

# Economic survey

## Perspectives

Global economic growth increased appreciably in 2010 following the pronounced slow-down in the wake of the financial crisis. Growth picked up in Norway, too; the level of mainland activity was higher in the second half of last year than in the first half of 2008, before the financial crisis became acute. In the OECD area, countries that experienced a sharp GDP fall in 2009 tended to make the strongest recovery in 2010. However, there are exceptions. Growth in EU countries with serious government debt problems and difficulty in financing budget deficits was particularly low in 2010. In these countries, growth will be inhibited in the short term by a restrictive fiscal policy designed to reduce the debt burden.

There is considerable uncertainty regarding economic developments in the OECD area in the near term. Most observers assume that growth in 2011 will remain at approximately the same level as in 2010, however, and that it will be a while before a real cyclical upturn occurs. Growth in a number of emerging economies is high, however. This has contributed to high and rising prices for many commodities, although these developments are also partly attributable to extraordinary supply side factors. We assume that Norwegian export-oriented industry will experience moderate growth in demand from world markets in the years ahead.

The economic situation in Norway is now substantially brighter than it was a year ago. The decline in mainland business investment has come to a halt, and there was an upswing through 2010. Household real income is rising appreciably and contributing to consumption growth. Along with low interest rates, this has caused the decline in residential construction to give way to a new upswing. The increase in unemployment also appears to be levelling off, and man-hours worked are increasing. We now consider that a weak cyclical upturn began in the second half of 2010. Our calculations show that the recovery will be more pronounced through this year and 2012, so that the current downturn will be over in 2013.

Despite our assumptions that fiscal policy will cease to stimulate the economy and that interest rates will be raised a quarter of a percentage point per quarter, our calculations indicate that more pronounced tightening will be necessary to prevent the Norwegian economy from entering a clear expansion – with capacity utilisation that is too high to be sustainable in the longer term – from and including 2013.

Active use of stabilisation policy instruments contributed to preventing the Norwegian economy in 2009 from entering a deep downturn such as that experienced by many of our trading partners. However, use of instruments during the previous upturn was not sufficient to prevent the Norwegian economy overheating, particularly in 2007. In fiscal policy, the authorities committed themselves to keeping the tax level unchanged, which limited the options for exercising control. At the same time, public spending growth was relatively high. The objective of attaining the inflation target led to interest rates not being raised as much as might have been desirable in the interests of stabilising the real economy. As a result, the expansion in 2007 was as strong as at the end of the 1990s, even though the financial crisis brought it more rapidly to a halt. In order to avoid the Norwegian economy overheating a couple of years ahead, it is important to consider using stabilisation policy instruments before the expansion becomes a fact. It takes time for a change in policy to have a significant effect on the economy.

Developments in the Norwegian economy have been quite unique for almost two decades. Not only has economic growth been high, whether it is calculated per inhabitant or per man-hour worked; in addition, prices for the goods and services Norway exports have risen appreciably more than corresponding import prices. Norway has therefore increased its real national income (GNI) both through increased production and through more favourable terms of trade. Moreover, a low rise or a fall in prices for many imported finished goods has only caused limited problems for Norwegian production because few enterprises compete with low price imports.

The strong improvement in the terms of trade has been relatively important to Norway because of our open economy. The result has been fairly cost-free income for Norway that few, if any, other countries have enjoyed to the same extent. Approximately a third of growth in real disposable income in the past two decades can be attributed to more favourable terms of trade.

Much of the proceeds of the strong growth in national income have been saved and invested abroad through the Norwegian Pension Fund Global. Only a very few of us have therefore experienced such strong growth in our disposable income as the growth in national income implies, since we save a large portion of our petroleum revenue. Our petroleum wealth has given us and will continue to give us ample fiscal scope for manoeuvre. Management of the wealth, and when and how the oil revenue is used, has a strong bearing on how we manage to translate this scope for manoeuvre into a lasting increase in welfare.

Ten years have passed now since the monetary and fiscal policy guidelines were changed. In the setting of interest rates, an exchange rate target was replaced by goals of low and stable inflation, and stable output and employment. The fiscal rule provided a strategy for phasing the government petroleum revenues into the Norwegian economy. The rule makes a flexible fiscal policy possible in the short term, but in the long term anchors the non-oil budget deficit to the real return on the Pension Fund. The rule also ensures a relatively steady increase in the use of petroleum revenues, but is a prudent strategy in that spending of petroleum revenues at any time shall be sustainable in real terms, irrespective of fluctuations in oil prices or how much oil and gas are produced. If we look back at the major adjustments to fiscal policy that were necessary as a result of oil price shocks in the days when we did not have a large petroleum fund – the situation in 1986 is possibly the best example – we see that the fiscal rule and the Pension Fund are clearly advantageous to the economy. When the financial crisis hit Norway, as it did other countries, we were able to pursue an expansionary fiscal policy even though the fall in oil prices meant lower current income for the central government. The Pension Fund also saves us having to rapidly implement restrictive fiscal measures in 2011, as many other countries are now being compelled to do due to the national financial situation.

Because of the global economic situation we assume in our projections for the next few years that petroleum revenue expenditure will be less than four per cent of the Fund's value. This is in line with the principles underlying the fiscal rule. Looking further ahead, there are two reasons to discuss whether the fiscal rule should continue to be based on spending equivalent to an expected real annual return of 4 per cent, or whether it should be adjusted down. Historically, the Fund has not succeeded in achieving such a high real return, but this in itself is not a weighty argument, since the return on funds of this type must be considered in a longer time perspective than the 15 years the Fund has actually existed. With slower global economic growth in the period ahead, however, real rates of return may be lower for several years than we have been used to in the past. A prudent approach may then suggest that we should base our projections on a lower return rate.

A more important argument for a tighter fiscal rule is that spending of petroleum revenues has increased sharply since the turn of the century, and that the fiscal rule dictates a continued increase in spending from a rapidly growing Pension Fund for the next decade, whereas the costs associated with an aging population will begin to increase in earnest after that. This points to lower drawings from the Fund over the next few years. If, for example, we instead keep petroleum revenue spending constant in real terms over the next 10 years, we might be able to spend NOK 20 billion more in 2011 money each year thereafter. This would meet a larger share of future pension commitments and the health care challenges that a higher percentage of old people will present. It would limit the need for higher taxes, higher user fees or reduced welfare services after 2020. A modified fiscal rule could result in a better adapted phase-in of petroleum revenues. Our projections show that also the cyclical situation points to spending of less than 4 per cent of petroleum revenues for the next few years.

Petroleum is important to the Norwegian economy, but its importance can be exaggerated. It is the ongoing creation of wealth through ordinary work, both now and in the future, that will provide the primary basis for our welfare. A high level of prosperity depends on

a well qualified population who actively participate in a highly adaptable working life and business sector. By international standards, Norway has a high labour participation rate measured as the share of the working age population who are in paid employment. However, a relatively large number work part time, and this contributes to annual hours worked that are among the lowest in the OECD. In addition, the share of persons of working age who are on some benefit scheme or other has increased substantially over the past couple of decades. The increase in social security benefits is partly due to the increasing number of older employees, although the share of the elderly who are disabled has not increased. However, an increasing share of disabled persons among the youngest age groups gives cause for concern, even though the number of young disabled persons is still fairly moderate. A greater tendency has also been found for groups of immigrants from poor countries to transfer to disability benefits than persons born in Norway.

A number of our rights to benefit depend on prior labour market participation. An including working life means including larger shares of marginal groups in paid work. It gives persons belonging to these groups social security rights. These persons often have poorer health and are at greater risk of dropping out of working life again than others. It can therefore be claimed to some extent that a high share on benefits success in getting many people into work.

Irrespective of the cause, the increase in the share of persons on benefits represents a challenge to government finances. Having people on benefits entails loss of tax income and high public expenses. The question is whether today's system, attitudes and practice represent the best balance between the errors that every system will make from time to time: Are we putting persons who are not disabled on benefits, or are the benefits we grant to those who really are disabled too limited? Since many people are not entirely healthy, but also not entirely incapable of working, combinations of benefits and work may be an option for large groups. When this is a "mix" that the individual can influence to some extent, rules for taxation and reduction of social welfare benefits where there is some earned income will play an important part for the amount of benefits. Many persons who are on benefits will have little to gain from going from benefits to work. This applies in particular to persons who are providers for children, and where market wages are relatively low.

The work-first approach is that it must pay to work, while at the same time social security benefits must make a proper standard of living possible. Social security benefits are insurance against loss of income. The level of social welfare benefits forms a lower limit to the wage level in the labour market, and helps to put weak groups into a better negotiating position. On the other hand, it may mean that for many people it does not pay in the short term in purely economic terms to get a job rather than to remain on benefit, assuming that they actually have a choice. Several studies indicate that the more generous the social security scheme, the more people end up on it. The wages that employers are willing to pay reflect the contribution of the individual to the creation of wealth, and are determined by qualifications, health and other factors. It is cause for concern if the productivity of many people who are capable of working is permanently lower than the level of social security benefits. It is therefore important that the education system equips as many young people as possible with qualifications that are in demand in working life. Most youngsters on disability pensions have not completed secondary school. If a lack of schooling and qualifications means a life on social welfare, it is highly undesirable both for the real economy and national finances and for the individual.

Norway's petroleum wealth is not a vaccine against the consequences of wrong choices and poor policy. However, in contrast to many other countries that have found abundant natural resources, Norway has so far succeeded in managing its petroleum revenues so that they can make a lasting contribution to greater prosperity.

The level of the population's welfare will, in the future as in the present, depend on as many people as possible being highly productive. This will chiefly be determined by numbers of working age individuals, labour force participation, supply of real capital, and the ability of society to adapt and to use sophisticated technology. It is our performance in these areas that will determine what sort of society "Norway after the oil" will be.

# Cyclical developments in Norway

## Cyclical developments in Norway

Preliminary quarterly national accounts (QNA) figures show that mainland GDP increased by 2.2 per cent from 2009 to 2010, measured at constant prices. The output level in 2010 was higher than in 2008, and seasonally-adjusted figures show that the activity level was higher in the second half of last year than in the summer half year of 2008, before the onset of the acute financial crisis. Total GDP, on the other hand, remained lower in

2010 than it was in 2008 due to a lower production rate in the petroleum sector.

