Economic trends

The cyclical upturn in the Norwegian economy is continuing with growth slightly higher than trend-growth, increasing employment and a fall in unemployment. Underlying consumer price inflation is low and even falling, although higher energy prices and indirect tax increases brought the overall rise in consumer prices to 2 per cent in the first quarter. Fiscal policy has not generated any significant new impulses to the Norwegian economy in 2006, while monetary policy has been gradually tightened. However, the interest rate level is still low both in nominal terms and not least in real terms. The krone exchange rate has appreciated considerably and is now amplifying the mild contractionary impulses stemming from the interest rate increases. Wage settlements have so far remained within the limits that have been widely expected. Total wage growth is set to be about 4 per cent in 2006. Against this background, it is not likely with a near-term increase in inflation unless energy prices should rise further from the current high level or the krone should depreciate markedly. With approximately unchanged or slightly lower energy prices ahead, inflation in Norway will soon fall below 2 per cent. Several of the driving forces behind the cyclical upturn in Norway over the past three years are expected to bring down output growth to a more moderate level through 2006 than the level prevailing in the two preceding years.

Economic growth in the OECD area has edged up recently, partly as a result of an upswing in the euro area. Growth in world trade is also high and rising, not least supported by sustained growth in many Asian economies. This has also pushed up oil prices and led to a more general rise in commodity prices, which has fuelled inflation. Many countries have responded by raising policy rates in order to curb growth and inflation. In the US, the economic outlook is more uncertain than earlier and many observers are now looking at the possibility of a cyclical downturn ahead. Wide short-term fluctuations in share prices partly reflect increased uncertainty surrounding the economic outlook.

Our economic outlook is still based on the assumption that global growth will gradually slow, particularly in the US. Slower growth in the US will have an impact on growth in the euro area next year. In 2006, we expect oil prices and international commodity prices to fall, moderating the inflationary impulses stemming from commodity prices. The interest rate increases in the US and Europe will then come to a halt. This will influence the frequency of interest rate increases in Norway. We still expect key rates to be held unchanged when global growth slows. In an environment of weaker global growth, Norwegian exports will grow at a slower pace ahead. Petroleum investment is expected to edge down after 2006, or at least not to increase further from its current high level. Without any renewed, strong fiscal stimulus and a somewhat more contractionary monetary policy through 2006, growth in the Norwegian economy will moderate ahead so that the expansion will be both moderate and short-lived.

Given the cyclical profile outlined above, the inflation target will not be reached in the period to 2009. For the target to be attained, the krone exchange rate would have to depreciate markedly from today's level or the global economy would have to move on a considerably different path that would sustain commodity prices at a high level with an attendant rise in prices for Norwegian imports of goods and services. In an alternative scenario, we show an example of a path which can almost be characterized as a permanent global expansion. However, this is closer to a consensus path for the global economy than that illustrated in our baseline scenario. The alternative analysis shows that if global growth holds up, inflation could move closer to the target for monetary policy than has been the case for a long period. This may then occur at the same time as nominal and real interest rates approach a more normal level.

The cut off date for information used in this issue was 13 June 2006.

Cyclical developments in Norway

The Norwegian economy continued to expand into 2006. Growth in mainland GDP may have slowed marginally in the first quarter of 2006 compared with the previous year, but it is difficult to estimate precisely as the Easter holiday occurred in the second quarter this year against the first quarter in 2005. Unemployment has declined in recent quarters, and both employment and the labour force are growing at a faster pace than the rate that can be expected in the longer term. Inflation measured by the consumer price index (CPI) has been relatively high as a result of a sharp rise in energy prices and higher indirect taxes. However, inflation adjusted for tax changes and excluding energy products (CPI-ATE) has exhibited a falling tendency since late summer last year. The import-weighted krone exchange rate appreciated markedly this spring and in this respect does not signal an appreciable rise in the inflation rate in the near term. Should energy prices fall in the period ahead in line with our assumptions, CPI inflation may edge down in the months ahead, but particularly during the spring of 2007. This spring's wage settlements have remained within the limits that must be looked upon as

Macroeconomic indicators 2004-2006. Growth from previous period unless otherwise noted. Per cent

			Seasonally adjusted			
	2004	2005	05.2	05.3	05:4	06:1
Demand and output						
Consumption in households etc.	4.7	3.4	2.0	0.6	0.0	1.6
General government consumption	2.2	1.5	0.4	-0.2	0.4	1.2
Gross fixed investment	8.1	10.9	2.7	1.8	11.4	-8.9
Mainland Norway	7.8	8.8	4.5	1.1	7.9	-5.3
Extraction and transport via pipelines	7.8	15.6	9.5	-4.9	14.5	-16.0
Final domestic demand from Mainland Norway[1]	4.5	3.8	2.0	0.5	1.5	0.2
Exports	0.6	0.7	2.9	0.9	-1.1	1.1
Crude oil and natural gas	-0.7	-4.1	0.9	-1.4	-2.5	0.7
Traditional goods	3.4	5.8	-0.8	4.3	2.1	-1.1
Imports	8.9	7.4	3.9	3.6	1.4	0.9
Traditional goods	10.2	8.3	4.0	4.8	0.4	3.0
Gross domestic product	3.1	2.3	1.0	0.8	0.3	0.6
Mainland Norway	3.8	3.7	0.9	0.6	1.3	0.6
Labour market						
Man-hours worked	1.9	0.8	0.3	0.2	0.3	0.6
Employed persons	0.4	0.7	0.2	0.6	0.4	0.9
Labour force[2]	0.4	0.8	0.3	0.6	0.2	0.2
Unemployment rate, level[3]	4.5	4.6	4.7	4.7	4.5	3.9
Prices and wages						
Wages per standard man-year[4]	4.3	3.6	4.0	3.1	2.7	2.9
Consumer price index (CPI)[4]	0.4	1.6	1.5	1.8	1.8	2.2
CPI adjusted for tax changes and excluding energy products $(CPI\text{-}ATE)_4$	0.3	1.0	1.0	1.2	1.0	0.9
Export prices, traditional goods	8.4	3.5	1.1	2.5	1.5	4.7
Import prices, traditional goods	4.5	0.4	-0.4	0.1	0.8	2.1
Balance of payment						
Current balance, bill. NOK	233.0	316.5	55.6	80.3	104.7	88.7
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	2.0	2.2	2.1	2.3	2.5	2.6
Lending rate, banks[5]	4.2	4.0	3.9	4.0	4.0	4.1
Crude oil price NOK[6]	257.3	351.4	327.5	398.9	377.1	409.7
Importweighted krone exchange rate, 44 countries, 1995=100	95.6	91.8	92.1	90.7	91.0	92.9
NOK per euro	8.37	8.01	8.05	7.88	7.88	8.02

[1] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.
[2] Unemployed (Labour Force Survey) and employment (NA) excl. maritime personnel in ocean transport.
[3] According to Statistics Norway's labour force survey (LFS).
[4] Percentage change from the same period the previous year.
[5] End of period.
[6] Average spot price, Brent Blend.
Source: Statistics Norway and Norges Bank.

moderate given the prevailing cyclical conditions, but wage drift is likely to be high in 2006.

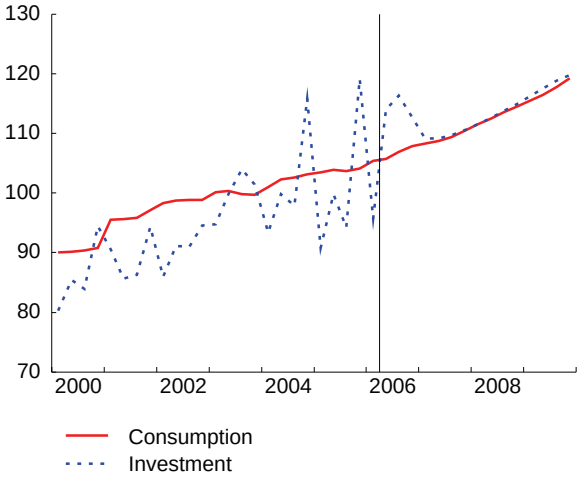
The Storting (Norwegian parliament) deliberations on the Revised National Budget (RNB) for 2006 do not appear to entail any significant changes in economy policy. This means that fiscal policy is approximately neutral even though the stimulatory impulses may be slightly stronger as a result of the adjustments proposed in the RNB. Monetary policy has become less expansionary through small, not too frequent interest rate increases. The appreciation of the krone through the spring will have a contractionary impact on the Norwegian economy if it persists, and will also contribute to keeping inflation at a low level ahead. If interest rates in Norway are increased broadly in pace with interest rates in the euro area, the impact on the euro/krone exchange rate will probably be small. A gradual fall in oil prices in the years ahead might contribute to weakening the krone somewhat, but will hardly suffice to prevent overall CPI inflation from falling between 2006 and 2007.

Minor changes in fiscal policy this year and next

Quarterly national accounts figures (QNA) show an unusually high rate of growth in general government consumption between the first quarter of 2005 and the first quarter of this year. This is mainly due to the difference in Easter holiday dates in 2005 and 2006. General government gross investment showed strong annual growth, and growth will be even higher in this quarter as a result of investments in imported military equipment (frigates). For 2006, we have applied the same estimates for fiscal variables as in the RNB. This implies a slightly higher forecast for consumption than previously, and is partly ascribable to the spending increases proposed in the RNB. The overall spending limit for the central government budget was raised somewhat, but the increase in revenues excluding petroleum revenues is somewhat higher so that the non-oil deficit is slightly lower. The cyclically adjusted, structural non-oil budget deficit remains unchanged compared with the budget approved in autumn 2005. In line with previous practice, we have incorporated the approved changes in direct and indirect taxes for 2006 in our projections.

For 2007, there is little concrete information for making a detailed estimation of general government spending and revenues. For the structural, non-oil deficit, we assume that the Storting will adhere to the fiscal rule fairly closely for the first time since the rule was introduced five years ago. According to the RNB, the petroleum fund (the Government Pension Fund – Global) will amount to a little more than NOK 1 700 billion at the beginning of 2007, and 4 per cent of the amount, or close to NOK 70 billion, will set the limit for the structural, non-oil deficit. On the expenditure side, growth is expected to broadly follow trend

General government
Seasonally adjusted volume indices, 2003=100



Source: Statistics Norway.

growth for mainland GDP, while growth in transfers is primarily driven by demographic conditions and wage growth. Our projections are based on the assumption of unchanged real direct and indirect tax rates with the exception of an increase in personal taxation of NOK 2 billion in line with the Government's declared intention to bring the tax level back to the 2004 level.

