.1 |
| Prices trad. exports | -5.2 | -8.5 | -8.0 |
| Prices trad. imports | -8.6 | -10.0 | -10.0 |
| Import-weighted exch. rate | -10.0 | -10.0 | -10.0 |
| Current account balance | -8.2 | -6.6 | -9.7 |
| House prices | -6.4 | -14.1 | -12.6 |
| Household real disp. income | 1.8 | 0.9 | 0.7 |
| Saving ratio (pp) | 1.4 | 2.9 | 1.3 |

Slightly higher interest rate and continued strong krone?

Norges Bank has left its key rate unchanged, at 6.5 per cent, since 12 December 2001. At its most recent monetary policy meeting on 22 May, the Bank indicated that with unchanged interest rates the probability that inflation (adjusted for taxes and energy prod-

ucts) two years ahead would be higher than 2.5 per cent was greater than the probability that it would be lower. Three-month money market rates have risen since the end of January and now stand at a good 7 per cent. Forward contracts in the money market (FRAs) indicate that market participants expect the money market rate to rise further in the second half

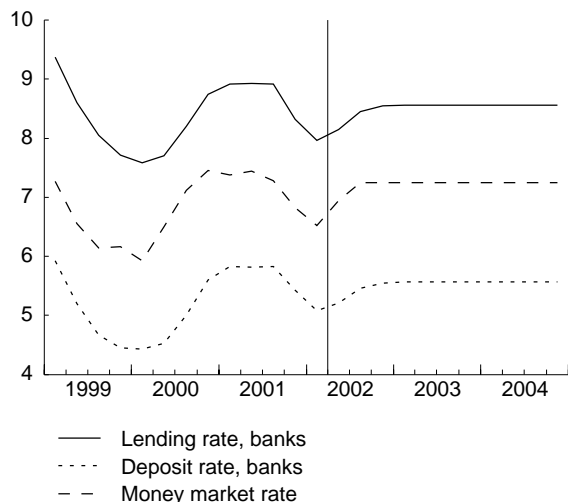
Interest rate and inflation differential between NOK, and the ECU/euro



Sources: Norges Bank and Statistics Norway.

Lending rate and deposit rate

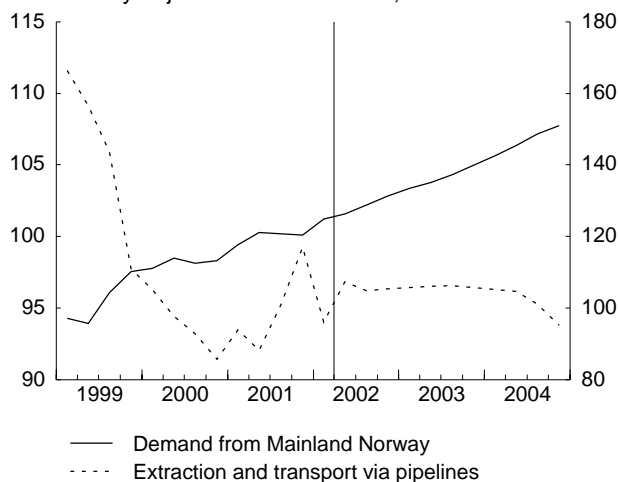
Per cent



Sources: Norges Bank.

Demand from Mainland Norway and investment in petroleum activities

Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

of 2002. The spring wage settlement and spending growth in the public sector increase the risk of rising inflation and have fuelled expectations of higher interest rates. The strengthening of the krone exchange rate has the opposite effect; lower imported price inflation and a lower level of activity in the internationally exposed sector curbs overall inflation and reduces the need for an increase in interest rates. Our projections are based on the assumption that Norges Bank will increase its key rate by 0.5 percentage point in the third quarter and leave it unchanged thereafter. This is slightly less than indicated by market expectations at the beginning of June. We assume that three-month money market rates will in the event edge up to 7.25 per cent in the third quarter of 2003 and then remain unchanged at this level through the projection period.

In line with our projections for international developments, we assume that interest rates in the EU and the US will be raised slightly in the second half of 2002 and next year. This means that the interest rate differential between Norway and other countries will narrow somewhat in the course of 2003, but will still remain at a relatively high level.

The import-weighted krone exchange rate appreciated gradually by about 6 per cent from May 2000 to September 2001. Following a "pause" in the fourth quarter of last year, the krone has appreciated by nearly 9 per cent since the beginning of the year. The krone has appreciated to a greater extent than assumed earlier. This particularly reflects changes against the euro, but the krone has also strengthened more against the US dollar and Swedish krona than we expected when *Economic Survey* was published in February. The large interest rate differential against other countries, a robust oil price, large current account surpluses and rapidly increasing foreign wealth have contributed to the appreciation of the krone. The new guidelines for fiscal and monetary policy have also boosted confidence in the Norwegian economy. We nevertheless assume that the strong appreciation of the krone is exaggerated. We therefore project that the krone will weaken to NOK 7.53 against the euro in the third quarter and then depreciate gradually to NOK 7.78 by the end of 2004.

Higher petroleum investment

As a result of the approved reduction in oil production in the first half of this year, Norway's production of oil declined in the first quarter and is expected to fall further in the second quarter. OPEC wants Norway to maintain its production cut in the second half of 2002. A technical assumption that this does not occur has been applied. Norway's production of crude oil is nevertheless projected to contract by about 2 per cent from 2001 to 2002. For 2003 and 2004, production is assumed to show a marginal increase in the order of 2-3 per cent annually, with the production of crude oil reaching its peak in 2004 and declining thereafter.

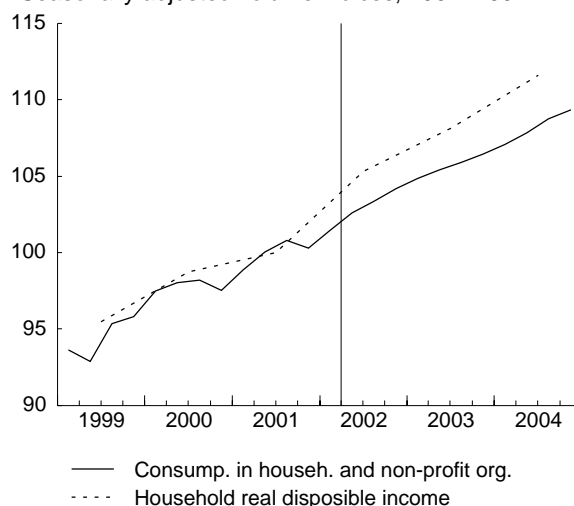
The oil price has been rising through the year, and is expected to remain at approximately the average recorded so far this year. We assume that the price edges up in the rest of the projection period. For 2002, we have assumed an oil price of about USD 23 and USD 24 from next year. This is based on the low stocks of crude oil in the US and OPEC's willingness to limit production to achieve a higher price. As a result of the strong krone that is assumed in 2002, the price will be around NOK 190 and about NOK 200 thereafter. Gas production is projected to rise by 25 per cent this year and then increase further by 6 per cent in each of the following two years.

Statistics Norway's investment intentions survey of gross investment in the petroleum sector now shows that investment in 2002 is expected to remain at approximately the same level as last year. It is particularly investment in land-based facilities and fields in operation that is now expected to show an increase. The estimates are based on the development of the Snøhvit field, even though there are still aspects of the project that are controversial and delays may take place. Investment in existing facilities is expected to edge up, while investment in field development, exploration and pipeline transport is projected to fall. The demand impetus from petroleum investment for the Norwegian economy is expected to increase somewhat as a result of higher investment in land-based facilities. In 2003, it is assumed that petroleum investment will increase by a little less than 2 per cent. Investment in land-based facilities is the main reason for the increase in total investment next year as well. The estimates for this year are approximately the same as earlier, while the estimates for 2003 have been revised down. For 2004, petroleum investment is expected to decline marginally, but experience shows that there is considerable uncertainty associated with investment projections two years ahead.