The QNA figures show a moderate turnaround in the mainland economy from the end of 2009. Since then growth has remained at approximately the same level as estimated trend growth for the mainland economy, but picked up in the third quarter of 2010 only to fall back in the fourth quarter. However, the figures for the fourth quarter of 2010 are influenced by what we

Table 1. **Macroeconomic indicators 2009-2010. Growth from previous period unless otherwise noted. Per cent**

Table 1: Macroeconomic indicators: 2009-2010: Growth from previous period unless otherwise noted. For text

	2009*	2010*	Seasonally adjusted			
			10:1	10:2	10:3	10:4
<b>Demand and output</b>						
Consumption in households etc.	0.2	3.6	0.8	-0.1	1.2	1.1
General government consumption	4.7	2.2	-0.2	1.2	1.7	0.4
Gross fixed investment	-7.4	-8.9	-14.4	8.1	-6.6	8.1
Mainland Norway	-11.7	-4.4	-11.2	6.1	-2.1	7.0
Extraction and transport via pipelines	5.8	-12.6	-6.8	5.2	-16.4	18.5
Final domestic demand from Mainland Norway <sup>1</sup>	-1.1	1.8	-1.7	1.3	0.8	1.9
Exports	-4.0	-1.3	0.1	-4.5	1.5	-0.7
Crude oil and natural gas	-1.2	-6.5	-2.5	-2.0	-4.6	0.9
Traditional goods	-8.2	5.0	0.9	0.2	3.1	-3.8
Imports	-11.4	8.7	0.2	7.7	-1.9	1.1
Traditional goods	-13.1	8.4	3.5	5.9	-1.5	2.3
Gross domestic product	-1.4	0.4	0.6	0.0	-1.5	2.4
Mainland Norway	-1.3	2.2	0.6	0.4	1.1	0.3
<b>Labour market</b>						
Man-hours worked	-1.8	0.6	-0.3	0.4	0.6	0.1
Employed persons	-0.4	-0.2	-0.2	0.2	0.2	0.2
Labour force <sup>2</sup>	0.0	0.5	0.4	0.3	-0.1	0.6
Unemployment rate, level <sup>2</sup>	3.2	3.6	3.5	3.6	3.4	3.6
<b>Prices and wages</b>						
Wages per standard man-year <sup>3</sup>	3.6	3.9	3.6	3.6	4.3	4.2
Consumer price index (CPI) <sup>3</sup>	2.1	2.5	2.9	2.6	1.9	2.2
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>3</sup>	2.6	1.4	2.0	1.5	1.2	1.0
Export prices, traditional goods	-6.1	3.6	1.3	4.0	2.0	2.4
Import prices, traditional goods	-1.3	-0.3	1.4	2.0	-1.0	2.7
<b>Balance of payment</b>						
Current balance, bill. NOK	311.8	323.0	88.7	71.4	73.0	89.8
<b>Memorandum items (unadjusted level)</b>						
Money market rate (3 month NIBOR)	2.5	2.5	2.3	2.5	2.7	2.6
Lending rate, banks <sup>4</sup>	4.9	..	4.4	4.6	4.7	..
Crude oil price NOK <sup>5</sup>	388.1	484.3	452.5	493.8	473.1	517.2
Importweighted krone exchange rate, 44 countries, 1995=100	93.8	90.3	89.3	89.9	90.8	91.1
NOK per euro	8.73	8.01	8.10	7.91	7.96	8.05

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

<sup>2</sup> According to Statistics Norway's labour force survey(LFS).

<sup>3</sup> Percentage change from the same period the previous year.

<sup>4</sup> Period averages.

<sup>5</sup> Average spot price, Brent Blend.

Source: Statistics Norway and Norges Bank.

regard as a one-off fisheries decline. Consequently we are still of the view that a moderate upturn in the mainland economy started in the second half of 2010. The data for the preliminary QNA figures are limited, and the seasonally-adjusted QNA figures in particular are often changed subsequently. The uncertainty of the preliminary figures must therefore be stressed. So far, the figures through 2010 have been revised slightly upward. Registered mainland GDP growth in 2010 is somewhat higher than previously estimated, strengthening our belief that we have now seen a cyclical turnaround.

Labour market developments also indicate that the cyclical downturn in the mainland economy came to a halt in the first half of 2010. After man-hours worked bottomed out in the first quarter of 2010, they have increased again, even when hours worked in general government is excluded. There was a rise in man-hours worked in both manufacturing and construction, two cyclically sensitive industries. The increase in unemployment gradually slowed and, according to the seasonally-adjusted figures from the Norwegian Labour and Welfare Organisation (NAV), there has been a decline for the last two months in the number of registered unemployed plus persons on labour market programmes. Slightly more vacancies than previously are also reported. In the course of a business cycle it is usual for the turnaround in the labour market to lag slightly behind the turnaround in output.

High energy prices in 2010 brought the overall rise in the CPI to 2.5 per cent from 2009 to 2010. Consumer price inflation adjusted for tax changes and excluding energy products (CPI-ATE) was only 1.4 per cent. Underlying inflation remained weak in late 2010 and into 2011. The krone appreciated considerably through 2009 and into 2010, but since then has undergone little change. Exchange rate movements nevertheless contributed to curbing inflation in 2010 because it takes some time before changes in the exchange rate are reflected in consumer prices. We do not expect major exchange rate changes going forward, but there is reason to expect that higher energy prices and other international commodity prices will gradually feed through into consumer prices. Rising food prices have attracted considerable attention recently. This has not yet been reflected in Norwegian food prices, but is expected to be so in the next few months. With little change in wage growth and domestic cost inflation from 2010 to 2011, a slight increase in CPI-ATE inflation can be expected in the period ahead. Overall, however, CPI inflation will be somewhat lower in 2011 than last year, unless energy prices should rise substantially from their existing high levels. We do not consider this very probable. Somewhat further ahead, an improved economic situation and a tighter labour market will push up domestic cost inflation and thereby also underlying consumer price inflation.

Economic developments among our trading partners are still characterised by the after-effects of the financial crisis. We expect positive growth, but far from enough to be able to say that a broad-based global cyclical upturn is under way. High commodity prices indicate that growth has picked up internationally, particularly in emerging economies, although negative supply side factors have also contributed to price increases. These developments are of great importance to the Norwegian economy, since our exports are so strongly affected by these products. There is therefore reason to believe that growth in real disposable income in Norway will increase appreciably more than GDP growth in 2011 as a result of improved terms of trade. The effects of higher international food prices will be dampened in Norway since some domestic markets are sheltered from foreign competition and thus not directly affected by global market developments. The increased income will gradually benefit households and stimulate household demand. We therefore assume that growth in domestic demand from the mainland economy will continue in the period ahead after picking up appreciably through 2010. These developments, coupled with increasing impulses from petroleum investment and some export growth, therefore point to a broad-based economic upturn in the next few quarters. In the somewhat longer term, an improved global economic situation will provide further impetus to the Norwegian economy.

Fiscal policy is now generating less stimulus to the Norwegian economy than it has done in recent years. This is in line with ambitions for an active stabilisation policy. There is reason to assume that the authorities are forward-looking in their policy and will avoid stimulating the economy in a period when the private sector is growing fast on its own. However, the Government Pension Fund Global will grow strongly during the next few years. Fiscal policy is therefore expected to be appreciably less expansionary than allowed by the 4 per cent rule. The upturn we anticipate also implies that monetary policy will be gradually tightened from today's situation, where both nominal and real interest rates are very low.

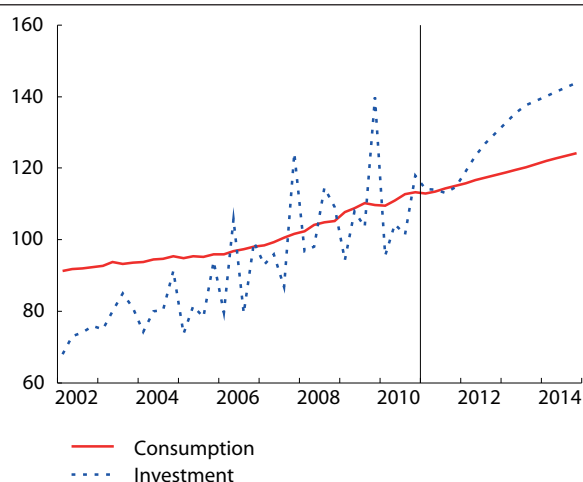
We have made supplementary calculations with the KVARTS quarterly model in order to illustrate alternatives for monetary and fiscal policy going forward. In Box 1 we have considered the macroeconomic effects of dampening the upturn in 2012-2014 by means of tighter fiscal or monetary policy. This would prevent an expansion towards the end of the projection period. Box 2 shows the possible macroeconomic consequences of adjusting fiscal policy to slavishly follow the 4 per cent rule. The resulting expansion would be appreciably stronger than in our projection scenario.

### **Fiscal policy**

Preliminary QNA figures show that general government consumption increased by 2.2 per cent from 2009 to 2010. Apart from accounting changes associated with

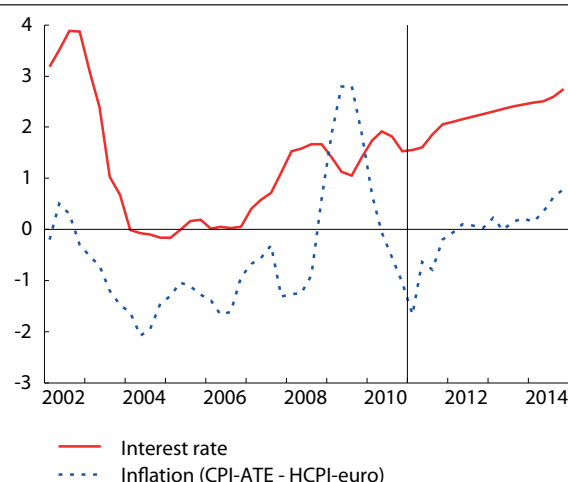


Figur 1. **General government. Seasonally adjusted volume indices, 2007=100**



Source: Statistics Norway.

Figur 2. **Interest rate and inflation differential between NOK and the euro. Percentage points**



Source: Norges Bank and Statistics Norway.

the transfer of responsibility for national highways from central to local government, non-military central government consumption growth was slightly lower than in the local government sector. Defence spending increased by only 1.4 per cent last year. Total gross general government investment fell by about 6 per cent from 2009 to 2010. If we adjust for changes in military investment, however, there was only a weak decline in investment in 2010. Growth in general government purchases of goods and services was somewhat lower last year than previously projected.

Transfers to households increased by 5.5 per cent from 2009 to 2010, which is substantially lower growth than the previous year. Increased unemployment benefits pushed up growth. Pension benefits increased moderately, sick pay and maternity benefits dropped nominally, while the sum of child benefit and cash benefit for young children was unchanged in nominal terms. The total demand impulses generated by general government purchases of goods and services and transfers increased little more in real terms than trend growth in the mainland economy. Tax rates were largely unchanged.

In Proposition 47 LS (2010-2011), the Ministry of Finance reported new projections for the non-oil government budget surplus and for the structural non-oil budget deficit (SNOBD) for 2010 (see Box 1). According to these figures, SNOBD calculated as a percentage of trend mainland GDP increased by 0.4 percentage point from 2009 to 2010, which also indicates that fiscal policy was moderately expansionary last year. SNOBD was also NOK 14 billion higher than the expected real return on the Government Pension Fund Global in 2010, according to the Ministry of Finance's projections. This is 0.5 percentage point higher than the 4 per cent path of the fiscal rule. However, the SNOBD calculations for 2010 in the proposition were based on a number of uncertain estimates. Among

other things, Statistics Norway has subsequently published the central government accounts for 2010, which show that the non-oil government budget deficit was almost NOK 7 billion lower than estimated in the proposition. Furthermore, activity adjustment of the non-oil deficit depends on projections for government revenues and spending for many years to come. Our estimates indicate that in 2010 SNOBD roughly followed the 4 per cent path of the fiscal rule.

