# Economic trends

## **Moderate cyclical upturn continues**

The cyclical upturn in the Norwegian economy has now continued for one year, but output growth has been low over the past few quarters given that we are in the early phase of the upturn. The Norwegian economy thus remains in a slump. The global cyclical upturn is well under way but is also moderate from a historical perspective, particularly in the euro area. Both in Norway and abroad, the upturn is being fuelled by low interest rates. As expected, household demand is making a considerable contribution to the cyclical upturn. In Norway, higher petroleum investment is also making a contribution. In the period ahead, the global upturn will also stimulate Norway's exports of traditional goods. The situation for internationally exposed industries has now improved, not least thanks to what appears to be a stabilisation of the krone exchange rate at a more normal level and this year's moderate wage settlement. In many ways, there has been a reversal of developments in the factors that contributed to the cyclical downturn through 2001 and 2002.

The cyclical upturn is thus moderate both in Norway and internationally. This is primarily reflected in a very modest improvement in labour market conditions, but also in inflation which is not showing an upward tendency internationally when excluding the inflationary impulses from the rise in oil prices this spring. As a result, there is little reason to tighten monetary policy in the short term at least in Europe, while interest rates may be raised in the US over the summer if the upturn continues at the current pace. As many observers have indicated, the increasing integration of Asian countries into the world economy entails a virtual «supply shock» for many western countries, which is keeping inflation low in spite of the cyclical upturn. On the other hand, the strong expansion in Asian countries is exerting pressure on many commodity markets - not least on the oil market. This has contributed to higher prices for many commodities and semi-manufactured goods. If the effects of higher commodity prices dominate in relation to the negative price impulses from finished goods, central banks may increase interest rates to restrain inflationary impulses. However, our projections for the international economy and the Norwegian economy are based on the assumption that this will not be the case. Given our assumption of a moderate global upturn, the interest rate level may remain low for a long period ahead, particularly in the euro area. In that case, the upturn in the Norwegian economy will be more pronounced over the next two years, without a rise in inflation that implies any considerable change in monetary policy. Unemployment will fall somewhat, but hardly to the level prevailing during the previous expansion.

However, there are certain risk factors that are worth highlighting with regard to the Norwegian economy. It is conceivable that continued high oil prices will lead to higher growth in oil investment than assumed in our baseline scenario. This would contribute to amplifying and prolonging the cyclical upturn in Norway. High oil prices will also lead to a higher-than-expected increase in the Petroleum Fund. Even if current use of petroleum revenues is higher than implied by the fiscal rule, and the extra revenues should thus be used to reduce the «over-consumption», it cannot be ruled out that fiscal policy may generate further impulses. This fiscal stimulus peculiar to Norway, combined with higher oil investment, will increase the risk of inflation rising to a level that is higher than the inflation target. As a result, Norges Bank (the central bank) may have to increase interest rates faster than assumed in our baseline scenario. However, we do not believe this will be necessary, and we have illustrated the implications for the Norwegian economy of these factors in an alternative scenario.

# Norwegian economy

The Norwegian economy passed a cyclical trough in the third quarter of last year. At the same time, growth in the world economy picked up. The subsequent production upswing in Norway has not been particularly strong, however. Moreover, the improvement in labour market conditions has been moderate thus far. Inflation remains low and monetary policy is expansionary, but in terms of the real interest rate less expansionary than in the US and the euro area. Fiscal policy is no longer generating the same expansionary impulses as earlier.

According to preliminary, seasonally adjusted quarterly national accounts (QNA) figures, mainland GDP

grew at an annualised rate of 4 per cent in the second and third quarter of 2003. Through the winter months, growth fell to estimated trend growth for the Norwegian economy at 2.3 per cent. Developments for mainland demand were the opposite, with demand rising from an annual rate of close to 2 per cent to 4 per cent in the same period. In the same period, growth in household consumption increased from 5 to 6 per cent and mainland investment from -7 to 1 per cent. The contribution to growth from stock-building increased. The corollary to this was, among other things, a fall in oil investment from an annual rate of 37 to 2 per cent, a decline in growth in traditional merchandise exports from 9 to 2 per cent, and in par-

## Macroeconomic indicators 2002-2004. Growth from previous period unless otherwise noted. Per cent

				Seasonally adjusted					
	2002	2003	03.2	03.3	03.4	04.1			
Demand and output									
Consumption in households and non-profit organizations	3.6	3.8	1.2	1.2	1.2	1.8			
General government consumption	3.1	1.4	1.6	-1.1	0.3	0.2			
Gross fixed investment	-3.4	-3.7	-2.6	0.6	-5.8	6.3			
Mainland Norway	-2.5	-4.7	-1.8	-1.7	2.1	-1.7			
Extraction and transport via pipelines	-3.6	15.8	13.7	2.9	-6.8	8.3			
Service activities incidential to extraction									
Final domestic demand from Mainland Norway <sup>1</sup>	2.4	1.7	0.8	0.1	1.1	8.0			
Exports	0.1	1.2	3.8	-2.5	4.6	-1.9			
Crude oil and natural gas	2.2	-0.2	4.3	-7.1	0.4	5.7			
Traditional goods	1.6	2.6	3.2	1.2	1.5	-0.4			
Imports	2.3	2.2	-0.3	0.0	2.1	2.9			
Traditional goods	3.8	4.0	1.6	0.1	1.4	4.6			
Gross domestic product	1.4	0.4	0.3	1.2	0.5	1.0			
Mainland Norway	1.7	0.6	0.6	1.4	0.6	0.5			
Labour market									
Man-hours worked	-0.9	-1.2	-1.3	0.3	0.1	0.1			
Employed persons	0.3	-0.6	-0.1	0.1	-0.1	-0.3			
Labour force <sup>2</sup>	0.7	0.0	0.3	0.2	-0.1	-0.5			
Unemployment rate, level <sup>3</sup>	3.9	4.5	4.6	4.6	4.6	4.3			
Prices and wages									
Wages per standard man-year <sup>4</sup>	5.3	3.9	4.3	3.2	2.8	2.8			
Consumer price index (CPI) <sup>4</sup>	1.3	2.5	2.2	1.9	1.2	-1.4			
CPI adjusted for tax changes and excluding									
energy products (CPI-ATE) <sup>4</sup>	2.3	1.1	1.2	0.8	0.6	0.1			
Export prices, traditional goods	-8.6	-1.2	2.9	0.1	2.2	3.5			
Import prices, traditional goods	-7.4	0.7	-0.3	2.3	1.7	8.0			
Balance of payment									
Current balance, bill. NOK	196.1	201.2	44.0	49.6	55.4	53.9			
Memorandum items (unadjusted, level)									
Money market rate (3 month NIBOR)	6.9	4.1	4.7	3.1	2.8	2.0			
Lending rate, banks <sup>5</sup>	8.5	6.2	6.9	5.2	4.7				
Crude oil price NOK <sup>6</sup>	197.5	204.7	183.0	209.0	203.2	221.0			
Importweighted krone exchange rate, 44 countries, 1995=10	0 91.6	92.8	91.9	95.7	94.7	98.2			
NOK per euro	7.5	8.0	8.0	8.3	8.2	8.6			

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

<sup>&</sup>lt;sup>2</sup> Unemployed (Labour Force Survey) and employment (NA) excl. maritime personnel in ocean transport.

<sup>&</sup>lt;sup>3</sup> According to Statistics Norway's labour force survey (LFS).

<sup>&</sup>lt;sup>4</sup> Percentage change from the same period the previous year

<sup>&</sup>lt;sup>5</sup> End of period

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

Sources: Statistics Norway and Norges Bank.

ticular a rise in the growth rate for overall imports from 0 to 10 per cent.

The number of person-hours worked also increased during the period, from a decline of 4 per cent annualised through the summer to an increase of ½ per cent through winter. As a result, productivity growth has remained high for the year as a whole. The number of employed showed the opposite tendency, with zero growth through the summer of 2003 to negative growth of a little more than ½ per cent through the winter. In spite of this, unemployment has shown a falling tendency over the past year, which primarily reflects the outflow of many potential job-seekers from the labour market.

Strong productivity growth is one of the factors behind low inflation. Owing to weak profitability and relatively high unemployment, wage growth has been moderate. In addition, negative external price impulses, partly as a result of higher imports from low-cost countries, low house rent inflation and generally low pressures in the economy are keeping inflation at a low level.

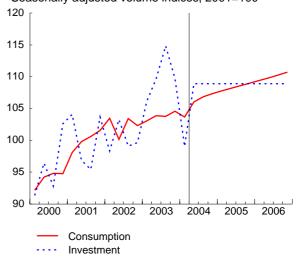
We assume that the sharp upswing in imports will prove to be temporary and that there will be a shift in demand towards domestically produced goods in the period ahead. With continued low interest rates and a gradual rise in inflation, real interest rates will fall, contributing to brisk growth in consumption and housing investment. This will in turn fuel investment in service industries. We also expect further impulses from oil investment the coming years. In addition, the global upturn will generate considerable growth impulses in the period to 2006, when we expect a renewed global cyclical slowdown.

## **Moderate fiscal impulses**

According to revised QNA figures, growth in general government consumption was 1.4 per cent in 2003, or lower than in 2002. Gross general government investment rose by 10 per cent in 2003. All in all, general government consumption and investment increased by 2.4 per cent in 2003. Revised QNA figures indicate approximately the same growth as earlier for the sum of the two components consumption and investment. We have assumed that growth in general government consumption and investment will continue at a moderate pace in the years ahead. The estimates imply that public spending on goods and services will grow at a somewhat faster pace than employment growth, in line with the tendency observed in recent years. The estimates for direct and indirect taxes for 2003 are based on approved policy.

In real terms, volume taxes have increased slightly since the beginning of the year. There was a sharp increase in tobacco taxes, however. From 1 March, the VAT regime for transport services was changed. VAT

#### **General government** Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

was applied to services that were previously exempt, but the VAT rate was set at such a low level that when taking into account deductions for input VAT, these services will benefit from an implicit subsidy. Fiscal policy for 2004, combined with some measures introduced in 2003, has reduced prices for day-care services as a result of an increase in government support. Reference is made to the discussion in the section on consumer price developments.