Higher consumption growth ahead – continued high saving

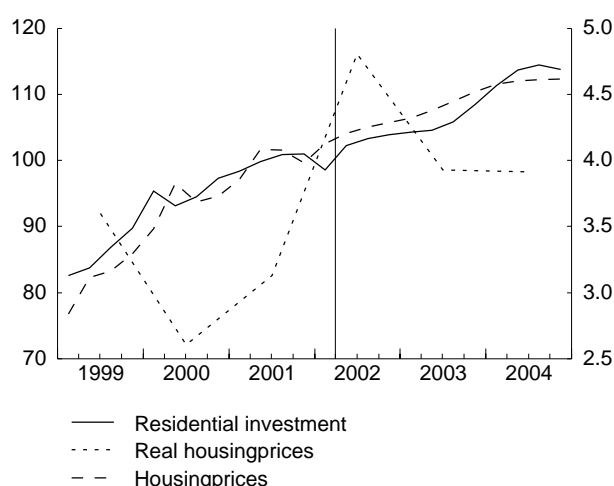
Growth in household consumption has not been revised up to any extent in 2001 compared with earlier projections, according to the national accounts. On the other hand, growth rates for the years prior to 2001 have been revised up to a greater extent, and the household saving ratio has been revised up considerably as a result of the revision of the national accounts for the years from 1990. Recent developments in consumption are not clear-cut and an early Easter in 2002 compared with the previous year makes seasonal adjustment uncertain. Following sluggish developments in the fourth quarter of 2001, consumption growth has picked up, but the strength of the upswing is uncertain. Consumption growth appears to have slowed somewhat in the spring months and car purchases, for example, show no growth at all.

Income and consumption in households
Seasonally adjusted volume indices, 2001=100



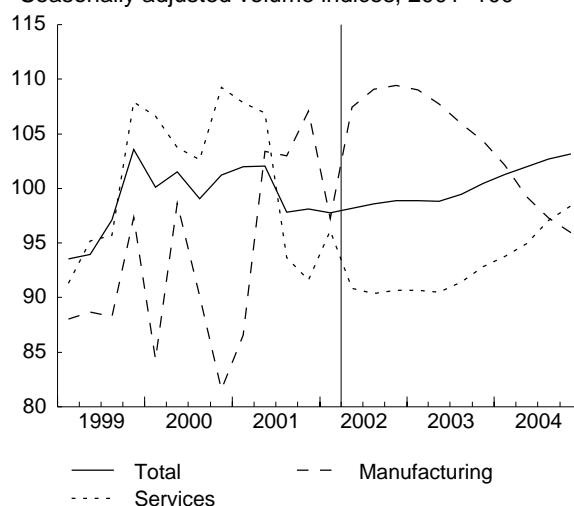
Source: Statistics Norway.

Residential investment and housingprices
Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

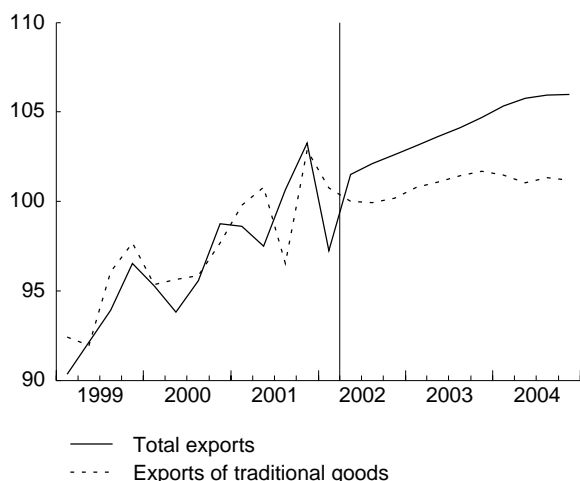
Investment, Mainland Norway
Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

Exports

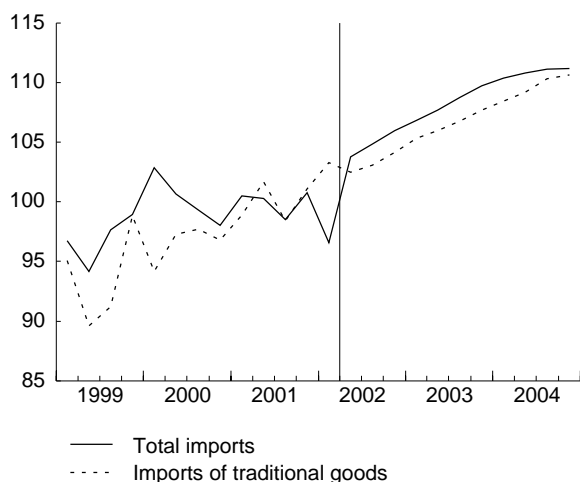
Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

Imports

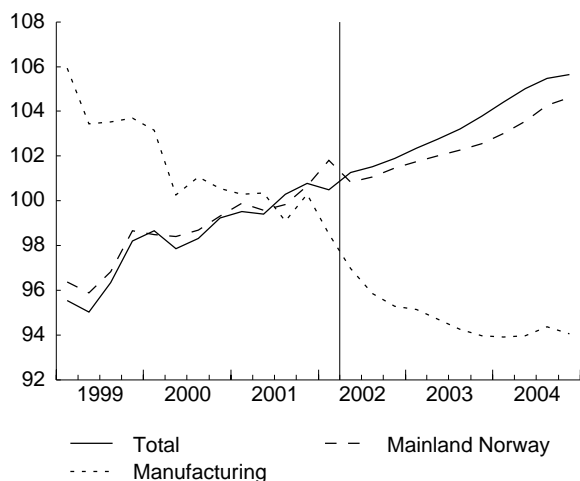
Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

Gross domestic product

Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

High real wage growth in 2002 will make a strong contribution to higher household real disposable income. The social security settlement will normally also give pensioners and other social security recipients high income growth, which means that household real disposable income may rise by a good 5 per cent this year. Based on developments so far in 2002, it is not very likely that consumption growth will be substantially higher than 3 per cent. The household saving ratio may then rise by about 2 percentage points from 2001 to 2002. High real interest rates are an important reason for the increase in the saving ratio. Another reason is that when income growth rises rapidly, the saving ratio will first increase and then decline gradually as households adjust consumption to what they perceive as permanently higher income. For the years ahead, we have in these calculations assumed high nominal interest rates that permanently contribute to maintaining a high saving ratio, but slightly higher inflation means that the real interest rate falls somewhat from the high level in 2002. This would imply that the saving ratio edges down in the period ahead. However, one factor that has the opposite effect is that rising unemployment contributes to increased uncertainty with regard to income and, in isolation, pushes up the saving ratio. All in all, we have therefore estimated that the saving ratio will remain approximately unchanged from 2002 to 2004.

Housing investment – which in terms of level has been revised up sharply in the revision of the national accounts – peaked in 2001 and has fallen slightly since the third quarter of 2001. Housing starts, however, have picked up this year after declining through the end of 2001. Starts measured by floor space, however, show a more stable trend over the past year. Major changes in housing investment in the period ahead are therefore not very likely. Prices for existing homes have continued to increase in real terms. Higher interest rates and increasing unemployment indicate that the rise will come to a halt, while strong growth in household income points to the opposite. All in all, we now project a more moderate rise in prices for existing homes than estimated earlier. This will contribute to reducing real growth in household wealth, which will curb consumption growth and, in isolation, contribute to a higher saving ratio.

Decline in mainland investment

Gross investment in the mainland economy, excluding general government, appears to have peaked at the beginning of 2001, according to revised national accounts figures. This decline was primarily due to a fall in investment in service industries. Towards the end of last year, it also appears that the investment upswing in manufacturing came to a halt, so that the projected growth from 2001 to 2002, which is in accordance with estimates from Statistics Norway's May investment intentions survey, primarily reflects the carry-over from the end of 2001. For other goods pro-

duction, investment has shown little change through recent quarters. We expect this picture to remain unchanged in the period ahead. Investment in the electricity sector is partly influenced by the postponed construction of gas-fired power stations, and in isolation this will contribute to pushing down investment in relation to our projections in the previous report.

Manufacturing investment is expected to remain at a high level in 2003 before falling in 2004, partly as a result of the completion of major plants for the production of metals. Weak production and profitability trends in manufacturing will, in isolation, push down investment. For private service industries, on the other hand, it is likely that slightly higher growth in the Norwegian economy will contribute to reversing the investment decline to a moderate upswing through 2003.

Increased market growth among trading partners, but sluggish trend for Norwegian exports

The volume of traditional merchandise exports fell on a seasonally adjusted basis from the fourth quarter of 2001 to the first quarter of 2002, but developments through last year showed considerable fluctuations. Given the sluggish trend in markets for Norwegian export goods in 2001, the growth in Norwegian exports was fairly high. Market growth is expected to pick up considerably in the period ahead as a result of international cyclical developments. As a result of the krone appreciation and high wage growth in Norway, traditional Norwegian exports are nevertheless expected to show very low growth. Deteriorating competitiveness is projected to lead to a substantial loss of market shares in international markets in the period ahead. This will contribute to curbing growth in the Norwegian economy. The uncertainty in this area is fairly considerable. The strengthening of the krone may be reversed to a greater extent than we have assumed, and local wage negotiations in the period ahead may result in smaller pay increases than what has been customary in recent years. In that case, it is conceivable that export growth will be somewhat higher than we have assumed in our calculations.