Our projections for fiscal policy in 2011 are close to those in the National Budget for 2011. They are based on the programme of direct and indirect taxes adopted for 2011. Indirect taxes increase somewhat more than adjustment for inflation and contribute to pushing up consumer price inflation by a bare 0.1 percentage point from 2010 to 2011, while the income limits for direct taxes are adjusted so that a taxpayer with income growth of 3¼ per cent will pay the same average income tax in 2011 as in 2010. Growth in transfers to households is in line with current rules and regulations on the whole. Sick pay continues to fall slightly in real terms, while transfers to the unemployed will increase only slightly as unemployment levels off through 2011 and thereafter are expected to fall gradually. Projections for growth in general government gross consumption and investment are approximately the same as previously, and approximately the same as growth in 2010 (adjusted for changes in defence investment). We now assume that fiscal policy will remain well within the 4 per cent limit in 2011. As a percentage of trend mainland GDP, SNOBD is roughly unchanged from 2010. This can be interpreted as indicating that fiscal policy in 2011 is almost cyclically neutral.

For the years 2012-2014 we assume that fiscal policy will gradually deviate slightly from the 4 per cent path. The reason for this is that the mainland economy is in a cyclical upturn and that fiscal policy will not be oriented in such a way that it fuels the upturn. As a result,

**Box 1 More active use of fiscal and monetary policy to stabilise the economy in 2012-2014**

The projections in Table 2.4 show the Norwegian economy entering an expansion in 2013 which gathers pace in 2014. Mainland GDP in 2014 is approximately 1 percentage point higher than what we estimate to be a cyclically neutral situation. If this is the case, it must be regarded as a moderate expansion. Expansions are characterised by the fact that capacity utilisation in the economy is at a level so high that it is unsustainable in the longer term. The high level of activity is reflected in high wage and cost inflation, increased imports and weakened competitiveness. It results in lower activity in the internationally exposed sector, and over time probably lower value added. It may therefore be of interest to know how much economic policy would have had to be tightened compared with our projection scenario for the upturn in the Norwegian economy to level off to a cyclically neutral situation in the next few years. We have therefore used Statistics Norway's KVARTS model to show what is necessary to avoid the expansion defined by mainland GDP in 2013 and 2014:

- Through tighter fiscal policy, but with a response from monetary policy
- Through higher key policy rates
- Through tighter fiscal policy

In this scenario, general government's purchase of goods and services is reduced from and including the fourth quarter of 2012, so that the Norwegian economy is at the trend level for mainland GDP in 2013 and 2014. As Table 1 shows, we have tightened general government investment substantially more than general government spending. This is partly because investment growth in the projections is fairly high. In this alternative scenario, the general government investment level in 2014 is approximately the same as in 2010, excluding investment in defence material.

Lower consumption and general government investment reduce GDP compared with our projections directly by lowering general government production. In addition, there is lower demand directed at the private sector, resulting in lower production in this sector too. Lower production in both public and private sectors leads to lower employment needs and hence higher unemployment. This dampens wage growth slightly compared with the projections. Given lower wages and employment, household demand falls. It

is assumed in KVARTS that Norges Bank does not raise the key policy rates as much when growth in the real economy is curbed. This is in line with the monetary policy guidelines. Lower money market rates will cause the krone to depreciate slightly, resulting in somewhat higher import and consumer prices. Lower wages and higher consumer prices reduce real wages. Mainland GDP falls by one per cent compared with the level in the projections in 2014.

**Higher key rates**

In this scenario we assume that Norges Bank wishes to use the interest rate to achieve a cyclically neutral situation in 2013 and 2014. This means that the relationship in KVARTS that implicitly determines the key rate is deactivated.

In KVARTS, the effect of the interest rate on mainland GDP acts through two channels of roughly equal importance. First, a higher interest rate causes the krone to appreciate. At its strongest, the krone-euro exchange rate is down to NOK 7.60 per euro in early 2014, compared with 7.90 in the projections. This results in lower import prices and weakened competitiveness for Norwegian enterprises compared with the projections. As a result, exports of goods and services fall. Second, higher interest rates lead to households reducing their spending and their demand for dwellings, and to mainland enterprises reducing their investment. Corporate investment declines as a result of both higher financing costs and lower demand for their products. Employment falls and unemployment increases. After a while, real wages will therefore decline slightly compared with the projections. A simple rule-of-thumb can in fact be recognised in the estimation: a 1 percentage point rise in interest rates will result after a time lag in an approximately 1 per cent decline in mainland GDP.

Comparing these two calculations, we see that stabilisation policy based on monetary policy acts through household demand and net exports from the internationally exposed business sector to a greater extent than stabilisation policy based on fiscal policy. If general government spending is to adjust the overall activity level, the impact on the private sector will be less pronounced. However, employment will be more strongly affected.

**Table 1. Macroeconomic effects of tighter fiscal policy.**  
Deviations in per cent from the projection scenario unless otherwise specified

	2012	2013	2014
Consumption, household	0.0	-0.1	-0.2
Consumption, general government	-0.1	-0.5	-1.3
Mainland gross investment	-1.2	-4.4	-6.1
Gross investment, general government	-4.7	-16.1	-22.3
Exports excluding petroleum products	0.0	0.0	0.1
Imports	-0.3	-1.2	-1.7
Mainland GDP	-0.1	-0.6	-1.0
Employed	-0.1	-0.2	-0.5
LFS unemployment (percentage points)	0.1	0.1	0.2
Annual wages	0.0	-0.2	-0.5
Consumer price index	0.0	0.0	0.1
Money market rate (percentage points)	0.0	-0.1	-0.2
Import-weighted krone exchange rate	0.0	0.5	0.9

**Table 2. Macroeconomic effects of tighter monetary policy.**  
Deviations in per cent from the projection scenario unless otherwise specified

	2012	2013	2014
Consumption, household	-0.1	-0.7	-1.5
Consumption, general government	0.0	0.0	0.0
Mainland gross investment	-0.1	-0.4	-1.2
Gross investment, general government	0.0	0.0	0.0
Exports excluding petroleum products	-0.2	-0.5	-0.8
Imports	0.1	-0.1	-0.7
Mainland GDP	-0.1	-0.5	-1.0
Employed	-0.0	-0.1	-0.3
LFS unemployment (percentage points)	0.0	0.1	0.2
Annual wages	-0.1	-0.4	-0.9
Consumer price index	-0.1	-0.5	-0.8
Money market rate (percentage points)	0.4	0.8	0.9
Import-weighted krone exchange rate	-1.5	-3.5	-4.0

### Box 2 A fiscal policy that follows the 4 per cent path in 2011-2014

We have made an approximately cyclically neutral fiscal policy the basis for our projections. Because of Norway's high oil income, this implies a structural non-oil budget deficit (SNOBD) that is clearly lower than the expected real return (4 per cent) on the Government Pension Fund Global. The fiscal rule thereby provides substantial scope for a more expansionary fiscal policy. We do not believe this scope for manoeuvre will be used to the full, since according to our projections the Norwegian economy is in an economic upturn and will enter an expansion in 2013. In the calculations in this box, we will consider the effects on the Norwegian economy if the 4 per cent rule is in fact observed slavishly. We use the KVARTS model in the analysis.

Central to the analysis is how large we believe the deviation from the 4 per cent path will be. There is considerable uncertainty associated with quantifying this deviation. The uncertainty can perhaps best be illustrated through the major downward revision of SNOBD carried out by the Ministry of Finance from the time when the National Budget was submitted in October 2009, to when Proposition 47 LS was submitted in December 2010 – a total amount of NOK 29 billion. This reduction has little to do with changes in fiscal policy. For a more detailed discussion of this subject, see Eika (2009) and Bjørnstand and Prestmo (2010). The calculations in this box are based on the under-consumption in the projection scenario increasing gradually to NOK 73 billion in 2014. This accounts for a bare 3 per cent of trend mainland GDP that year, and we will calculate here the consequences for the Norwegian economy of a fiscal stimulus of this magnitude.

Different ways of conducting an expansionary fiscal policy have very different effects on the economy. Two possible extremes are to a) increase transfers to the UN and b) employ more people in the public sector. The latter alternative will have major and immediate effects on the economy, while the former may not necessarily have any effects on the Norwegian economy. We have increased non-military public investment most, and the increase here is twice as much as purchases of goods and services for non-military consumption. Public sector employment is increased only slightly, by only ¼ of the increase in purchases for consumption purposes. Measured as a change in demand growth from one year to the next, the impulses are greatest in 2011 and waning thereafter. The fact that we have also changed 2011 compared with the adopted budget shows that the calculation is not intended to be an alternative forecast. It is intended purely to illustrate some effects of changing the use of petroleum revenues so that it follows the 4 per cent path.

General government activity increases relatively substantially compared with the projections, but the increase in business sector added value is large nonetheless. This is because most of the increased spending goes to increased purchases that stimulate the business sector. Higher household income leads to increased consumption. Mainland GDP increases gradually compared with the projection path, and in 2014 the level is 1.9 per cent higher. The cyclical upturn is accordingly stronger, and the expansion will be brought forward somewhat and be more pronounced. The increased activity level also contributes to an increase in business sector investment.

Pressures in the labour market increase markedly, and the unemployment rate is 0.7 percentage point lower in 2014 than in the projections, which brings it down to 1.9 per cent. This contributes to higher wages, and the effect in 2014 of 1.5 per cent is just the beginning: because of lags before effects are felt, the impact on wages over the next six years can be forecast to be almost four times this amount. In isolation, higher wage growth contributes to higher inflation and this, coupled with increased capacity utilisation, leads to the interest rate being raised more. In 2014 the interest rate level is raised 0.9 percentage point higher than in the projection scenario, causing the krone to appreciate slightly. This offsets the rise in inflation, while cost-competitiveness is weakened by changes in both the krone exchange rate and wages. Exports will then be reduced, while imports (and import shares) increase, substantially reducing the current account surplus. The effects of this expansionary policy are by no means exhausted in 2014. Weakened cost-competitiveness erodes activities in internationally

exposed industries with a time lag, and Norwegian production costs will continue to increase relative to the projection scenario.

The effect an expansionary fiscal policy will have depends on which components are increased. The expansionary effects due to our combination of placing decidedly greatest weight on increased investment and purchases of goods and services, and a relatively moderate change in employment must be described as moderate. Greater emphasis on increasing the production of public sector services through increased employment would have yielded stronger effects generally, and in particular a sharper rise in costs with further undermining of internationally exposed enterprises. However, a certain amount of tax relief would have moderated the effects even more. Activity growth per budgeted krone would have been limited, and the cost level would have been reduced rather than increased. We refer to a box in Economic Survey 4/2008 for a more detailed account of the effects of various expansionary measures.