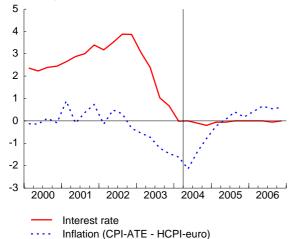
For 2005 and 2006, we assume as usual unchanged real direct and indirect tax rates. The Government presented a white paper on the tax system this spring, which included proposals to change the system for direct taxation of individual and enterprise and which may be implemented as from 2005. It is difficult to predict the outcome of the Storting (Norwegian parliament) deliberations as a majority compromise has yet to be reached. The Government has not presented concrete proposals as to how the proposed tax changes that entail lower tax revenues are to be financed. Therefore, we have not incorporated any changes in our baseline calculations for 2005 and thereafter, but have presented an alternative scenario where the removal of wealth tax as from 2005 is one element. In isolation, there is no room for tax alleviations in connection with the tax reform if the fiscal rule is to be adhered to in 2005. Revenue spending is already markedly higher than implied by the fiscal rule in 2004. If projections for developments in the real economy prove to be close to the mark, the Norwegian economy can hardly be described as being in a downturn in 2005. Hence, there are no cyclical factors that warrant an expansionary fiscal stance in 2005, in contrast to the situation prevailing in 2004.

#### **Continued low interest rates, but stronger krone**

On 11 March, Norges Bank cut the sight deposit rate and the overnight lending rate by 0.25 percentage point. The banks' deposit rate has thereafter stood at

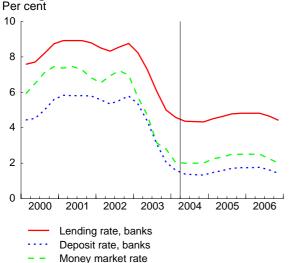
# Interest rate and inflation differential between NOK and the euro

Percentage points



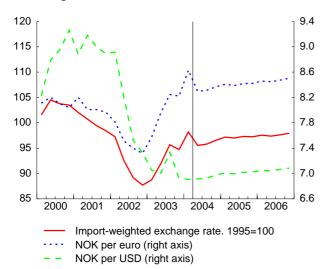
Sources: Norges Bank and Statistics Norway.

## Norwegian interest rates



Source: Norges Bank

#### **Exchange rates**



Source: Norges Bank.

1.75 per cent. At the subsequent two monetary policy meetings, Norges Bank has maintained its bias that inflation will be lower than 2.5 per cent two years ahead. In spite of this, money market rates have edged up recently, and the three-month rate was slightly higher than 2 per cent in mid-June, rising from less than 1.9 per cent in March. This would indicate that the market deems that a bottom level for interest rates has been reached this time around, and that the next interest rate change will be an increase. Market expectations, as implied by Consensus Forecasts and FRA rates, point to an unchanged interest rate to the end of 2004, followed by an interest rate increase between 0.5 and 1 percentage point in the first six months of 2005.

In pace with falling expectations of further interest rate cuts, the krone has appreciated against the euro. The exchange rate against the euro has now reverted to the interval prevailing before Norges Bank started the last round of interest rate cuts in December 2003, i.e. between 8.10 and 8.30. Measured by the tradeweighted index, the krone has appreciated by 4 per cent from the beginning of March to mid-June, primarily reflecting an appreciation against European currencies. The krone has shown little change against the US dollar.

In spite of prospects of continued cyclical upswing, inflation is projected to be low. Our projections indicate that core inflation (CPI-ATE) will be below 2.5 per cent in 2006. Against this background, interest rates are expected to be low in the period ahead. Our projections are based on a rise in money market rates of 0.5 percentage point in the first six months of 2005, returning to 2 per cent in the latter half of 2006. This path is based on our expectation that Norges Bank will follow the path for foreign interest rates in the period ahead, but with some lag. We have chosen an interest rate path that is somewhat lower than implied by FRA rates given our very low domestic inflation expectations.

With only small interest rate changes and a stable interest rate differential against European countries, we also expect the exchange rate to be relatively stable in the period ahead. The exchange rate is model-determined in our projections. In this model, the exchange rate is primarily influenced by the difference between domestic and foreign interest rates, and by the difference between domestic and foreign prices. The model predicts that the krone will depreciate somewhat over time. Our projections are based on a depreciation of the krone against the euro to 8.40 by the end of 2004, and down towards 8.50 by the end of 2006. The trade-weighted exchange rate index is expected to depreciate to the same extent.

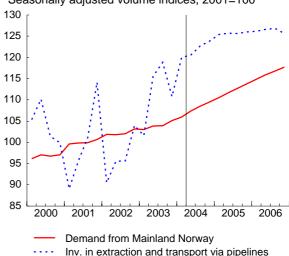
# Oil investment – is the uncertainty on the upside?

According to QNA figures, total oil and gas production declined in the first six months of 2003 (at constant prices), followed by an increase in the latter half of the year. For the year as a whole, the figures show weak growth. Production increased further in the first quarter of 2004, primarily reflecting an increase in gas extraction, but oil extraction also rose somewhat. We assume that oil production will remain at this level to the end of the year, followed by an increase of about 0.5 per cent in 2005 and a decline of 3.5 per cent in 2006. Furthermore, we assume that gas production will be slightly lower in the last three quarters of 2004 than in the first quarter. Gas production is expected to expand by about 10 per cent in both 2005 and 2006. These estimates imply a fairly steady increase in overall production, which means that the level of production will be close to 3 per cent higher in 2006 than in 2003. This is broadly in line with estimates in the Revised National Budget for 2004.

Considerable uncertainty in the oil market was reflected in high price variability in 2003. In the first six months of 2004, oil prices have also varied markedly, generally between USD 30 and 39 per barrel. Since the latter part of winter 2003, oil prices have been moving on an upward trend, from as low as USD 23 at that time, followed by a gradual rise to around USD 39 at the beginning of June this year and then declining somewhat in recent weeks. The average price so far this year is about USD 34. We assume that prices will fall to USD 30 as from the fourth quarter of this year and remain steady at this level to the end of the projection period. This implies an average oil price of USD 32.5 per barrel in 2004. Given our exchange rate assumption, this implies an oil price in Norwegian kroner of 225 per barrel in 2004. Oil prices are assumed to average around NOK 210 in 2005 and 2006.

In volume terms, investment in extraction and pipeline transport has generally shown an upward tendency over the past two years, except in the last quarter of 2003. However, investment picked up again in the first quarter, with growth close to 10 per cent higher than in the previous quarter. Although the decline in on-shore investment explained a substantial share of the investment decline between the third and fourth quarter, the increase in on-shore investment contributed to the volume increase in the first quarter of this year. The level of investment in 2004 is projected to be a good 8 per cent higher in 2004 than in 2003. In 2005 and 2006, investment is expected to increase by a further 1-2 per cent annually. If this proves to be the case, investment in the coming three-year period will be relatively high in absolute terms - but measured as a percentage of GDP (at constant prices) investment will remain steady. The estimates imply that the investment level will be somewhat higher as from 2004





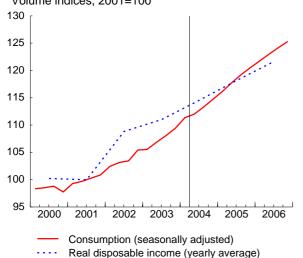
Source: Statistics Norway.

in relation to our previous report, which primarily reflects higher estimates this year for investment in pipeline transport and investment in connection with fields in operation. The consequences of the investment profile for the Snøhvit project, as a result of the recently discovered cost overshoots, are uncertain. Our projections are based on the assumption that the overshoots will raise the investment level in 2006 and 2007. There is probably an upside risk associated with the oil investment projections. With higher oil prices, it is conceivable that oil companies will consider launching previous investment projects, which are now clearly more profitable. It is also conceivable that the licences awarded in the last round will trigger additional investments within the projection period. This is not taken into account in our baseline scenario, but we have attempted to do so in an alternative calculation presented in the box in this report.

# Fall in the real interest rate boosts consumption growth

According to revised national accounts figures, growth in consumption for household and non-profit institutions was 3.8 per cent between 2002 and 2003, at constant prices. With relatively low growth in household real disposable income of about 2 per cent, the main factor stimulating consumption is most likely the sharp fall in the real interest rate after tax. High electricity prices resulted in low consumption growth at the beginning of 2003. Seasonally adjusted figures show that consumption growth has been high thereafter. Seasonally adjusted figures for the first quarter of this year show that consumption growth was 1.8 per cent higher than in the fourth quarter of 2003. The strong rate of growth in the first quarter primarily reflects the decline in lending rates. Somewhat reduced uncertainty as to future income growth, as a result of prospects of lower unemployment, may also have stimulated consumption somewhat.

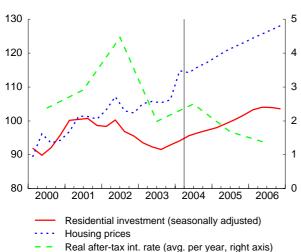
# Income and consumption in households Volume indices, 2001=100



Source: Statistics Norway.

#### Residential market

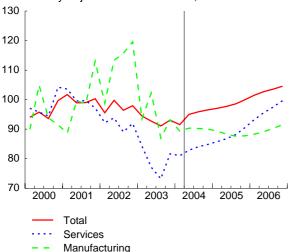
Left axis adj. indices, 2001=100, right axis per cent



Source: Statistics Norway.

#### **Investment, Mainland Norway**

Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

The projections for household real disposable income are primarily contingent on developments in wage income, net capital income and consumer prices. The wage settlement was moderate this year and the carry-over from last year is low. Wage growth in line with last year, combined with some increase in employment, implies stronger growth in wage income in 2004 than in 2003, when employment declined. Net capital income consists among other things of interest income from banks deposits and interest expenses. As households are in a net debt position, excluding insurance claims and claims other than bank deposits, the interest rate reductions will reduce deposit income to a lesser extent than interest expenses, which implies an increase in net capital income. Lower dividend payments as a result of weak profitability last year have the opposite effect, however. All total, household net capital income is thus expected to decline between 2003 and 2004. Consumer prices will increase by a modest 0.7 per cent between 2003 and 2004, compared with 2.5 per cent last year. All in all, growth in household real disposable income is projected at 3.2 per cent in 2004.