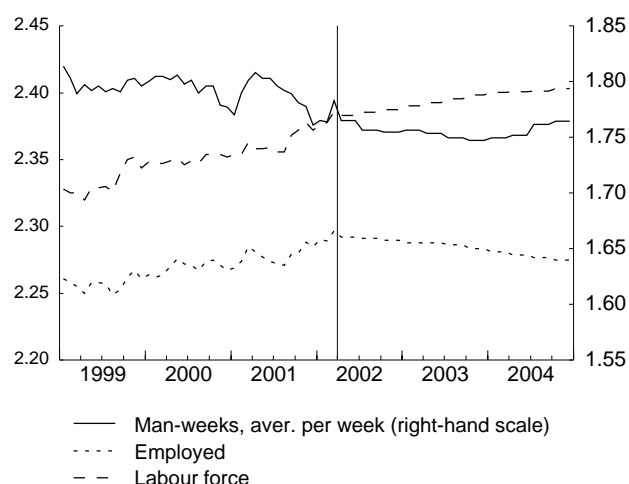
Growing domestic demand

Stronger growth in household demand and a gradual levelling off of the investment decline for mainland enterprises will contribute to a pick-up in domestic demand in the period ahead. The growth contribution from the petroleum sector will underpin this. Demand growth in both 2002 and 2003 is approximately the same as we projected in our previous report. Demand growth is expected to be somewhat higher in 2004, primarily due to mainland investment.

Weak GDP growth ahead

Total GDP fell from the fourth quarter of 2001 to the first quarter of 2002, primarily reflecting a sharp decline in petroleum activities and shipping Production

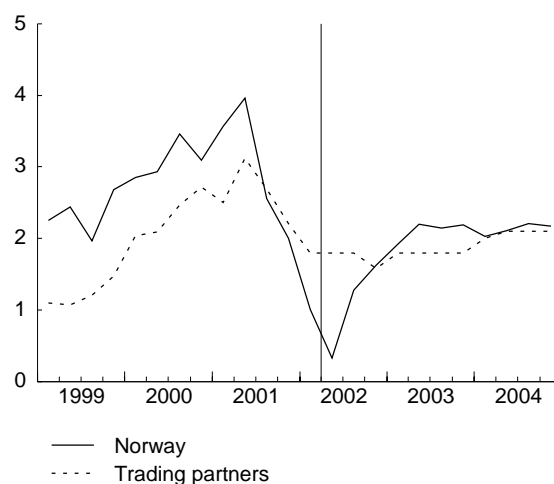
Labour force, employment and number of man-weeks
Millions. Seasonally adjusted and smoothed indices.



Source: Statistics Norway.

Consumer price indices

Percentage growth from the same quarter previous year



Sources: Statistics Norway, OECD and Eurostat.

limitations in the oil sector are an important explanatory factor. Mainland GDP, on the other hand, rose appreciably, primarily as a result of sharp growth in private and public services. For manufacturing, production continued to decline and has been falling since peaking in the second half of 1997.

Several important conditions for manufacturing industry have changed considerably since we published our last forecasts for the Norwegian economy in February. The wage settlement has been more expensive than was assumed at that time, the appreciation of the krone has eroded manufacturing industry's competitiveness further, and higher interest rates result in higher capital costs. Combined with record low inflation, this entails a very high real interest rate. Although market growth abroad is expected to pick up gradually, manufacturing will lose market shares both at home and abroad. A somewhat stronger impetus from petroleum investment may help to make the

Main economic indicators 2001-2004. Accounts and forecasts

Percentage change from previous year unless otherwise noted

| | | Forecasts | | | | | | | |
|--|------------------|-----------|-------|--------|-------|-------|-------|-------|-------|
| | Accounts 2001 | 2002 | | | 2003 | | | 2004 | |
| | | SN | MoF | NB | SN | MoF | NB | SN | NB |
| Demand and output | | | | | | | | | |
| Consumption in households and non-profit organizations | 2.5 | 3.1 | 3.5 | 3 1/2 | 3.0 | 3.5 | 3 1/4 | 3.3 | 3 |
| General government consumption | 2.0 | 1.8 | 1.5 | 2 | 1.9 | 0.8 | 2 1/4 | 2.4 | 2 1/4 |
| Gross fixed investment | -4.6 | 0.9 | 0.5 | -1/4 | 1.7 | 2.6 | 4 1/4 | 2.2 | 1/4 |
| Extraction and transport via pipelines | 7.2 | 0.5 | 1.0 | 0 | 1.7 | 10.4 | 15 | -2.0 | -5 |
| Mainland Norway | -0.3 | -1.3 | 0.0 | -1/4 | 1.9 | 0.4 | 1 1/4 | 3.5 | 1 3/4 |
| Firms | -1.3 | -4.9 | -1.9 | -3 | 2.2 | -0.1 | 1 | 2.4 | 1 1/4 |
| Housing | 5.1 | 2.7 | -0.5 | 4 | 2.9 | 4.7 | 3 1/4 | 10.4 | 2 3/4 |
| General government | -4.3 | 6.5 | 6.7 | 4 3/4 | -0.2 | -2.1 | 0 | -0.2 | 2 1/4 |
| Demand from Mainland Norway ¹ | 1.8 | 2.0 | 2.4 | 2 1/2 | 2.6 | 2.3 | 2 1/2 | 3.1 | 2 3/4 |
| Stockbuilding ² | -0.8 | 0.0 | -0.1 | .. | 0.0 | 0.0 | .. | 0.0 | .. |
| Exports | 4.2 | 1.6 | 2.0 | 1/4 | 2.3 | 3.1 | 2 3/4 | 2.3 | 2 3/4 |
| Crude oil and natural gas | 5.2 | 2.4 | 2.9 | 0 | 3.0 | 2.4 | 4 | 4.0 | 2 1/2 |
| Traditional goods | 4.0 | 0.8 | 1.6 | -1/2 | 2.3 | 3.9 | 2 | 0.2 | 3 |
| Imports | 0.0 | 3.7 | 2.7 | 2 1/4 | 4.0 | 3.8 | 4 3/4 | 2.9 | 3 |
| Traditional goods | 4.0 | 3.2 | 3.2 | 2 1/4 | 4.0 | 4.4 | 4 3/4 | 3.5 | 3 |
| Gross domestic product | 1.4 | 1.5 | 2.0 | 1 1/4 | 1.8 | 2.5 | 2 1/2 | 2.5 | 2 |
| Mainland Norway | 1.2 | 1.2 | 1.8 | 1 3/4 | 1.7 | 2.2 | 2 1/4 | 2.3 | 2 |
| Labour market | | | | | | | | | |
| Employed persons | 0.5 | 0.1 | 0.6 | 1/2 | 0.2 | 0.5 | 1/2 | -0.2 | 1/2 |
| Unemployment rate (level) | 3.6 | 3.9 | 3.6 | 3 3/4 | 4.2 | 3.5 | 3 3/4 | 4.8 | 3 3/4 |
| Prices and wages | | | | | | | | | |
| Wages per standard man-year | 5.0 | 5.0 | 5 | 5 | 4.4 | .. | 5 | 4.6 | 5 |
| Consumer price index (CPI) | 3.0 | 1.1 | 1.4 | 1 1/4 | 2.1 | .. | 2 1/2 | 2.1 | 2 1/2 |
| CPI adjusted for tax changes and excluding energy products (CPI-ATE) | 2.6 | 2.3 | .. | 2 1/4 | 2.1 | .. | 2 1/2 | 2.2 | 2 1/2 |
| Export prices, traditional goods | -3.1 | -4.1 | .. | -9 | 3.7 | .. | -1/2 | 4.9 | 2 1/2 |
| Import prices, traditional goods | 0.4 | -6.7 | .. | .. | 1.9 | .. | .. | 1.3 | .. |
| Housing prices | 6.6 | 4.8 | .. | 8 | 4.7 | .. | 6 | 4.3 | 5 |
| Balance of payment | | | | | | | | | |
| Current balance (bill. NOK) | 233.4 | 205.0 | 188.6 | 140 | 203.0 | 179.7 | 130 | 226.0 | 130 |
| Current balance (per cent of GDP) | 15.4 | 13.5 | .. | 10 | 12.8 | .. | 9 | 13.5 | 8 |
| Memorandum items: | | | | | | | | | |
| Household saving ratio (level) | 4.6 | 5.9 | 8.6 | 8 | 5.7 | 8.1 | 8 | 5.8 | 8 |
| Money market rate (level) ³ | 7.2 | 7.3 | 6.8 | .. | 7.3 | 6.9 | .. | 7.3 | .. |
| Lending rate, banks (level) ⁴ | 8.8 | 8.6 | .. | .. | 8.8 | .. | .. | 8.3 | .. |
| Crude oil price NOK (level) ⁵ | 220.1 | 199.7 | 200 | 179.8 | 220.1 | 182.0 | 179.8 | 189.1 | 179.8 |
| Export markets indicator | 0.4 | 4.0 | .. | .. | 7.1 | .. | .. | 7.1 | .. |
| Importweighted krone exchange rate (44 countries) ^{3, 6} | -3.2 | -6.0 | .. | -2 1/2 | 0.8 | .. | 0 | 0.9 | 0 |

¹ Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.² Change in stockbuilding. Per cent of GDP.³ NB technically assumes its rates to be constant through the forecast period.⁴ Households' borrowing rate in private financial institutions.⁵ Average spot price Brent Blend.⁶ Increasing index implies depreciation.