The effects on the labour market are pronounced in the calculation. This means that unemployment will be very low. It is unclear whether it is possible to achieve such low unemployment. Some unemployment is an accompaniment to changing jobs, terminations, new persons entering the labour market, closing down of enterprises, etc. We have to go back to the 1970s to see unemployment rates as low as in this calculation. However, there is reason to believe that both working life and the business sector are changing more than they were then. This raises the question of the model's stability. KVARTS reflects the fact that Norwegian wage growth has mainly been adapted to what the internationally exposed business sector tolerates. As a result, Norway has had relatively low unemployment compared with other countries. This has been possible as long as fiscal policy has contributed to stabilising the labour market. It does not do so in this calculation. Wage drift may then change more towards the way it is in other countries. In this case, stronger wage growth must be expected, and a sharp weakening of competitiveness. Very low unemployment also highlights a weakness of KVARTS, which is that inward labour migration must be determined outside the model. Projections based on Brunborg and Cappelen (2010) indicate that inward labour migration will increase gradually compared with the projections and in 2014 will be over 5 000 persons higher.

#### References:

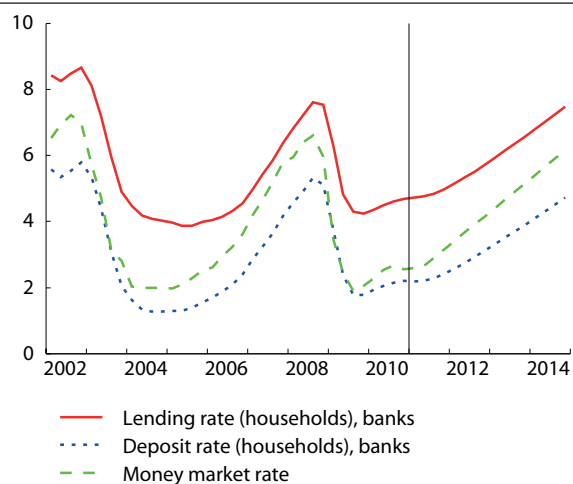
- Bjørnstad, R and J. Prestmo (2010): Er det strukturelle underskuddet et godt mål på den løpende bruken av oljepenger? [Is the structural deficit a good measure of current spending of petroleum revenues?] *Samfunnsøkonomen* 64 (8), 2010, 4-14.
- T. Eika (2009): Nasjonalbudsjett på sporet? [National budget on track?] *Samfunnsøkonomen* 63 (8), 2009, 9-14.
- H. Brunborg and Å. Cappelen (2010): Forecasting migration flows to and from Norway using an econometric model, *Work session on demographic projections*, Lisbon, 28-30 April, 2010, Eurostat, Methodologies and Working Papers 2010 edition.

#### Macroeconomic effects of adhering to the fiscal rule. Deviations in per cent from the projection scenario unless otherwise specified

	2011	2012	2013	2014
Consumption, household	0.3	0.5	0.7	0.7
Consumption, general government	4.2	4.7	6.0	6.3
Mainland gross investment	4.4	5.3	6.3	6.0
Gross investment, general government	14.6	16.8	21.0	21.7
Exports excluding petroleum products	-0.2	-0.3	-0.6	-0.7
Imports	1.8	2.3	2.9	3.0
Mainland GDP	1.4	1.6	1.9	1.9
Employed	1.2	1.4	1.7	1.7
LFS unemployment (percentage points)	-0.7	-0.6	-0.7	-0.7
Annual wages	0.7	0.7	1.0	1.5
Consumer price index	0.0	-0.1	-0.1	0.0
Money market rate (percentage points)	0.5	0.5	0.9	0.9

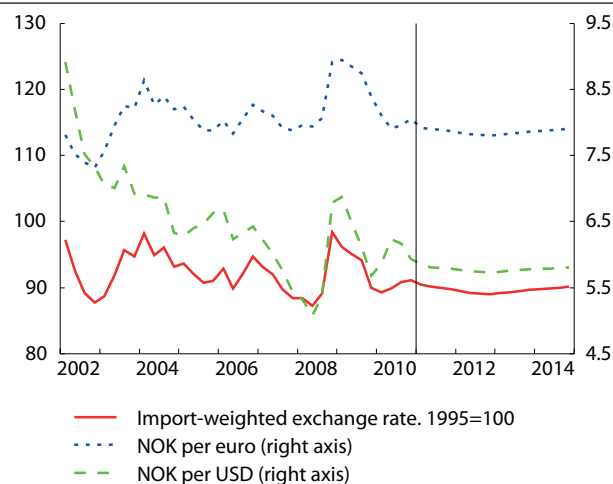


Figur 3. Norwegian interest rates. Per cent



Source: Norges Bank and Statistics Norway.

Figur 4. Exchange rates



Source: Norges Bank.

the responsibilities of monetary policy in the stabilisation policy will not be too extensive. In concrete terms, we anticipate an unchanged real tax level and gradually stronger real growth in pension transfers. Growth in general government consumption is expected to increase by about 2¾ per cent annually, which is approximately the same as trend mainland economic growth. Gross general government investment is expected to increase considerably more, particularly in 2012 and 2013. Given the projections for growth in the Government Petroleum Fund Global following from our assumptions about oil prices and production, this means that SNOBD calculated as a share of the capital in the Fund will be less than 3 per cent in 2014. We deviated most from the 4 per cent path of the fiscal rule in 2007, when SNOBD was estimated at 3.0 per cent of the Government Pension Fund Global.

In our projections for the Norwegian economy, the mainland economy will enter an expansion in 2013 that strengthens in 2014. In a separate calculation (Box 1) we show how public consumption and gross investment would have to develop from 2012 to 2014 if these variables alone were to ensure that the mainland economy only grows along a cyclically neutral path after 2012. In another calculation (Box 2) we show that the expansion is considerably stronger if fiscal policy uses the whole scope for manoeuvre in the 4 per cent rule.

### Monetary policy

The monetary policy guidelines are laid down in the regulation of 29 March 2001, which states that: “The operational target of monetary policy shall be annual consumer price inflation of approximately 2.5 per cent over time. In general, the direct effects on consumer prices resulting from changes in interest rates, taxes, excise duties and extraordinary temporary disturbances shall not be taken into account.” It also states that monetary policy shall be aimed at “stability in the Norwegian krone’s national and international value, contributing to stable expectations concerning

exchange rate developments. At the same time, monetary policy shall underpin fiscal policy by contributing to stable developments in output and employment.”

In its conduct of monetary policy, Norges Bank places emphasis on inflation developments measured by various indicators, including Statistics Norway’s official consumer price index adjusted for tax changes and excluding energy products (CPI-ATE). At the same time, Norges Bank practises flexible inflation targeting. This means that the setting of interest rates is forward-looking and emphasis is placed on the course taken by inflation. Account is also taken of the cyclical situation and the output and employment outlook. Inflation measured by the 12-month rise in the CPI-ATE was 0.7 per cent in January 2011.

Prompted by the crisis in financial markets worldwide and the sombre economic outlook, Norges Bank cut the key policy rate by 4.5 percentage points from autumn 2008 and over a nine month period, so that in June 2009 it was 1.25 per cent. Since then, the policy rate has been raised three times, most recently at the beginning of May 2010. Each of the interest rate hikes has been 0.25 percentage point, so that the key rate is now 2.0 per cent.

As a direct result of the financial crisis, the differential between money market rates and the key policy rate widened. Before this, money market rates largely shadowed the policy rate with a premium of about 0.25 percentage point. Since the summer of 2007, the premium has been substantially larger, and at the end of September 2008 it was over 2 percentage points. Since November 2009 the premium has been between 0.5 and 0.75 percentage point. The average money market rate in 2010 was 2.5 per cent and in January 2011 it was close to 2.6 per cent.

Banks’ average deposit and lending rates normally shadow movements in money market rates. The deposit

rate increased from 1.7 per cent at the end of the third quarter of 2009 to 2.2 per cent at the end of the third quarter of 2010. Banks' average lending rate increased from 4.2 per cent to 4.7 per cent in the same period, while their interest margin hovered around 2.4-2.5 percentage points.

In recent years, however, banks' share of total lending has been reduced, while mortgage companies have increased their share. It may therefore be informative to look at average lending rates from financial institutions as a whole. These increased from 3.8 to 4.2 per cent from the third quarter of 2009 to the third quarter of 2010. Financial institutions' interest margin was thereby reduced from 2.2 to 2.0 per cent during the period.

The increase in mortgage companies' share of lending to the private and municipal sector is largely due to transfers of loan portfolios from banks to mortgage companies, particularly as a result of the authorities' measures to deal with the financial crisis. In June 2007 it was made possible to issue covered bonds (OMFs) in Norway. Whereas the share of these bonds issued by mortgage companies remained relatively stable at just over 10 per cent before 2007, it is now around 30 per cent. It is largely loans with a high degree of security, and hence a low interest rate, that have been transferred from banks to mortgage companies.

The interest rate level influences private and municipal sector demand for credit, which is important for the financial stability of the economy. Growth in gross domestic debt in the private and municipal sector (C2) was just under 1.3 per cent from the third to the fourth quarter of 2010. This is a reduction on the previous quarter, when growth was 1.7 per cent, but appreciably higher than growth from the third to the fourth quarter of 2009, which was less than 0.5 per cent. Credit growth is nevertheless substantially less than in the years prior to the financial crisis, when growth was over 2.5 per cent each quarter, or over 10 per cent measured as an annual rate.

There was zero growth in credit from the third to the fourth quarter of 2010 for non-financial enterprises, a marked decline compared with growth of 1.4 per cent in the previous quarter. Households, by contrast, increased their credit growth through 2010. It rose to 1.8 per cent from the third to the fourth quarter, after being 1.6 and 1.4 per cent, respectively, one and two quarters earlier.

Government bond yields were record low in 2010. The annualised yields on government bonds with average residual maturities of 3 and 5 years were 2.1 and 2.5 per cent respectively in May 2010, while yields on government bonds with a 10-year residual maturity bottomed out at 3.1 per cent in August 2010. From the record low level and to December 2010 the yield on government bonds increased by 0.4-0.5 percentage

point for all maturities. Yields on government bonds have continued to rise into 2011, and by early February 2011 had increased by a further 0.3 percentage point. Yields on government bonds were nevertheless lower at the beginning of February 2011 than at end of 2009.

From early 2010 until mid-May there were only small, short-term fluctuations in the value of the krone around a fairly stable level, measured by the import-weighted krone exchange rate. During this period the krone strengthened against the euro and weakened against the US dollar. In mid-May the krone weakened by about 2 per cent, measured by the import-weighted krone exchange rate, and for the remainder of 2010 the value of the krone again only displayed short-term fluctuations around the new level. In the last half of 2010 the krone strengthened against the US dollar and weakened against the Swedish krona.

According to our projections, GDP growth this year and through the projection period will be higher than estimated trend growth. Other indicators also point to a cyclical upturn. As a result there is no longer any need to keep the interest rate level in Norway as low as it is now. We therefore expect the key policy rate to be raised in June, and that there will be a further two hikes this year. The interest rate increases will continue for the next few years, and money market rates are expected to reach 6 per cent in the course of 2014. Banks' average lending rate is expected to be just over 7 per cent on average in 2014.

The interest rate level in the euro area is expected to increase less than in Norway. The wider interest rate differential points to a stronger krone. The inflation differential has the opposite effect. Rising inflation in Norway will gradually result in prices rising more in Norway than in the euro area. On an annual basis we assume that the value of the krone, measured by the imported-weighted krone exchange rate, will remain virtually unchanged in 2011. Next year the krone will be strengthened by about one per cent, but will weaken slightly in 2013 and 2014. This means that there will be minor fluctuations around a krone-euro exchange rate of 7.80-7.90 throughout the projection period.