Growth in household real disposable income is projected at 3.2 per cent in 2005 and 2.9 per cent in 2006. In 2005 and 2006, wage growth is expected to be approximately on a par with growth in 2004, while employment growth is expected to pick up ahead. Even though a small increase in interest rates will in isolation push down real disposable income, overall growth in net capital income will remain virtually unchanged through 2005 and 2006, primarily as a result of higher dividend payments. However, the dividend estimates are highly uncertain because of the tax reform, which will probably be implemented in 2005. Higher consumer price inflation will curb growth in household real disposable income in 2005 and 2006.

Consumption is projected to grow by 5 per cent at constant prices in 2004. This is high in relation to projected growth in real disposable income and implies a decline in the saving ratio from 7.7 per cent in 2003 to 5.5 per cent this year. In volume terms, consumption is projected to expand by 5.3 per cent in 2005 and 4.2 per cent in 2006, which primarily reflects the decline in the real interest rate after tax, particularly in 2005. Despite an assumed marginal rise in nominal interest rates in the years ahead, the real interest rate after tax will show a marked fall through 2005 and 2006 owing to higher consumer price inflation. A decline in real interest rates implies that consumption will be relatively cheaper in this period than in the next period, so that households will consume more in the current period at the expense of consumption in subsequent periods. In 2006, growth in consumer spending will be restrained by lower growth in real disposable income. Against this background, the saving ratio will fall to 3.6 per cent in 2005 and as low as 2.4 per cent in 2006, i.e. a level

that was last recorded during the cyclical upturn in the mid-1990s. The fall in the saving ratio, in conjunction with growth in housing investment, will translate into a sharp fall in household net lending. In nominal terms, household net lending is expected to fall from a little more than NOK 30 billion in 2003 to just below -16 billion in 2006.

## **Growth in housing investment**

The decline in residential construction in 2002 came to a halt in 2003. Housing starts came to a little less than 22 500 in 2003, or about the same as in 2002. According to revised national accounts figures, housing investment fell by 5.2 per cent annualised, but showed a clear upward tendency towards the end of last year. Seasonally adjusted figures indicate that the upswing continued in the first quarter of 2004. Prospects of a sharp fall in real interest rates will continue to fuel housing investment this year. In addition, stronger income growth, combined with falling unemployment and a clear rise in prices for resale homes, implies higher activity in the residential construction industry in 2004. Housing investment is thus projected to rise through 2004, bringing annual growth to 3 per cent.

Growth in housing investment is projected at 4 per cent in 2005 and 2006. The rise in prices for resale homes is projected at about 5 per cent in 2005 and 4 per cent in 2006, i.e. a continued clear increase in real prices. The outlook for the housing market in the coming years must largely be seen in connection with the projected growth in household real disposable income, prospects of low real interest rates and the downward turnaround in unemployment.

# Signs of renewed growth in mainland business investment

According to revised national accounts figures, mainland gross business investment contracted by 10 per cent from 2002 to 2003, with a particularly sharp fall in manufacturing investment and investment in service industries (excl. housing). Preliminary estimates for the first quarter of 2004 show that mainland business investment is falling at a slower pace than earlier. The decline is expected to come to a halt, with renewed growth in investment towards the end of 2004 and in the period thereafter. Annualised, mainland business investment is projected to increase by around 4 per cent in 2004.

Statistics Norway's investment intentions survey for manufacturing and electricity production shows some increase in investment in these sectors in 2004. Manufacturing investment is expected to show little change, but investment in electricity production is expected to show a substantial increase. For the latter sector, investment may also show a considerable increase in the period following 2004 if plans to build gas power plants are realised. We have nevertheless assumed

virtually unchanged investment in electricity production from 2005. Manufacturing industry is now expecting a substantial decline in investment in 2005, but an improvement in cyclical conditions and profitability may induce manufacturing enterprises to raise their estimates for 2004 to a somewhat higher level. Manufacturing investment is projected to continue to fall somewhat in both 2004 and 2005, but to pick up thereafter in line with a normal cyclical pattern. There are signs of a pick-up in investment in service industries, albeit at a moderate pace. Non-residential vacancy rates remain high and construction activity is not expected show a pronounced increased in the coming years. On the other hand, investment in machinery in service industries is rising.

The low interest rate level, which is assumed to prevail in the period ahead, will most probably stimulate business investment even though it has been difficult to establish a clear correlation between the interest rate level and business investment, unlike the relationship we have shown to exist between household consumption and housing investment. Increased activity in the Norwegian economy will nevertheless lead to a pick-up in mainland business investment, which will typically occur with a lag in relation to growth in household demand. Our projections indicate that mainland business investment will expand by 3-4 per cent this year and next, but that growth may be markedly higher in 2006.

# Market growth and weaker krone fuel upswing in exports

The conditions for Norwegian exports have improved considerably since the beginning of 2003. The krone exchange rate depreciated sharply in the first half of 2003. After weakening further in December and January, the krone has appreciated again and has returned to the level prevailing in the latter half of 2003. The trade-weighted exchange rate index was still about 10 per cent weaker in the first half of June than at the beginning of 2003. Moreover, global cyclical conditions have improved markedly. As a result of this, exports have increased.

For 2003 as a whole, the volume of traditional merchandise exports increased by 2.6 per cent compared with the previous years, up from 1.6 per cent in 2002. In the first quarter of this year, exports fell by 0.4 per cent seasonally adjusted, against 1.5 per cent in the previous quarter. Metal exports rose sharply in 2003, increasing by 7.9 per cent compared with the previous year. In the first quarter of 2004, metal exports rose by as much as 3.4 per cent seasonally adjusted. Exports of chemicals and mineral products also showed a considerable increase last year, expanding by 5.7 per cent.

Exports to the EU, particularly to Germany and the UK, have shown the strongest increase, primarily reflecting the relatively marked depreciation of the kro-

Main economic indicators 2003-2006. Accounts and forecasts. Percentage change from previous year unless otherwise noted

			Forecasts									
	Accounts		2004			2005		20	006			
	2003	SN	MoF	NB	SN	MoF	NB	SN	NB			
Demand and output												
Consumption in households and non-profit organizations	3.8	5.0	4.5	5 1/4	5.3	3.7	4	4.2	2 3/4			
General government consumption	1.4	2.5	1.8	2 1/4	1.8	1.3	1 1/2	1.5	1 1/2			
Gross fixed investment	-3.7	5.3	4.9		2.5	5.0		4.1				
Extraction and transport via pipelines <sup>1</sup>	15.8	8.4	11.0	8	2.4	7.1	3	1.3	-5			
Mainland Norway	-4.7	2.3	3.6	1 3/4	2.4	4.0	6	5.2	6			
Firms	-10.1	3.7	3.5		2.8	5.1		7.9				
Housing	-5.2	3.0	4.0		3.9	5.5		4.3				
General government	10.1	-1.4	3.5		0.0	0.1		0.0				
Demand from Mainland Norway <sup>2</sup>	1.7	3.9	3.7	4	3.9	3.3	3 1/2	3.7	3			
Stockbuilding <sup>3</sup>	-0.3	0.1			0.0			0.0				
Exports	1.2	1.0	1.6		4	3.0		2.1				
Crude oil and natural gas	-0.2	0.4	-0.4		2.9	2.1		0.1				
Traditional goods	2.6	3.8	4.8	3	4.9	5.6	3 1/2	2.9	3 1/2			
Imports	2.2	5.4	4.7	5 1/2	5.7	4.2	3 1/4	4.7	1 3/4			
Traditional goods	4.0	6.2	5.2		6.3	4.1		5.5				
Gross domestic product	0.4	2.6	2.4		3.3	2.9		2.5				
Mainland Norway	0.6	3.3	3.2	3 1/4	3.3	3.1	3 1/4	3.0	2 3/4			
Labour market												
Employed persons	-0.6	0.2	0.2	1/2	0.9	8.0	1 1/4	1.1	3/4			
Unemployment rate (level)	4.5	4.3	4.3	4 1/2	4	4.1	4 1/4	3.8	4			
Prices and wages												
Wages per standard man-year	3.9	3.8	3 3/4	3 3/4	3.6	4.0	4 3/4	4.1	5			
Consumer price index (CPI)	2.5	0.7	1/2	0	1.7	2.0	2 1/4	2.0	2 1/2			
CPI adjusted for tax changes and excluding												
energy products (CPI-ATE)	1.1	0.5	3/4	1/2	1.9	2 1/4	2 1/4	2.3	2 1/2			
Export prices, traditional goods	-1.2	5.3	3.6		-1.2			-0.6				
Import prices, traditional goods	0.7	3.2	1.9		1.1			0.7				
Housing prices⁴	1.6	9.3			5			4.1				
Balance of payment												
Current balance (bill. NOK)	201.2	242.7	181.1		230.9	165.4		224.3				
Current balance (per cent of GDP)	12.9	14.6			13.4		**	12.4	••			
Memorandum items:												
Household savings ratio (level)	7.7	5.5	6.3		3.6	5.7		2.4				
Money market rate (level) <sup>5</sup>	4.1	2.0	2.1	2	2.4	3.4	2 1/2	2.3	3 1/2			
Lending rate, banks (level) <sup>6</sup>	6.6	4.4			4.7			4.7				
Crude oil price NOK (level) <sup>7</sup>	205	225	200		210	183		212				
Export markets indicator	3.9	4.8			5.1			2.8				
Importweighted krone exchange rate (44 countries) <sup>8</sup>	1.3	4.0		7	0.7		- 1/2	0.4	- 1/2			

<sup>&</sup>lt;sup>1</sup> Forecasts from Ministry of Finance incl. service activities incidential to extraction

Sources: Statistics Norway (SN), Ministry of Finance, St.meld. nr.2 (2003-2004), (MoF), Norges Bank, forecasts based on forward interest and exchange rates, Inflasjons-rapport 1/2004 (NB).

ne against these countries' currencies. Exports to Sweden have remained virtually unchanged since the beginning of last year. Lower exports of electricity and mineral oil products made a negative contribution, while exports to Sweden of other important groups such as metals, chemicals and mineral products also showed an increase.

The global economic upturn and a somewhat weaker krone exchange rate point to a continued upswing in

exports in 2004 and 2005. Growth in traditional merchandise exports is projected at 3.8 per cent in 2004 and 4.9 per cent in 2005, compared with the year before. In 2006, growth is projected to slow to 2.9 per cent as a result of a pronounced slowdown in the global economy.