Sources: Statistics Norway (SN), Ministry of Finance, St.meld. nr 2, 2001 (MoF), Norges Bank, Inflation report 1/2002 (NB).

picture for some manufacturing sectors more positive. Value added is expected to decline by about 3 per cent this year, and the fall in production is assumed to take place in the domestic market. Those manufacturing sectors that supply goods to the export market are typically more specialized, less labour-intensive and also make use of a higher share of imported intermediate goods, thereby neutralizing the krone appreciation and wage growth to a greater extent. In addition, stronger market growth abroad compared with Norway will contribute to this result. For 2002, we have

assumed that the development of the Snøhvit field will start, with investment initially taking place in land-based facilities. In 2003, value added in manufacturing industry is projected to decline slightly before showing a marginal increase in 2004. Developments in the coming two years are influenced by the gradual depreciation of the krone exchange rate.

Given this forecast, the number of employees in manufacturing will be about 25 000 fewer in 2004 than in 2001, and about 50 000 (15 per cent) fewer than in

1998. Even though the displacement of labour in manufacturing is in line with the intentions in the new fiscal policy guidelines, this is, according to our calculations, such a sharp fall that it frees up more labour than that being absorbed in other sectors of the economy up to 2004.

Moderate growth in total demand will contribute to a moderate rise in value added for mainland enterprises in the period ahead, and production in the general government sector will push up growth in mainland GDP both in 2002 and next year. Our projections for growth in the mainland economy in 2002 have been revised down considerably compared with earlier. This primarily reflects lower growth in total exports as well as traditional exports. In 2003 and the following years, GDP is expected to expand at a faster pace, but still showing growth rates that must be characterized as moderate and below what we consider trend growth, particularly following the revision of national accounts figures.

Less tight labour market and slower wage growth ahead

Seasonally adjusted figures from Statistics Norway's Labour Force Survey (LFS) show that unemployment rose from 2.9 per cent at the beginning of 1999 to 3.7 per cent in March 2002. The Directorate of Labour's figures for registered unemployment have shown a slightly more pronounced increase over the last three quarters after having remained stable in the previous three years. The number of vacancies, measured as a percentage of the labour force, has been halved since 2000. Pressures in the labour market thus appear to be lower than in several years. However, the pay increases granted in connection with wage settlements so far in 2002 have been relatively high, despite very low price inflation. In particular, the pay increases in the public sector appear to have been considerable. One possible interpretation of this is that there are wage-wage spirals in service sectors which have made a particularly strong contribution (see analysis of this in *Economic Survey* 1/2002).

Analyses of Norwegian wage determination indicate that the wage level and unemployment level are closely related to each other. However, changes in unemployment have medium-term implications for wage growth, partly through wage compensation for price increases and other types of lags. The sharp decline in unemployment in the period 1993-1998 may thus contribute to fairly high wage growth in the years ahead (see separate box in *Economic Survey* 4/2001). As a result of this, the labour market may thus have been perceived by a number of observers as too tight, which the settlement in 2002 seems to confirm.

As a result of higher labour costs along with the high real interest rate and an appreciation of the krone exchange rate, unemployment is expected to continue

to rise, from 3.6 and 3.9 per cent in 2001 and 2002 respectively to 4.2 and 4.8 per cent in 2003 and 2004 respectively. Higher unemployment is primarily due to the decline in manufacturing employment. Demographic factors indicate a continued rise in the supply of labour, even though higher unemployment may reduce labour force participation rates for some groups. Reduced day-care rates, which are expected to increase the labour supply among women but perhaps not until the end of the projection period, point to the opposite.

The general pay increases that were awarded in this year's wage settlement were high. A considerable portion of the pay increases in the central government will not be effected until autumn, thereby contributing to a considerable wage carry-over into 2003. At the same time, agreement has now been reached concerning pay increases for a number of groups in 2003. The situation for manufacturing industry and weak profitability in some service sectors, combined with the rise in unemployment, must be expected to have a noticeable, dampening effect on wage drift in 2002 and 2003 compared with the last few years. Growth in wages per normal man-year in 2002 and 2003 are thus estimated at 5.0 and 4.4 per cent respectively. Wage growth is estimated at 4.6 per cent in 2004. Rising profits in manufacturing due to the increase in prices for traditional Norwegian export goods and the new main settlement to take place in 2004 will push up wage growth, whereas higher unemployment will reduce wage growth. With the lower rise in the consumer price index that is projected, real wage growth will be on a par with productivity growth in the same period. In 2002, real wage growth is substantially higher than productivity growth that year, which is otherwise estimated to be close to trend growth.

There is, however, considerable uncertainty associated with developments in wages – and to the actual system for wage determination in the period ahead. On the one hand, greater emphasis on the allocative advantages of decentralization, an increased use of petroleum funds domestically, technological changes that favour highly educated labour and the fact that the central bank no longer has to participate in the tripartite cooperation presupposed by the Solidarity Alternative indicate that wage determination is or will be more decentralized than what has traditionally been the case in Norway. We have calculated a scenario based on the assumption that wage determination moves in the direction of a regime similar to that of continental Europe, i.e. a relatively limited degree of coordination between the various trade unions. This results in noticeably higher wage growth than assumed in the baseline scenario. The results of these alternative calculations are presented in a separate box.

On the other hand, the prospect of a pronounced rise in unemployment – where the level in 2004 reaches

Effects of decentralized wage determination

Throughout the post-war period Norwegian wage determination has been highly centralized. Wage negotiations have either been coordinated or by industry, but it has often been difficult to distinguish between these two settlement types. The question of how the Norwegian economy will react to any decentralization of wage determination is therefore difficult to answer. We have no national experience on which to base this. The problem can be approached with the help of theoretical analysis with particular emphasis on microeconomic reasoning or by comparing the macro-economy across countries and over time. From the micro-economy we have elements that can have both a positive and negative impact on the economy. More flexible wages make it easier to allocate labour to sectors with the highest return at the same time that individual wage determination can increase productivity with the help of incentive schemes. On the other hand, unprofitable and unproductive enterprises are maintained for an unnecessarily long period because lower wages function as a subsidy. Bjørnstad and Johansen (2002) analyze the problem by quantifying how different degrees of decentralized wage determination will influence key macroeconomic variables with the help of the second method, i.e. by drawing on the experience of other countries.

Bjørnstad and Johansen replace wage relationships in Statistics Norway's macroeconometric model MODAG with the wage relationship in Nunziata (2001). This wage relationship is quantified for 20 OECD countries, including Norway. The model is then exposed to changes in several of the institutional variables that are included in the new wage relationship and which describe wage determination and factors that influence this. These variables are the degree of coordination in wage determination, employment protection, the level of unemployment benefits and union density. In their calculations, they look at the effects if wage determination in Norway is like that of continental Europe, with strong trade unions that do not coordinate pay demands to any extent. At the same time, favourable social security arrangements and extensive employment protection are retained. Trade unions then have strong bargaining power without affecting such a large part of the economy that they must take macroeconomic considerations into account. The result is higher real wages and higher unemployment as a result of deteriorating competitiveness and the loss of manufacturing jobs. A second set of calculations analyzes how wage determination like that in the US and the UK would affect the Norwegian economy. In these countries, wage determination is even less coordinated than in continental Europe. In isolation, less coordination has the effect of increasing wages, but reduced unemployment benefits and reduced employment protection curb this effect so that the effect on main macroeconomic variables is somewhat weaker than in the previous example. Viewed in relationship to the wage policy regime Norway has traditionally had, however, both scenarios have unfavourable effects for the macroeconomy. The result is a scaling back of internationally exposed activities and higher unemployment. If we see the emergence of an Anglo-American regime, it is also likely that we will record a sharp increase in wage disparities between those who are in employment, in addition to differentials in income between those in employment and those receiving social security benefits. Moreover, the climate in working life will probably be far tougher in the form of reduced worker rights.