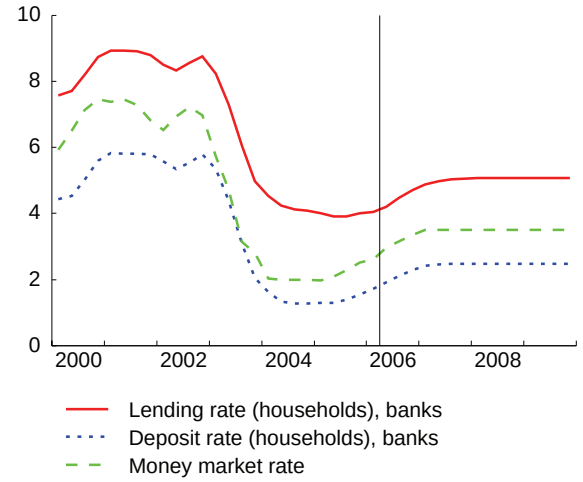
In 2008 and 2009, it will probably be possible to increase the structural, non-oil deficit by a good NOK 10 billion in each year (at 2006 prices) as a result of an increase in the petroleum fund in the years ahead. This translates into a stimulus of a close to ¾ per cent of mainland GDP, which is the equivalent of the stimulus from 2001 to 2003. The stimulus is assumed to come primarily via growth in general government consumption and investment of close to 4 per cent in 2008 and the same rate in 2009. Such a high growth rate for these variables has not been observed since 2000 and 2001. The growth rate is somewhat higher than projected growth in household consumption. In these years, real tax rates are assumed to remain constant. The projections are broadly in line with previous projections.

Interest rate hikes in 2006 – and stable thereafter

Three-month money market rates have increased since the previous *Survey* published at the beginning of March, from about 2.7 per cent to just over 3 per cent at the beginning of June. The FRA market has now priced in an interest rate increase of around 0.5 percentage point towards the end of 2006. Norges Bank raised the interest rate by 0.25 percentage point both in March and in June, bringing the sight deposit rate to 2.75 per cent.

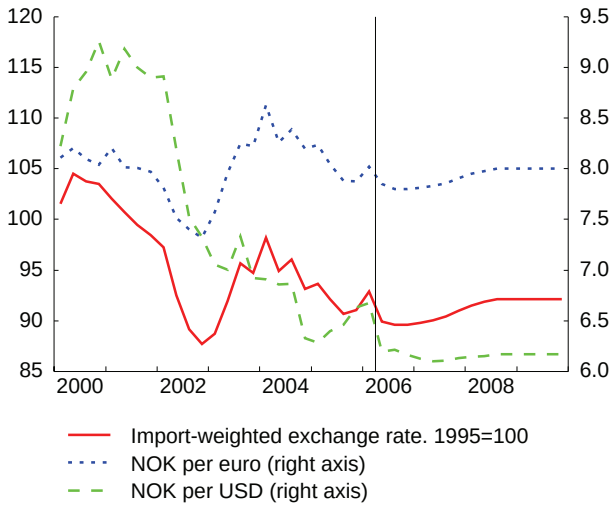
Norges Bank shall set interest rates on the basis of an assessment of the trade-off between stabilizing infla-

Norwegian interest rates
Per cent



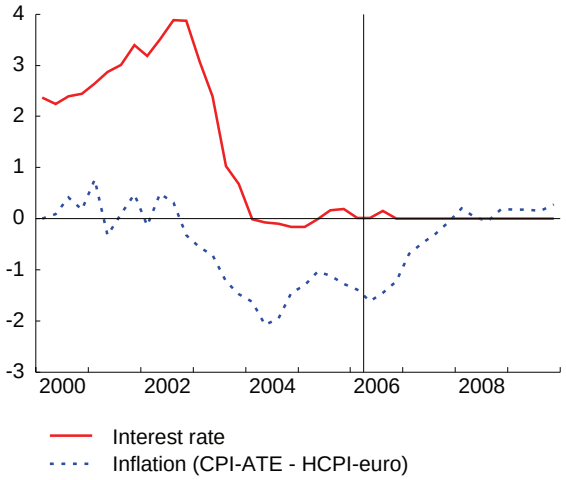
Source: Norges Bank and Statistics Norway.

Exchange rates



Source: Norges Bank.

Interest rate and inflation differential between NOK and the euro
Percentage points



Source: Norges Bank and Statistics Norway.

tion, the exchange rate, output and employment. The operational objective of monetary policy is annual consumer price inflation of close to 2.5 per cent over time. When a supply-side shock that leads to lower import prices results in lower inflation and rising capacity utilisation, a conflict arises between the objective of stabilizing inflation at target and stabilizing output.

Between May 2005 and May 2006, the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) rose by 0.7 per cent, which is clearly lower than the inflation target of 2.5 per cent. The krone exchange rate has appreciated since the previous *Survey*, with an attendant dampening impact on inflation.

At the beginning of June, in a speech addressing the theme of monetary policy trade-offs, the Governor of Norges Bank advanced the notion that the Norwegian economy has probably been exposed to changes in supply-side conditions that may have increased potential output permanently. At the same time, employment has increased this year. In addition, domestic credit growth, as measured by 12-month growth in gross domestic debt of households, non-financial enterprises and municipalities, C2, has exceeded 10 per cent in every month since April 2005. C2 growth was 13.7 per cent in April. Such persistent high growth in debt and asset prices such as share prices and house prices could lead to instability in the economy. On the basis of these trade-offs, Norges Bank has announced that it will continue to increase the key rate in small, not too frequent steps.

Interest rate increases internationally and growth slightly higher than trend-growth in the Norwegian economy suggest that Norges Bank will increase its policy rate somewhat in the period ahead. We assume that the policy rate will be raised by a further 0.5 percentage point this autumn, bringing the money market rate to 3.5 per cent towards the end of the year. Lower global growth and falling petroleum investment will gradually bring down output growth in Norway as well. The key rate is assumed to remain unchanged during the projected mild downturn.

The European Central Bank (ECB) started increasing its policy rate on 8 June, by 0.25 percentage point to 2.75 per cent, which is the same level prevailing in Norway. This was the third increase in the euro area in only six months, after the policy rate had remained unchanged at a historical low since June 2003. In the US, the current round of interest rate increases is continuing, and the key rate is now at 5 per cent. In line with our projections for the international economy, we assume that money market rates in the euro area will stand at about 3.5 per cent at the end of the year, and remain unchanged through the remainder of the projection period. This implies the same interest rate

level in Norway as in the euro area throughout the projection period.

The krone has appreciated since March. The krone stood at about 7.8 against the euro at the beginning of June, compared with about NOK 8 at the beginning of March. At the same time, the import-weighted krone exchange rate reached that same level as that prevailing in late autumn 2005. A fall in oil prices from today's record-high level will probably lead to a depreciation of the krone back to 8 in the course of 2008. The import-weighted krone exchange rate is also expected to weaken somewhat over the next two years and then remain approximately unchanged to the end of the projection period.

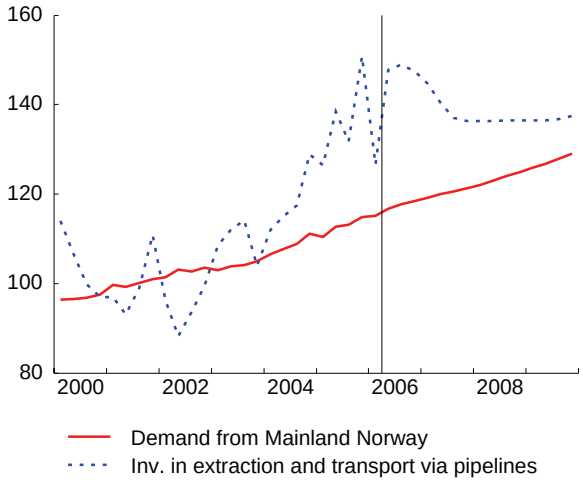
Petroleum investment approaches a new record

Statistics Norway's latest investment intentions survey of the oil and gas industry indicates that petroleum investment will exceed NOK 100 billion at current prices in 2006, i.e. an upward adjustment of close to NOK 10 billion compared with the previous survey. This is a record-high level, but measured at constant prices about 4 per cent below the peak in 1998. Investment as a percentage of mainland GDP came to about 8 per cent in 1998, while the figure for 2006 is estimated at just above 6 per cent. With approximately unchanged import shares, demand for domestically produced goods and services will thus be relative weaker than during the previous upswing.

The survey-based upward revision applies to all types of investment, but the estimates for investment in on-shore installations and fields in operation show a particularly strong increase. The estimate for on-shore investment relating to Melkøya is higher, and among fields in operation the increase in investments is particularly strong for Ekofisk, Valhall, Ringhorne and Åsgård. The latest survey also indicates an appreciable increase in investment in exploration activity between 2005 and 2006. In the light of capacity constraints in the rig market, it is somewhat doubtful whether the high level of investment can be realized this year. After rising markedly through 2005, the investment level in the first quarter is approximately at the same level as in the first quarter of 2005 according to preliminary quarterly national accounts figures. All total, we nevertheless expect the volume of investments in the extraction industry to be about 8 per cent higher in 2006 than in 2005.