Metal exports tend to rise sharply in the early phase of a cyclical upturn. Moreover, investment in recent years in this industry has led to higher production

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

<sup>&</sup>lt;sup>3</sup> Change in stockbuilding. Per cent of GDP.

<sup>&</sup>lt;sup>4</sup> Freeholder.

<sup>&</sup>lt;sup>5</sup> NB use their sight deposit rates.

<sup>&</sup>lt;sup>6</sup> Households' borrowing rate in private financial institutions. Yearly average.

<sup>&</sup>lt;sup>7</sup> Average spot price, Brent Blend.

<sup>&</sup>lt;sup>8</sup> Increasing index implies depreciation.

capacity. Strong growth is expected to continue next year. Exports of chemicals are also expected to show strong growth this year and next. In 2006, export growth for both metals and chemicals are expected to slow as a result of a global cyclical turnaround.

#### **High import growth**

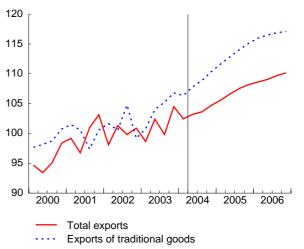
The volume of traditional merchandise imports increased by 4 per cent in 2003, compared with the previous year. Seasonally adjusted growth was as high as 4.6 per cent between the fourth quarter of 2003 and the first quarter of 2004. Imports from low-cost countries are still rising. The special movements in the krone exchange rate over the past year and a half have also contributed to the shift in imports. The krone has depreciated against European currencies, while it has appreciated against the US dollar and dollar-linked currencies in Asia among others. Imports from Asia have shown a marked increased over the past year, particularly imports of IT and telecommunications equipment from China and imports of cars, iron, steel and telecommunications equipment from Japan.

Textiles, clothing and footwear also made a considerable contribution to overall import growth in 2003, with a volume increase of 6.4 per cent, approximately on a par with the previous year. In the first quarter of this year, however, growth was somewhat slower at 0.7 per cent seasonally adjusted. Imports of passenger cars increased sharply both in the fourth quarter of 2003 and the first quarter of this year, by a seasonally adjusted 14 and 9.2 per cent respectively, after falling markedly in the preceding four quarters. Services imports increased by 0.2 per cent in 2003 compared with 2002. Services imports have picked up markedly in the past two quarters, by a seasonally adjusted 5.8 and 1.2 per cent respectively.

International commodity prices have risen sharply, while the rise in prices for finished goods has slowed. This has generated favourable terms-of-trade effects for the Norwegian economy, which has a high share of raw materials in its exports, and large share of finished goods in imports. Export prices for traditional goods increased by a seasonally adjusted 2.7 per cent in the fourth quarter of last year and by 3.5 per cent in the first quarter of this year. The corresponding figures for import prices are 1.7 per cent and 0.8 per cent. For 2004, export prices are expected to rise by 5.3 per cent compared with the previous year, while import prices are expected to rise by 3.2 per cent. The effect of this improvement in the terms of trade is expected to unwind as early as next year, primarily as a result of an expected, sharp fall in metal prices in 2005 and 2006 from a very high level this year.

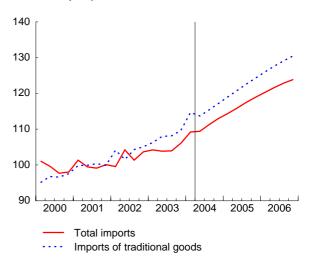
As a result of a high Norwegian cost level and a cyclical upturn in the Norwegian economy, imports will continue to show strong growth ahead, even if the krone is expected to weaken somewhat. Imports of

Exports
Seasonally adjusted volume indices, 2001=100



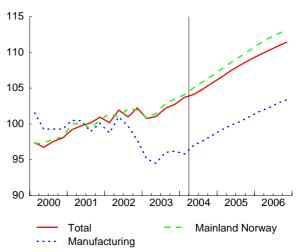
Source: Statistics Norway.

Imports
Seasonally adjusted volume indices, 2001=100



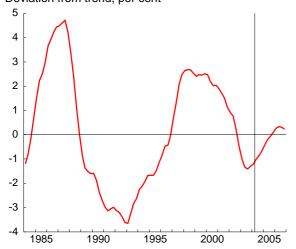
Source: Statistics Norway.

Gross domestic product
Seasonally adjusted volume indices, 2001=100



Source: Statistics Norway.

#### Output gap, Mainland Norway Deviation from trend, per cent



Source: Statistics Norway.

traditional goods are projected to grow by 6.2 per cent in 2004 and 6.3 per cent in 2005, compared with 2003. Growth is then expected to slow to 5.5 per cent in 2006. Traditional merchandise imports are expanding at a considerably faster pace than traditional merchandise exports.

Moderate pick-up in production after winter lull The pick-up in mainland production that started last summer lost momentum through the winter. In the fourth quarter of last year and the first quarter of this year, annualised growth in seasonally adjusted mainland GDP was 2.3 per cent according to preliminary ONA figures. This growth rate is on a par with estimated trend growth for the Norwegian economy. As a result of higher production in the oil and shipping industries, GDP growth still remained virtually unchanged at an annualised 3 per cent. The slower growth in the mainland economy reflects developments in manufacturing output, distributive trades, commercial services and education, while financial services and health and social services picked up. Construction activity also picked up, albeit moderately and from a low level. While output growth levelled off somewhat, imports showed sharp growth, which partly reflects the traditional high import content in demand components that are now showing strong growth, and partly a loss of domestic market shares for Norwegian companies.

Output growth is projected to pick up in the period ahead, primarily as a result of markedly stronger growth in demand, particularly demand for domestically produced goods. Owing to a continued loss of market shares for Norwegian companies, particularly in goods-producing industries, output growth will still be weaker than growth in demand. For both 2004 and 2005, mainland GDP growth is projected at 3.3 per cent, slowing to 3.0 per cent in 2006. The upswing can also be observed to some extent in manufacturing, driven by higher global growth and increased oil

investment, but is clearest for service industries where higher household consumption is expected to be the main source of impetus. Higher growth in housing investment and mainland business investment, excluding manufacturing, is also expected to generate impulses during the period 2004-2006.

The projected growth path implies that the Norwegian economy will emerge from the cyclical downturn and enter a moderate expansionary phase in the course of 2005, i.e. with a positive output gap where mainland GDP growth will be higher than estimated trend growth. Growth is then projected to slow in 2006 as a result of an expected global cyclical slowdown and weaker growth in domestic demand components. The output gap is then expected to close again towards the end of 2006.

### **Unemployment declines at a slow pace**

The Norwegian economy has experienced a cyclical upturn since the second quarter of last year, following a clear downturn through 2002. Typically, labour market developments have not been following cyclical developments as closely during the upturn as during the preceding downturn. Unemployment tends to become entrenched at a higher level once it has risen. Relatively short economic slumps may thus have lasting consequences for the labour market.

There are two main reasons for this. First, enterprises do not reduce their workforces to the same extent as production during a downturn. As a result, there is idle production capacity when demand picks up. Productivity growth therefore tends to be high at the early stage of a cyclical upturn because there is spare labour capacity within enterprises.

QNA figures show that productivity growth increased markedly after the cyclical turnaround in 2003. In the second and third quarter of last year, seasonally adjusted value added per person-hour for mainland Norway increased by an annualised 7.8 per cent and 4.5 per cent, respectively. In the fourth quarter of last year and the first quarter of this year, productivity growth has been more closely in line with the historical average, at an annualised growth rate of around 2 per cent.

Second, there is the discouraged worker effect and job-seeking activity falls when unemployment is high. This reduces the possibilities for the unemployed to find work, and they remain unemployed for a longer period. Moreover, many unemployed will no longer be included in the labour force as measured by the Labour Force Survey (LFS) where the unemployed only include those who have reported that they have applied for a job in the past four weeks. This reduction in unemployment will then be matched by a reduction in the labour supply. A similar effect may also be observed for the number of registered unemployed when many unemployed no longer qualify for unem-

ployment benefits. There are two consequences of the discouraged worker effect on unemployment; the number of jobless remains higher for a longer period at the same time as it may reduce both unemployment and the labour supply, particularly in the LFS.

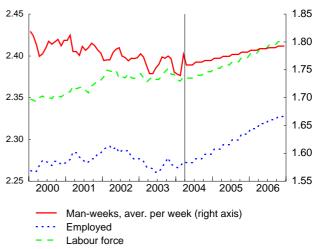
Labour market statistics reflect these features. Seasonally adjusted LFS figures show that the number of unemployed rose by about 20 000 from the summer of 2002 to the summer of 2003. The number of unemployed thereafter remained stable at around 110 000 in the period to end-2003. Unemployment started to decline after the turn of the year. The number of unemployed averaged 102 000 in the period February-April of this year, i.e. a decline of close to 7000 compared with the fourth quarter of 2003. The decline in unemployment has taken place during the same period – and in spite of an increase of about 5000 in the working age population since the fourth quarter of last year – that the labour force has contracted by about 3000. This considerable outflow from the labour market indicates that the employment outlook remains weak. LFS is a sample survey, which means that there is considerable uncertainty linked to the results from one month to the next. The figures for this month still confirm a tendency of a shrinking labour since unemployment started to rise in earnest in the summer of 2002.

According to seasonally adjusted figures from the Directorate of Labour, the number of registered unemployed fell from 96 000 at the end of August 2003 to 92 000 at the end of April 2004. At the end of May, the figure was 93 000, but the increase on the previous month probably reflects lay-offs in connection with the labour conflict in the transport industry. The sum of the number of unemployed and persons participating in labour market measures has remained unchanged since last autumn.

According to seasonally adjusted QNA figures, overall unemployment fell by a good 6 000 persons, or 0.3 per cent, between the fourth quarter of 2003 to the first quarter of this year. On the other hand, the number of person-hours worked increased by 0.1 per cent. This implies that productivity as measured by value added per employed person has increased more than value added per person-hour. The fall in employment was particularly strong in manufacturing in the first quarter of this year, but employment also fell in distributive trades and the transport sector. In spite of this, there are some bright signs in the labour market. For example, seasonally adjusted QNA figures for the first quarter of this year show that employment is now growing in the cyclically sensitive construction sector. Employment in the hotel and restaurant industry and the public sector is also showing moderate growth.