### **Household income, consumption and saving**

According to preliminary QNA figures, household real disposable income increased by 3.8 per cent in 2010 compared with 4.5 per cent in the previous year. Substantially lower interest expenses in the wake of the financial crisis and a more than one per cent lower rise in prices contributed substantially to the sharp growth in real income in 2009. Higher public transfers as a result of increased payments of pensions, sick pay and unemployment benefit also made a strong contribution to income growth in 2009. Developments in net interest income in 2010 did not provide any further contribution of any significance to the income growth. Wage income, which is the primary source of income for

Table 2. **Household real disposable income. Percentage growth**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Totalt	7.6	-6.4	6.3	3.6	4.5	3.8	3.1	4.2	3.6	3.8
Exclusive dividends	3.6	4.3	5.1	2.9	4.8	3.6	2.2	3.9	3.2	3.4

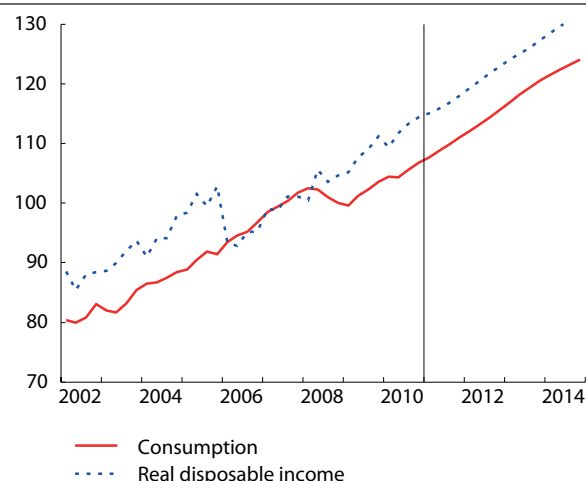
Source: Statistics Norway.

households, made a particular contribution to income growth in 2010 as a more favourable cyclical situation resulted in almost unchanged employment last year compared with a clear decline in 2009. Public transfers also made a positive contribution to income growth last year, albeit a lesser one than wage income. Whereas old-age pensions went up, disability pensions and sick pay went down, thereby curbing transfer growth last year.

Household consumption increased by 3.6 per cent in 2010, roughly in line with growth in real disposable income. Despite strong real income growth, consumption showed virtually zero growth in 2009. Household financial consolidation as a result of a sharp fall in house prices through the second half of 2008, a less favourable outlook for the economy in general and uncertainty regarding own income in particular, was probably an important reason for the weak development in consumption from 2008 to 2009. As a result of the cyclical downturn, car purchases fell sharply. However, the fall in consumption through 2008 and into 2009 reversed to an upswing in the second quarter of 2009. From then on, with the exception of the second quarter of 2010, when there was a slight fall, consumption increased sharply with quarterly growth rates of around 1 per cent. The fall in consumption in the second quarter of last year must be viewed in the light of special factors – high electricity bills and abnormally high advance tax payments – which weakened household liquidity. Travel in the second quarter of 2010 was also hampered by the ash clouds from Iceland. Goods consumption in particular has increased sharply since the second quarter of 2009. Important product groups such as food, clothing and footwear and car purchases have shown strong growth through the last seven quarters. Consumption of services has grown more moderately during this period, however.

Household financial consolidation led to roughly a doubling of the saving ratio (saving as a share of disposable income) from 2008 to 2009. In 2009, household saving accounted for over 7.5 per cent of disposable income. The saving ratio remained at about this level in 2010. If we count purchases of consumer durables, including cars, as investment rather than consumption, the saving ratio can be estimated at 9.7 per cent in 2010 compared with 9.3 per cent in 2009.

Growth in household real disposable income is expected to be between 3 and 4 per cent in the projection period 2011-2014. Although growth in wage income will pick up with an improved economic situation, higher interest rates and gradually increasing consumer price inflation will moderate growth in real disposable

Figur 5. **Income and consumption in households. Seasonally adjusted volume indices, 2007=100**

Source: Statistics Norway.

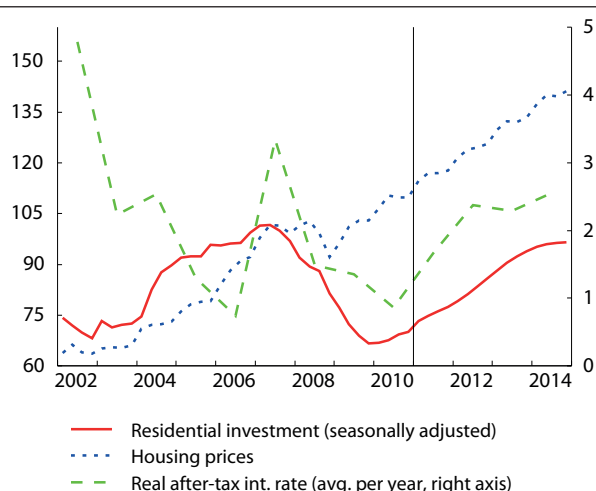
income in the projection period. Housing wealth increases with rising house prices and will stimulate consumption in the next few years. Consumption growth is projected at around 4 per cent this year and in 2012 and around 4.5 per cent in 2013. This is lower than in the previous cyclical upturn, when consumption growth rates approached 5.5 per cent. An expected higher real interest rate level during the projection period will contribute through higher household saving to lower consumption growth again to about 3.5 per cent in 2014. At the same time, rising house prices will in isolation reduce the need for household financial consolidation, so that the saving ratio may lie at around 7 per cent in the period 2011-2014.

With housing investment well on the way up, net investment in financial assets will decline through the projection period in pace with the fall in saving. Households are projected to reduce their investment in net financial assets from a level of about NOK 51 billion in 2010, according to the income accounts, to around NOK 26 billion in 2014. Thus households will still have positive investment in net financial assets when the Norwegian economy moves from cyclical downturn to upturn.

### Housing investment and house prices

After falling by close to 35 per cent in the course of two and a half years, housing investment bottomed out in the fourth quarter of 2009. Housing investment has now increased for four consecutive quarters. As an annual average, housing investment nevertheless dipped by 3.5 per cent from 2009 to 2010, compared with a fall of almost 19 per cent from 2008 to 2009. Prospects of

Figur 6. Residential market. Left axis adj. indices, 2007=100, right axis per cent



Source: Statistics Norway.

a more favourable economic situation and rising house prices imply a continued increase in housing starts in the period ahead. We therefore expect housing investment to rise by from 5 to 8 per cent annually in the projection period. Despite this, the housing investment level in 2014 will be about 5 per cent lower than the peak level in 2007.

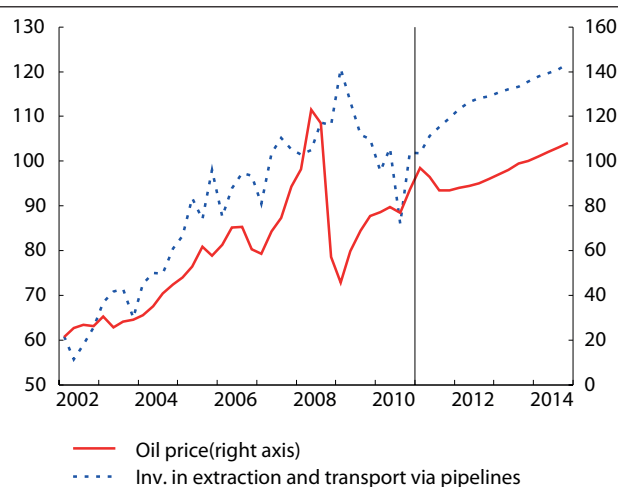
According to Statistics Norway's house price index, house prices as a whole fell by almost 10 per cent from the second to the fourth quarter of 2008 as a result of the financial crisis. Prices have subsequently shown a pronounced increase that more than offset this decline, though they levelled off through the second half of 2010. As an annual average, overall house prices rose by 8.3 per cent in 2010, compared with just on 2 per cent the previous year. Prices for detached houses were 8.1 per cent higher in 2010 than in 2009, while prices for small houses and flats rose by 9.4 per cent and 7.4 per cent, respectively. We estimate that house prices will continue to rise by 6 to 7 per cent annually in pace with the cyclical upturn during the projection period.

### Petroleum investment

According to preliminary QNA figures, investment in the petroleum industry picked up substantially in the fourth quarter of 2010 following the sharp fall in the third quarter. Fourth quarter investment was approximately on a level with the first and second quarters of 2010. A decline in total petroleum investment though 2009 and up to and including the third quarter of 2010 contributed to a fall from 2009 to 2010 of a whole 12.6 per cent.

The decline in investment in 2010 can be attributed to the sharp reduction in the construction of platforms and drilling rigs. Investment in platforms, drilling rigs and modules dropped by no less than 32.9 per cent from 2009 to 2010. The reason for this is that several platforms were completed in the course of 2009 and

Figur 7. Petroleum investments and oil price in USD. Seasonally adjusted volum indices, 2007=100



Source: Statistics Norway.

early in 2010. However, there was only a moderate reduction of 1.3 per cent in drilling and pipeline transport, which limited the decline in overall petroleum investment.

A number of new projects were launched last year, and a further rise in the pace of new field developments is expected in 2011. The increase will consist of both new developments and expansions of existing fields. A slight increase in exploration drilling is expected next year, after which it will decline somewhat through the projection period. An increased focus on the recovery factor and start-up of several new fields will contribute to a slight upswing in production drilling in the period ahead. Overall, this will result in an increase in petroleum investment of just under 10 per cent this year before growth again declines somewhat.

Petroleum production was unchanged from the fourth quarter of 2009 to the same quarter in 2010. Developments through the year were volatile, however. Because of the shutdown of several gas fields in summer 2010, gas production fell off substantially from the second to the third quarter. Oil production was only affected to a minor extent. Overall petroleum recovery fell by 4 per cent from 2009 to 2010. We expect the trend decline in oil production to continue, but not as rapidly as previously. Gas production is expected to increase slightly, so that overall petroleum production will be approximately unchanged for the next four years.