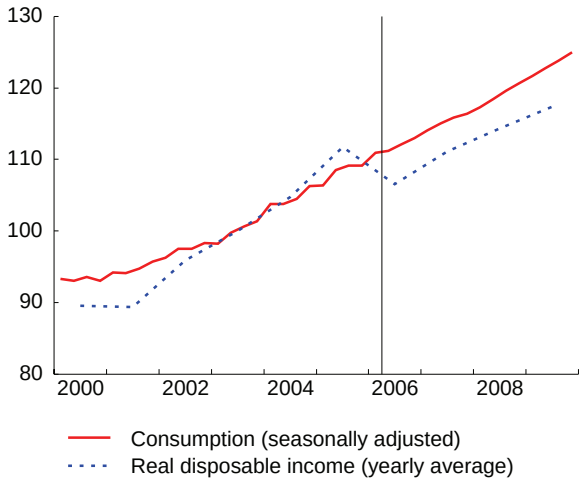
The survey includes for the first time estimates for 2007. The initial estimates have previously been considerably lower than actual levels, which is also expected to be the case this time around. This is partly because the statistics are based on projects for which development and operating plans have already been approved. However, it must be assumed that new projects are approved through the year, thereby generating additional investments. The planned phasing-out of investments in the Snøhvit and Ormen Lange fields will push down investments in field developments and on-shore installations markedly, but we expect this to be partly offset by investment in exploration and fields in operation. Relatively high oil prices over a long period, attractive exploration areas and a gradual increase in rig market capacity are expected to induce oil companies to increase investments in these areas. All in all, the investment volume will decline by about 8 per cent between 2006 and 2007, bringing the investment volume for 2007 to approximately the same level as that prevailing in 2005, but with some change in composition. For example, prospective new projects are expected to be linked to existing infrastructure without the need for on-shore facilities, which implies a further fall in investment in on-shore installations. Against this background, petro-

Domestic demand
Seasonally adjusted volume indices, 2003=100



Source: Statistics Norway.

Income and consumption in households
Volume indices, 2003=100



Source: Statistics Norway.

leum investment is expected to contribute to increased growth in the mainland economy again this year, but the impulses are thereafter expected to push down economic growth to some extent. See box on the effects of changes in petroleum investment.

The level of crude oil production is expected to be considerably lower in 2006 than in 2005. Gas production is expected to show a slower rate of increase than earlier this year, resulting in a production level that is close to 4 per cent lower this year than in 2005. Preliminary QNA figures show that total production was close to 4 per cent lower in the first quarter of 2006 than in the same quarter one year earlier. Production growth is expected to continue at the same rate to the end of the year. As some investment projects are completed and installations come on stream, both oil and gas production should show a renewed increase. Oil production may increase both in 2007 and 2008, but thereafter the expected decline in production at the large, existing installations will again push down oil production. Gas production is expected to expand sharply again in 2007, at an annual growth rate of 10 per cent. Overall, production is projected to move on a rising trend during the last three years of the projection period, with the highest growth rate in 2007 and thereafter more moderate growth in 2008 and 2009. These projections are broadly in line with the projections in the Revised National Budget.

High consumption ahead

Consumption for households and non-profit institutions increased from 2004 to 2005 by 3.4 per cent at constant prices according to preliminary national accounts figures. The increase in consumption in 2005 was in line with growth in household real disposable income excluding record-high dividend payments (see table). It appears that the high income deriving from share dividends, which probably reflects adaptations to the reintroduction of dividend tax in 2006, has to a large extent been reinvested in the business sector and has generated little impetus to consumption. The household saving ratio is projected to reach a record-high level of 12.6 per cent in 2005.

Seasonally adjusted figures show that goods consumption rose by slightly more than 2 per cent in the first quarter of this year compared with the previous quarter, after falling by a good 1 per cent in the fourth quarter of 2005. Household demand for most groups of goods moved up. On the other hand, purchases of private motor vehicles showed a sharp fall, and services consumption remained virtually unchanged. All total, growth is still buoyant, and consumption grew by as much as 1.6 per cent in the first quarter of 2006. The strong rate of growth in household consumption in recent years must be seen in connection with the fall in real interest rates after tax and solid growth in household income.

Household real disposable income. Percentage growth from the previous year

	2005	2006	2007	2008	2009
Real disposable income incl. dividends	6.7	-4.7	4.3	2.9	2.6
Real disposable income excl. dividends	3.6	3.6	2.4	2.9	2.6

Growth in household real disposable income is projected to be weaker through the projection period than in 2005, also when excluding dividend payments, in spite of stronger growth in wage income and transfers ahead. Households' financial position and a moderate increase in interest rates will result in weak growth in net capital income (also excluding dividend payments) through the projection period. Combined with an increase in direct taxes and higher consumer price inflation in 2006, this will push down growth in household real income, albeit to a moderate extent. The real interest rate after tax will be appreciably lower this year than in the two previous years and will then rise in 2007 before falling again to a level just below 2 per cent in 2009. The combinations of developments in income and real interest rates results in a path for consumption where consumption growth remains relatively firm at around 3.5 per cent.

Given these projections, the saving ratio will fall from the record-high level of 12.6 per cent in 2005 to slightly below 6 per cent for the projection period as a whole. The sharp fall in the saving ratio will be reflected in a marked fall in household net lending. Measured at current prices, household net lending is expected to fall from a little less than NOK 67 billion in 2005 to almost NOK 11 billion in 2009. The decline can primarily be ascribed to the estimated changes in dividend payments and a high level of housing investment.

Turnaround in housing investment

According to figures for the building industry, housing starts came to about 31 600 in 2005, which represents a 5.4 per cent increase on the previous year. By way of comparison, the increase was as a high as 29.4 per cent in 2004. The upswing has continued into 2006, and preliminary figures show that housing starts are 4.8 per cent higher in the first four months of this year compared with the same period one year earlier.

According to preliminary national accounts figures, housing investment expanded by 14.5 per cent in 2005, supported by strong growth in real income and lower real interest rates. The strong housing start figures at the end of 2005 and the beginning of 2006 point to a sustained, high level of housing investment again in 2006.

Housing wealth is now at a very high level in a historical context. In conjunction with the prospect of higher

real interest rates, this will contribute to restraining both house price inflation and housing investment. Against this background, housing investment is projected to level off in 2006 and hover around this level to the end of the projection period. Housing investment is projected to be 4.5 per cent higher in 2006 than in 2005. The projections imply continued strong growth in housing wealth in the period to 2009.

Growth in mainland business investment flattens

In the past two years, growth in gross mainland business investment has been relatively high after passing a cyclical trough in 2003. In 2004, growth came to 8 per cent, while the figure for 2005 was 9 per cent. Housing investment and manufacturing investment showed the highest growth rates. However, investment growth was also buoyant for many segments of the service industry.

Statistics Norway's latest investment intentions survey indicates that manufacturing companies expect approximately unchanged investment levels in 2006 compared with the previous year, which implies a sustained high level of manufacturing investment. A new, large project relating to non-ferrous metals production accounts for a considerable share of growth in manufacturing investment this year. The relatively high level of manufacturing investment is expected to hold up over the next few years, partly supported by several new investment plans relating to the use of renewable energy.

Investment plans within the power supply industry point to a sharp increase in investment between 2005 and 2006, with investment projected to increase by as much as 28.3 per cent. Both the need for renewal of the power distribution grid and investment in gas plants suggest that the investment level may remain high in the coming years. Growth is not projected to pick up further after 2006, but the high level prevailing this year is expected to persist.

Total mainland business investment is projected to increase by 7.6 per cent between 2005 and 2006. The level of mainland business investment will remain at around the 2006 level to the end of the projection period. This implies approximately unchanged growth in mainland business investment in relation to the projections in our previous *Survey*.

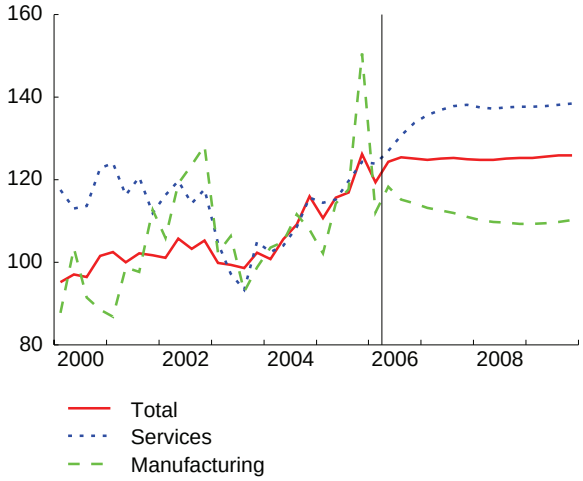
Export growth edges back

In the first quarter, traditional goods exports slowed to 1.1 per cent seasonally adjusted, while total exports increased by 1.1 per cent. Earnings from natural gas, gross freight in the shipping sector, refined petroleum products and industrial chemicals account for the rise in exports. The negative outcome for traditional goods exports primarily reflects the fall in exports of metals, electricity and travel. Electricity exports fell, however,

Residential market
Left axis adj. indices, 2003=100, right axis per cent

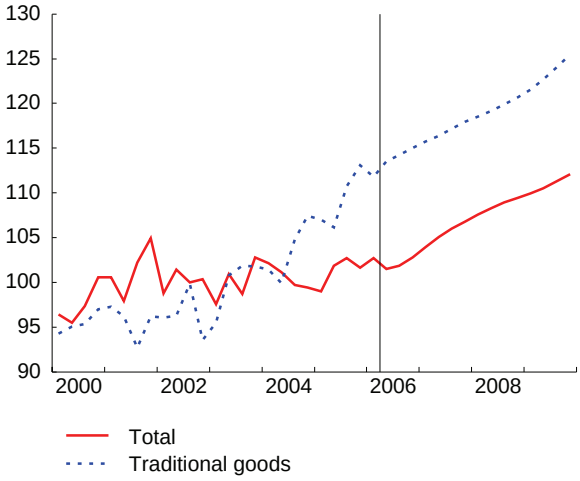
Source: Statistics Norway.

Investment, Mainland Norway
Seasonally adjusted volume indices, 2003=100



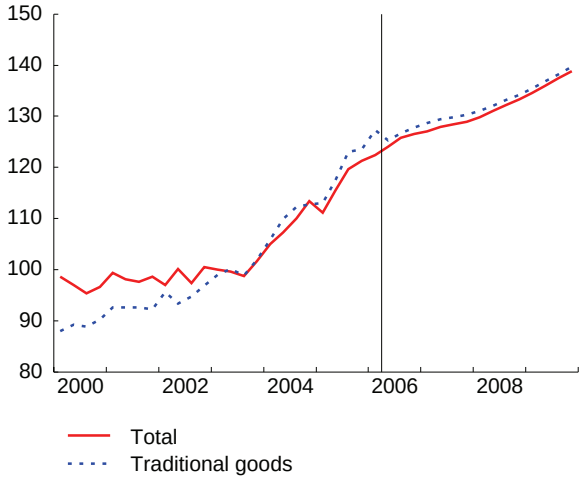
Source: Statistics Norway.