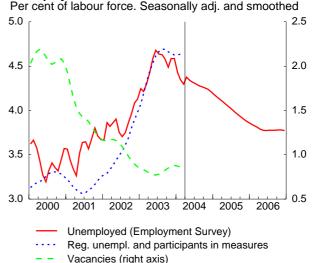
Overall, it appears that the deterioration in labour market conditions that started in 2001 has come to a

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



Source: Statistics Norway.

#### Unemployed and number of vacancies



Sources: The Directorate of Labour and Statistics Norway.

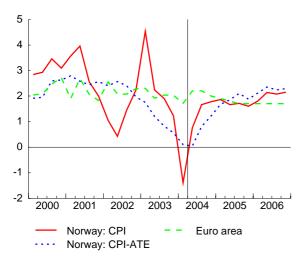
halt in the past year, and we expect that the labour market will improve gradually in the period ahead in line with the increase in production. LFS unemployment is projected to average 4.3 per cent in 2004, against 4.5 in 2003, partly because many of those who were unemployed last year are no longer included in the labour force, and partly owing to growth in employment in the latter half of the year. Employment is projected to pick up further next year, and in spite of a clear increase in the labour supply, unemployment is projected to fall to 4.0 per cent in 2005 and to 3.8 per cent in 2006.

#### Moderate wage growth

Wage negotiations in virtually all sectors have resulted in pay increases approximately in line with the pay increases for manufacturing workers. The social partners have estimated that wage growth, as defined by the Technical Reporting Committee on income settlements, will be about 3.5 per cent from 2003 to 2004.

#### Consumer price indices

Percentage growth from the same quarter previous year



Sources: Statistics Norway and Norges Bank.

This wage concept does not include overtime, however. We expect a reversal in the sharp fall in overtime last year, particularly in the manufacturing sector and the construction industry. In 2003, the decline in overtime pushed down overall wage growth by close to half a percentage point. Moreover, it is likely that wage growth for white-collar workers in the business sector will push up overall wage growth. Strong international competition in some service industries may, however, contribute to reducing overall wage growth. For example, wage cuts have been implemented for SAS employees. Against this background, overall wage growth per normal person-year is projected at 3.8 per cent in 2004.

The moderate pay increases negotiated this year reflect higher unemployment in recent years and weaker profitability in industries traditionally exposed to international competition. Historically, wage formation in Norway implies that economic developments in the years preceding the wage negotiations are important for wage growth in the current year. From the second quarter of 2001 to the second quarter of 2003, the number of registered unemployed rose by more than 30 000. Even if unemployment stopped rising last summer, it has not shown a noticeable fall thereafter. Moderate pay increases for all sectors in line with the pay increases for manufacturing workers reflects the manufacturing sector's role as wage leader in Norway. The industry-level settlements do not seem to have weakened this coordinating capacity. Centralised wage formation in Norway is thus an important reason why wage growth will be closely in line with that of trading partners this year, in spite of a higher inflation target and lower unemployment in Norway.

As the economic upturn gradually gains a firmer footing, the labour market is expected to show a clear improvement in the period to 2006. The fall in unem-

ployment will, however, be far more moderate than the increase at the beginning of 2000, which implies that the labour market will only generate moderate impulses to wage growth in the coming years. In the same way that the decline in unemployment and the rise in business sector profitability through the 1990s led to high wage growth in the period from 1996 to 2002, opposite developments since 1999 are likely to contribute to continued low wage growth in the coming years. Wage growth is projected at 3.6 per cent in 2005 and 4.1 per cent in 2006.

#### **Continued low inflation**

After the unwinding of the direct effects on inflation of high electricity prices last winter, the 12-month rate of increase in the consumer price index (CPI) has again turned positive, but remains very low. In May, CPI inflation was 1.0 per cent, compared with a record low of -1.8 per cent in January. Underlying inflation, as measured by the 12-month rise in the CPI adjusted for changes in taxes and excluding energy products (CPI-ATE), peaked in February 2003 at 2.0 per cent, falling gradually in the period to February 2004 when the rate of increase was -0.1 per cent. After moving up to 0.3 per cent in March, underlying inflation was 0.1 per cent in May.

Moderate wage growth, falling interest rates and generally subdued pressures in the economy are domestic factors behind low inflation. Negative external price impulses, for example in the form of higher imports from low-cost countries, are having the same effect. A tendency towards rising inflation since February partly reflects a moderate rise in prices for imported consumer goods. The 12-month rise in prices for these goods is still clearly negative, but the price decline slowed from -3.3 per cent in February to 1.9 per cent in May. Imported consumer goods account for a good quarter of household consumption, which means that this in isolation pushes up consumer price inflation by close to 0.4 percentage point. House rent inflation, which is currently very low, is having the opposite effect.

The gradual deceleration in the decline in prices for imported consumer goods in the first four months of the year partly reflects the weakening of the Norwegian krone over the past 18 months. The krone has appreciated slightly in the past three months, however. In the first quarter, the import-weighted krone exchange rate index was a good 10 per cent weaker than 12 months earlier. The long-term currency depreciation points to higher prices, while the short-term impulses point to lower prices. Import prices for finished goods are generally higher than one year earlier. but have not increased to the extent implied in isolation by the change in the exchange rate. It would appear that inflation has recently increased slightly in some of the main supplier countries, but this is being offset by an increase in imports from low-cost countries. Domestic conditions may also be restraining the

rise and increasing the lag in changes in import prices. The lag between a change in the exchange rate and a change in domestic prices probably varies somewhat, and Norwegian consumer price for imported goods are also heavily influenced by domestic conditions such as costs and market developments in distributive trades.

Tobacco taxes increased sharply from 1 January this year, which alone contributed to pushing up CPI inflation by about 0.2 percentage point. Other volume taxes were generally increased by 1.8 per cent which, with the projected rate of inflation, also implies a real increase in indirect taxes. Government policy has recently had a direct effect on price developments as a result of the imposition of VAT of 6 per cent on public transport from 1 March and the introduction of maximum rates for day-care places as from 1 May. The low VAT rate for public transport implies an implicit subsidisation of this activity. Transport companies will now be entitled to deduct VAT from factor inputs, and the value of the deductions exceeds the VAT revenues from these services. However, the immediate effect was an increase in transport prices. As a result of a sharp fall in air fares in the past two months, transport prices were markedly lower in May than prior to the introduction of VAT for these services. These prices are also heavily influenced by fuel prices and continuous structural changes, which means that it can be difficult to identify the effects of the various changes. CPI-ATE inflation in March was adjusted for the direct effect of VAT on transport services. The deduction effect is not taken into account when making adjustments as this is looked upon as an indirect effect.

Day-care rates in the CPI fell by 3.4 per cent between February and May, after falling by bout 10 per cent during the preceding 12 months. This was primarily due to the increase in government support for day-care services as from August 2003. CPI-ATE inflation has not been adjusted for this measure. As a result of the day-care policy and VAT on transport services, the CPI-ATE can be said to underestimate underlying inflation somewhat. On the other hand, it can be said that higher user fees for some public services are having the opposite effect.

Low domestic cost inflation is still expected to mark inflation developments. Wage growth will remain relatively low, while productivity growth is rather high. Domestic inflation will, however, edge up as the strong negative external price impulses from import goods diminish. Electricity prices are expected to rise at a somewhat faster pace in the coming months, compared with the same months one year earlier. The tendency towards higher inflation is thus expected to continue, but at a more subdued pace than in recent months. Annual CPI inflation is projected at 0.7 per cent in 2004, while underlying inflation is projected

to be slightly lower. CPI-ATE inflation is projected to reach a little more than 1.0 per cent towards the end of the year, and is projected at 1.9 per cent in 2005 and 2.3 per cent in 2006. The annual rise in electricity prices is expected to edge down slightly in 2005 and 2006. Our calculations are based on the assumption that indirect taxes will remain unchanged in real terms. CPI inflation will thus be somewhat lower than CPI-ATE inflation in 2005 and 2006.

### Sizeable current account surpluses

Revised national accounts figures show that Norway recorded a current account surplus of a good NOK 201 billion in 2003, or close to 13 per cent of GDP. which is in line with the figure for 2002. In the first quarter of 2004, the current account surplus came to about NOK 54 billion. High oil prices in the second quarter of this year will result in a particularly large current account surplus for that quarter. Our estimate is NOK 66 billion. For 2004 as a whole, traditional merchandise exports will show a marked increase in value terms according to our calculations. Moreover, petroleum exports will increase even if oil prices should fall from today's high level down to USD 30 in the course of the year as we have assumed. Imports also increased sharply in the first quarter and will increase markedly this year as a result of higher domestic demand and a somewhat weaker krone which increases import prices in NOK. The surplus on the goods and services balance may reach NOK 235 billion in 2004, which is higher than the surplus for 2003. The increase in the surplus will, however, be amplified by the improvement on the interest and transfer balance as a result of the considerable surpluses that are being accumulated as steadily higher net foreign assets. All total, the surplus on the current account is estimated at a good NOK 240 billion in 2004, or a good 14 per cent of estimated nominal **GDP** 

For 2005 and 2006, our estimates show a gradual fall in the surplus on the goods and services balance, owing to continued low or zero volume growth in oil and gas exports combined with unchanged nominal prices for these products from the end of 2004. Traditional merchandise exports will expand in pace with market growth in this period and as a result of the expected slowdown in the world economy and a mild downturn in 2006, export growth will slow from 2005 to 2006. Relatively strong growth in the Norwegian economy will fuel strong growth in exports in both years. Even though import price inflation in NOK will be considerably more moderate in the same period, the value of imports will nevertheless increase at a markedly faster pace than the value of exports. The goods and services balance is expected to run a surplus of close to NOK 200 billion in 2006. Higher net foreign assets will contribute to a surplus on the interest and transfer balance, bringing the current account surplus to a good NOK 220 billion in 2006, or 12 per cent of GDP.