Historically, export prices for gas have shadowed developments in oil prices with a time lag. In line with this trend, gas prices rose substantially through 2008 and did not fall before 2009. After levelling off in late 2009, gas prices have not yet picked up as strongly as oil prices. The question has been posed of whether the increased supply of liquid natural gas has changed market conditions to the extent that it will lead to less



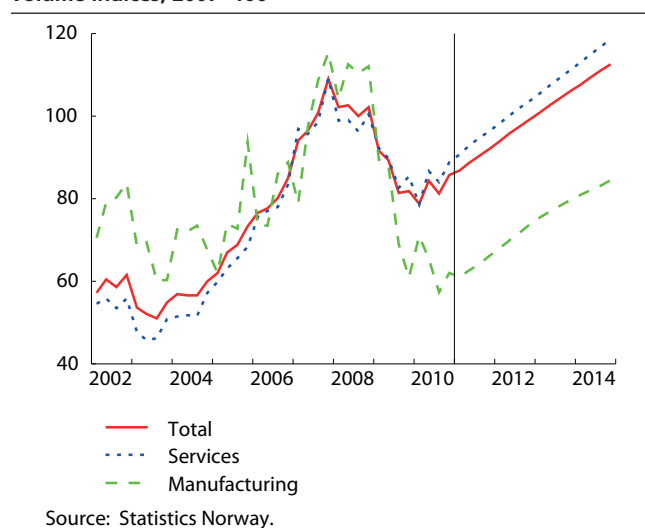
Table 3. **Main economic indicators 2009-2013. Accounts and forecasts. Percentage change from previous year unless otherwise noted**

	Accounts 2010*	Forecasts							
		2011			2012		2013		2014
		SN	MoF	NB	SN	NB	SN	NB	SN
<b>Demand and output</b>									
Consumption in households etc.	3.6	3.7	3 1/4	3.5	4.0	3 1/2	4.5	2 3/4	3.4
General government consumption	2.2	2.3	2	2.1	2.7	..	2.5	..	2.8
Gross fixed investment	- 8.9	7.7	..	4.6	8.2	..	6.6	..	4.8
Extraction and transport via pipelines <sup>1</sup>	- 12.6	10.5	7	6.0	6.8	5	2.0	4	3.2
Mainland Norway	- 4.4	6.8	10	4.3	9.0	..	8.4	..	5.5
Industries	- 4.2	6.4	..	3.3	8.0	..	7.1	..	6.4
Housing	- 3.5	8.7	..	6.0	9.3	..	11.0	..	5.2
General government	- 5.9	6.0	..	5.1	10.8	..	9.0	..	3.7
Demand from Mainland Norway <sup>2</sup>	1.8	3.8	4	3.3	4.6	3 1/4	4.7	2 1/4	3.6
Stockbuilding <sup>3</sup>	3.4	-0.1	..	..	0.0	..	0.0	..	0.0
Exports	- 1.3	0.4	..	1.8	1.3	..	1.3	..	2.3
Crude oil and natural gas	- 6.5	-1.8	..	-2.8	0.1	..	-1.4	..	-0.4
Traditional goods <sup>4</sup>	5.0	3.6	2 3/4	4.9	1.9	..	3.1	..	4.7
Imports	8.7	5.0	6	5.6	5.5	..	6.2	..	5.2
Traditional goods	8.4	6.2	..	5.1	7.7	..	7.6	..	6.3
Gross domestic product	0.4	2.1	2	2.1	2.9	2 1/4	2.5	1 1/2	2.4
Mainland Norway	2.2	3.3	3	3.1	3.8	3	3.6	2 3/4	3.2
<b>Labour market</b>									
Employed persons	- 0.2	1.5	1	0.6	2.1	1 1/4	2.2	3/4	1.6
Unemployment rate (level)	3.6	3.6	3 1/2	3.6	3.2	3 1/4	2.9	3 1/4	2.6
<b>Prices and wages</b>									
Wages per standard man-year	3.6	3.6	3 3/4	3 1/4	4.1	4 1/4	4.6	4 1/2	5.8
Consumer price index (CPI)	2.5	1.8	1 1/4	1.8	1.5	2	2.2	2 1/4	2.6
CPI-ATE5	1.4	1.5	1 1/4	1.9	1.7	2	2.0	2 1/4	2.5
Export prices, traditional goods	3.6	8.0	..	4.5	3.3	..	2.9	..	3.7
Import prices, traditional goods	- 0.3	1.5	..	3.1	-0.2	..	1.7	..	2.5
Housing prices	8.3	6.8	..	..	6.3	..	6.5	..	5.8
<b>Balance of payment</b>									
Current balance (bill. NOK)	323.0	325.5	..	398.6	321.7	..	319.6	..	351.5
Current balance (per cent of GDP)	12.9	12.3	..	15.3	11.5	..	10.8	..	11.1
<b>Memorandum items:</b>									
Household savings ratio (level)	7.4	6.9	..	5.8	7.3	..	6.5	..	7.0
Money market rate (level)	2.5	2.8	2.7	3 1/4	3.8	3.6	4.8	4.4	5.8
Lending rate, banks (level) <sup>6</sup>	..	4.8	..	..	5.4	..	6.2	..	7.1
Crude oil price NOK (level) <sup>7</sup>	484	529	..	485	516	..	560	..	609
Export markets indicator	10.4	4.3	..	..	3.6	..	5.0	..	7.5
Importweighted krone exchange rate (44 countries) <sup>8</sup>	- 3.8	-0.2	0.6	..	-1.0	-0.3	0.2	1.1	0.6

<sup>1</sup> Forecasts from Ministry of Finance incl. service activities incidental to extraction.<sup>2</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.<sup>3</sup> Change in stockbuilding. Per cent of GDP.<sup>4</sup> Norges Bank estimates traditional exports, which also includes some services.<sup>5</sup> CPI adjusted for tax changes and excluding energy products (CPI-ATE).<sup>6</sup> Yearly average.<sup>7</sup> Average spot price, Brent Blend.<sup>8</sup> Increasing index implies depreciation. Ministry of Finance forecasts trade-weighted exchange rate.

Source: Statistics Norway (SN), Ministry of Finance, St.meld. nr.1 (2010-2011), (MoF), Norges Bank, Pengepolitisk rapport 3/2010 (NB).

Figur 8. **Investments, Mainland Norway. Seasonally adjusted volume indices, 2007=100**



parallel developments in prices for gas and oil. We have assumed that the rise in gas prices will be somewhat weaker than the rise in oil prices in the period ahead.

### Mainland investment

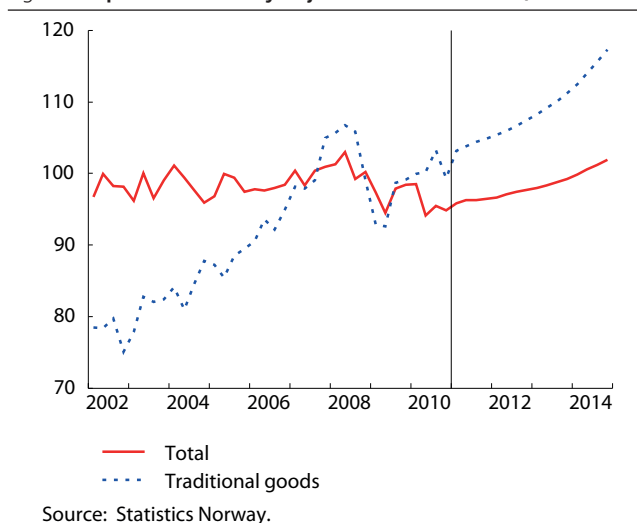
Historically, there has been a close correlation between developments in investment and business cycles – investment has been procyclical. Investment nevertheless differs from other demand components in that there are substantially wider fluctuations. The last economic cycle was no exception.

Mainland business investment doubled in the last cyclical upturn from 2003 to 2008, but fell in pace with the subsequent cyclical downturn by about 19 per cent from 2008 to 2010. Investment in manufacturing and mining in particular sank to a low level, and an investment decline of 42 per cent was recorded during this period. The completion of large oil refinement projects and solar cell activities contributed strongly to the decline. Developments in manufacturing investment must also be seen against the backdrop of structural changes in the form of a gradual transition to fewer, larger and more mechanised production facilities for food and beverages.

The decline in mainland investment came to a halt in pace with the cyclical turnaround in the first half of 2010. From the second to the fourth quarter of 2010, investment adjusted for normal seasonal variations rose by 1.7 per cent. Growth in service industry investment in particular pushed up business investment during this period.

Commercial building starts, which also include buildings for schools, health and social services and general government, show a rising trend from a low level in 2009. Growth in utility floor space in 2010 was 13.9 per cent higher than the previous year.

Figur 9. **Exports. Seasonally adjusted volume indices, 2007=100**



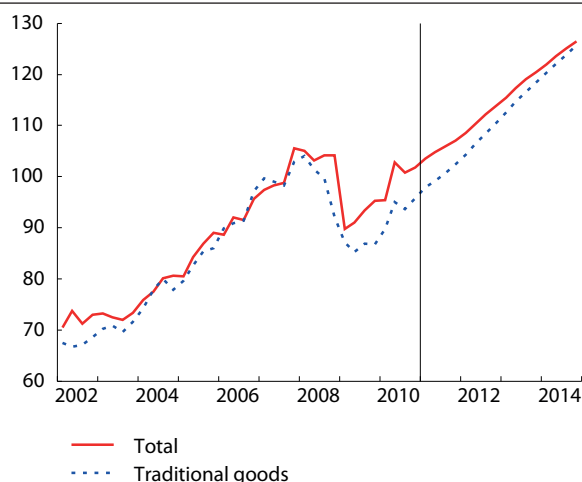
Increased investment is expected in pace with the cyclical upturn. For mainland industries we project annual investment growth of 6-8 per cent through the projection period. The total level of investment in 2014 is expected to be about 6 per cent higher than the level at the cyclical peak in 2008.

### Balance of payments

Exports and imports are very important to the Norwegian economy. Norway's total exports and imports accounted for 42 per cent and 28 per cent, respectively, of GDP in both 2009 and 2010. The value of exports excluding oil and gas accounted for 23 per cent of mainland GDP in both years. It is exports that pay for the imports over time. Norwegian exports are largely determined by international demand and the (price) competitiveness of Norwegian export products. Exports generate demand for domestic production of goods and services, while domestic production generates direct – and indirect through investment – demand for imports of production input factors in manufacturing. Imports also depend on domestic demand, and on prices for imports.

Since 2000, the value of Norwegian exports has risen more than the value of Norwegian imports. There has been a generally higher rise in prices for Norwegian export products such as oil, commodities and semi-finished goods than for the products we import. The volume of exports excluding oil and gas has increased less than the volume of imports, however. Oil exports continue on a declining trend, while gas exports are increasing. Without exports of oil and gas, the balance of payments would have shown a large deficit every year. Economic developments in the past two years have reduced total exports more than total imports, and export prices fell sharply in the wake of the financial crisis. Norway withstood the crisis better than our trading partners, and our imports did not fall correspondingly. As a result, the trade surplus was sharply reduced from

Figur 10. Imports. Seasonally adjusted volume indices, 2007=100



Source: Statistics Norway.

the peak year of 2008 through 2009 and 2010. This tendency now appears to be coming to a halt, underpinned by a broad-based rise in export prices led by the increase in oil prices. In the light of the third quarter fall, some of the growth in export volumes and prices in the fourth quarter of 2010 should be viewed as catching up and not as underlying growth.

Total exports in 2010 were 1.3 per cent lower than in 2009. The decline can be attributed entirely to a production-based decline in petroleum exports. Exports of traditional goods increased by 5 per cent, with chemicals, mineral products and metals contributing most to growth. Despite the large decline in exports of wild fish and fish products in the fourth quarter, 2010 was the seventh record year in a row for total exports of fish and fish products, which constitutes one of the largest groups of export products. Farmed fish represents almost half of fish exports, the overall value of which accounted for almost 19 per cent of traditional exports excluding refined petroleum products in 2010. The increase in volume was 7-8 per cent, while fish prices increased by up to 20 per cent. By far the two largest groups of service exports, commercial services and gross freight exports in shipping, grew by 4.4 and 2.4 per cent, respectively. The decline in exports of many other types of services pushed growth in total service exports down to less than 1 per cent. In terms of value, service exports were equivalent to 80-90 per cent of traditional goods exports.