Exports
Seasonally adjusted volume indices, 2003=100



Source: Statistics Norway.

Imports
Seasonally adjusted volume indices, 2003=100



Source: Statistics Norway.

from a historically high level. In 2005, traditional goods exports increase in volume terms by 5.8 per cent, against 3.4 per cent in 2004. The growth rate is slightly lower than market growth, which implies a loss of market shares.

Overall, export prices increased by 16.9 per cent in 2005, reflecting the surge in the price of crude oil and natural gas prices, electricity and refined petroleum products. Developments in the first quarter this year show a sustained rise in prices for these products, particularly natural gas and electricity, which is related to a general rise in global commodity prices.

Traditional goods exports are projected to expand by close to 4 per cent this year, followed by somewhat slower growth in the years ahead as a result of the projected slowdown in the world economy. The volume of oil and gas exports is expected to contract by about 3 per cent in 2006, followed by growth of 7.5 per cent in 2007. Exports of petroleum products are projected to expand throughout the projection period, albeit at a somewhat slower rate. Volume growth in exports will generally lie below market growth during the projection period, which implies a further loss of market shares for the export industry. This is primarily the delayed effect of the deterioration in competitiveness earlier this year.

Commodity prices, which are currently at a high level, are expected to fall in 2007 and 2008 as a result of a global cyclical slowdown. Towards the end of the projection period, prices show a renewed rise as the global economy picks up again.

Lower import growth ahead

In the first quarter of this year, traditional goods imports expanded by 3 per cent, i.e. an annual growth rate that is slightly higher than the annual average for 2005 when growth came to 8.3 per cent. In the previous quarter, traditional goods imports grew by 0.4 per cent. The strong rate of growth in imports in the first quarter of this year partly mirrored higher demand for capital goods with a high import share, such as engineering products, and an appreciation of the krone. Metals imports also rose sharply. This may be related to a high level of production of industrial raw materials and high activity within the shipbuilding and engineering industries. A decline in imports of ships, crude oil and commercial services accounts for a 0.9 per cent decrease in overall growth.

In 2006, growth in traditional goods imports is projected to slow to 6 per cent owing to lower investment growth. Slower investment growth will then lead to further decrease in import growth to a little more than 2 per cent in 2008. Towards the end of the projection period, import growth is projected to edge up again as a result of stronger growth in mainland demand. Total import growth will be somewhat higher owing to the delivery of 5 new frigates. Two frigates will be delivered this year, while one frigate will be delivered in each of the following three years.

The cyclical expansion will continue to end-2006

Mainland GDP growth has been a good 1 percentage point above trend growth in the two previous years. Growth has been broadly the same for the main sectors of the economy. This has brought the Norwegian economy into a moderate expansion. The main driving force behind the upturn has been growth in domestic demand, including the increase in petroleum investment. The low interest rate level is another important factor, with the stimulus from monetary policy resulting in high growth in household consumption and housing investment. Changes in fiscal policy also contributed to boosting growth in the beginning of the cyclical upturn. Monetary policy is now being tightened somewhat through increases in the key rate, and the krone exchange rate has appreciated. Renewed fiscal stimulus is not expected until 2008 if the fiscal rule is closely adhered to. Nor do updated estimates for oil company investments in the petroleum sector indicate stronger impulses from that source in the period after 2006. Against this background, we still assume that the current expansion will be very moderate compared with previous upturns in the Norwegian economy in the mid-1980s and 1990s. The upturn is also expected to span a relatively short period.

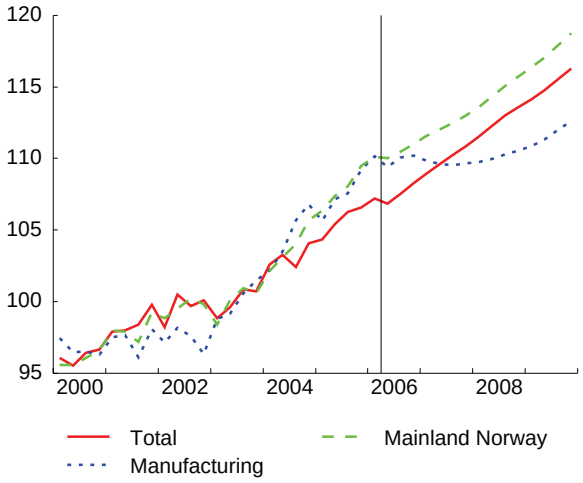
However, it appears that mainland growth will be slightly higher in 2006 than projected earlier, primarily owing to four factors. First, we underestimated growth in the housing market, both with respect to housing investment and the rise in prices for existing homes. Consequently, growth in the building and construction sector was also slightly underestimated. Somewhat lower growth in household real income, in

conjunction with somewhat higher interest rates, are still expected to curb activity in the housing market in the period ahead, although there is still no statistical evidence of this so far. We consider this to be an important source of uncertainty as to the economic outlook ahead. Second, the projection for general government consumption is slightly higher than earlier. Third, the projection for petroleum investment has been revised up for 2006, and finally global growth has proved to be somewhat higher than previously projected. Given these factors, our projection for mainland GDP growth in 2006 has been revised upwards by almost a half percentage point to 2.7 per cent, which means that growth will be higher than trend growth again in 2006, albeit only marginally so. Total GDP growth has also been adjusted upwards as a result of this, but owing to the fall in petroleum production total growth is projected at close to 2 per cent in 2006.

Total consumption growth is projected to remain approximately unchanged in the years ahead at the 2006 level. The composition of growth in 2007 is expected to be broadly similar to that of 2006, while growth may be somewhat stronger for general government consumption in 2008 and 2009. The shift in the Norwegian economy towards more moderate growth will primarily be caused by lower investment demand, particularly when major ongoing development projects in the oil and gas industry come on stream in 2007. Investment in the mainland economy is not expected to show a pronounced decline, but rather remain steady at the current high level. This will nevertheless have a dampening impact on economic growth. In addition, the global economy is projected to move into a downturn, with an attendant slowdown in growth in traditional exports. On the whole, mainland growth is thus projected to lie under trend growth in 2007, with the output gap gradually closing through 2007. Against this backdrop, growth in the mainland economy is projected at less than 2 per cent in 2007. On the other hand, total GDP growth is projected to be higher in 2007 owing to an increase in oil and gas production. Growth in total GDP is projected at 2.6 per cent in 2007. Growth in manufacturing and the building and construction industry, which has been high in 2005 and in 2006, will be moderate next year. The downturn in manufacturing may be amplified in 2007 and 2008 as a result of higher electricity prices as some manufacturing enterprises will be renewing long-term electricity contracts. The impact of these changes is still unclear, but the effects on the economy as a whole will be pronounced during the projection period.

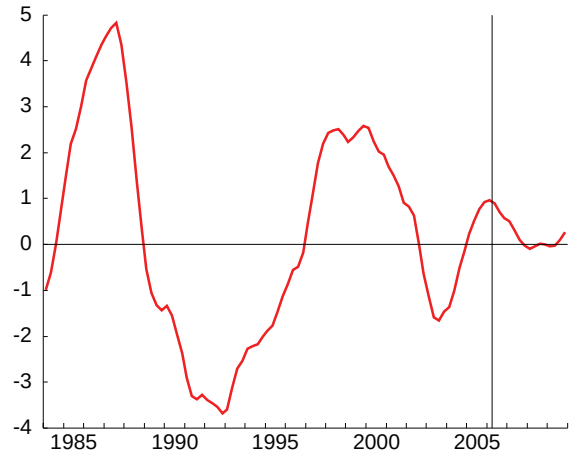
In 2008 and 2009, the fiscal stimulus generated by increased petroleum revenue spending will entail a slight pickup in mainland growth towards trend growth. The reason why growth in the overall economy does not show a concomitant increase is because

Gross domestic product
Seasonally adjusted volume indices, 2003=100



Source: Statistics Norway.

Output gap, Mainland Norway
Deviation from trend, per cent



Source: Statistics Norway.

petroleum investment does not rise and traditional goods exports show moderate growth. Export growth is projected to exhibit a pronounced rise through 2009 as a result of a cyclical revival in the global economy towards the end of the projection period. This will be accompanied by a renewed pickup in manufacturing production. Mainland GDP growth is projected at 2¼ per cent in 2008 and 2009, i.e. slightly lower than trend growth. Total GDP will grow at approximately the same pace for the two years as a whole.

On balance, the cyclical expansion is projected to persist through 2006, followed by slower growth in 2007 with growth moving down towards trend growth in mainland GDP through the year and holding steady at that level thereafter.

