

## Norwegian economy

The fear of a demand-driven increase in inflation has so far induced Norges Bank to maintain high interest rates. Changes in figures from the quarterly national accounts (QNA) in the first half of 2001 show no strong demand impulses. The level of activity in the mainland economy has been noticeably reduced and is now slightly below trend. Thus, it may be argued that the Norwegian economy is now experiencing a recession even though a precise specification of this is difficult. According to our estimates, however, growth as early as the turn of the year will be slightly higher

than trend mainland GDP growth. For practical purposes we can therefore not characterize the situation in the Norwegian economy as an actual recession. Inflation in Norway is approximately on a par with the level abroad and is expected to remain moderate and lower in the projection period than in previous years. This will provide a basis for a slight decline in interest rates through 2002. However, domestic demand is expected to expand in the period ahead. The prospect of slightly stronger pressures in the Norwegian economy towards the end of the projection period and a further

### Macroeconomic indicators 1999-2001

Growth from previous period unless otherwise noted. Per cent

			Seasonally adjusted			
	1999	2000	00.3	00.4	01.1	01.2
<b>Demand and output</b>						
Consumption in household and non-profit organizations	2.2	2.4	-0.1	-0.5	2.0	0.1
General government consumption	3.3	1.4	0.5	0.5	0.8	0.4
Gross fixed investment	-8.2	-1.1	-6.1	-1.0	2.3	-4.6
- Mainland Norway	-2.6	1.4	-3.2	2.5	-0.5	-2.6
- Petroleum activities <sup>1</sup>	-19.9	-17.1	-2.6	-3.3	7.3	-3.5
Final domestic demand from Mainland Norway <sup>2</sup>	1.5	1.9	-0.5	0.3	1.2	-0.3
Exports	2.8	2.7	2.0	4.2	1.8	-2.6
- Crude oil and natural gas	-0.1	6.4	4.3	5.0	2.3	-6.2
- Traditional goods	3.2	2.1	-1.5	1.3	5.6	-0.4
Imports	-1.6	2.5	-1.9	-1.6	2.0	-1.1
- Traditional goods	-1.3	1.7	-1.0	-0.9	2.8	0.1
Gross domestic product	1.1	2.3	0.7	0.1	0.5	0.1
- Mainland Norway	1.0	1.8	0.1	-0.3	0.7	0.3
<b>Labour market<sup>3</sup></b>						
Man-hours worked	0.2	-0.8	-0.9	-0.9	1.3	1.1
Employed persones	0.6	0.5	-0.5	0.1	0.2	0.2
Labour force	0.5	0.8	-0.3	0.4	0.1	0.2
Unemployment rate, level <sup>4</sup>	3.2	3.4	3.4	3.6	3.4	3.4
<b>Prices</b>						
Consumer price index <sup>5</sup>	2.3	3.1	3.5	3.1	3.6	4.0
Consumer price index, excl. energy products <sup>5</sup>	2.3	2.3	2.6	2.6	3.2	2.9
Export prices, traditional goods	0.0	13.8	0.9	2.1	-2.3	-1.2
Import prices, traditional goods	-2.3	6.0	1.2	1.1	3.3	-0.9
<b>Balance of payment</b>						
Current balance, bill. NOK	47.3	203.6	56.9	66.3	59.6	53.7
<b>Memorandum items (Unadjusted, level)</b>						
Money market rate (3 month NIBOR)	6.4	6.6	7.0	7.4	7.3	7.3
Average borrowing rate	7.6	8.9	8.5	8.9	8.9	8.9
Crude oil price NOK <sup>6</sup>	141.6	252.0	272.9	278.3	229.3	250.2
Importweighted krone exchange rate, 44 countries, 1997=100	101.0	103.6	104.0	103.6	102.2	100.8
NOK per ECU/euro	8.31	8.11	8.10	8.04	8.20	8.01

<sup>1</sup> Figures for petroleum activities now covers the sectors oil and gas extraction proper, transport via pipelines and service activities incidental to oil and gas extraction.

<sup>2</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.

<sup>3</sup> Figures for 1999 and 2000 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>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.

increase in the use of petroleum revenues in the following years are factors that may contribute to a relatively modest reduction in interest rates in Norway.

### Expansionary fiscal policy

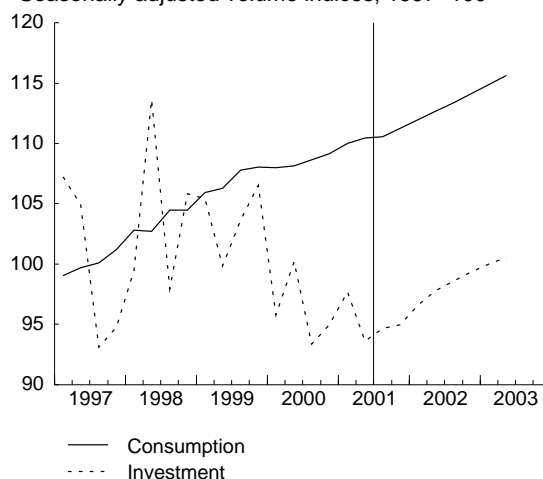
In the calculations, the fiscal policy impetus this year is in line with the Revised National Budget for 2001 and may be characterized in cyclical terms as relatively neutral or slightly expansionary. At this time, just before the general election, there is considerable uncertainty concerning the fiscal policy stance for the new few years. However, it seems clear that fiscal policy will be somewhat more expansionary than what has been customary in recent years, taking into account the cyclical situation. There appears to be relatively broad political agreement concerning the new guidelines for economic policy presented by the current Government in March this year. According to these guidelines, the use of petroleum revenues will increase approximately in step with the expected real return on the Petroleum Fund. The use of petroleum revenues is defined as the structural, non-oil government budget deficit, and this shall be viewed in relation to the expected return on the Petroleum Fund at the beginning of the fiscal year. This implies an increased use of petroleum revenues – assuming that oil prices do not plunge or the Petroleum Fund records sharply negative valuation changes – compared with the previous regime. This implied that the structural, non-oil deficit over time was to rise in pace with long-term Mainland GDP growth. On the basis of the new guidelines, however, there is considerable scope for various adaptations of fiscal policy and studies show that there are considerable differences in the effect of various fiscal policy stances with the same budget balance.