Preliminary seasonally-adjusted QNA figures show weak developments in exports in the fourth quarter of 2010 compared with the previous quarter. The total export volume edged down by 0.7 per cent, and the decline was broad-based. Traditional goods exports fell by 3.8 per cent, but if refined oil products are excluded, the decline was 1 per cent. The fall may be attributable to high growth in the previous quarter. Exports of crude oil continued a trend decrease of 4.2 per cent, while the third quarter dip in gas exports, due to maintenance

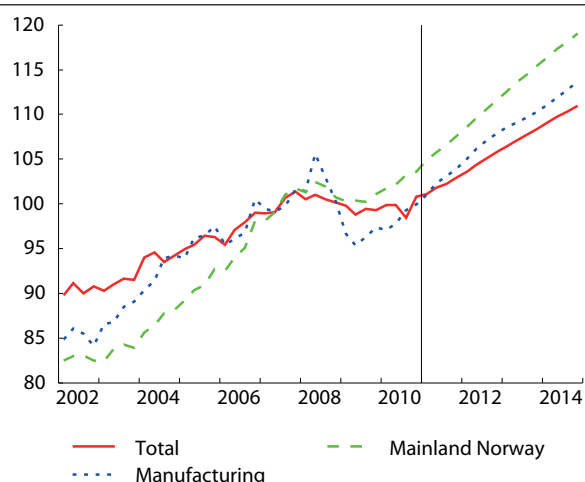
work, was reversed. Exports of wild fish and fish products fell by over 20 per cent compared with the third quarter, after rising over 10 per cent in the previous quarter. Exports of insurance services almost doubled in the fourth quarter of 2010, as in the fourth quarter of 2009, and this accounted for a large part to the almost 1 per cent increase in total service exports.

Prices for most important exports rose substantially in the fourth quarter of last year. Export prices for traditional goods rose by 2.4 per cent, thereby continuing the rise of previous quarters, and annual growth ended at 3.6 per cent. Prices for crude oil and most petroleum products rose substantially in both the fourth quarter of 2010 and the year as a whole. The price of natural gas, however, fell sharply both in the fourth quarter and for the year as a whole, by almost 13 per cent. The rise in price for overall exports was 5.2 per cent in the fourth quarter and 5.5 per cent for the year 2010. The rise in the oil price in the fourth quarter contributed substantially to the average oil price in 2010 being almost 29 per cent higher than the average in 2009. This substantially boosted both the overall value of exports and the trade surplus last year.

In the fourth quarter of 2010, Statistics Norway's business sentiment survey for manufacturing reported weak, but broad-based optimism among Norwegian business leaders regarding the immediate future. An increase in orders from export markets is expected and rising market prices. Manufacturers of input factors such as wood and wood products, pulp and paper, chemicals, metals and metal products, expressed the most positive expectations regarding exports in the first quarter of 2011, based to a large extent on growth in orders received. The positive expectations regarding developments in volume may well also be influenced by a broad-based and relatively strong upswing in global market prices for Norwegian export goods in the fourth quarter. We estimate that growth in exports of traditional goods will slow to just over 3½ per cent this year and to under 2 per cent next year, before the global economic upturn pushes growth up to 4-5 per cent in 2014. Exports of services are expected to increase from under 2 per cent this year to over 5 per cent in 2014. The production-based decline in oil exports is expected to outweigh a weak increase in gas exports. The result will be slow, but increasing growth in total exports through the entire projection period, from under ½ per cent this year to over 2 per cent in 2014.

Growth in exports of traditional goods and services which, unlike crude oil and natural gas exports are impacted by international competition, was slower than growth in our trading partners' total imports in 2010, as in many previous years. We expect their combined imports to continue growing more than our exports, excluding oil and gas, through the projection period. Loss of market shares may be partly due to a weakening of cost-competitiveness as a result of higher productivity-adjusted wage growth in Norway than in

Figur 11. **Gross domestic product. Seasonally adjusted volume indices, 2007=100**

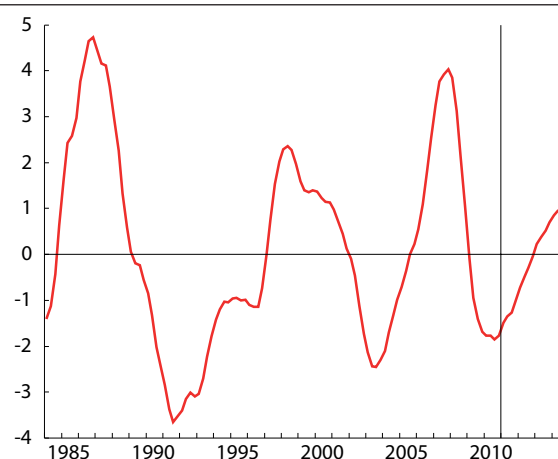


other countries, measured in a common currency. Loss of market shares may also be due to some of the growth in our trading partners' demand being for import goods other than those that Norway exports. Loss of market share is not in itself a problem for the balance of payments. It is the value of exports in relation to imports that is important. Norway has had a surplus on trade of goods and services for over 10 years. However the large surpluses have been, and continue to be, entirely dependent on the export value of oil and gas.

In the fourth quarter of 2010, traditional and total imports rose by 1.1 and 2.3 per cent, respectively, compared with the previous quarter. Both increased by about 8½ per cent from 2009 to 2010. Both quarterly and annual growth rates must be considered against the backdrop of even larger reductions in the previous quarter and the previous year. There is also higher domestic demand with a shift towards import-intensive components. Developments through 2009 and 2010 imply a positive trend in import volumes, while import prices fluctuate more from quarter to quarter. Prices for traditional import goods increased by 2.7 per cent in the fourth quarter of last year, pushed up by commodities, fuels and machinery and vehicles in particular. The rise in commodity prices was largely driven by higher prices for metal ores and waste. Prices for imported services fell in the fourth quarter of last year. However, developments for the fourth quarter do not reflect 2010 as a whole, when average prices for traditional import goods barely dipped compared with 2009, while prices for imported services rose a couple of per cent on average. We expect a continued low increase in import prices for the next few years, up to about 2½ per cent in 2014.

In most years since 2000, the volume of imports has grown faster than the volume of exports. In 2011 and for the next three years we expect traditional and total imports to grow more each year than the respective

Figur 12. **Output gap, Mainland Norway. Deviation from trend, per cent**



exports, but at lower rates than before the downturn in 2008. Imports of traditional goods are projected to increase by 6-7 per cent annually, and total imports by 1-2 percentage points less.

The surplus on Norway's external trade in goods and services in December last year was the highest since November 2008, and the fourth quarter surplus almost reversed the decline through 2010. The trade surplus in 2010 was reduced by about 3 per cent compared with the previous year, to NOK 342 billion. The annual net factor income and transfers deficit was halved, to an estimated NOK 19 billion, such that the current account surplus improved by NOK 11 billion, or 3.5 per cent. For the projection period 2011-2014 we expect a continuing reduction in net export surpluses, in constant prices, which will be offset by a terms of trade gain for the period as a whole. The annual trade surplus is projected to remain stable at around NOK 330-350 billion. Given negative net factor income and transfers, we project that the current account surplus will be between 10 and 13 per cent of GDP in the projection period.

## Output

The cyclical downturn that started at the beginning of 2008 was strengthened by the financial crisis. The decline in activity that followed gave way to clear growth in the fourth quarter of 2009 which has since fluctuated around trend. The upturn in the mainland economy appeared to brake in the fourth quarter of 2010. The preliminary national accounts figures show mainland GDP growth of only 0.3 per cent, which is appreciably under trend. This rather weak development must be viewed in the light of especially high growth in the previous quarter, which was as much as 1.1 per cent. Growth from the second to the fourth quarter of last year was an annualised 2.8 per cent, which is slightly higher than trend mainland growth. Fish and fishing contributed negative growth of almost 0.3 percentage point in the fourth quarter. This decline, which was



close to 40 per cent compared with the previous quarter, must be attributed to industry-specific factors, not to general economic developments. However activities in the second quarter were also affected by special factors: strikes in local government and the construction industry and a cold, dry winter contributed to pushing down GDP. The QNA figure can therefore be claimed to underestimate underlying mainland GDP growth in the second quarter.

It is accordingly still a little difficult to date the cyclical turnaround precisely on the basis of mainland GDP figures. There is also great uncertainty surrounding the initial preliminary figures for a quarter, and developments through the previous year may still be subject to considerable revision. Given the way the figures look now, and with prospects of relatively clear growth ahead, it appears reasonable to say that the Norwegian economy was in a moderate economic upturn in the second half of 2010.

The QNA figures for the fourth quarter of 2010 show moderate growth in all the four parts of mainland industries; manufacturing, other goods production, private services and general government. Growth was highest in manufacturing, with an increase of 0.7 per cent on the previous quarter. However, growth in other goods production excluding fishing was appreciably higher. Value added in building and construction, for example, increased by 1.4 per cent. Value added in private services increased by 0.3 per cent, while general government only edged up 0.2 per cent. The annual average figures for 2010 were very similar in the main industries, with growth of just over 2 per cent for all except other goods production, where growth was 1 percentage point lower. A substantial reduction in power production from 2009 to 2010 is an important explanatory factor.

Despite the fact that it is now two and a half years since the bankruptcy of Lehman Brothers, which represents the start of the acute stage of the global financial crisis, it was not until the fourth quarter of 2010 that seasonally-adjusted mainland GDP excluding general government rose above the level in the second quarter of 2008. In the fourth quarter, levels in both manufacturing and other goods production were still lower than in the second quarter of 2008.

Although the economy has entered a cyclical upturn, capacity utilisation is relatively weak: last year mainland GDP was almost 2 per cent lower than the estimated trend level (see Figure 12). According to our projections, the economy will enter a period of boom in 2013.

The most important force driving economic developments in the period ahead is developments in domestic investment, which has been low for a while, but has begun to rise. Prospects of increased activity and a continued low interest rate level point to increased mainland business investment in both the petroleum industry and

households. At the same time we anticipate continued high consumption growth and increased exports. This will contribute to higher, broad-based activity growth. The catch-up in manufacturing will thus continue, spurred by increased demand from the petroleum industry and growth in export markets. An upswing in housing investment coupled with investment in commercial buildings and various infrastructure will contribute to clear growth in building and construction. Private services are stimulated by growth in mainland business activity and the petroleum industry, increased general government demand and increased household consumption.

By contrast, growth in general government value added will be appreciably less than average, given the assumptions we have made. General government value added as a share of mainland GDP increased markedly during the cyclical downturn in 2008 and 2009. This situation began to change in 2010, and general government's share of GDP is expected to fall throughout the projection period, as is normal during a cyclical upturn.