The results of the analysis referred to above must be considered as more long-term consequences of a reduced degree of coordination in wage determination. The focus in the forecasts presented here is of a more short-term nature. Even though the analysis in the article referred to above focuses on the long-term properties of alternative wage determination regimes, this is also specified in the short term. This version of MODAG may thus also be able to describe developments in the Norwegian economy following any transition to new wage policy regimes. We present here a shift calculation in line with the results of this model run, where we have only changed the degree of coordination in wage determination so that it corresponds to that of continental Europe. We have thus not used the calculation in the article referred to above as this presupposes an instantaneous shift in a set of institutional variables. It is in fact the case that even if the degree of coordination in Norwegian wage determination changes, unemployment benefits, employment protection and union density are still the same. In the model version used in the analysis of Bjørnstad and Johansen, the real interest rate and balance in public sector budgets are kept unchanged in order to maintain a neutral monetary and fiscal policy stance. In this calculation, however, we want to look at the partial effect of a change in the degree of coordination. We therefore keep the nominal interest rate unchanged and allow public sector budgets to weaken as a result of wage increases. The exchange rate is kept unchanged in both analyses. The table below summarizes the results for five years from the time the shift takes place. The results must in other words be interpreted as estimates for developments in the Norwegian economy on the assumption that wage determination actually changes. Our forecasts are, however, based on the assumption that the Norwegian system of wage determination will remain unchanged.

Some maintain that a shift to a wage determination system similar to that of continental Europe has already taken place and this is the reason for the high pay increases awarded in wage settlements in Norway since 1998. In the event, it may be that the social partners are in the process of moving towards less coordination between them. In these calculations, we have changed the degree of coordination in wage determination down to the continental European level instantaneously. If this process in reality has been taking place over several years, the transition will be less evident than the results in the table suggest.

The reduced degree of coordination increases wage growth the same year by 3.3 percentage points. The effect then tapers off from wage growth that is 2.7 percentage points higher in the second year to 2.3 percentage points after five years. Higher wage growth has several effects on the economy; it increases household income but it also increases enterprises' costs. The segment of the business sector that is sheltered from international competition can to a greater extent pass on the increase in costs to prices. This contributes in particular to higher price inflation domestically. The rise in the consumer price index increases by 0.7 percentage point in the first two years. In the fourth and fifth years, consumer price inflation is 1.0 percentage point higher. This reduces to some extent the effect on real wage growth compared with the effect on the nominal level. Viewed in

cont.

cont.

relation to a situation without a change in wage determination, growth in household real disposable income is increased by 1.1 and 1.9 percentage points respectively in the first two years. After five years, growth in real income is 0.9 percentage point higher. Income growth contributes to pushing up household consumption, imports and housing investment.

The increase in labour costs erodes manufacturing industry's competitiveness. The operating results of manufacturing industry deteriorate by as much as 5.7 and 9.5 per cent in the first two years. After five years, the operating results in manufacturing are 23.6 per cent lower than in a situation without a reduced degree of coordination. This means that 3 600 manufacturing jobs disappear the first year and twice as many disappear after two years. After five years, 15 900 manufacturing jobs have been eliminated. Even though private consumption increases slightly as a result of the increase in real income, higher labour costs contribute to

lower employment in the rest of the economy as well. The level of employment is reduced by a total of 0.4 per cent the first year and 1.0 per cent after five years compared with a situation without a reduced degree of coordination. In the same period, the unemployment rate rises by 0.2 and 0.5 percentage point respectively.

References

Nunziata, L. (2001): "Institutions and Wage Determination: a Multi-Country Approach", Nuffield College Working Papers in Economics, no. 29, Internet://www.nuff.ox.ac.uk/users/nunziata/.

Bjørnstad, R. and P.R. Johansen (2002): "Desentralisert lønnsdannelse: Avindustrialisering og økt ledighet selv med et tøffere arbeidsliv" (Decentralized wage determination: deindustrialization and higher unemployment even with a tougher climate in working life), to be published in *Norsk Økonomisk Tidsskrift*, no. 1.

Effects on growth rates in some main macroeconomic variables through reduced coordination in wage determination

Growth deviation in percentage points unless otherwise noted

| | 1 year | 2 year | 3 year | 4 year | 5 year |
|--|--------|--------|--------|--------|--------|
| Consumption in households and non-profit organizations | 0.2 | 1.4 | 1.7 | 1.0 | 0.7 |
| Housing investments | 0.0 | 2.7 | 4.2 | 4.8 | 4.9 |
| Manufacturing investments | -0.6 | -0.0 | 0.2 | -0.2 | -0.5 |
| Export traditional goods | -0.4 | -0.5 | -0.6 | -0.6 | -0.6 |
| Imports | 0.2 | 1.2 | 1.5 | 1.0 | 0.8 |
| Mainland GDP | -0.1 | 0.4 | 0.6 | 0.2 | 0.1 |
| Gross product manufacturing | -0.7 | -0.8 | -0.9 | -1.2 | -1.2 |
| Man-hours worked in industry | -1.3 | -1.1 | -1.1 | -1.1 | -1.0 |
| Employed persons | -0.4 | -0.3 | -0.1 | -0.1 | -0.1 |
| Labour supply | -0.2 | -0.2 | -0.1 | -0.0 | 0.0 |
| Unemployment (deviation in percentage points) | 0.2 | 0.3 | 0.4 | 0.4 | 0.5 |
| Wages | 3.3 | 2.7 | 2.4 | 2.4 | 2.3 |
| Consumer price index (CPI) | 0.7 | 0.7 | 0.8 | 1.0 | 1.0 |
| Real disposable income, households | 1.1 | 1.9 | 1.2 | 1.0 | 0.9 |
| Current balance (deviation in per cent) | -0.4 | -4.0 | -9.5 | -15.2 | -22.0 |

the same level as at the beginning of the 1990s – provides the basis for new income policy measures in connection with the main settlement in 2004. It is difficult to consider this possible, however, unless the Government and the central bank cooperate with the social partners. It has been a tradition for the authorities and the large employee and employer organizations to participate in efforts to improve competitiveness in particularly difficult periods. Income policy in the 1970s, wage acts in 1988-1989 and the Solidarity Alternative in the 1990s are examples of this cooperation.

Strong krone contributes to moderate rise in prices

As a result of indirect tax reductions, the appreciation of the krone and developments in electricity prices, the year-on-year rise in the consumer price index (CPI) has fallen markedly over the last 12 months. Electricity prices showed unusual movements last

year, with no decline in the summer half-year. As a result, the rate of inflation reached as much as 4.3 per cent in May 2001. In May this year, the inflation rate was reduced to 0.4 per cent. The rate of inflation, measured by the rise in the CPI adjusted for tax changes and excluding energy products (CPI-ATE), reached a peak in February 2001, at 2.9 per cent, but has since fluctuated around 2.5 per cent. The year-on-year rise in the CPI will probably reach the lowest level ever recorded (as long as the current system for the index has existed, i.e. since 1960) in June inasmuch as we expect a fall in the level of prices on an annual basis for this month. Price inflation is expected to pick up after this, as the 12-month effect of the halving of VAT on food from last summer is then eliminated and the effects of the extraordinary path for electricity prices last year are gradually reduced through the second half of 2002. On an annual basis, CPI inflation is expected to be about 1 per cent this year.

Money market rates have been slightly higher the last four months than we assumed in our previous report. The interest rate influences the inflation process through several channels. The most direct effect is seen through the cost element of the interest rate in the user price of capital. House rents in particular are influenced, and developments in house rents have in recent months contributed to curbing the fall in the inflation rate. A higher interest rate will also contribute to cooling off activity in the economy. Reduced pressures in the labour market will, in isolation, translate into lower wage growth, thereby resulting in a gradual reduction in inflation. According to our model's description of the functioning of the economy, the total effect of an increase in interest rates through these interest rate channels will first be an increase in inflation followed by a reduction in inflation after two years. The strongest interest rate channel, however, is the effect on the exchange rate. The current strong krone exchange rate has both a direct impact through lower prices for imported goods and an indirect effect by contributing to reducing the level of activity.

In the assessment of the inflation outlook, further developments in exchange rates have thus played a key role. Developments are obviously influenced by Norges Bank's setting of interest rates, but expectations concerning future developments in capital and foreign exchange markets probably play a decisive role. Our calculations are based on the assumption that the import-weighted krone exchange rate will gradually fall from the level prevailing at the beginning of June this year and through the projection period. Even though the krone declines in value, this entails an appreciation of the krone on an annual basis of about 6 per cent from 2001 to 2002 and a depreciation of 1 per cent the next two years.