However, there are also at least three other elements that contribute to the uncertainty even if the authorities adhere to the new guidelines:

- It is still the intention to use fiscal policy to counter fluctuations in the economy so that more or less than the level implied by the rule shall be used depending on the cyclical situation.
- Major changes in the use of oil revenues may be carried out over several years.
- The quantification of adjustments in activity that are found in the structural, non-oil budget deficit will depend on the choice of methodology and different assumptions.
- All three elements imply that the budget balance will not automatically follow the “use of petroleum revenues rule”, but incorporate considerable scope for judgement.

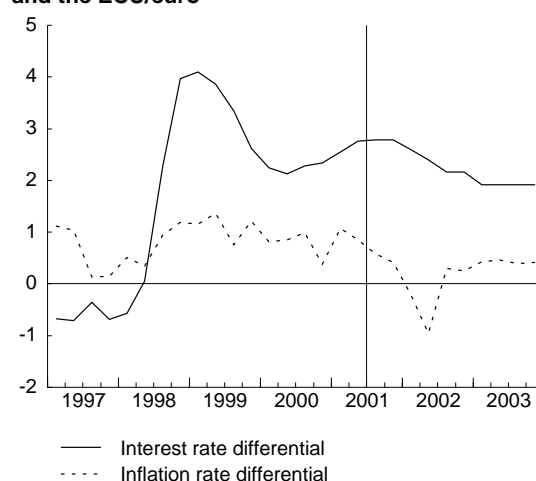
Our estimates for the next two years are based on the assumption that fiscal policy leeway through an increased use of “petroleum revenues” is attained through a combination of higher general government

**General government**  
Seasonally adjusted volume indices, 1997=100



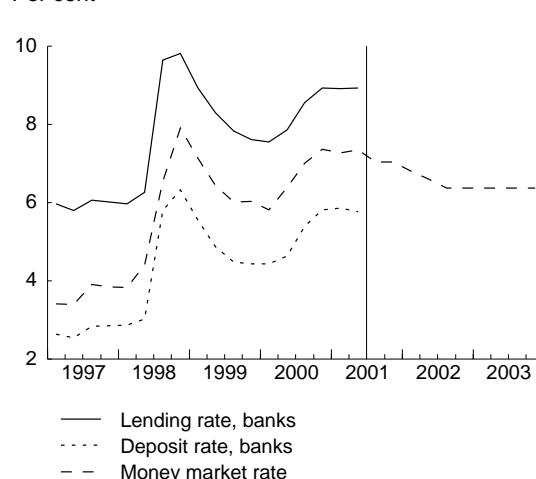
Source: Statistics Norway.

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



Sources: Norges Bank and Statistics Norway.

**Lending rate and deposit rate**  
Per cent



Source: Norges Bank.

consumption and investment and reduced direct and indirect taxes. We have assumed somewhat higher growth in general government expenditure on goods and services than trend output growth in the mainland economy in both 2002 and 2003. With regard to the tax programme, we assume that the investment tax will be removed with effect from 1 April 2002, while direct and indirect taxes are otherwise adjusted for inflation. Inasmuch as the halving of the VAT rate on food in July this year will have an effect throughout 2002 but only half of 2001, the expansionary element of the indirect tax policy will be considerable next year. We have therefore not incorporated reductions in income taxes for 2002. In 2003, changes in indirect taxes will still have an expansionary effect, with the elimination of the investment tax affecting the entire year. Moreover, we have assumed a reduction in direct personal taxes of about NOK 3 billion and an increase in general government expenditure on goods and services of less than NOK 2 billion.

Production in the public sector and hence also general government consumption is calculated on the basis of man-hours worked. Fewer working days due to public holidays in 2001 and 2003 and the increase in vacation days in 2001 and 2002 will thus contribute to lower growth in general government production and consumption than the level implied by developments in the number employed in the sector.

### **Estimates for interest rates and exchange rates**

The import-weighted krone exchange rate has in the course of the summer appreciated slightly more than was assumed previously. This can be ascribed to both a weak euro and a fall in the exchange rate for the Swedish krona both against the euro and the Norwegian krone. The Norwegian krone has also appreciated slightly more against the US dollar than assumed earlier. We still expect the dollar to depreciate against the euro in the period ahead, with approximate parity between the euro and the dollar in 2003. The krone exchange rate is still expected to depreciate against the euro, and stand at 8.18 as from 2002. All in all, these estimates imply that the import-weighted exchange rate will appreciate by about 2.5 per cent this year and then remain approximately unchanged the next few years. This will contribute to a levelling off in the rise in import prices. Combined with weaker international cyclical developments, the inflationary impetus from higher import prices will thus be noticeably lower in the period ahead than that recorded in previous years.