## An alternative scenario based on higher oil prices

In the baseline scenario presented in this report, the Norwegian economy – in line with the international economy – is expected to experience a moderate cyclical upturn in the period to 2006. The effects of an international slowdown will then, combined with falling oil investment, move the Norwegian economy into a cyclically neutral position. Even though it cannot be ruled out that the current moderate global upturn may be followed by a far more pronounced downturn, the risk for the Norwegian economy seems to be on the upside when taking into account developments in oil prices, oil investment and possibly fiscal policy. In the following, we will therefore attempt to outline the main features of an alternative scenario in the period to 2008, where these three factors provide stronger growth impulses to the Norwegian economy than in the baseline scenario. This also implies that the baseline scenario is extended to 2008. We start with the assumption that oil prices will be higher, since this may also be a trigger for the other two effects as well.

#### Oil prices are USD 5 higher from the third quarter of 2004

Oil prices have risen over the past six months and stood at about USD 38 per barrel in the last half of May, or almost USD 10 higher than the level for 2003. In spite of the marked rise in oil prices, the general perception seems to be that the increase will have limited effects on the global economy. The explanation for this is that real oil prices are still relatively moderate in relation to previous periods of high oil prices, oil consumption now accounts for a smaller share of total consumption, and that the price increase has been driven by rising demand. When the price of a product increases in response to a shift in demand, this primarily restrains growth in aggregate demand and hence production. Oil prices edged down to USD 35 per barrel in the first weeks of June, and our projections are based on an oil price of USD 30 in the third quarter of 2004 and ahead.

What if oil prices were to remain at USD 35 per barrel ahead, i.e. USD 5 or around NOK 35 higher than in the baseline scenario. Even if this implies a real oil price that is considerably higher than the level for the past 20 years, it is still lower than the level recorded for the previous decade, following the oil price increases in 1974 and 1980, known as OPEC-I and OPEC-II, respectively.

Based on IEA calculations using OECD's INTERLINK model (IEA, 2004), the inflation effects in the OECD area of an oil price that is USD 5 higher from the third quarter of 2004 can be estimated at 0.3 percentage point in the latter half of 2004 and in 2005, falling to 0.2 percentage point in 2008. In this calculation, a higher oil price must be seen as being driven by supply-side conditions and not by higher demand in industrial countries. The interest rate is not changed as a result of higher inflation. The effects on production in industrial countries are limited, on average 0.15 per cent on GDP growth in each year in the period 2004-2008. This implies an 0.3 percentage point increase in import growth in Norwegian export markets. This is in line with the general perception concerning moderate effects on production in industrial countries as mentioned above.

# Annual increase in oil investment of NOK 16 billion from third quarter 2006

The Government has recently awarded new exploration and production licences for petroleum on the Norwegian continental shelf. This may trigger a rise in oil investment in the years ahead in relation to the investment plans underlying the projections in the baseline scenario. The high level of oil prices over the past year may in itself trigger a rise in investment. At least this seems likely if oil prices remain at USD 35 for several years ahead.

Even if oil prices are of incontrovertible importance for investment in oil activity, such a relationship has not been modelled in Statistics Norway's macroeconometric models. Nor are we aware of attempts to quantify the relationship between oil prices and investment based on Norwegian data. Such a relationship will obviously be influenced by a number of other variables, such as the resource inventory and any previous investment in field exploration, etc, costs, taxes, companies' required return, etc. As these are long-term investments, not only actual values but also expectations will have an influence. As a result, it will probably be very difficult to identify sound relationships that explain oil investment.

Johansen and Eika (2000) point out that if cyclical deviation is estimated as the deviation between a series and its underlying trend growth, there seems to have been some measure of correlation between cyclical deviations in the oil price and oil investment in the period 1989-1999. The cyclical impact on oil investment occurs about two years after a change in oil prices. It may then be the case that certain factors that influence oil investment, such as resource estimates and technological conditions that influence cost levels, change in a more trend-like manner – or randomly – and do not give rise to systematic cyclical fluctuations, while cyclical variations in oil prices systematically generate corresponding variations in oil investment. The effects of higher oil prices on oil companies' cash flows may be an important channel, in addition to the fact that a change in the actual oil price may change the cost applied by companies when assessing the profitability of new investments.

Our calculations are based on the method used by Johansen and Eika (2002) and cover the period 1976-2004. Up to 1985, the correlation between the cyclical deviation between oil prices and investment is very strong, based on a lagged effect from prices to investment of as long as four years. From 1985 to 1999, the correlation is somewhat weaker, with a lag – as in Johansen and Eika (2002) – of two years. Since 2000 the lag seems to have been somewhat longer, but the correlation is very weak. This may be because there are other factors that have been of greater importance for changes in oil investment in that period than oil price variations. Partly on the basis of these calculations, the alternative scenario is based on an increase in oil investment of NOK 4 billion from the third quarter of 2006 to the end of the projection period, compared with the baseline scenario.

Higher investment will gradually translate into higher oil and gas production. If the investment increase relates to fields in operation, the effect on production may occur within one year. If this also leads to higher exploration activity and development of new projects, it may take many years. With higher investment activity from the third quarter of 2006, the effects on production will probably not be noticeable until 2007. We have assumed that oil production increases over time in pace with the increase in real capital stock in the oil sector, but that the increase in production will not start until the end of 2007.

#### Annual tax reduction of NOK 4 billion from 2005

Higher oil prices will increase government petroleum revenues and the transfers to the Petroleum Fund. As a result, the expected real return on the Fund will increase and will provide room for a more expansionary fiscal policy, assuming that a higher oil price does not have negative repercussions for the Petroleum Fund's assets. Admittedly, central government spending is higher than implied by the fiscal rule. This suggests that the additional revenues should perhaps be used to return more quickly to the level implied by the rule. On the other

hand, there has already been a willingness to exercise the exemption provided for in the fiscal rule, i.e. if there are substantial changes in the accumulation of capital in the Fund, spending can be smoothed over time. If the oil price were to remain steady at USD 35 ahead, it may easily be argued that a smooth phasing-in implies that the use of petroleum revenues should be increased in the first years.

Since we have not found any room for tax relief within the fiscal rule in the baseline scenario in the coming years, we have assumed that the increased fiscal leeway in the alternative scenario will be used to remove the wealth tax from 2005. The Government has estimated the annual loss in revenues at NOK 4 billion, which brings the overall loss in revenues to NOK 16 billion during the period 2005-2008. This revenue loss is larger than the increased fiscal leeway provided by higher revenues as a result of higher oil prices and production in the same period. If we take into account that the tax reductions will be partly

offset for example by higher tax revenues from an increased activity level the difference will not be particularly wide.

#### Macroeconomic effects on the Norwegian economy

The effects on the Norwegian economy of higher oil investment and a more expansionary fiscal policy as a result of higher oil prices are shown in the Table. Statistics Norway's quarterly macroeconomic model KVARTS has been used to calculate the effects. The calculations also show the estimates obtained by extending the baseline scenario to 2008, where we assume the onset of a renewed cyclical upswing in 2007. The baseline scenario is also based on a fall in oil investment towards the end of 2006, with a continued fall in 2007 and 2008. In addition, the baseline scenario is based on unchanged fiscal stimulus in the projection period as the use of petroleum revenues is not back in line with the fiscal rule until 2008 in this scenario. In the following, we will focus on the differences between the two scenarios.

#### Effects of higher oil prices, higher oil investment and a more expansionary fiscal policy

Percentage point/ per cent	2004	2005	2006	2007	2008	Deviation in 2008
Oil investment, growth						
Baseline scenario	8.4	2.4	1.3	-7.0	-11.0	
Alternative scenario	8.4	2.4	12.7	4.1	-8.9	
Deviation	0.0	0.0	11.3	11.0	2.1	27.3
Consumption in households and						
on profit org., growth						
Baseline scenario	5.0	5.3	4.2	3.7	3.4	
Alternative scenario	5.0	5.5	4.4	3.9	3.7	
Deviation	0.0	0.2	0.2	0.2	0.2	0.0
Mainland investment, growth						
Baseline scenario	2.3	2.4	5.2	3.1	3.0	
Alternative scenario	2.3	2.6	5.7	4.1	2.8	
Deviation	-0.1	0.1	0.5	0.9	-0.3	1.2
xp. trad goods, growth						
aseline scenario	3.8	4.9	2.9	0.7	3.9	
Alternative scenario	3.7	4.6	2.7	0.0	3.6	
Peviation	-0.1	-0.3	-0.3	-0.3	-0.3	-1
mport, growth						
aseline scenario	5.4	5.7	4.7	3.2	3.6	
Alternative scenario	5.4	5.8	5.5	3.8	3.6	
eviation	0.0	0.1	0.8	0.6	0.0	1.
lainland GDP, growth						
aseline scenario	3.3	3.3	3.0	2.1	2.3	
Iternative scenario	3.3	3.4	3.4	2.5	2.4	
eviation	0.0	0.0	0.4	0.4	0.0	0.
Inemployment rate (level)						
aseline scenario	4.3	4.0	3.8	3.7	3.9	
Ilternative scenario	4.3	4.0	3.6	3.5	3.7	
eviation	0.0	0.0	-0.2	-0.2	-0.3	-0.
Vage, growth						
aseline scenario	3.8	3.6	4.1	3.2	3.3	
Alternative scenario	3.8	3.7	4.2	3.7	3.6	
Peviation	0.0	0.0	0.1	0.4	0.3	0.
PI, growth						
Baseline scenario	0.7	1.7	2.0	2.3	2.2	
Alternative scenario	0.7	1.8	2.2	2.4	2.4	
Deviation	0.0	0.1	0.1	0.1	0.2	0.
PI-ATE, growth					_	
Baseline scenario	0.5	1.9	2.3	2.3	2.2	
Alternative scenario	0.6	2.0	2.3	2.4	2.4	
Deviation	0.0	0.1	0.1	0.2	0.2	0.!
exchange rate (IMP44), growth	0.0	3.1	0.1	5.2	0.2	0
Baseline scenario	4.0	0.7	0.4	1.1	0.6	
Alternative scenario	3.9	0.3	0.2	1.1	0.6	
Deviation	-0.2	-0.4	-0.2	-0.1	0.0	-0.8

(Cont.)

(cont.)

In the alternative scenario, oil prices rise to a higher level in 2004 than in the baseline scenario and international market growth weakens somewhat while external inflation increases. Domestic inflation also picks up, but at a slower pace and to a lesser extent than abroad. This shows that the oil price is a less important energy price for Norwegian enterprises and households as Norway relies more heavily on hydro-electric energy. Moreover, electricity prices are held constant in the calculation. As a result of weaker price effects in Norway, the krone appreciates, which further curbs the impact of higher oil prices on Norwegian prices.