Even this more moderate appreciation than we have witnessed so far will generate strong price-dampening impulses to the Norwegian economy. One factor of uncertainty, however, is the timing of the feed-through to consumer prices. There are many reasons why there is a considerable time lag. First, inventories mean that costs are not influenced immediately. Importers and foreign producers may have agreed on prices in NOK for a lengthy period, or they may have hedged against exchange rate fluctuations in the financial market. A key element for price setters will be whether a change in the exchange rate is perceived as a temporary phenomenon or a more permanent change. Under the former monetary policy regime, Norges Bank's objectives were linked to the exchange rate. Devaluations and revaluations were for that reason far more quickly perceived as permanent than under the current monetary policy regime where there are no such explicit objectives. Experience from earlier exchange rate changes may thus provide limited information with regard to the time profile of the feed-through to Norwegian prices. According to our

model's description of the functioning of the Norwegian economy, a permanent exchange rate change will in the long run result in an equivalent change in the level of domestic prices – and the effects on inflation will be increasing the first year. According to our calculations, inflation, as measured by the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE), will fall markedly through this year and well into next year, and the annual rise may be in the range 2-2.5 per cent both in 2002 and in the next two years. Inflation may be lowest around the end of this year. The reason that price inflation in 2004 is estimated to be lower than 2.5 per cent is that the contribution from lower day-care rates is then expected to reduce CPI inflation by 0.4 percentage point that year. Even though the CPI-ATE has not been formally adjusted for this, monetary policymakers may nevertheless take into account that lower day-care rates represent a special and temporary factor that influences price developments.

The low estimates for price inflation may appear surprising given high wage growth. Wages per normal man-year may be slightly higher in 2002 than in 2001, but the rise in labour costs shows little change inasmuch as in the previous year we had the effect of the costs of additional vacation days. Productivity growth for mainland enterprises of about 2.5 per cent per year means that unit labour costs will not deviate substantially from 2.5 per cent in 2002 before edging down in 2003.

High oil prices result in large current account surpluses

The revision of the national accounts figures has resulted in an upward adjustment of exports of services, total exports and the trade surplus, while the value of imports has not been changed to any extent. All in all, this has resulted in an upward revision of the current account surplus in 2001 of about NOK 17 billion, to a good NOK 233 billion, which is equivalent to 15.4 per cent of GDP. Higher oil prices will contribute to substantial trade surpluses in the years ahead. Sluggish growth in the volume of traditional merchandise exports and high growth in imports will be partly offset by an estimated improvement in the terms of trade for traditional goods. All in all, the trade surplus is projected at NOK 220 billion and the current account surplus at NOK 205 billion in 2002. Slightly higher prices measured in krone terms are expected to boost the trade surplus somewhat in the years ahead, but in general the current account balance shows fairly stable and large surpluses, according to our calculations. This means that total saving in Norway will remain at a high level and that investments in the Petroleum Fund will continue.

National accounts: Final expenditure and gross domestic product

At fixed 1999 prices. Million kroner

| | Unadjusted | | Seasonally adjusted | | | | | | | |
|---|------------|---------|---------------------|---------|---------|---------|---------|---------|---------|---------|
| | 2000 | 2001 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 |
| Final consumption exp. of housh. and NPISHs | 604 894 | 619 828 | 151 886 | 152 168 | 151 102 | 153 187 | 154 971 | 156 164 | 155 374 | 157 215 |
| Household final consumption expenditure | 579 806 | 594 720 | 145 668 | 145 964 | 144 819 | 146 822 | 148 653 | 149 874 | 149 233 | 150 767 |
| Goods | 323 787 | 331 261 | 81 812 | 81 427 | 80 391 | 81 529 | 82 634 | 82 896 | 84 092 | 84 631 |
| Services | 247 270 | 254 712 | 61 805 | 62 427 | 62 001 | 62 883 | 63 743 | 64 666 | 63 457 | 64 033 |
| Direct purchases abroad by resident househ. | 26 089 | 26 065 | 6 416 | 6 555 | 6 476 | 6 667 | 6 555 | 6 688 | 6 057 | 6 116 |
| Direct purchases by non-residents | -17 340 | -17 317 | -4 365 | -4 446 | -4 050 | -4 257 | -4 278 | -4 376 | -4 372 | -4 014 |
| Final consumption exp. of NPISHs | 25 088 | 25 108 | 6 218 | 6 205 | 6 283 | 6 365 | 6 318 | 6 290 | 6 141 | 6 448 |
| Final consump. exp. of general government | 266 784 | 272 179 | 66 324 | 66 271 | 66 795 | 67 367 | 67 923 | 68 460 | 68 959 | 70 340 |
| Final consump. exp. of central government | 105 943 | 107 664 | 26 277 | 26 040 | 26 258 | 26 916 | 26 953 | 27 005 | 27 301 | 37 623 |
| Central government, civilian | 81 256 | 83 875 | 20 044 | 19 920 | 20 188 | 20 914 | 21 030 | 21 137 | 21 310 | 31 513 |
| Central government, defence | 24 687 | 23 789 | 6 233 | 6 120 | 6 071 | 6 002 | 5 923 | 5 868 | 5 991 | 6 110 |
| Final consump. exp. of local government | 160 840 | 164 516 | 40 048 | 40 231 | 40 537 | 40 451 | 40 970 | 41 455 | 41 658 | 32 718 |
| Gross fixed capital formation | 267 774 | 255 527 | 67 118 | 62 872 | 61 831 | 65 115 | 62 454 | 60 460 | 61 607 | 59 655 |
| Extraction and transport via pipelines | 47 929 | 51 362 | 11 133 | 10 579 | 9 770 | 10 708 | 10 054 | 11 489 | 13 337 | 10 953 |
| Service activities incidental to extraction | 6 573 | -897 | 492 | 476 | 470 | 253 | 1 034 | 295 | -2 479 | 194 |
| Ocean transport | 16 298 | 8 672 | 5 683 | 3 226 | 1 917 | 4 112 | 1 283 | 679 | 2 597 | 535 |
| Mainland Norway | 196 974 | 196 390 | 49 810 | 48 591 | 49 675 | 50 042 | 50 083 | 47 996 | 48 153 | 47 972 |
| Mainland Norway ex. general government | 158 114 | 159 189 | 39 777 | 38 990 | 39 859 | 40 255 | 41 000 | 38 945 | 38 788 | 38 651 |
| Manufacturing and mining | 19 620 | 22 457 | 5 497 | 5 022 | 4 544 | 4 823 | 5 760 | 5 738 | 5 967 | 5 417 |
| Production of other goods | 15 832 | 15 601 | 4 180 | 3 885 | 3 708 | 3 947 | 3 742 | 3 920 | 3 884 | 3 792 |
| Dwellings | 47 830 | 50 288 | 11 704 | 11 877 | 12 230 | 12 358 | 12 538 | 12 680 | 12 689 | 12 391 |
| Other services | 74 832 | 70 842 | 18 396 | 18 206 | 19 378 | 19 126 | 18 960 | 16 607 | 16 248 | 17 051 |
| General government | 38 860 | 37 201 | 10 033 | 9 601 | 9 816 | 9 787 | 9 082 | 9 051 | 9 364 | 9 321 |
| Changes in stocks and stat. discrepancies | 29 300 | 18 583 | 8 060 | 9 923 | 8 951 | 6 631 | 7 856 | 4 986 | 4 620 | 5 997 |
| Gross capital formation | 297 074 | 274 110 | 75 178 | 72 795 | 70 782 | 71 746 | 70 310 | 65 445 | 66 227 | 65 652 |
| Final domestic use of goods and services | 1168751 | 1166117 | 293 388 | 291 234 | 288 679 | 292 300 | 293 204 | 290 069 | 290 560 | 293 207 |
| Final demand from Mainland Norway | 1068652 | 1088398 | 268 020 | 267 030 | 267 572 | 270 596 | 272 977 | 272 620 | 272 486 | 275 527 |
| Final demand from general government | 305 644 | 309 380 | 76 358 | 75 872 | 76 611 | 77 155 | 77 006 | 77 510 | 78 323 | 79 661 |
| Total exports | 500 366 | 521 299 | 122 310 | 124 569 | 128 760 | 128 552 | 127 094 | 131 199 | 134 598 | 126 796 |
| Traditional goods | 188 774 | 196 328 | 46 959 | 47 066 | 47 958 | 48 985 | 49 490 | 47 383 | 50 506 | 49 461 |
| Crude oil and natural gas | 169 668 | 178 502 | 41 394 | 42 794 | 42 806 | 44 060 | 42 005 | 46 476 | 46 009 | 42 469 |
| Ships and oil platforms | 8 892 | 14 178 | 1 573 | 3 068 | 2 892 | 2 399 | 2 864 | 3 867 | 5 049 | 3 217 |
| Services | 133 032 | 132 291 | 32 384 | 31 640 | 35 103 | 33 109 | 32 735 | 33 473 | 33 034 | 31 649 |
| Total use of goods and services | 1669118 | 1687416 | 415 698 | 415 803 | 417 439 | 420 852 | 420 298 | 421 268 | 425 158 | 420 003 |
| Total imports | 406 472 | 406 535 | 102 236 | 100 856 | 99 537 | 102 037 | 101 865 | 100 022 | 102 307 | 98 075 |
| Traditional goods | 260 826 | 271 200 | 65 906 | 66 204 | 65 583 | 66 988 | 68 891 | 66 679 | 68 482 | 69 988 |
| Crude oil | 1 009 | 1 034 | 51 | 409 | 408 | 233 | 224 | 194 | 382 | 103 |
| Ships and oil platforms | 22 592 | 12 112 | 5 942 | 4 566 | 2 384 | 3 907 | 1 753 | 2 928 | 3 524 | 657 |
| Services | 122 045 | 122 188 | 30 337 | 29 677 | 31 163 | 30 908 | 30 997 | 30 221 | 29 918 | 27 326 |
| Gross domestic product | 1262645 | 1280881 | 313 462 | 314 947 | 317 902 | 318 815 | 318 433 | 321 245 | 322 851 | 321 928 |
| Mainland Norway (market prices) | 1055400 | 1068417 | 262 946 | 263 690 | 265 385 | 266 965 | 266 065 | 266 804 | 269 031 | 272 082 |
| Petroleum activities and ocean transport | 207 245 | 212 464 | 50 516 | 51 257 | 52 517 | 51 850 | 52 368 | 54 441 | 53 820 | 49 845 |
| Mainland Norway (basic prices) | 915 775 | 930 091 | 227 700 | 229 031 | 230 398 | 232 156 | 231 185 | 232 129 | 234 607 | 237 584 |
| Mainland Norway ex. general government | 711 897 | 723 906 | 177 015 | 178 122 | 179 272 | 180 856 | 179 901 | 180 650 | 182 745 | 184 630 |
| Manufacturing and mining | 134 200 | 132 701 | 33 246 | 33 518 | 33 346 | 33 257 | 33 278 | 32 858 | 33 255 | 32 668 |
| Production of other goods | 102 805 | 98 808 | 26 121 | 25 906 | 25 082 | 25 259 | 24 147 | 23 872 | 25 080 | 24 932 |
| Service industries | 474 893 | 492 397 | 117 648 | 118 698 | 120 843 | 122 341 | 122 476 | 123 920 | 124 410 | 127 030 |
| General government | 203 878 | 206 185 | 50 685 | 50 909 | 51 126 | 51 300 | 51 284 | 51 479 | 51 862 | 52 954 |
| Correction items | 139 624 | 138 326 | 35 245 | 34 659 | 34 987 | 34 809 | 34 880 | 34 675 | 34 424 | 34 498 |