Whereas US money market rates have been sharply reduced through 2001, Norwegian interest rates have shown little change after having risen considerably through 2000. The Norwegian money market rate is now 3 percentage points higher than the euro rate,

while the inflation rate in Norway is approximately the same as in the EU. The appreciation of the import-weighted krone exchange rate this year must therefore be viewed in connection with the widening interest rate differential between Norway and other countries. The high level of Norwegian interest rates is a good illustration of how monetary policy is now being oriented towards specific Norwegian factors, which are thus substantially different than in other countries where the cyclical downturn seems to be deepening.

Our projections for developments in the Norwegian economy in the period ahead do not provide scope for any substantial fall in interest rates in Norway. As in our previous report, we have assumed a 0.7 percentage point decline in interest rates in the first half of 2002, but no further subsequent decline. We believe, however, that European rates may edge up towards the end of next year and reach about 4.5 per cent in 2003. It is reasonable to assume that with a renewed upward trend in the US during the coming winter US money market rates will increase towards the end of 2002. Our estimates imply a nominal Norwegian interest rate differential in relation to euro rates of about 2 percentage points and a probable inflation differential of about 0.5 per cent in 2003, i.e. Norwegian real interest rates will then be about 1.5 percentage points higher. We are uncertain whether this is compatible with a nominally unchanged exchange rate against the euro as we have assumed beginning next year. The quantification of the link between Norwegian and European money market rates, inflation differentials and the exchange rate, based on the historical experience of a fixed exchange rate regime, indicates that our estimates are consistent. However, it is now uncertain how valid this historical relationship is given the new monetary policy regime and in a situation with a large and quickly growing Petroleum Fund. It is also worth noting that our estimates for mainland GDP do not imply that the Norwegian economy will again experience a period of strong expansion during the next few years. This, combined with moderate inflation, might result in somewhat greater interest rate changes than we have assumed in our estimates.

The cyclical situation in Norway compared with the EU and the US is well illustrated by different monetary policy stances. Under Norway's former exchange rate regime, Norwegian interest rates would probably have been appreciably lower than they are today, which in isolation would have generated greater pressures in the Norwegian economy. At the moment, traditional Norwegian export industries are facing both a strong Norwegian krone and slower market growth abroad. This is eroding profitability, which will contribute to a relatively moderate wage settlement when the main settlement takes place next spring, and hence somewhat lower interest rates in the period ahead.

## The petroleum sector

So far this year, the oil price has fluctuated in the interval USD 23-29 per barrel (Brent Blend), averaging about USD 26 the first eight months of the year, compared with about USD 28 last year. When calculating our forecasts, we have assumed that the oil price will remain at about USD 26 through the projection period. With an appreciation of the Norwegian krone against the US dollar, the oil price measured in NOK terms may fall slightly in the period ahead, but still remain at a fairly high level.

Following a sharp decline in the demand for goods and services from mainland Norway by investment activities in the petroleum sector through 1999, developments since then have been relatively stable. Admittedly, the quarterly national accounts show a very high level of investment in the first quarter of 2000, but this is largely ascribable to extraordinarily high imports of oil platforms and modules. Petroleum investment is projected to show little change in the period ahead compared with 2001, which will imply approximately the same demand impetus for the Norwegian economy in 2001 as in 2000, but with a noticeable decline in recorded investment (due to high imports in the first quarter of 2000).

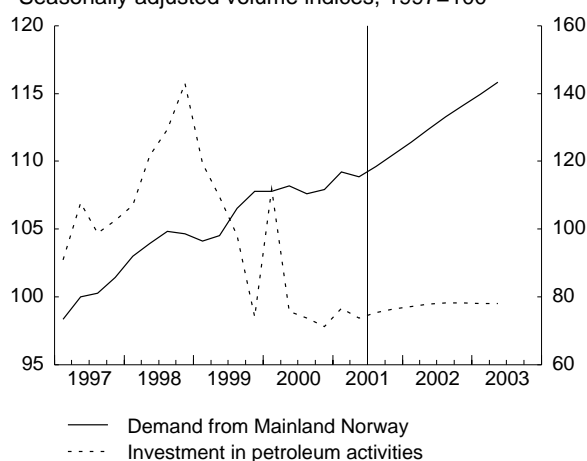
The investment outlook in the period ahead is influenced by two conflicting factors. There are many indications that an investment peak has been reached and that petroleum investment will exhibit an underlying tendency to fall in the long term. However, developments and the outlook for oil prices point to higher investment in the petroleum sector for some time ahead. In the calculations, we assume a slight increase in investment in 2002 and zero growth in 2003.

In recent years, there has been a clear tendency to reduce the development of new fields, but to increase investment in fields that are already on stream. It appears that this tendency will continue. Investment in onshore installations and pipeline transport was at a historically low level in 2000. According to Statistics Norway's investment statistics, pipeline investment will edge up in the period ahead, while investment in onshore installations will remain approximately unchanged.

Substantial production halts in connection with maintenance and various operating problems have contributed to very modest production growth in the petroleum sector through the first half of this year. Oil production is nevertheless expected to increase slightly on an annual basis compared with last year and remain relatively stable through 2002 and 2003. Gas production is projected to rise somewhat in the period ahead, but this production is still relatively modest compared with oil. All in all, we therefore assume that production developments in the petroleum sector will make a fairly moderate contribution to GDP

## Demand from Mainland Norway and investment in petroleum activities

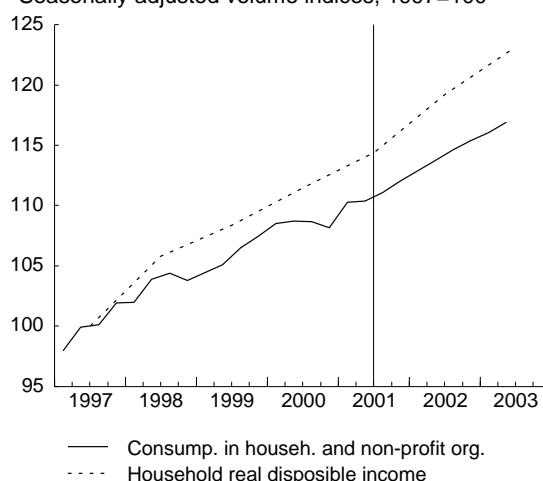
Seasonally adjusted volume indices, 1997=100



Source: Statistics Norway.