This process continues through most of the projection period, and results in inflation that is not more than 1-2 tenths of a percentage point higher than in the baseline scenario. This brings inflation in the alternative scenario closer to the inflation target for monetary policy. This scenario is therefore based on the same interest rate path as in the baseline scenario. As mentioned, interest rates are also assumed to remain unchanged abroad.

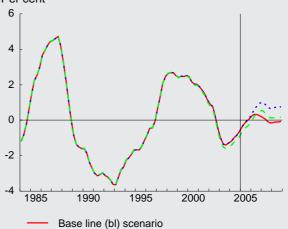
A stronger krone and weaker international market growth affects Norwegian exports of traditional goods, so that growth is lower throughout the period. The effects gradually spread to export companies' investments.

In 2005, the wealth tax is removed, which implies an increase in household real disposable income in the alternative scenario compared with the baseline scenario, even if this is partly offset by higher prices. As a result, private consumption and housing investment also increase, and has spillover effects on domestically produced goods for the home market and in turn on investment in this sector.

In 2006, oil investment increases compared to the baseline scenario. This generates considerable stimulus to Norwegian production, which gradually boosts mainland enterprises' investments. Higher activity also has an impact on household income, and the higher rate of growth in consumption and housing investment is sustained. Mainland GDP growth is pushed up by 0.4 percentage point in both 2006 and 2007, with growth in 2006 on a par with growth in 2004 and 2005. Growth remains relatively high in 2007 and 2008. The expansion that starts in 2005 continues both in 2007 and 2008, while it comes to a halt in the course of 2006 in the baseline scenario. Growth picks up again in 2008 as a result of the assumption of a renewed international cyclical upswing, and in spite of the start of a downward trend in oil investment also in the alternative scenario.

In 2008, mainland GDP is 0.8 per cent higher than in the base-line scenario. If the cyclical deviation for GDP is measured as the deviation from estimated trend GDP in the baseline scenario, the cyclical expansion will be that much more pronounced than in the baseline scenario. However, if we estimate a new trend path for the Norwegian economy directly based on the alternative scenario, a higher GDP level also implies that the trend level will be higher than in the baseline scenario, so that the deviation between actual GDP growth and trend growth is revised down somewhat. This also influences the estimated trend level for the years preceding 2006, which implies that the current





Base line (bl) scenario
Alternative scenario, bl-trend
Alternative scenario, new trend

Source: Statistics Norway.

slump is more pronounced than in the baseline scenario (see figures).

Higher production growth implies that unemployment will be somewhat lower than in the baseline scenario. Lower unemployment will translate into higher wage growth, which comes in addition to the effects of higher inflation on wage growth. On the other hand, reduced corporate profitability as a result of higher oil prices and a stronger krone will have a dampening impact on wage growth. Real wages increase even if higher wages also feed through to prices. This explains why the inflationary effects are stronger towards the end of the projection period.

Over the past 20 years, after the deregulation in the 1980s, wide fluctuations in oil investment have been the primary source of cyclical fluctuations in the Norwegian economy, and have often resulted in a divergence in cyclical developments in Norway and other industrial countries (see Johansen and Eika (2000)). The question may be raised as to why the increase in oil investment in this scenario does not have an even stronger impact on the economy than indicated above. A tendency towards a higher import share in oil investment in recent years is one answer. Another is that even if the level of oil investment in the alternative scenario is high, particularly in 2008, the level is lower measured as a percentage of GDP than in many previous upturns. Oil investments are substantial, but their relative importance diminishes as other sectors of the Norwegian economy expand.

IEA (2004): Analysis of the Impact of High Oil Prices on the Global Economy. May 2004, <a href="https://www.iea.org">www.iea.org</a>

Johansen, P.R. and T. Eika (2000): *Drivkrefter bak konjunktur-forløpet på 1990-tallet* (Driving forces behind cyclical developments in the 1990s) (annex 11 in NOU 2000:21)

National accounts: Final expenditure and gross domestic product. At fixed 2001-prices. Million kroner

	Unad	ljusted	Seasonally adjusted							
	2002	2003	02.2	02.3	02.4	03.1	03.2	03.3	03.4	04.1
Final consumption exp. of housh. and NPISHs	674 867	700 258	167 953	168 439	171 669	171 869	173 936	175 986	178 148	181 280
Household final consumption expenditure	646 090	668 881	160 720	161 276	164 251	164 130	166 215	168 108	170 086	173 064
Goods	359 552	374 436	89 337	89 340	91 763	90 876	93 282	94 374	95 530	97 312
Services	276 042	282 721	68 850	68 819	69 700	69 993	70 181	70 762	71 794	72 142
Direct purchases abroad by resident househ.	28 596	30 227	7 195	7 447	7 282	7 608	7 382	7 567	7 696	8 546
Direct purchases by non-residents	-18 100	-18 503	-4 662	-4 330	-4 494	-4 347	-4 630	-4 596	-4 934	-4 936
Final consumption exp. of NPISHs	28 777	31 378	7 233	7 163	7 419	7 740	7 720	7 878	8 062	8 216
Final consump. exp. of general government	324 406	329 098	79 462	81 367	80 594	81 672	82 988	82 078	82 328	82 469
Final consump. exp. of central government	171 130	174 119	42 192	43 201	42 752	43 179	43 394	43 505	44 020	43 963
Central government, civilian	141 875	145 394	34 890	35 873	35 493	35 987	36 187	36 343	36 855	36 649
Central government, defence	29 255	28 725	7 301	7 328	7 259	7 192	7 207	7 162	7 165	7 314
Final consump. exp. of local government	153 275	154 979	37 270	38 166	37 842	38 493	39 595	38 573	38 308	38 505
Gross fixed capital formation	269 519	259 519	71 538	65 191	69 552	66 984	65 226	65 594	61 769	65 667
Extraction and transport via pipelines	54 521	63 158	13 508	13 514	14 703	14 362	16 334	16 803	15 658	16 958
Services activities incidential to extraction	5 572	-1 616	4 337	122	1 089	502	-437	-139	-1 526	-37
Ocean transport	7 139	5 096	1 882	1 510	2 874	3 044	1 159	1 594	-700	1 226
Mainland Norway	202 287	192 880	51 811	50 045	50 886	49 076	48 169	47 336	48 337	47 519
Mainland Norway ex. general government	160 556	146 937	41 021	39 689	40 474	37 983	36 710	35 334	36 871	37 167
Manufacturing and mining	21 823	18 298	5 544	5 659	5 853	4 573	5 002	4 257	4 558	4 373
Production of other goods	16 971	19 125	4 320	4 210	4 438	4 940	4 744	4 940	4 405	4 870
Dwellings	52 999	50 231	13 595	13 136	12 952	12 687	12 522	12 424	12 603	12 759
Other services	68 764	59 284	17 561	16 684	17 231	15 782	14 443	13 713	15 305	15 165
General government	41 731	45 943	10 791	10 356	10 412	11 093	11 459	12 002	11 466	10 351
Changes in stocks and stat. discrepancies Gross capital formation	27 409 296 928	14 803 274 322	7 268 78 806	7 354 72 545	5 790 75 342	5 934 72 918	-1 517 63 709	5 899 71 493	3 703 65 473	7 187 72 854
Final domestic use of goods and services	1 296 200	1 303 678	326 221	322 351	327 606	326 460	320 633	329 558	325 948	336 603
Final demand from Mainland Norway	1 201 560	1 222 237	299 227	299 851	303 149	302 618	305 094	305 400	308 812	311 268
Final demand from general government	366 137	375 041	90 253	91 723	91 006	92 765	94 447	94 080	93 793	92 820
Total exports	697 866	706 501	176 668	173 986	175 881	171 967	178 476	174 044	182 128	178 602
Traditional goods	203 832	209 179	50 478	52 558	49 775	50 587	52 202	52 804	53 597	53 367
Crude oil and natural gas	320 893	320 189	82 663	79 085	83 034	80 348	83 823	77 884	78 163	82 590
Ships and oil platforms	13 439	18 233	3 881	2 746	2 398	2 547	3 686	3 524	8 475	1 389
Services	159 701	158 900	39 647	39 597	40 674	38 485	38 766	39 833	41 893	41 256
Total use of goods and services	1 994 066	2 010 179	502 889	496 337	503 487	498 427	499 109	503 602	508 076	515 205
Total imports	446 819	456 462	113 808	110 711	113 224	113 782	113 433	113 479	115 868	119 225
Traditional goods	290 400	302 142	71 010	72 987	73 553	74 352	75 538	75 629	76 695	80 203
Crude oil	1 807	1 998	482	472	395	891	435	345	334	232
Ships and oil platforms	16 368	13 831	7 993	2 446	3 855	4 443	3 216	3 400	2 772	2 289
Services	138 244	138 491	34 322	34 806	35 421	34 096	34 244	34 105	36 068	36 501
Gross domestic product	1 547 246									
Mainland Norway (market prices)	1 186 716	1 194 109	295 040	298 240	297 586	294 485	296 118	300 339	302 153	303 808
Petroleum activities and ocean transport	360 531	359 609	94 041	87 386	92 677	90 160	89 558	89 784	90 055	92 173
Mainland Norway (basic prices)	1 032 496									
Mainland Norway ex. general government	799 137	807 287		200 547		198 762			204 714	
Manufacturing and mining	150 079	144 359	38 159	37 667	36 925	35 939	35 713	36 277	36 350	36 199
Production of other goods	109 395	106 361	27 149	27 722	26 944	26 179	26 396	26 837	26 815	27 155
Service industries	539 662	556 566	134 346	135 157	136 468	136 644	137 700	140 363	141 549	142 507
General government	233 360	232 201	57 167	58 838	58 153	57 836	58 234	58 150	58 125	58 331
Correction items	154 219	154 621	38 220	38 855	39 095	37 887	38 075	38 712	39 314	39 616

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product. At fixed 2001-prices. Percentage volum change from previous period