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product

At fixed 1999- prices. Percentage volume change from previous period

| | Unadjusted | | Seasonally adjusted | | | | | | | |
|---|------------|--------|---------------------|-------|-------|-------|-------|-------|--------|--------|
| | 2000 | 2001 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 |
| Final consumption exp. of housh. and NPISHs | 3.5 | 2.5 | 0.6 | 0.2 | -0.7 | 1.4 | 1.2 | 0.8 | -0.5 | 1.2 |
| Household final consumption expenditure | 3.6 | 2.6 | 0.7 | 0.2 | -0.8 | 1.4 | 1.2 | 0.8 | -0.4 | 1.0 |
| Goods | 3.3 | 2.3 | 0.7 | -0.5 | -1.3 | 1.4 | 1.4 | 0.3 | 1.4 | 0.6 |
| Services | 3.5 | 3.0 | 1.1 | 1.0 | -0.7 | 1.4 | 1.4 | 1.4 | -1.9 | 0.9 |
| Direct purchases abroad by resident househ. | 0.7 | -0.1 | -3.1 | 2.2 | -1.2 | 2.9 | -1.7 | 2.0 | -9.4 | 1.0 |
| Direct purchases by non-residents | -7.6 | -0.1 | 0.7 | 1.8 | -8.9 | 5.1 | 0.5 | 2.3 | -0.1 | -8.2 |
| Final consumption exp. of NPISHs | 1.2 | 0.1 | -2.8 | -0.2 | 1.3 | 1.3 | -0.7 | -0.4 | -2.4 | 5.0 |
| Final consump. exp. of general government | 1.2 | 2.0 | 0.5 | -0.1 | 0.8 | 0.9 | 0.8 | 0.8 | 0.7 | 2.0 |
| Final consump. exp. of central government | 0.5 | 1.6 | -0.1 | -0.9 | 0.8 | 2.5 | 0.1 | 0.2 | 1.1 | 37.8 |
| Central government, civilian | 3.2 | 3.2 | 0.0 | -0.6 | 1.3 | 3.6 | 0.6 | 0.5 | 0.8 | 47.9 |
| Central government, defence | -7.4 | -3.6 | -0.4 | -1.8 | -0.8 | -1.1 | -1.3 | -0.9 | 2.1 | 2.0 |
| Final consump. exp. of local government | 1.6 | 2.3 | 0.9 | 0.5 | 0.8 | -0.2 | 1.3 | 1.2 | 0.5 | -21.5 |
| Gross fixed capital formation | -1.5 | -4.6 | -6.4 | -6.3 | -1.7 | 5.3 | -4.1 | -3.2 | 1.9 | -3.2 |
| Extraction and transport via pipelines | -31.6 | 7.2 | -7.1 | -5.0 | -7.6 | 9.6 | -6.1 | 14.3 | 16.1 | -17.9 |
| Service activities incidental to extraction | -458.4 | -113.6 | -90.4 | -3.3 | -1.3 | -46.1 | 308.3 | -71.5 | -940.3 | -107.8 |
| Ocean transport | 23.8 | -46.8 | 3.8 | -43.2 | -40.6 | 114.5 | -68.8 | -47.1 | 282.2 | -79.4 |
| Mainland Norway | 3.4 | -0.3 | 1.4 | -2.4 | 2.2 | 0.7 | 0.1 | -4.2 | 0.3 | -0.4 |
| Mainland Norway ex. general government | 6.7 | 0.7 | 0.5 | -2.0 | 2.2 | 1.0 | 1.9 | -5.0 | -0.4 | -0.4 |
| Manufacturing and mining | -3.4 | 14.5 | 17.0 | -8.6 | -9.5 | 6.2 | 19.4 | -0.4 | 4.0 | -9.2 |
| Production of other goods | 1.0 | -1.5 | 4.6 | -7.1 | -4.5 | 6.4 | -5.2 | 4.8 | -0.9 | -2.4 |
| Dwellings | 11.0 | 5.1 | -2.4 | 1.5 | 3.0 | 1.1 | 1.5 | 1.1 | 0.1 | -2.4 |
| Other services | 8.3 | -5.3 | -2.7 | -1.0 | 6.4 | -1.3 | -0.9 | -12.4 | -2.2 | 4.9 |
| General government | -8.1 | -4.3 | 5.4 | -4.3 | 2.2 | -0.3 | -7.2 | -0.3 | 3.5 | -0.5 |
| Changes in stocks and stat. discrepancies | 41.3 | -36.6 | 5.9 | 23.1 | -9.8 | -25.9 | 18.5 | -36.5 | -7.3 | 29.8 |
| Gross capital formation | 1.5 | -7.7 | -5.2 | -3.2 | -2.8 | 1.4 | -2.0 | -6.9 | 1.2 | -0.9 |
| Final domestic use of goods and services | 2.5 | -0.2 | -1.0 | -0.7 | -0.9 | 1.3 | 0.3 | -1.1 | 0.2 | 0.9 |
| Final demand from Mainland Norway | 2.9 | 1.8 | 0.7 | -0.4 | 0.2 | 1.1 | 0.9 | -0.1 | 0.0 | 1.1 |
| Final demand from general government | -0.1 | 1.2 | 1.1 | -0.6 | 1.0 | 0.7 | -0.2 | 0.7 | 1.0 | 1.7 |
| Total exports | 2.9 | 4.2 | -1.5 | 1.8 | 3.4 | -0.2 | -1.1 | 3.2 | 2.6 | -5.8 |
| Traditional goods | 1.7 | 4.0 | 0.3 | 0.2 | 1.9 | 2.1 | 1.0 | -4.3 | 6.6 | -2.1 |
| Crude oil and natural gas | 6.6 | 5.2 | -2.1 | 3.4 | 0.0 | 2.9 | -4.7 | 10.6 | -1.0 | -7.7 |
| Ships and oil platforms | -38.9 | 59.4 | 15.8 | 95.0 | -5.7 | -17.1 | 19.4 | 35.0 | 30.6 | -36.3 |
| Services | 4.9 | -0.6 | -4.1 | -2.3 | 10.9 | -5.7 | -1.1 | 2.3 | -1.3 | -4.2 |
| Total use of goods and services | 2.6 | 1.1 | -1.1 | 0.0 | 0.4 | 0.8 | -0.1 | 0.2 | 0.9 | -1.2 |
| Total imports | 3.2 | 0.0 | -2.1 | -1.3 | -1.3 | 2.5 | -0.2 | -1.8 | 2.3 | -4.1 |
| Traditional goods | 2.6 | 4.0 | 3.3 | 0.5 | -0.9 | 2.1 | 2.8 | -3.2 | 2.7 | 2.2 |
| Crude oil | -51.4 | 2.5 | -63.8 | 702.0 | -0.2 | -42.8 | -3.8 | -13.7 | 97.4 | -73.1 |
| Ships and oil platforms | 13.0 | -46.4 | -38.7 | -23.2 | -47.8 | 63.9 | -55.1 | 67.1 | 20.4 | -81.3 |
| Services | 3.9 | 0.1 | -1.5 | -2.2 | 5.0 | -0.8 | 0.3 | -2.5 | -1.0 | -8.7 |
| Gross domestic product | 2.4 | 1.4 | -0.8 | 0.5 | 0.9 | 0.3 | -0.1 | 0.9 | 0.5 | -0.3 |
| Mainland Norway (market prices) | 1.9 | 1.2 | -0.1 | 0.3 | 0.6 | 0.6 | -0.3 | 0.3 | 0.8 | 1.1 |
| Petroleum activities and ocean transport | 4.9 | 2.5 | -4.4 | 1.5 | 2.5 | -1.3 | 1.0 | 4.0 | -1.1 | -7.4 |
| Mainland Norway (basic prices) | 2.0 | 1.6 | -0.2 | 0.6 | 0.6 | 0.8 | -0.4 | 0.4 | 1.1 | 1.3 |
| Mainland Norway ex. general government | 2.4 | 1.7 | -0.3 | 0.6 | 0.6 | 0.9 | -0.5 | 0.4 | 1.2 | 1.0 |
| Manufacturing and mining | -2.9 | -1.1 | -2.8 | 0.8 | -0.5 | -0.3 | 0.1 | -1.3 | 1.2 | -1.8 |
| Production of other goods | 5.0 | -3.9 | 0.9 | -0.8 | -3.2 | 0.7 | -4.4 | -1.1 | 5.1 | -0.6 |
| Service industries | 3.5 | 3.7 | 0.1 | 0.9 | 1.8 | 1.2 | 0.1 | 1.2 | 0.4 | 2.1 |
| General government | 0.5 | 1.1 | 0.2 | 0.4 | 0.4 | 0.3 | 0.0 | 0.4 | 0.7 | 2.1 |
| Correction items | 1.4 | -0.9 | 0.7 | -1.7 | 0.9 | -0.5 | 0.2 | -0.6 | -0.7 | 0.2 |