## Income and consumption in households

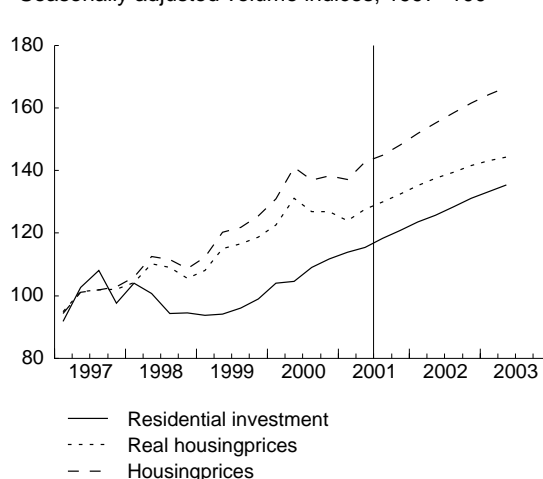
Seasonally adjusted volume indices, 1997=100



Source: Statistics Norway.

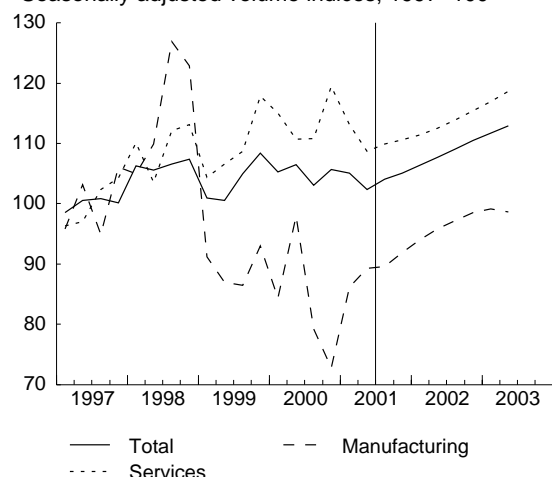
## Residential investment and housingprices

Seasonally adjusted volume indices, 1997=100



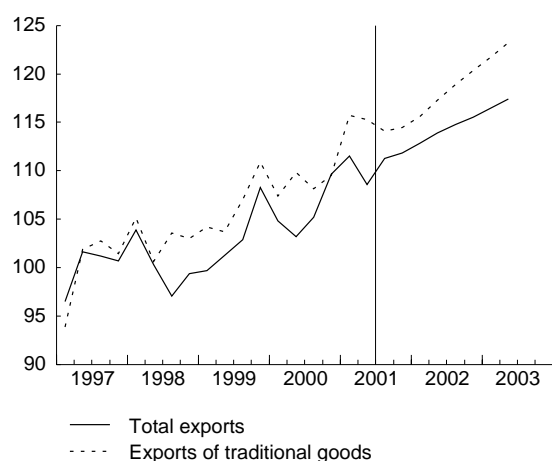
Source: Statistics Norway.

**Investment, Mainland Norway**  
Seasonally adjusted volume indices, 1997=100



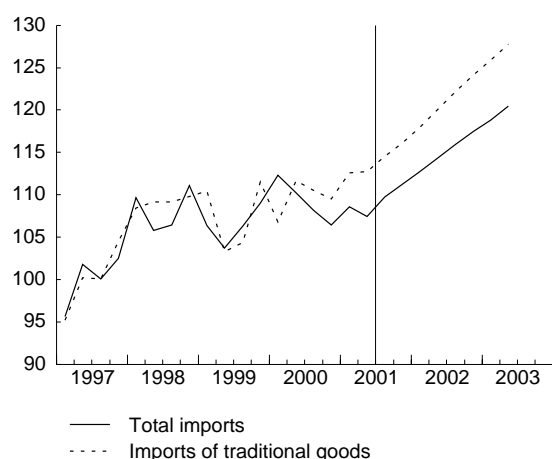
Source: Statistics Norway.

**Exports**  
Seasonally adjusted volume indices, 1997=100



Source: Statistics Norway.

**Imports**  
Seasonally adjusted volume indices, 1997=100



Source: Statistics Norway.

growth. Any major deviation in growth between mainland GDP and total GDP is thus unlikely. However, the estimates for petroleum production are always shrouded in a considerable degree of uncertainty. In the coming five years, a large share of Norwegian oil production will come from fields that are being scaled back and there is considerable uncertainty associated with production developments for these fields.

### Rising consumption and high saving

According to preliminary accounts figures, household real disposable income expanded by 2.9 per cent last year. In the calculations, slightly lower growth in benefits from the public sector will contribute to reducing income growth this year. On an annual basis, interest rates both in nominal and real terms show an increase and thus contribute to boost household saving. According to our estimates, the saving ratio will increase by 3/4 percentage point from 2000 to 2001. As a result of the prospect of particularly low price inflation in 2002, real income growth is expected to pick up appreciably next year. In spite of a moderate fall in nominal interest rates and pronounced growth in housing wealth, it is likely that the household saving ratio will increase further, while consumption growth may reach more than 3 per cent. One reason for higher saving is that the real after-tax interest rate does not fall but instead increases from 2001 to 2002.