	Unadj	usted	Seasonally adjusted							
	2002	2003	02.2	02.3	02.4	03.1	03.2	03.3	03.4	04.1
Final consumption exp. of housh. and NPISHs	3.6	3.8	0.7	0.3	1.9	0.1	1.2	1.2	1.2	1.8
Household final consumption expenditure	3.5	3.5	0.6	0.3	1.8	-0.1	1.3	1.1	1.2	1.8
Goods	4.2	4.1	0.3	0.0	2.7	-1.0	2.6	1.2	1.2	1.9
Services	1.7	2.4	-0.2	0.0	1.3	0.4	0.3	8.0	1.5	0.5
Direct purchases abroad by resident househ.	6.6	5.7	11.1	3.5	-2.2	4.5	-3.0	2.5	1.7	11.0
Direct purchases by non-residents	-2.8	2.2	-0.2	-7.1	3.8	-3.3	6.5	-0.7	7.4	0.0
Final consumption exp. of NPISHs	7.0	9.0	3.6	-1.0	3.6	4.3	-0.2	2.0	2.3	1.9
Final consump. exp. of general government	3.1	1.4	-4.2	2.4	-0.9	1.3	1.6	-1.1	0.3	0.2
Final consump. exp. of central government	40.0	1.7	-1.7	2.4	-1.0	1.0	0.5	0.3	1.2	-0.1
Central government, civilian	51.0	2.5	-1.9	2.8	-1.1	1.4	0.6	0.4	1.4	-0.6
Central government, defence	3.4	-1.8	-0.9	0.4	-0.9	-0.9	0.2	-0.6	0.0	2.1
Final consump. exp. of local government	-20.4	1.1	-6.9	2.4	-0.8	1.7	2.9	-2.6	-0.7	0.5
Gross fixed capital formation	-3.4	-3.7	12.8	-8.9	6.7	-3.7	-2.6	0.6	-5.8	6.3
Extraction and transport via pipelines	-3.6	15.8	5.6	0.0	8.8	-2.3	13.7	2.9	-6.8	8.3
Services activities incidential to extraction	69.2			-97.2	792.6	-53.9	-187.0	-68.2	997.8	-97.6
Ocean transport	-38.2	-28.6	115.4	-19.8	90.4	5.9	-61.9	37.6	-143.9	-275.3
Mainland Norway	-2.5	-4.7	4.4	-3.4	1.7	-3.6	-1.8	-1.7	2.1	-1.7
Mainland Norway ex. general government	-3.2	-8.5	4.2	-3.2	2.0	-6.2	-3.4	-3.7	4.3	0.8
Manufacturing and mining	11.5	-16.2	14.7	2.1	3.4	-21.9	9.4	-14.9	7.1	-4.1
Production of other goods	-1.7	12.7	10.3	-2.5	5.4	11.3	-4.0	4.1	-10.8	10.6
Dwellings	-2.3	-5.2	1.9	-3.4	-1.4	-2.0	-1.3	-0.8	1.4	1.2
Other services	-8.1 0.1	-13.8 10.1	1.7 5.0	-5.0 -4.0	3.3 0.5	-8.4 6.5	-8.5 3.3	-5.1 4.7	11.6 -4.5	-0.9 -9.7
General government Changes in stocks and stat. discrepancies	32.6	-46.0	5.0 4.4	-4.0 1.2	-21.3	2.5	-125.6	4.7 -488.8	-4.5 -37.2	-9.7 94.1
Gross capital formation	-0.9	-46.0 -7.6	12.0	-7.9	3.9	-3.2	-125.6	12.2	-8.4	11.3
Final domestic use of goods and services	2.4	0.6	1.9	-1.2	1.6	-0.3	-1.8	2.8	-1.1	3.3
Final demand from Mainland Norway	2.4	1.7	-0.1	0.2	1.1	-0.2	0.8	0.1	1.1	0.8
Final demand from general government	2.7	2.4	-3.2	1.6	-0.8	1.9	1.8	-0.4	-0.3	-1.0
Total exports	0.1	1.2	3.3	-1.5	1.1	-2.2	3.8	-2.5	4.6	-1.9
Traditional goods	1.6	2.6	-1.0	4.1	-5.3	1.6	3.2	1.2	1.5	-0.4
Crude oil and natural gas	2.2	-0.2	9.1	-4.3	5.0	-3.2	4.3	-7.1	0.4	5.7
Ships and oil platforms	-24.2	35.7	-12.1	-29.2	-12.7	6.2	44.7	-4.4	140.5	-83.6
Services	-3.1	-0.5	-0.6	-0.1	2.7	-5.4	0.7	2.8	5.2	-1.5
Total use of goods and services	1.6	0.8	2.4	-1.3	1.4	-1.0	0.1	0.9	0.9	1.4
Total imports	2.3	2.2	4.7	-2.7	2.3	0.5	-0.3	0.0	2.1	2.9
Traditional goods	3.8	4.0	-2.5	2.8	0.8	1.1	1.6	0.1	1.4	4.6
Crude oil	-21.3	10.6	4.3	-2.1	-16.4	125.6	-51.2	-20.7	-3.2	-30.6
Ships and oil platforms	-9.6	-15.5	285.3	-69.4	57.6	15.3	-27.6	5.7	-18.5	-17.4
Services	1.1	0.2	2.9	1.4	1.8	-3.7	0.4	-0.4	5.8	1.2
Gross domestic product	1.4	0.4	1.7	-0.9	1.2	-1.4	0.3	1.2	0.5	1.0
Mainland Norway (market prices)	1.7	0.6	-0.4	1.1	-0.2	-1.0	0.6	1.4	0.6	0.5
Petroleum activities and ocean transport	0.4	-0.3	9.0	-7.1	6.1	-2.7	-0.7	0.3	0.3	2.4
Mainland Norway (basic prices)	1.4	0.7	-0.6	1.0	-0.3	-0.7	0.6	1.4	0.5	0.5
Mainland Norway ex. general government	1.8	1.0	0.4	0.4	-0.1	-0.8	0.5	1.8	0.6	0.6
Manufacturing and mining	-0.8	-3.8	2.3	-1.3	-2.0	-2.7	-0.6	1.6	0.2	-0.4
Production of other goods	1.1	-2.8	-1.7	2.1	-2.8	-2.8	0.8	1.7	-0.1	1.3
Service industries	2.6	3.1	0.3	0.6	1.0	0.1	0.8	1.9	0.8	0.7
General government	0.1	-0.5	-3.9	2.9	-1.2	-0.5	0.7	-0.1	0.0	0.4
Correction items	3.6	0.3	1.0	1.7	0.6	-3.1	0.5	1.7	1.6	8.0

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product. Price indices. 2001=100

	Unadj	usted	Seasonally adjusted							
	2002	2003	02:2	02:3	02:4	03:1	03:2	03:3	03:4	04:01
Final consumption exp. of households and NPISHs	100.8	103.1	100.2	101.1	101.4	103.5	102.5	102.9	103.0	103.0
Final consumption exp. of general government	103.8	107.3	103.9	105.3	105.3	106.7	107.4	107.8	107.5	107.7
Gross fixed capital formation	99.9	100.7	101.1	101.9	96.9	97.9	102.5	102.3	100.8	101.3
Mainland Norway	100.6	100.8	101.2	102.3	99.2	98.4	101.4	102.1	102.5	101.3
Final domestic use of goods and services	101.3	103.6	101.4	101.2	102.2	103.6	102.9	103.1	104.7	105.0
Final demand from Mainland Norway	101.6	103.9	101.4	102.4	102.1	103.5	103.6	104.1	104.1	104.0
Total exports	89.8	91.5	91.6	89.7	89.4	91.0	88.6	92.9	93.8	95.5
Traditional goods	91.4	90.2	93.3	88.7	90.0	87.8	90.3	90.4	92.4	95.7
Total use of goods and services	97.2	99.4	97.9	97.2	97.8	99.3	97.8	99.5	100.8	101.7
Total imports	93.3	95.0	94.0	92.2	92.2	92.0	93.2	96.3	97.9	99.6
Traditional goods	92.6	93.2	93.3	91.4	91.5	91.9	91.6	93.8	95.4	96.1
Gross domestic product	98.4	100.6	99.1	98.6	99.4	101.4	99.1	100.5	101.6	102.3
Mainland Norway (market prices)	102.3	104.4	103.7	102.4	103.4	103.6	105.0	104.0	104.8	104.3

Source: Statistics Norway.

### National accounts: Final expenditure and gross domestic product. Price indices. Percentage volume change from previous period

	Unadj	usted		Seasonally adjusted						
	2002	2003	02:2	02:3	02:4	03:1	03:2	03:3	03:4	04:01
Final consumption exp. of households and NPISHs	0.8	2.3	0.4	0.9	0.3	2.1	-1.0	0.4	0.1	0.1
Final consumption exp. of general government	3.8	3.4	3.1	1.4	0.0	1.3	0.7	0.4	-0.3	0.2
Gross fixed capital formation	-0.1	0.8	0.7	0.8	-4.9	1.1	4.7	-0.3	-1.4	0.5
Mainland Norway	0.6	0.2	0.8	1.0	-3.0	-0.8	3.1	0.6	0.5	-1.3
Final domestic use of goods and services	1.3	2.3	1.3	-0.2	1.1	1.4	-0.8	0.2	1.6	0.3
Final demand from Mainland Norway	1.6	2.3	1.2	1.1	-0.4	1.4	0.1	0.4	0.0	-0.1
Total exports	-10.2	1.9	3.2	-2.0	-0.3	1.7	-2.6	4.8	1.0	1.8
Traditional goods	-8.6	-1.2	-0.5	-5.0	1.5	-2.5	2.9	0.1	2.2	3.5
Total use of goods and services	-2.8	2.2	1.9	-0.8	0.6	1.5	-1.5	1.8	1.2	0.9
Total imports	-6.7	1.8	-0.9	-2.0	0.0	-0.2	1.3	3.3	1.6	1.8
Traditional goods	-7.4	0.7	-0.9	-2.1	0.2	0.4	-0.3	2.3	1.7	0.8
Gross domestic product	-1.6	2.3	2.7	-0.5	0.8	2.0	-2.3	1.4	1.1	0.7
Mainland Norway (market prices)	2.3	2.0	4.2	-1.2	0.9	0.2	1.3	-0.9	0.8	-0.5

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 2001 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 2001 as the base year (common year of recalculation). The recalculation of prices is carried out at the sectoral level of the quarterly national accounts.