Main economic indicators 2005-2009. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Accounts	Forecasts								
		2006			2007		2008		2009	
	2005	SN	MoF	NB	SN	NB	SN	NB	SN	NB
Demand and output										
Consumption in households etc.	3.4	3.7	3.1	3 3/4	3.4	3	3.1	2 1/2	3.5	2 1/4
General government consumption	1.5	2.5	2.5	2 1/2	2.4	1 3/4	3.8	3	3.5	3
Gross fixed investment	10.9	8.7	7.7	..	-1.7	..	-0.4	..	0.2	..
Extraction and transport via pipelines[1]	15.6	8.1	5.0	5	-8.0	0	-0.7	-5	0.0	0
Mainland Norway	8.8	7.6	9.9	6	0.1	4 1/2	-0.2	2 1/4	0.7	1 3/4
Industries	9.8	6.5	8.3	..	3.5	..	-1.3	..	-0.5	..
Housing	14.5	4.6	8.1	..	-0.9	..	-1.0	..	0.0	..
General government	-0.8	14.6	16.4	..	-5.9	..	3.6	..	4.5	..
Demand from Mainland Norway[2]	3.8	4.0	4.1	3 3/4	2.6	3	2.7	2 1/2	3.0	2 1/2
Stockbuilding[3]	0.2	0.0	..	..	0.0	..	0.0	..	0.0	..
Exports	0.7	0.5	1.2	..	4.1	..	2.9	..	2.0	..
Crude oil and natural gas	-4.1	-2.7	-2.9	..	7.5	..	3.8	..	1.0	..
Traditional goods	5.8	3.9	2.7	6	2.6	5	2.4	3 3/4	3.2	3 1/2
Imports	7.4	7.8	6.1	6	2.3	3 3/4	2.8	1 3/4	3.8	2 3/4
Traditional goods	8.3	6.1	5.4	..	2.8	..	2.4	..	3.7	..
Gross domestic product	2.3	1.9	2.2	3	2.6	2 1/2	2.5	2 1/4	2.1	2
Mainland Norway	3.7	2.7	3.0	3 1/2	1.8	2 3/4	2.3	2 1/2	2.3	2 1/4
Labour market										
Employed persons	0.7	2.1	2.1	1 3/4	0.7	1	0.6	3/4	1.0	1/2
Unemployment rate (level)	4.6	3.8	3.8	3 3/4	3.9	3 3/4	3.9	3 3/4	3.7	3 3/4
Prices and wages										
Wages per standard man-year	3.6	3.9	3 1/2	4	4.0	4 1/2	3.7	4 3/4	4.0	4 3/4
Consumer price index (CPI)	1.6	2.1	2 1/4	1 3/4	1.2	1 3/4	1.5	2 1/4	1.9	2 1/2
CPI-ATE[4]	1.0	0.9	1 1/4	1 1/4	1.6	1 3/4	1.8	2 1/4	1.9	2 1/2
Export prices, traditional goods	3.5	6.0	..	..	-3.9	..	-3.3	..	0.0	..
Import prices, traditional goods	0.4	0.3	..	..	-1.2	..	0.7	..	0.8	..
Housing prices[5]	7.9	7.2	..	..	3.3	..	3.4	..	1.8	..
Balance of payment										
Current balance (bill. NOK)	316.5	387.0	..	..	405.5	..	314.4	..	295.9	..
Current balance (per cent of GDP)	16.6	18.4	16.9	..	18.9	..	14.8	..	13.5	..
Memorandum items:										
Household savings ratio (level)	12.6	5.2	3.6	..	6.4	..	6.2	..	5.4	..
Money market rate (level)	2.2	3.0	..	3	3.5	3 3/4	3.5	4 1/4	3.5	5
Lending rate, banks (level)[6]	4.0	4.4	..	..	5.0	..	5.1	..	5.1	..
Crude oil price NOK (level)[7]	351	428	420	..	370	..	308	..	308	..
Export markets indicator	5.2	6.4	..	..	4.5	..	2.1	..	3.2	..
Importweighted krone exchange rate (44 countries)[8]	-3.9	-1.5	..	1	-0.2	1/4	1.8	0	0.2	0

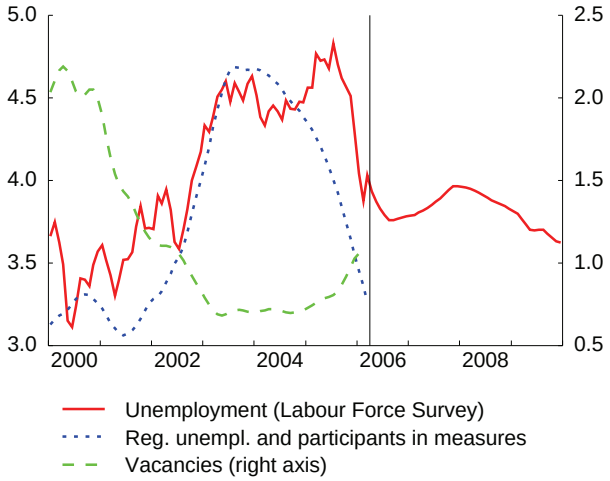
[1] Forecasts from Ministry of Finance incl. service activities incidential to extraction.
[2] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.
[3] Change in stockbuilding. Per cent of GDP.
[4] CPI adjusted for tax changes and excluding energy products (CPI-ATE).
[5] Freeholder.
[6] Households' borrowing rate in private financial institutions. Yearly average.
[7] Average spot price, Brent Blend.
[8] Increasing index implies depreciation.
Source: Statistics Norway (SN), Ministry of Finance, St.meld. nr.2 (2005-2006), (MoF), Norges Bank, forecasts based on forward interest and exchange rates, Inflasjonsrapport 1/2006 (NB).

What are the factors that might lead to stronger growth and a more prolonged expansion with stronger inflationary pressures than projected in this o:*Survey?* First, the impulses from the petroleum sector may be stronger than projected. This is not unlikely in the light of the prevailing high level of oil prices. Our projections are indeed based on the assumption that crude oil prices will fall to USD 50 per barrel towards the end of 2008, but even at that price level many projects in Norwegian waters are highly profitable. As an illustration of some of the effects from higher petroleum investment, we have estimated an alternative path where petroleum investment shows no decline. This affects the outcomes, but does not change the picture from a qualitative perspective. The likelihood naturally exists that the number and scale of investment projects will be larger than we have envisaged, with more pronounced effects. However, we consider the likelihood of this outcome to be limited. Investment could also decline to a further extent than projected, but this is less relevant as an alternative path in the current context of a cyclical expansion

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

Source: Statistics Norway.

Unemployment and number of vacancies
Seasonally adjusted and smoothed
Per cent of labour force



Source: The Directorate of Labour and Statistics Norway.

in the Norwegian economy. An additional source of uncertainty is the global economic environment. The world economy could be marked by stronger economic growth than anticipated, which may imply a somewhat higher interest rate level abroad and in Norway than in the baseline scenario. Such an alternative path shows that the growth pattern may deviate from our baseline scenario, but with no significant impact on overall activity.

Unemployment – fall matches rise

Traditionally unemployment has increased faster than it has declined, accompanied by fears of stubbornly high unemployment once it has risen. Developments over the past year have been different, however. Seasonally adjusted unemployment figures from Statistics Norway (Labour Force Survey, LFS) are published as three-month average. After peaking in June-August last year, unemployment declined by 18 000 to 98 000 in February-April this year.[1] The decline was of the same order as the increase in the period June-August to February-April 2003, which was the period when unemployment peaked during the previous downturn. Figures published by the Directorate of Labour show the same profile.

According to quarterly national accounts figures, growth in employment was as high as 2.0 per cent in the period between the first quarter of 2005 and the first quarter of 2006. Seasonally adjusted, growth was 0.9 per cent from the fourth quarter of 2005 to the first quarter of this year, with particularly strong growth in the building and construction industry, commercial services and the civilian government sector. For the manufacturing sector as a whole, employment remained unchanged in the first quarter, although there was a clear increase in employment in some manufacturing segments such as industrial chemicals, shipbuilding and the construction of oil platforms.

So far, the labour market has not tightened to the same extent as prior to the abrupt rise in unemployment in 2002, but it might still be interesting to look at the breakdown of employment today compared with the situation at that time. Total employment has increased by a good 30 000 between the first quarter of 2002 and the first quarter of 2006. In the same period, manufacturing employment fell by 24 500. In addition, the number employed in agriculture and forestry declined by 9 500, and in the defence sector employment fell by close to 8 000. During the period, the building and construction industry, retail trade and commercial services accounted for the largest share of growth in employment, with an increase in employment of around 15 000 in each industry. In addition, the number of employed increased by 31 5000 in the health and social services sector. According to the LFS, employment growth was approximately evenly distributed between men and women.

Developments during this four-year period can be explained by three factors in particular. First, the problems facing Norwegian manufacturing primarily reflect adverse exchange rate movements through 2001 and 2002 in addition to high cost inflation during the expansion that was nearing an end at that time. Second, growth in private services reflects the very low interest rate level prevailing since 2003. Third, the structural budget deficit has increased from NOK 35 billion in 2002 to NOK 66 billion in 2006, which has been accompanied by strong growth in

[1] With effect from January 2006, a number of changes have been made in the LFS (see Economic Survey 1/2006 p. 86). The changes entail extraordinary uncertainty as to unemployment figures, but the effects are assumed to be limited.

public employment at the end of the period. At the beginning of the period, a larger share of the increase in the deficit was used to finance tax reductions.

Labour market shifts are expected to be less pronounced over the next four years, but the sluggish trend in manufacturing employment and strong employment growth in the public sector is projected to continue during the projection period. Vigorous growth in petroleum investment in 2005 and 2006 will make a contribution to employment growth in manufacturing in the period to 2007, but a projected flattening of petroleum investment and a somewhat weaker international business cycle will result in broadly unchanged manufacturing employment in the period to 2009. Somewhat higher real interest rates, with an associated moderation in household consumption and housing investment ahead, will also lead to approximately unchanged employment also in private mainland industries excluding manufacturing. On the other hand, rising budget deficits imply sustained, strong employment growth. Increased need for labour in the public sector will be partly accommodated by an increase in overtime among existing employees. According to the LFS, 114 000 part-time employees would like to increase their working hours. The majority of those persons are employed in the health and social services sector or in retail trade. Our projections still imply a sharp increase in public employment, which is projected to rise by more than 50 000 between 2006 and 2009.

All in all, the pronounced decline in unemployment will now level off and stabilize, with LFS unemployment measured as an annual average hovering around 3.8 per cent in the period 2006-2009. In comparison, seasonally adjusted unemployment was 4 per cent in the period from February to April. Developments in the labour force and employment will thus move closely in tandem in the period towards 2009. The strong rate of growth in public employment will, however, lead to a renewed fall in unemployment through 2009. Measured as an annual average, unemployment growth is projected at 3.7 per cent in 2009, down from 3.9 per cent in 2008.

Solid real wage growth

According to preliminary national accounts figures, growth in wages per normal person-year was 3.6 per cent between 2004 and 2005, compared with 4.3 per cent in the previous year. A decline in benefit payments and higher wage disbursements owing to a decline in long-term sickness absence in 2004 contributed to pushing up wage growth by this measure by an estimated 0.5 percentage point in 2004 and 0.3 percentage point in 2005. Wage growth per normal person-year as low as 2.9 per cent between the first quarter of 2005 and the first quarter of 2006 is evidence of the small pay increases awarded through the previous year, indicating that an even greater share of this year's wage growth will have to stem from further pay increases this year.

In spite of record-high employment growth and a sharp decline in unemployment over the past year, this spring's collective wage negotiations have largely been carried out without any major conflicts and the outcome would indicate overall wage growth of 3.9 per cent between 2005 and 2006. Experience indicates that locally negotiated pay increases are higher when the labour market improves. Our wage projections are therefore based on the assumption that a rising contribution to wage growth will come from pay increases awarded outside of collective wage negotiations (wage drift).