In 2003, we have assumed a tax reduction for households. This will contribute to higher disposable income, while higher price inflation will in isolation push down real income growth. In the calculations, real income growth is reduced in relation to 2002, but remains at a relatively high level. As a result of the decline in interest rates through 2002 and a further increase in housing wealth, household consumption will rise markedly again in 2003, with only a modest increase in the saving ratio.

Prices for existing dwellings have risen considerably in recent years, and with the exception of a projected relatively low rise this year, we assume a faster rise in prices for existing dwellings through 2002 and 2003. The rise in prices implies an increase in wealth, making it relatively more attractive to construct new dwellings. Growth in housing investment is expected to be maintained during the remainder of the projection period, but at a slightly slower pace than through 2000.

### Mainland corporate investment

Mainland private industries recorded higher investment in 2000 compared with the previous year, but a decline in manufacturing investment pushed down overall growth. A slightly different picture is expected this year. Manufacturing investment picked up again in the first quarter of 2001 and Statistics Norway's investment intentions survey indicates further growth through the year and in 2002. Other mainland enter-

prises are expected to record a decline this year, with an overall fall in investment in private mainland industries. It is assumed that the investment tax will be removed with effect from the second quarter of next year. As a result, some investment is expected to be postponed, thereby contributing to reducing investment in 2001 and increasing investment in 2002. For 2002 and 2003, investment is projected to rise in most mainland sectors and corporate investment in the mainland economy is expected to grow by about 4 per cent both years.

### Growth in total demand is increasing

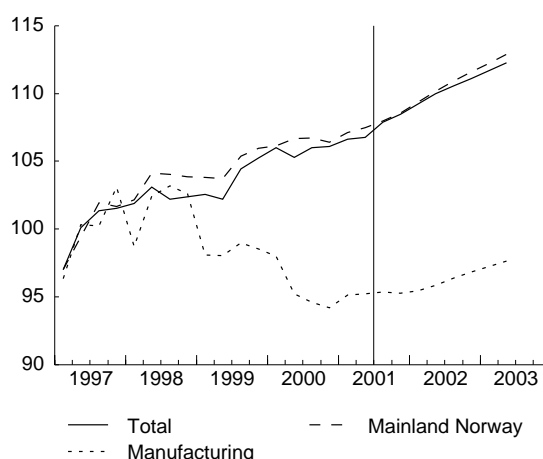
There are now clear signs of faster growth in several domestic demand components. This perhaps applies most to the investment side, with housing investment expanding in particular. It appears that the contraction in manufacturing investment will be reversed to a sharp increase. The decline in petroleum investment has come to a halt and it is not inconceivable that this investment will resume an upward trend in the short-term. The same applies to general government investment. Growth in household consumption has been moderated by high interest rates for a period, but this effect is now ebbing. An increase in vacation days will contribute to curbing growth in household real income, while more subdued price inflation will have a strong opposite effect. These effects will also be in evidence next year. Real wage growth is then expected to increase considerably from a good 1.5 per cent this year to about 3 per cent next year, measured per normal man-year. Foreign cyclical impulses will have the opposite effect and we must assume noticeably lower growth in traditional merchandise exports for some quarters ahead than the level recorded in the first half of this year.

### Faster growth in mainland GDP

Growth in mainland GDP in both 2000 and 2001 is heavily influenced by considerable changes in electricity production. Even though mainland growth will decline slightly from 2000 to 2001, the rate of growth shows an increase when electricity production is excluded. High electricity production in 2000 contributed to pushing up annual growth by 0.4 per cent that year and will make approximately the same contribution to pushing down growth this year. Excluding electricity production, mainland GDP expanded by 1.4 per cent in 2000, while growth in 2001 is projected at 1.7 per cent. Total GDP growth for mainland Norway is now estimated at 1.3 per cent, against 1.8 per cent last year. It also appears that total GDP growth will again this year be somewhat higher than mainland growth, not least as a result of brisk growth in gas production. An increase in vacation days will contribute to reducing growth in the economy somewhat.

In 2002, stronger consumption growth and a turnaround in mainland investment through 2001 are expected to contribute to noticeably higher growth in

**Gross domestic product**  
Seasonally adjusted volume indices, 1997=100



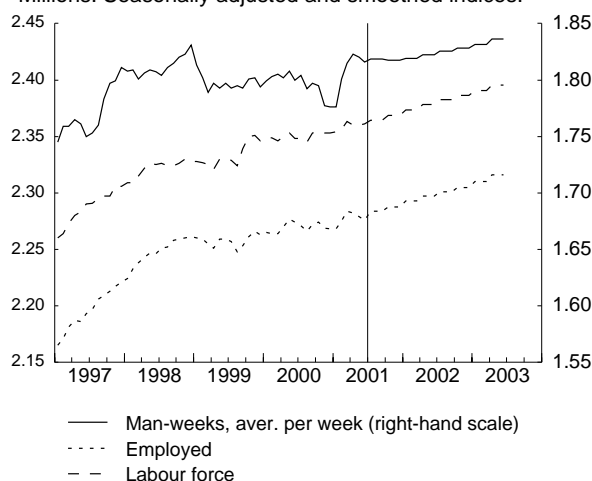
Source: Statistics Norway.

**Productivity and output gap**  
Per cent



Source: Statistics Norway.