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product

Price indices. 1999=100

| | Unadjusted | | Seasonally adjusted | | | | | | | |
|---|------------|-------|---------------------|-------|-------|-------|-------|-------|-------|-------|
| | 2000 | 2001 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 |
| Final consumption exp. of households and NPISHs | 103.3 | 105.1 | 102.4 | 103.5 | 105.1 | 105.5 | 105.3 | 104.3 | 105.8 | 105.8 |
| Final consumption exp. of general government | 105.0 | 112.5 | 104.4 | 106.0 | 107.4 | 110.3 | 111.5 | 112.2 | 114.7 | 112.3 |
| Gross fixed capital formation | 105.9 | 109.6 | 105.3 | 107.0 | 108.3 | 109.6 | 110.3 | 109.9 | 108.4 | 108.1 |
| Mainland Norway | 104.4 | 107.6 | 104.4 | 105.1 | 105.5 | 108.5 | 108.1 | 107.6 | 106.2 | 107.1 |
| Final domestic use of goods and services | 104.3 | 107.5 | 104.4 | 104.5 | 106.2 | 106.8 | 108.3 | 106.3 | 109.0 | 107.6 |
| Final demand from Mainland Norway | 103.9 | 107.4 | 103.3 | 104.4 | 105.8 | 107.2 | 107.3 | 106.9 | 108.1 | 107.7 |
| Total exports | 137.2 | 134.1 | 134.1 | 142.0 | 145.9 | 140.6 | 142.3 | 133.6 | 121.0 | 124.4 |
| Traditional goods | 113.5 | 110.0 | 114.1 | 115.0 | 117.0 | 113.6 | 112.2 | 108.1 | 105.2 | 103.4 |
| Total use of goods and services | 114.1 | 115.7 | 113.2 | 115.7 | 118.5 | 117.1 | 118.6 | 114.8 | 112.8 | 112.7 |
| Total imports | 108.2 | 108.7 | 108.0 | 109.3 | 111.2 | 112.3 | 110.1 | 107.0 | 105.9 | 104.0 |
| Traditional goods | 104.8 | 105.2 | 103.8 | 105.1 | 107.0 | 109.7 | 106.8 | 103.3 | 101.8 | 99.3 |
| Gross domestic product | 116.0 | 118.0 | 114.9 | 117.8 | 120.8 | 118.7 | 121.3 | 117.2 | 115.0 | 115.3 |
| Mainland Norway (market prices) | 104.4 | 107.8 | 104.8 | 104.8 | 106.0 | 106.9 | 108.0 | 107.0 | 109.3 | 108.3 |

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product

Price indices. Percentage volume change from previous period

| | Unadjusted | | Seasonally adjusted | | | | | | | |
|---|------------|------|---------------------|------|------|------|------|------|------|------|
| | 2000 | 2001 | 00.2 | 00.3 | 00.4 | 01.1 | 01.2 | 01.3 | 01.4 | 02.1 |
| Final consumption exp. of households and NPISHs | 3.3 | 1.8 | 0.5 | 1.1 | 1.6 | 0.3 | -0.2 | -0.9 | 1.4 | 0.1 |
| Final consumption exp. of general government | 5.0 | 7.1 | 2.0 | 1.6 | 1.3 | 2.7 | 1.1 | 0.7 | 2.2 | -2.1 |
| Gross fixed capital formation | 5.9 | 3.5 | 2.1 | 1.6 | 1.3 | 1.2 | 0.6 | -0.4 | -1.4 | -0.2 |
| Mainland Norway | 4.4 | 3.1 | 1.9 | 0.7 | 0.4 | 2.8 | -0.3 | -0.4 | -1.3 | 0.9 |
| Final domestic use of goods and services | 4.3 | 3.1 | 2.8 | 0.0 | 1.7 | 0.6 | 1.4 | -1.9 | 2.6 | -1.3 |
| Final demand from Mainland Norway | 3.9 | 3.4 | 1.1 | 1.1 | 1.3 | 1.4 | 0.1 | -0.4 | 1.1 | -0.4 |
| Total exports | 37.2 | -2.3 | 6.6 | 5.8 | 2.8 | -3.7 | 1.3 | -6.2 | -9.4 | 2.9 |
| Traditional goods | 13.5 | -3.1 | 6.0 | 0.7 | 1.8 | -2.9 | -1.2 | -3.6 | -2.7 | -1.8 |
| Total use of goods and services | 14.1 | 1.4 | 4.1 | 2.2 | 2.4 | -1.1 | 1.3 | -3.2 | -1.7 | -0.1 |
| Total imports | 8.2 | 0.4 | 3.8 | 1.2 | 1.7 | 1.1 | -2.0 | -2.8 | -1.1 | -1.7 |
| Traditional goods | 4.8 | 0.4 | 1.3 | 1.2 | 1.8 | 2.5 | -2.6 | -3.3 | -1.5 | -2.4 |
| Gross domestic product | 16.0 | 1.7 | 4.2 | 2.5 | 2.5 | -1.7 | 2.2 | -3.4 | -1.8 | 0.2 |
| Mainland Norway (market prices) | 4.4 | 3.3 | 3.2 | 0.0 | 1.2 | 0.8 | 1.1 | -0.9 | 2.2 | -0.9 |

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 1999 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 1999 as the base year (common year of recalculation). The recalculation of prices is carried out at the sectoral level of the quarterly national accounts.