The national accounts show that there has been strong growth in earnings in the Norwegian business sector in recent years. A comparison of the ratio of income to labour costs for enterprises since 2003 with previous national accounts figures shows that corporate profitability is now record-high. Earnings growth does not, however, reflect traditional production activity, but can be ascribed to terms-of-trade gains stemming from trade with low-cost countries.

We assume that these terms-of-trade gains will not be accompanied by the same wage growth as other incomes.[2] On the contrary, such indirect competition between Norwegian and Asian labour in particular, which comes in addition to more direct competition from labour inflows from Eastern Europe, has probably restrained the decline in unemployment in Norway and limited wage growth. Global labour competition will most likely persist. A relatively balanced path for the Norwegian and international economy will nevertheless keep unemployment at around 3.8 per cent throughout the projection period to end-2009.

Total wage growth must, however, be seen in connection with developments in manufacturing companies' earnings from ordinary production activity. Since manufacturing is a wage leader, settlements in that sector will set the pace for other negotiating sectors. Slower growth internationally and in Norway will exert downward pressure on the activity level in manufacturing, which will lead to reduced profitability and productivity growth. That will in turn curb wage growth during the projection period, as will the subdued rise in consumer prices.

Moderate pay increases in 2005 have provided room for relatively large increases this year, but the situation will be the reverse next year. Pay increases that

[2] See Economic Survey No. 1/2006, p. 20, for an analysis of the relationship between income growth in manufacturing and wage growth since 2003.

are awarded this year will have a full effect on annual wages next year. According to our projections, wage growth of 4.0 per cent between 2006 and 2007 implies clearly lower pay increases in 2007 than in 2006. This must also be seen in the light of the fact that the 2007 settlement is an interim settlement with centralized negotiations and no right to strike.

On balance, the Norwegian economy is expected to move on a stable path in the period 2007-2009. Wage growth is not likely to be marked by pronounced cyclical fluctuations. Wage growth is projected at 3.7 per cent in 2008 and 4.0 per cent in 2009. This implies annual real wage growth of 2 per cent, which is about the same as average real wage growth since 1950.

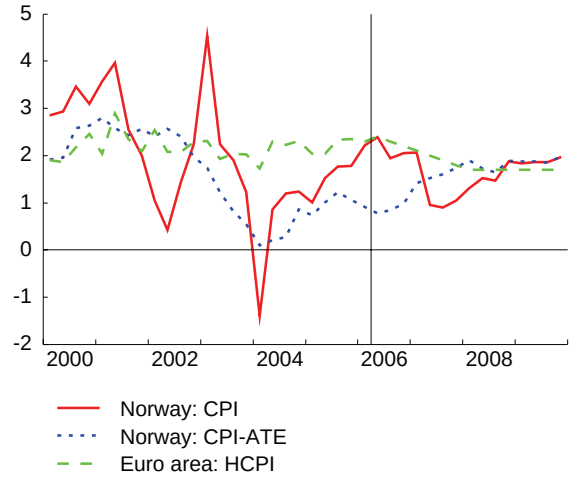
Continued low inflation

Underlying inflation has been low for a long period. The consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) has been well below the inflation target of 2.5 per cent for almost four years. In May 2006, the year-on-year rise in the CPI-ATE was 0.7 per cent, which is at the lower end of the range within which inflation (by this measure) has moved over the past 18 months. Inflation has shown a downward tendency over the past six months. Partly owing to a sharp rise in prices for energy products, the CPI was 2.3 per cent higher in the first five months of this year than in the same period last year. In April, CPI inflation on an annual basis was 2.7 per cent, which will probably be the highest monthly observation this year. Following a slight fall in electricity prices from April to May this year and the reverse in the same period last year, CPI inflation in May had fallen to 2.3 per cent.

A clear decline in prices for imported consumer goods (in Norwegian shops) has been an important contributor to the slow rise in the CPI-ATE in the past four years. Factors behind these developments have included the krone appreciation, increased imports from low-cost countries («the China effect»), low global inflation and more efficient retail trade. Over the past two years, however, the decline in prices has slowed markedly, and in May prices for imported consumer goods were only 0.5 per cent lower than 12 months earlier. Excluding energy products, the overall rise in prices for domestically produced goods has moved down since early 2005, and in May the rate of increase in these prices was only slightly higher than the rise in prices for imported consumer goods. Excluding energy products and adjusted for tax changes, the year-on-year rise in the CPI for domestically produced goods excluding primary industry goods was only 0.1 per cent in May.

The rise in house rents in the past year has been relatively stable at around 2 per cent, while the average rise in prices for other services has clearly slowed in the same period. This may be due to reduced maximum rates for day-care places. Even if the figures are adjusted for this, there is nonetheless a weak tendency towards a slower rise in prices for services in general.

Consumer price indices
Percentage growth from the same quarter previous year



Source: Norges Bank and Statistics Norway.

Growth in hourly labour costs has shown a clear decline since 2001. Labour productivity growth has contributed to an even clearer fall in unit labour costs. In spite of considerable cost impulses from energy products, the slow rise in the CPI-ATE is largely explained by low domestic cost inflation in addition to a slow rise in import prices.

As growth in the economy moderates, productivity growth is also expected to slow. Combined with somewhat higher wage growth, this suggests somewhat higher inflation ahead. The appreciation of the krone over the past three-four months is having the opposite effect. The effects on prices of the krone appreciation in late autumn 2005, however, are still unwinding. A slight depreciation of the krone is also expected ahead. Overall external inflationary impulses from world market prices for manufactured goods are expected to be fairly modest ahead. Developments in prices for imported consumer goods may thus push down inflation in the near term, but will be more neutral thereafter. The interest rate increases that have already been implemented and prospective increases will gradually push up the rise in house rents to some extent.

Thus, overall underlying inflation measured by the CPI-ATE may edge up through the coming year. It is thereafter expected to be relatively stable at between 1.5 and 2.0 per cent from 2007 to the end of the projection period.

From 1 January 2006, VAT on food was increased from 11 to 13 per cent, while the low VAT rate on

transport and other services was raised from 7 to 8 per cent. According to CPI statistics, real indirect tax changes have exerted upward pressure on CPI inflation, contributing 0.2 percentage point in the first five months of the year. In the same period, energy prices have pushed up CPI inflation by approximately 1.3 percentage points, with electricity prices accounting for about two-thirds.

Prices in the electricity market have fallen markedly through the past two months. Forward prices are now broadly unchanged until the end of the summer, increasing somewhat thereafter. Electricity prices charged to households are expected to edge down in the next few months, then gradually move up through the autumn and winter. On an annual basis, the rise in electricity prices will probably remain high up to the end of the first quarter next year, although clearly lower than in May when electricity prices were 25 per cent higher than in May last year.

The rapid rise in fuel prices reflects the rise in crude oil prices. Given our assumptions of lower oil prices ahead, petrol prices are likely to be reduced somewhat in the next few years. However, prices in this market vary considerably, with local price wars having a substantial and varying impact. In addition, fuel purchase prices are not only affected by the price of crude oil, but also by developments in refining margins. It is therefore difficult to estimate petrol price developments accurately based on given assumptions concerning crude oil prices.

CPI inflation this year is now expected to be 2.1 per cent. Looking ahead, we assume there will be no real indirect tax changes, while energy prices are assumed to fall, resulting in somewhat lower CPI inflation than CPI-ATE inflation in the first few years. According to our calculations for next year, CPI inflation will be 1.2 per cent, against 1.6 per cent for CPI-ATE inflation.

Balance of payments sets new records

Preliminary national accounts figures for the first quarter show a sharp rise in the balance of payments surplus. For the first time, the trade balance showed a surplus of more than NOK 100 billion in a single quarter, and reached NOK 104 billion, an increase of as much as 49 per cent on the surplus for the first quarter last year. As previously, exports of oil and gas account for the largest share of the surplus. Production volumes have fallen slightly, and the dollar has depreciated against the Norwegian krone. However, high and rising oil prices in USD compensate for this. Volume and price developments for both imported and exported goods continue to be favourable and are also contributing to the record-high surplus.

The services balance also recorded a new record-high surplus of more than NOK 12 billion in the first quarter, with revenues from oil drilling and financial and commercial services showing the highest increase. The interest and transfers balance showed a record low, with a quarterly deficit of as much as NOK 26 billion. This is whole attributable to an unusually large difference between inward and outward dividend payments. As a result, the current account surplus (trade balance + services balance ut:– interest and transfers balance) was NOK 89 billion, an increase of 17 percent on the previous year.

The large balance of payments surpluses will continue in the years ahead. In relation to the previous projection, oil prices have been adjusted upwards slightly in 2006 and 2007, falling to a lower level in 2008 and 2009. Weaker global cyclical developments will curb export growth from the end of the year. A weaker domestic economic situation will reduce import growth. It seems likely that the trade balance surplus will increase this year, and decline towards the end of the projection period.

Exports and imports of goods and services will continue to grow in volume throughout the projection period, with somewhat higher growth in imports in general. Export prices are expected to rise sharply this year and fall in the following years, while import prices are likely to remain virtually unchanged. It seems likely that the trade surplus this year may exceed NOK 400 billion for the first time in history, an increase of more than 20 per cent on last year. In 2008 and 2009 the surplus is expected to be considerably reduced, in pace with an assumed decline in oil prices, to below NOK 300 billion in 2009.

Effects of a continued global upturn

The outlook for the Norwegian economy presented in the baseline scenario in this *Survey* is in our view the most likely. The shift towards lower growth and after a period a modest downturn is partly based on assumptions concerning developments in the global economy and in particular among our trading partners. As our view is a little more pessimistic than that of many other observers, we examine more closely in this section how developments in the Norwegian economy will be affected if the global economic upturn continues.[3]

The basis for the alternative calculation is continued growth in the global economy and among our trading partners at about the same pace as we assume for 2006. The level of imports among our trading partners will then be 8 per cent higher in 2009 than in the baseline scenario. With higher global growth, the price level for commodities including crude oil will remain high. The price of crude oil in this calculation

[3] A similar analysis was conducted in Economic Survey 6/2004, pp. 22-23.