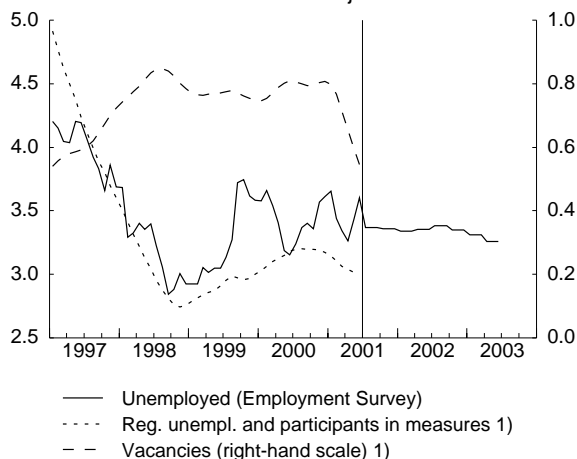
**Labour force, employment and number of man-weeks**  
Millions. Seasonally adjusted and smoothed indices.



Source: Statistics Norway.

**Unemployed and number of vacancies**

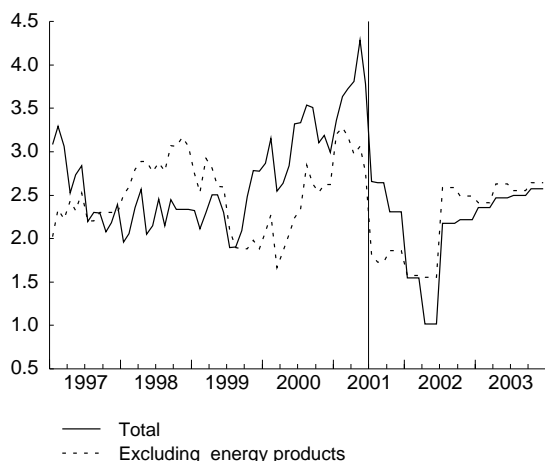
Per cent of labour force. Seas. adj. and smoothed



1) Backwards adjusted for breaks in the series from January 1999.  
 Sources: The Directorate of Labour and Statistics Norway.

**The consumer price index**

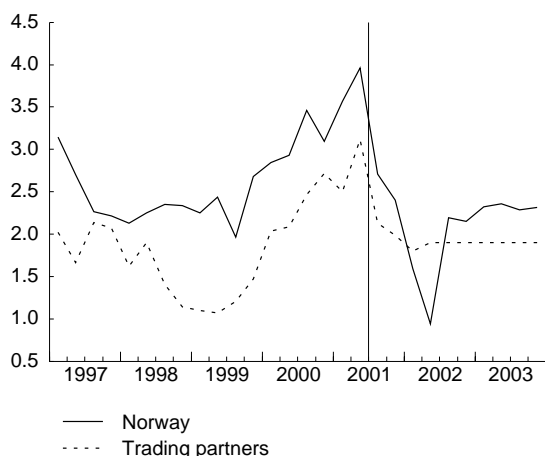
Percentage change from the same month the previous year



Source: Statistics Norway .

**Consumer price indices**

Percentage growth from the same quarter previous year



Sources: Statistics Norway, OECD and Eurostat.

the mainland economy. Higher petroleum investment is also expected to make a contribution, while moderate export growth will reduce the overall growth impetus. In 2003, the international cyclical upturn will again contribute to stronger growth in traditional merchandise exports, while the impetus from petroleum activities is expected to be limited. All in all, it is therefore assumed that production growth in the mainland economy will increase to about 2.5 per cent in 2002 and 2003. This is slightly higher than underlying trend growth for the mainland economy, but not to the extent that the level of mainland GDP exceeds the trend level in the period.

**High productivity growth**

Growth in labour productivity came to a good 3 per cent in 2000 for mainland enterprises. Productivity growth is expected to be slightly lower this year, but this reflects the unusual conditions associated with electricity production as discussed above. Productivity growth is projected to remain high in 2000, but may then be curbed somewhat in 2003 as enterprises gradually adjust employment. Productivity growth in 2003 for mainland enterprises will be on a par with normal trend growth of about 2.25 per cent.

**Stable or even slight drop in unemployment?**

According to Statistics Norway's Labour Force Survey, unemployment was 3.4 per cent in 2000. Our projection for this year is the same. It appears that both the number employed and the labour force will expand by about half a per cent in 2001. The number of man-hours worked, on the other hand, will decline as a result of the increase in vacation days and additional public holidays. This will be repeated next year and while the number employed will continue to show an increase, the number of man-hours worked will decline. Employment growth is expected to be slightly stronger next year, but the labour force is also projected to expand somewhat more than in 2001. Growth in man-hours worked and stronger employment growth are expected in 2003, which in spite of higher participation rates may contribute to slightly lower unemployment.

Even though pressures in the labour market, measured by the unemployment rate, are stable, the number of unfilled vacancies has exhibited a noticeable decline in the course of 2001. This implies that labour market mismatches may have been reduced somewhat compared with last year, and may place a slight damper on wage growth in the period ahead.

**Sharp decline in price inflation**

There have been pronounced variations in the rate of inflation over the past two years. After the year-on-year rise in the consumer price index (CPI) was reduced to 1.9 per cent in August 1999, the rate of inflation has moved on a clear upward trend until May this year when the rate of increase was as high as 4.3

per cent. The increase in inflation was largely fuelled by changes in the crude oil price on the world market, electricity prices in the Nordic countries along with increases in excise duties. In the last two months, the rate of increase has fallen markedly, and was reduced to 2.7 per cent in July. The halving of the VAT rate on food with effect from 1 July was the most important single factor behind the decline in the rate of inflation, but developments in petrol prices also made a pronounced contribution.

Changes in the rate of inflation are expected to be fairly modest through the autumn. Electricity prices have shown very unusual developments this year, with the normal pronounced decline in prices during the summer months failing to materialize so far. Little snow on mountains in the western part of Norway last winter contributed to a continued high spot price for electricity. Abundant precipitation in recent months has contributed to reducing the spot price and the price of forward contracts. It now appears that electricity prices may remain fairly stable until the end of the year. Inasmuch as electricity prices rose considerably during the second half of 2000, this will contribute to reducing the rate of inflation later in the autumn. A more normal path for electricity prices in 2002 compared with this year will help to reduce the rate of inflation in the summer half-year in 2002 in relation to the winter half-year. At an annual rate, electricity prices (excluding any changes in indirect taxes that have not been incorporated) are expected to be slightly lower next year and show little change from 2002 to 2003.

Our calculations for 2002 and 2003 are based on the assumption that there will be no changes in the indirect tax programme for consumer goods in the period ahead and that all specific taxes are raised by 2.5 per cent as of 1 January both years. Due to the VAT reform on 1 July this year, indirect taxes will make a markedly negative contribution to the inflation rate in the first half of next year, but will thereafter have a neutral impact. The fact that the direct effect of the VAT increase from 23 to 24 per cent on the year-on-year rate of inflation will be eliminated in January next year will contribute to reducing the rate of inflation from December to January next year. As from July 2002, there will no longer be any direct effects of indirect tax changes on the rate of inflation that are now known. This points to a pronounced rise in the year-on-year rate of inflation from June to July 2002 to a little more than two per cent.

In its conduct of monetary policy Bank of Norway has now been given an inflation target of about 2.5 per cent annually. In the short term it is in practice virtually impossible for a central bank to control inflation. Norges Bank's own interpretation of the regulation is that the target shall be linked to inflation expectations a period ahead (about two years). In this time horizon it is difficult to predict "extraordinary, temporary dis-

turbances". One natural interpretation when the regulation states that "normally, the direct effects of changes in indirect taxes and extraordinary, temporary disturbances shall not be taken into account" is that these effects shall be eliminated when later evaluating whether Norges Bank has "done its job". There is, however, no obvious way to identify such disturbances.

Over the past year, many of the changes in the rate of inflation can be traced to changes in indirect taxes and changes in prices for electricity and crude oil. Many of the changes in energy prices can be perceived as such extraordinary, temporary disturbances. A natural solution to the challenge linked to identifying a "success indicator" for monetary policy would be to exclude energy prices from the CPI and, at the same time, adjust for indirect tax changes for other goods. There are at least two fundamental objections to this: first, it is not the case that all real energy price changes can be considered extraordinary, temporary disturbances. Second, there will also always be other goods for which price changes can be considered temporary disturbances. In practice, adjustments must also be made for other short-term disturbances when subsequently evaluating Norges Bank's conduct of monetary policy, while at the same time price formation/developments for energy goods should be studied more thoroughly before deciding to consider all price changes for these goods as temporary disturbances.

Because energy prices have historically varied considerably and their budget share is fairly considerable, Statistics Norway publishes an index where these goods are excluded. This index may serve as a better *starting point* than the unadjusted CPI when evaluating whether the inflation target has been achieved. In July 2001, the year-on-year rise in the consumer price index, excluding energy prices, was 1.8 per cent. The rate of increase is projected at about 1.5 per cent in the first half of 2002 before stabilizing at around 2.5 per cent.

With regard to adjustments for direct effects of indirect tax changes, there are a number of fundamental and practical problems associated with quantifying such impulses. This is the reason why Statistics Norway does not already publish a consumer price index eliminating such effects. We have made some rough calculations and have concluded that indirect tax changes in excess of an adjustment for inflation have contributed to pushing up the rate of increase in the consumer price index by about 0.6 percentage point in the first half of 2001 and to reducing the rate of increase by about 0.6 percentage point in the current half-year. In the first half of the year, the effects of the increase in the electricity tax and reduced petrol taxes offset each other, so that the contribution of indirect taxes was approximately independent of whether energy prices were included or not. The petrol tax,