Higher international growth 2007-2009. Percentage deviation from the baseline scenario, unless otherwise stated

	2007	2008	2009
Market indicators	1.4	5.3	8.1
Crude oil price, USD per barrel, level	14	20	20
Consumer price index in the EURO area, level	0.4	1.1	1.8
Import price, foreign currency	0.3	0.6	1.0
Policy rate in the ECB and Norway (4^{th} quarter), level	0.5	1.0	1.5

Effects of higher international growth 2007-2009. Percentage deviation from the baseline scenario, unless otherwise stated

	2007	2008	2009
Household consumption	0.0	-0.1	0.5
Investment, Mainland Norway	0.1	0.6	0.6
Exports, traditional goods	0.6	3.4	6.4
Imports	0.2	0.7	1.1
GDP Mainland Norway	0.1	0.3	0.6
- Manufacturing	0.2	1.5	2.7
Unemployment rate, percentage points	0.0	-0.2	-0.2
Wage level	0.1	0.4	0.8
CPI level	0.1	0.5	0.8
Inflation (CPI-ATE), percentage points	-0.1	0.1	0.3
Exchange rate, NOK	-1.0	-1.7	-1.3
Current balance, bill. NOK	48.1	165.2	196.6

is thus assumed to remain at USD 70 per barrel as in the current quarter. The isolated effect on consumer prices in the euro area of oil prices that are higher than in the baseline scenario can be estimated at 1.0 per cent in 2009. We also assume that the isolated effect of higher activity in the OECD area is to push up consumer prices in 2009 by 0.8 per cent. With higher inflation and high activity in the real economy, central banks will continue to raise their key rates. Three-month money market rates in the euro area are assumed to reach 5 per cent in the fourth quarter of 2009, against 3.5 per cent in our baseline scenario. This scenario is the same as Norges Bank's baseline scenario for Norway in the most recent *Inflation Report*. We have therefore assumed in the alternative scenario that Norwegian money market rates fully follow euro area rates. As we shall see, such an orientation of monetary policy in Norway within this alternative calculation can be viewed as being in keeping with the operational target for monetary policy.

Norwegian import prices in foreign currency will increase as a result of higher commodity prices and a higher level of activity abroad. We assume that in 2009 these prices will be 1 per cent higher than in our baseline scenario. Even if the value of the petroleum fund increases as a result of higher oil prices, this increase is not substantial at the beginning of 2008. For 2009, however, the fiscal rule may provide scope for an additional spending increase of about NOK 4 billion 2006-kroner in relation to the baseline scenario. However, we have assumed that this will not be the case. Growth in the Norwegian economy will be higher than in the baseline scenario, and it is therefore to be expected that fiscal policy will be no more expansionary than it is there.

The Norwegian economy is affected by the alternative assumptions through two channels. Increased market growth abroad and higher prices on world markets will result in higher Norwegian exports of traditional goods and of services, fuelling pressures in the Norwegian economy. Wages will rise more rapidly and inflation will accelerate. The impact on the krone is not clear since inflation will also increase abroad. In isolation, higher interest rates have a dampening effect on economic activity in Norway, primarily affecting the household sector with a decrease in consumer demand and housing investment when interest rates rise. In other words, market growth abroad and interest rate increases in Norway have opposite effects. The effects on household demand are approximately equal and are largely offsetting. Mainland GDP will increase after three years by 0.6 per cent in relation to the baseline scenario, but the deviation from trend is marginal in 2009, as in the baseline scenario.

Interest rate increases in Norway occur in tandem with increases in the euro area and therefore do not contribute to a change in the euro rate. On the other hand, higher oil prices will, in isolation, result in some appreciation of the Norwegian krone. The inflationary impact in Norway may thus be less pronounced than in the euro area. Because of the appreciation of the krone, the overall inflationary effects in Norway as a result of these changes will be relatively modest. However, towards the end of the calculation period in 2009 inflation rises by 0.3 percentage point measured by both the CPI and the CPI-ATE, thereby closely approaching the target of 2.5 per cent. The CPI is then 0.8 per cent higher than in the baseline scenario, while the CPI-ATE is 0.4 per cent higher. Norges Bank's interest rate increases do not entirely remove the inflationary effects of higher oil prices and higher global growth, but there is a substantially stronger increase in the price level in the OECD area.

To sum up, the fairly modest effects of these changes on the real economy in Norway are related to the contractionary impact of the appreciation of the krone and interest rate increases. The rise in total exports is relatively modest considering the increase in market growth. This is due to the appreciation of the krone. Export prices for traditional goods edge up, while import prices for traditional goods calculated in NOK are approximately constant. For the Norwegian economy, the rise in oil prices results in clear terms-of-trade gains. As a result, real disposable income for Norway increases substantially more than GDP volume. At the end of 2009, the petroleum fund is more than NOK 200 billion larger than in the baseline scenario.

Importance of petroleum investment ahead

Impulses from investment in the petroleum sector have often proved to be an important factor for economic developments in Norway.[4] The current upturn was largely driven by increased petroleum investment.[5] The rise in petroleum investment from 2002 to our current estimate for 2006 was equivalent to an average of more than 0.6 per cent of mainland GDP each year. For 2006, growth in petroleum investment is now projected at 8 per cent, which is half as much as last year. Developments are expected to shift next year when petroleum investment falls back to the 2005 level.

In the calculation presented in this section, we look at the effects on the Norwegian economy should our assumptions concerning the decline in petroleum investment in 2007 prove to be incorrect and the result is instead zero growth. This change of NOK 7.8 billion at 2006 kroner in relation to the baseline scenario is applied throughout the calculation period. In the table below, the effects are entered as changes in relation to the baseline scenario.

Higher demand for capital goods than in the baseline scenario will to a certain extent result in an increase in imports, but the largest share will be covered by Norwegian enterprises. Activity among suppliers will also increase, which will in turn boost their demand for all forms of factor inputs, including investment. Employment and household income will rise as a result. This will translate into higher household demand, in the form of general consumption as well as residential property. After three years, the increase in demand from mainland Norway will be equivalent to approximately half of the increase in investment in the petroleum sector. GDP increases by 0.3 per cent in each of the first two years and by 0.4 per cent in 2009 in relation to the level in the baseline scenario. Unemployment declines by 0.1 percentage point, and is the main explanation for an annual increase in wage growth of 0.1 percentage point. This leads to a slight rise in inflation, but the increase is so small that we have not changed nominal interest rates. The orientation of economic policy in general is also assumed to be unchanged.

Effects of unchanged petroleum investments from 2006. Percentage deviation from the baseline scenario, unless otherwise stated

	2007	2008	2009
Investments, extraction and transport via pipelines	8.7	8.8	8.8
Household consumption	0.1	0.1	0.2
Investment, Mainland Norway	0.3	0.5	0.5
Exports, traditional goods	0.0	0.0	-0.1
Imports	0.4	0.5	0.6
GDP	0.3	0.3	0.4
- Manufacturing	0.6	0.6	0.5
Unemployment rate (percentage points)	-0.1	-0.1	-0.1
Wage level	0.1	0.2	0.3
CPI level	0.0	0.1	0.1

An alternative interpretation of the results of the calculation is that the assumed fall in petroleum investment contributes to a reduction in mainland GDP growth in Norway of 0.3 per cent in 2007 – that is, about one third of the decline in the growth rate in the previous year. This analysis also shows that if estimated growth in petroleum investment for 2007 is at the same level as in 2006, GDP growth in mainland Norway will reach trend level again next year. This outcome, however, is based on the assumption that interest rate developments and fiscal policy are the same as in the baseline scenario.

[4] See e.g. Annex 11 in NOU 2000:21.

[5] See Economic Survey 1/2005, pp. 22-23 for a closer analysis of some important driving forces in cyclical developments in the years following 2000.

National accounts: Final expenditure and gross domestic product. At fixed 2003 prices. Million kroner

	Unadjusted		Seasonally adjusted				
	2004	2005	05.1	05.2	05.3	05.4	06.1
Final consumption expenditure of households and NPISHs	753 923	779 193	191 413	195 200	196 355	196 311	199 479
Household final consumption expenditure	722 765	745 772	183 329	186 835	187 921	187 754	190 840
Goods	394 044	404 607	99 316	102 016	102 285	101 138	103 230
Services	313 188	322 375	79 514	80 135	80 909	81 727	81 868
Direct purchases abroad by resident households	35 984	40 047	9 742	9 939	9 939	10 493	10 803
Direct purchases by non-residents	-20 451	-21 257	-5 242	-5 256	-5 212	-5 604	-5 060
Final consumption expenditure of NPISHs	31 159	33 421	8 084	8 366	8 434	8 557	8 639
Final consumption expenditure of general government	362 156	367 604	91 629	92 004	91 800	92 194	93 311
Final consumption expenditure of central government	192 590	193 894	48 534	48 492	48 373	48 504	49 280
Central government, civilian	163 013	166 316	41 547	41 598	41 525	41 657	43 446
Central government, defence	29 577	27 579	6 987	6 894	6 848	6 847	5 835
Final consumption expenditure of local government	169 567	173 710	43 095	43 512	43 427	43 690	44 030
Gross fixed capital formation	298 950	331 663	78 242	80 387	81 861	91 185	83 045
Extraction and transport via pipelines	68 568	79 280	18 319	20 051	19 068	21 840	18 338
Service activities incidential to extraction	840	-1 635	105	-2 790	988	62	4
Ocean transport	9 775	14 821	3 417	4 199	2 210	4 990	3 844
Mainland Norway	219 768	239 196	56 400	58 926	59 595	64 294	60 861
Mainland Norway excluding general government	171 329	191 150	45 615	47 073	48 393	50 140	49 485
Industries	106 591	116 997	27 491	28 626	29 870	31 051	29 805
Manufacturing and mining	19 562	22 219	4 675	5 231	5 383	6 891	5 133
Production of other goods	20 855	22 009	5 238	5 695	6 098	5 040	5 638
Services	66 174	72 769	17 578	17 700	18 390	19 120	19 034
Dwellings (households)	64 738	74 153	18 124	18 447	18 523	19 089	19 680
General government	48 439	48 046	10 785	11 853	11 202	14 153	11 375
Changes in stocks and statistical discrepancies	33 108	36 007	9 790	7 823	11 649	6 634	12 577
Gross capital formation	332 058	367 670	88 032	88 210	93 510	97 820	95 622
Final domestic use of goods and services	1 448 138	1 514 467	371 074	375 414	381 665	386 324	388 412
Final demand from Mainland Norway	1 335 847	1 385 994	339 443	346 131	347 750	352 798	353 650
Final demand from general government	410 595	415 651	102 414	103 857	103 002	106 347	104 686
Total exports	640 937	645 523	157 778	162 410	163 798	161 996	163 731
Traditional goods	193 477	204 614	50 065	49 669	51 806	52 917	52 318
Crude oil and natural gas	278 867	267 301	67 432	68 012	67 048	65 391	65 820
Ships, oil platforms and planes	8 584	9 559	815	4 982	2 816	947	1 249
Services	160 010	164 049	39 467	39 747	42 128	42 742	44 344
Total use of goods and services	2 089 075	2 159 990	528 853	537 824	545 463	548 321	552 143
Total imports	463 796	498 003	118 334	122 950	127 362	129 106	130 243
Traditional goods	309 040	334 603	79 172	82 332	86 245	86 580	89 185
Crude oil and natural gas	1 511	2 355	523	491	452	920	315
Ships, oil platforms and planes	11 672	8 991	1 864	2 276	2 256	2 595	1 347
Services	141 573	152 054	36 776	37 851	38 409	39 011	39 395
Gross domestic product (market prices)	1 625 279	1 661 987	410 501	414 724	418 093	419 391	421 771
Gross domestic product Mainland Norway (market prices)	1 305 000	1 352 637	333 674	336 837	338 940	343 459	345 421
Petroleum activities and ocean transport	320 279	309 351	76 827	77 887	79 152	75 932	76 350
Mainland Norway (basic prices)	1 147 605	1 192 690	293 904	297 123	299 047	302 744	305 494
Mainland Norway excluding general government	886 447	927 417	227 844	230 982	232 696	236 028	238 597
Manufacturing and mining	164 025	167 947	41 351	41 952	42 099	42 750	43 124
Production of other goods	124 282	133 844	32 760	33 753	33 248	34 215	34 553
Services incl. dwellings (households)	598 140	625 626	153 733	155 277	157 348	159 062	160 920
General government	261 158	265 273	66 060	66 141	66 351	66 716	66 897
Correction items	157 395	159 946	39 770	39 714	39 893	40 715	39 927