**Main economic indicators 2000-2003. Accounts and forecasts**

Percentage change from previous year unless otherwise noted

		Forecasts							
Accounts 2000		2001			2002			2003	
		SN	MoF	NB	SN	MoF	NB	SN	NB
<b>Demand and output</b>									
Consumption in households and non-profit organizations	2.4	2.0	1.6	1 3/4	3.2	2.6	2 1/2	2.8	2 3/4
General government consumption	1.4	1.9	2.3	3	2.5	2.1	2 1/4	2.6	2 1/2
Gross fixed investment	-1.1	-4.8	0.7	1/2	5.1	1.3	1 1/2	3.5	-2
Petroleum activities	-17.1	-8.8	-1.2	2	4.6	0	0	-0.1	-10
Mainland Norway	1.4	-1.0	0.3	1/2	4.6	0.5	1 3/4	4.6	0
Firms	1.8	-3.5	-0.8	-3/4	3.8	0.2	2 1/2	4.3	1/2
Housing	12.2	9.5	6.8	8	8.3	0.9	1	7.7	0
General government	-7.9	-2.1	-2.2	-2 1/4	3.1	1.1	1	2.6	-1 3/4
Demand from Mainland Norway <sup>1</sup>	1.9	1.4	1.5	1 3/4	3.3	2.1	2 1/4	3.1	2 1/4
Stockbuilding <sup>2</sup>	0.8	-0.6	0.1	..	0.0	0.0	..	0.0	..
Exports	2.7	5.0	4.9	4 1/2	3.0	5.1	4 1/4	3.1	2
Crude oil and natural gas	6.4	5.3	8.2	6	1.8	6.9	6	-0.1	0
Traditional goods	2.1	4.7	3.2	4	3.5	4.5	3 1/4	5.0	3 1/2
Imports	2.5	0.8	3.1	2 1/2	5.5	3.7	4	5.5	2 1/4
Traditional goods	1.7	4.1	3.5	3	6.3	4.2	4 1/2	6.3	2 1/4
Gross domestic product	2.3	1.6	2.4	2 1/4	2.5	2.8	2 1/4	2.0	1 1/2
Mainland Norway	1.8	1.2	1.5	1 1/2	2.6	1.8	1 3/4	2.5	1 3/4
<b>Labour market</b>									
Employed persons	0.5	0.6	0.5	3/4	0.8	0.7	3/4	0.9	1/2
Unemployment rate (level)	3.4	3.4	3.3	3 1/4	3.4	3.2	3 1/4	3.2	3 1/4
<b>Prices and wages</b>									
Wages per standard man-year	4.3	4.6	4 1/2	4 3/4	4.4	..	5	4.0	4 3/4
Consumer price index	3.1	3.2	3	3 1/4	1.7	2 1/4	2	2.3	2 1/2
Consumer price index excl. energy products	2.3	2.5	..	..	2.0	..	..	2.4	..
Export prices, traditional goods	13.8	-0.3	0.2	2	-2.8	0.0	0	2.8	0
Import prices, traditional goods	6.0	2.7	1.8	3 3/4	0.6	1.4	0	2.1	1 1/2
Housing prices	14.0	4.9	..	5 1/2	9.3	..	4	7.1	4
<b>Balance of payment</b>									
Current balance (bill. NOK)	203.6	207.8	221.8	205	170.8	193.8	185	153.3	150
Current balance (per cent of GDP)	14.3	14.1	15.0	14	11.3	12.8	12	9.8	9
<b>Memorandum items:</b>									
Household savings ratio (level)	7.7	8.4	6.3	8	9.3	6.4	8	9.8	8 1/4
Money market rate (level) <sup>3</sup>	6.6	7.2	7.3	7.4	6.5	7.1	7.4	6.4	7.3
Implicit borrowing rate (level) <sup>4</sup>	8.2	9.0	..	..	8.4	..	..	8.1	..
Crude oil price NOK (level) <sup>5</sup>	252.0	233.5	225	237	218.9	194	210	212.7	182
Exports market indicator	10.3	4.6	..	..	5.4	..	..	7.2	..
Importweighted krone exchange rate (44 countries) <sup>3,6</sup>	2.5	-2.5	..	-2 1/4	0.3	..	-1/4	-0.1	0.0

<sup>1</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.<sup>2</sup> Change in stockbuilding. Per cent of GDP.<sup>3</sup> The NB figures are technical assumptions. The interest rate forecasts reflects the implicit expectations of the market participants.<sup>4</sup> Households' borrowing rate in private financial institutions.<sup>5</sup> Average spot price Brent Blend.<sup>6</sup> Increasing index implies depreciation.

Sources: Statistics Norway (SN), Ministry of Finance, Revidert nasjonalbudsjettet 2001 (MoF), Norges Bank, Inflasjonsrapport 2/2001 (NB).

however, was reduced with effect from 1 July, and the contribution of indirect taxes to the consumer price index *excluding energy prices* can be estimated at about 0.5 per cent in the second half of 2001. In the first half of 2002, changes in indirect taxes for consumer goods may, under our assumptions, contribute to reducing the rate of price inflation by about 1.3 percentage points.

**Higher real wage growth next year**

Growth in wages per normal man-year is estimated about 4.6 per cent this year and is likely to be slightly lower next year, dropping further in 2003. The cyclical downturn now being experienced by large parts of the world points to less favourable profitability in manufacturing and thus lower wage growth. Fairly high productivity growth is a factor indicating the

opposite. Relatively high and stable pressures in the labour market, measured by unemployment, have contributed to increasing the level of real wages in Norway. In our view, however, developments in this area do not indicate higher wage growth in 2002 since the level of unemployment now has been approximately the same for several years. Moreover, labour market mismatches appear to have been reduced, which will push down wage growth in the period ahead. In 2002, a main settlement will take place and experience shows that this contributes to higher wage growth. Teachers' salaries are also expected to contribute to high wage growth this year and next, but not in 2003. In 2003, however, pressures in the labour market are expected to increase somewhat.

### **Continued large current account surpluses**

In the first half of 2001, Norway recorded a current account surplus of a good NOK 113 billion, primarily as a result of high oil prices and sizeable petroleum production. For 2001 as a whole, the surplus is projected at a little less than NOK 210 billion, equivalent to about 14 per cent of GDP. It is then assumed that crude oil prices in the second half of the year will be slightly below the level in July and August. Inasmuch as it is assumed that the Norwegian krone will appreciate against the US dollar, whereas the oil price in dollar terms will remain at the current level, the oil price in krone terms will edge down in the years ahead. Admittedly, oil and gas production and exports will increase, but it is assumed that the value of oil and gas exports has passed a peak and will hereafter fall. Sluggish price developments for Norway's traditional export goods will contribute to falling export earnings, while import growth will increase noticeably in pace with rising growth in Norwegian demand. Trade surpluses are therefore expected to fall in the years ahead. As the return on the Petroleum Fund gradually increases, the interest and transfers balance will show an improvement. The deterioration in the current account balance will therefore be less than the reduction in the trade surplus.