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product. At fixed 2003 prices. Percentage change from the previous period

	Unadjusted		Seasonally adjusted				
	2004	2005	05.1	05.2	05.3	05.4	06.1
Final consumption expenditure of households and NPISHs	4.7	3,4	0.2	2.0	0.6	0.0	1.6
Household final consumption expenditure	4.7	3,2	0.1	1.9	0.6	-0.1	1.6
Goods	5.4	2,7	-0.5	2.7	0.3	-1.1	2.1
Services	3.3	2,9	0.6	0.8	1.0	1.0	0.2
Direct purchases abroad by resident households	12.3	11,3	2.7	2.0	0.0	5.6	2.9
Direct purchases by non-residents	8.9	3,9	1.3	0.3	-0.8	7.5	-9.7
Final consumption expenditure of NPISHs	5.0	7,3	2.1	3.5	0.8	1.5	1.0
Final consumption expenditure of general government	2.2	1,5	0.3	0.4	-0.2	0.4	1.2
Final consumption expenditure of central government	2.9	0,7	0.4	-0.1	-0.2	0.3	1.6
Central government, civilian	3.8	2,0	1.3	0.1	-0.2	0.3	4.3
Central government, defence	-1.4	-6,8	-5.1	-1.3	-0.7	0.0	-14.8
Final consumption expenditure of local government	1.5	2,4	0.3	1.0	-0.2	0.6	0.8
Gross fixed capital formation	8.1	10.9	-5.6	2.7	1.8	11.4	-8.9
Extraction and transport via pipelines	7.8	15.6	-1.8	9.5	-4.9	14.5	-16.0
Service activities incidential to extraction	119.3	-294.7	-84.2	..	-135.4	-93.8	-94.2
Ocean transport	11.7	51.6	-23.1	22.9	-47.4	125.8	-23.0
Mainland Norway	7.8	8.8	-4.6	4.5	1.1	7.9	-5.3
Mainland Norway excluding general government	9.6	11.6	0.5	3.2	2.8	3.6	-1.3
Industries	8.0	9.8	-1.5	4.1	4.3	4.0	-4.0
Manufacturing and mining	7.3	13.6	-5.3	11.9	2.9	28.0	-25.5
Production of other goods	9.9	5.5	0.9	8.7	7.1	-17.3	11.9
Services	7.6	10.0	-1.1	0.7	3.9	4.0	-0.4
Dwellings (households)	12.3	14.5	3.7	1.8	0.4	3.1	3.1
General government	1.9	-0.8	-21.6	9.9	-5.5	26.3	-19.6
Changes in stocks and statistical discrepancies	131.9	8.8	57.1	-20.1	48.9	-43.0	89.6
Gross capital formation	14.2	10.7	-1.2	0.2	6.0	4.6	-2.2
Final domestic use of goods and services	6.1	4.6	-0.1	1.2	1.7	1.2	0.5
Final demand from Mainland Norway	4.5	3.8	-0.6	2.0	0.5	1.5	0.2
Final demand from general government	2.2	1.2	-2.5	1.4	-0.8	3.2	-1.6
Total exports	0.6	0.7	-0.4	2.9	0.9	-1.1	1.1
Traditional goods	3.4	5.8	-0.4	-0.8	4.3	2.1	-1.1
Crude oil and natural gas	-0.7	-4.1	1.8	0.9	-1.4	-2.5	0.7
Ships, oil platforms and planes	-44.6	11.4	-35.8	511.5	-43.5	-66.4	31.9
Services	3.9	2.5	-3.0	0.7	6.0	1.5	3.7
Total use of goods and services	4.3	3.4	-0.2	1.7	1.4	0.5	0.7
Total imports	8.9	7.4	-2.0	3.9	3.6	1.4	0.9
Traditional goods	10.2	8.3	0.2	4.0	4.8	0.4	3.0
Crude oil and natural gas	-17.1	55.8	64.9	-6.1	-7.8	103.3	-65.7
Ships, oil platforms and planes	14.5	-23.0	-48.1	22.1	-0.8	15.0	-48.1
Services	6.2	7.4	-2.6	2.9	1.5	1.6	1.0
Gross domestic product (market prices)	3.1	2.3	0.2	1.0	0.8	0.3	0.6
Gross domestic product Mainland Norway (market prices)	3.8	3.7	0.6	0.9	0.6	1.3	0.6
Petroleum activities and ocean transport	0.4	-3.4	-1.4	1.4	1.6	-4.1	0.6
Mainland Norway (basic prices)	3.6	3.9	0.9	1.1	0.6	1.2	0.9
Mainland Norway excluding general government	4.0	4.6	1.2	1.4	0.7	1.4	1.1
Manufacturing and mining	4.7	2.4	-1.1	1.5	0.4	1.5	0.9
Production of other goods	3.3	7.7	4.9	3.0	-1.5	2.9	1.0
Services incl. dwellings (households)	3.9	4.6	1.1	1.0	1.3	1.1	1.2
General government	2.2	1.6	-0.3	0.1	0.3	0.5	0.3
Correction items	5.3	1.6	-1.4	-0.1	0.5	2.1	-1.9

Source: Statistics Norway.

National accounts: Final expenditure and gross domestic product. Price indices. 2003=100

	Unadjusted		Seasonally adjusted				
	2004	2005	05.1	05.2	05.3	05.4	06.1
Final consumption expenditure of households and NPISHs	100.9	102.1	101.3	101.5	102.7	103.0	103.0
Final consumption expenditure of general government	102.4	105.4	104.3	105.1	106.0	106.3	107,8
Gross fixed capital formation	103.6	107.4	106.2	107.8	107.1	108.6	109,2
Mainland Norway	103.3	105.4	104.8	104.9	105.0	106.9	106,5
Final domestic use of goods and services	101.8	104.1	101.4	105.5	105.4	103.9	105,0
Final demand from Mainland Norway	101.7	103.6	102.7	103.1	103.9	104.6	104,9
Total exports	114.3	133.6	126.7	126.4	135.7	144.8	153,4
Traditional goods	108.4	112.2	109.3	110.5	113.3	115.0	120,5
Total use of goods and services	105.6	112.9	108.9	111.8	114.5	116.0	119,3
Total imports	105.6	107.3	107.4	106.4	107.1	108.1	108,6
Traditional goods	104.5	104.9	105.0	104.6	104.7	105.5	107,7
Gross domestic product (market prices)	105.6	114.6	109.3	113.4	116.7	118.5	122,7
Gross domestic product Mainland Norway (market prices)	102.1	104.3	101.7	105.4	104.8	105.0	106,5

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted				
	2004	2005	05.1	05.2	05.3	05.4	06.1
Final consumption expenditure of households and NPISHs	0.9	1.2	-0.3	0.2	1.1	0.3	0.1
Final consumption expenditure of general government	2.4	3.0	0.7	0.8	0.8	0.3	1.5
Gross fixed capital formation	3.6	3.7	1.1	1.5	-0.7	1.4	0.6
Mainland Norway	3.3	2.0	0.2	0.1	0.0	1.9	-0.4
Final domestic use of goods and services	1.8	2.2	-1.1	4.1	-0.1	-1.4	1.0
Final demand from Mainland Norway	1.7	1.8	0.0	0.4	0.8	0.6	0.3
Total exports	14.3	16.9	3.5	-0.2	7.4	6.7	5.9
Traditional goods	8.4	3.5	-1.2	1.1	2.5	1.5	4.7
Total use of goods and services	5.6	6.9	0.5	2.7	2.4	1.3	2.9
Total imports	5.6	1.6	0.2	-0.9	0.7	0.9	0.5
Traditional goods	4.5	0.4	0.0	-0.4	0.1	0.8	2.1
Gross domestic product (market prices)	5.6	8.4	0.5	3.7	2.9	1.5	3.5
Gross domestic product Mainland Norway (market prices)	2.1	2.1	-1.4	3.6	-0.6	0.2	1.5

Source: Statistics Norway.