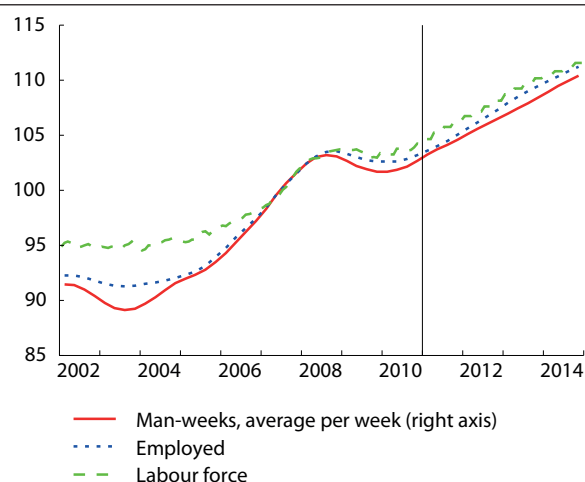
Higher cost growth in Norway than among competing countries will be a constraint on production in internationally exposed industries, however. At a somewhat later stage of the cyclical upturn, in 2013 and 2014, we therefore expect manufacturing output to increase less than other industries, despite the fact that growth in the Norwegian export market will be picking up then. Higher interest rates will dampen growth in most industries. In 2011 we expect mainland GDP growth to rise to around 3.5 per cent and keep climbing to 3.8 per cent in 2012. After that, growth is expected to fall back slightly as the economy moves into the boom.

### Labour market

The preliminary QNA figures show that 2 602 000 persons on average were employed in 2010, a decline of 0.2 per cent, or 4000 persons, on the previous year. As an annual average, the number employed has thus fallen by 14 000 since the previous peak in 2008. The decline during the last two years must nonetheless be described as moderate, following the unusually strong upswing in the labour market in the period 2004-2008, where the number employed increased by almost 300 000. The picture for the business sector is mixed, however. For the past two years general government employment has increased by nearly 40 000 persons, whereas there have been substantial staff cutbacks in internationally exposed industries.

According to seasonally-adjusted QNA figures, the fall in employment stopped in the first quarter of 2010, and the number employed has since increased by 13 000. For the past three quarters there has been growth in employment in building and construction, manufacturing and local government. A rise in the number employed in the production of health and care services is the main reason for employment growth in municipal government. The picture for manufacturing is mixed,

Figur 13. **Labour force, employment and number of man-hours.** Seasonally adjusted and smoothed indices, 2007=100



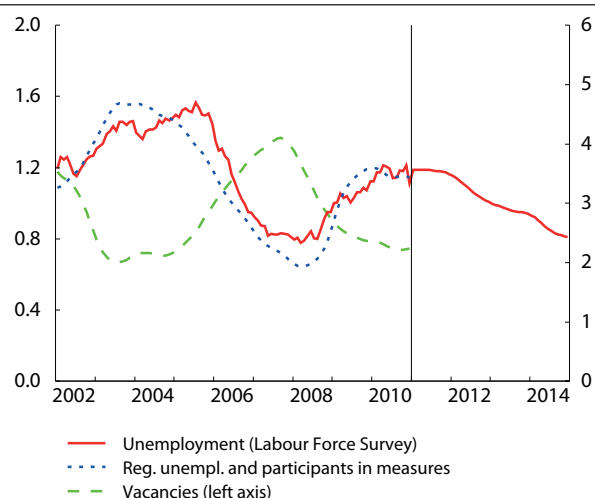
Source: Statistics Norway.

but overall manufacturing has recorded growth in seasonally-adjusted employment of 4 500 persons in the last three quarters. Developments in 2010 indicate that the decline in employment in manufacturing since the financial crisis has stopped up and has reversed into an increase. According to the QNA, growth in manufacturing employment in the last three quarters is entirely attributable to the engineering industry and to building of ships and platforms. In Statistics Norway's business sentiment survey for the fourth quarter of 2010, an increasing number of Norwegian business leaders consider the general short-term outlook to be improved and expect market conditions to continue improving. It may take time, however, before rising demand translates into higher employment.

Seasonally-adjusted QNA figures show that growth in the number of man-hours worked was somewhat higher than growth in the number employed from 2009 to 2010. The decline in sickness absence is one reason that the number of hours worked per employee is increasing. According to statistics from NAV, total sickness absence fell by 9.9 per cent from the third quarter of 2009 to the third quarter of 2010. Total sickness absence in the third quarter of 2010 was 7.0 per cent of contractual man-days, i.e. back to the same level as two years ago. In the first three quarters of 2010, sickness absence declined by 0.8 percentage point compared with the same period in 2009.

Statistics Norway's Labour Force Survey (LFS) shows that the unemployed constituted 3.6 per cent of the labour force in the fourth quarter of 2010, after adjustment for normal seasonal variations. Unemployment was 0.4 percentage point higher than in the same period in 2009. Following a slight increase early in 2010, the seasonally-adjusted unemployment rate was fairly stable through 2010 and has moved in the interval 3.4-3.6 per cent of the labour force. Seasonally-adjusted LFS unemployment increased by 30 000 persons from

Figur 14. **Unemployment and number of vacancies.** Per cent of labour force. Seasonally adjusted and smoothed



Source: The Norwegian Labour and Welfare Service and Statistics Norway.

the first quarter of 2008 to the first quarter of 2010, and was in the interval 87 000–95 000 persons through 2010. According to the LFS, there was a net increase in the labour force (sum of employed and unemployed) of 30 000 persons from the fourth quarter of 2009 to the fourth quarter of 2010. The working age population (persons aged between 15 and 74) increased by a full 61 000 during this period. The growth in the number of persons outside the labour force rose by 31 000. Outside the labour force, 19 000 more people replied that they had various types of pension as their main activity. The aging of the population means an increasing number of old-age pensioners. According to NAV, there was also an increase of just under 5 000 in the number of disability pensioners from 2009 to 2010. Following a slight decline in the years 2007-2009, the number of disability pensioners is back to approximately the level in 2006 – just under 300 000 persons. In a weaker labour market, some job-seekers withdraw from the labour force to take further education. According to Statistics Norway's education statistics, the number of students at universities and regional colleges increased by 6 100 from 1 October 2009 to 1 October 2010, to a level of just under 228 000 persons. According to the LFS, labour force participation, measured as the labour force expressed as a percentage of the population aged between 15 and 74, fell from 72.8 per cent in 2009 to 71.9 per cent in 2010.

Movements in seasonally-adjusted figures for those registered with NAV as fully unemployed tally well with developments in LFS unemployment through 2010. NAV reports a fall in seasonally-adjusted registered unemployment of nearly 4 000 persons for December 2010 and January 2011. Although seasonally adjusted, registered unemployment rose somewhat in autumn 2010, it was still somewhat lower at the end of January 2011 than in the same month the previous year. Unadjusted NAV figures show that 81 300 were registered as wholly unemployed at the end of January

2011. The total of those registered as wholly unemployed and persons on ordinary labour market programmes was about 95 300. This is a decline of about 5 600 compared with January 2010, and is mainly due to the fact that there have been fewer persons on labour market programmes. Fewer new unemployed persons are registering with NAV, and 5 per cent more vacancies per business day were announced in January 2011 than in the same month last year. In the Directorate of Labour's corporate survey for the fourth quarter of 2010, enterprises respond that they now lack 47 300 employees, which is 7 400 more than a year earlier.

According to preliminary estimates, there were 4 923 000 persons living in Norway at the beginning of 2011. The population growth in 2010 of over 65 000, or 1.3 per cent, was in such case the highest ever registered, and 2 700 higher than in the previous peak year of 2008. Record high net immigration of 44 500 persons accounts for about two thirds of overall population growth, and contributes to the high rise in the LFS working age population. We have assumed that net immigration will remain high during the projection period, and that as a result the labour force will grow by 1.5 to 2 per cent annually for the next three years.

The number of persons in the age group 62-66 will stabilise during the projection period. This population group has increased by some 110 000 persons during the past 10 years to about 280 000 at the beginning of 2011. Older employees work on average 2-2.5 man-years from the ages of 62 to 67. Natural retirement from working life is influenced not only by how many are in the highest age groups, but also how long they choose to keep working. From 2011 onwards, there are new, flexible rules for drawing an old-age pension from the National Insurance System. All those aged more than 62 after 1 January 2011 can retire with a pension if their pension earnings exceed the minimum pension level. When greater opportunities for flexible retirement present themselves, there is short-term uncertainty concerning the supply of labour from this age group. We have assumed in our projections that the labour force in the age group 62-66 will decline by 2 300 persons from 2010 to 2011, but that labour force participation by this group will then pick up with an improved economic situation. Our prediction of a short-term decline is based on the assumption that a number of older people who lost their jobs during and after the financial crisis, and subsequently had difficulty in finding new employment, will take advantage of the opportunity to withdraw from the labour market under the new pension scheme.

Broad-based employment growth appears likely for the next few years in construction and manufacturing. Substantial growth in private services also appears likely at a later stage of the business cycle. On average, public sector employment is expected to rise by over 11 000 persons annually during the projection period. Total employment in 2011 is expected to increase by

about 40 000 persons. Employment is expected to rise by a further 160 000 persons in the period 2012-2014.

We anticipate that labour force participation will rise for all population groups under 62 in pace with the cyclical upturn. This is to some extent a reversal of the decline in the wake of the financial crisis. Even with a substantial increase in employment, we do not anticipate any fall in unemployment in the first year of the projection period. Demographic changes, and in particular high net inward labour migration, will result in strong growth in the labour force. Increased employment frequencies will add to this growth.

According to the Labour Force Survey, average unemployment was 3.6 per cent in 2010, having edged up 0.4 percentage point from 2009. We expect the unemployment rate to remain unchanged at 3.6 per cent in 2011, and thereafter to fall later in the business cycle. The unemployment rate is projected to be 3.2 per cent in 2012 and then move down gradually to 2.6 per cent in 2014. LFS unemployment is estimated at 95 000 persons in 2011, and will then sink gradually to 72 000 in 2014.

## Wages

According to the National Accounts, annual earnings increased by 3.6 per cent last year compared with 4.2 per cent in the previous year and 6.3 per cent in 2008. Growth in Norwegian manufacturing wages has set the trend for wage growth in other sectors. The estimated annual earnings in manufacturing increased by 3.7 per cent in 2010. The decline in overall wage growth is more a result of the downturn in the global economy than of a weakening in the Norwegian labour market. Unemployment in Norway has increased relatively little, at just over one percentage point. However, value added in Norwegian manufacturing fell almost as much as among Norway's trading partners. The pronounced decline in wage growth since 2008 shows that Norwegian cost inflation is closely linked to conditions abroad.

Wages per standard man-year increased by 3.9 per cent last year, 0.3 per cent more than annual earnings. The difference was due to lower sickness absence, as annual earnings are not affected by changes in sickness absence. In non-military central government and in manufacturing the increase in wages per standard man-year was about 4½ per cent. Growth in local government was 1 percentage point lower. The highest wage growth was in financial services, where increased bonus payments boosted wage growth by 2.4 percentage points, to 6.3 per cent.

The ability to pay wages in the business sector is largely determined by productivity growth and developments in prices for Norwegian products. After a relatively sharp decline in 2008, labour force productivity picked up somewhat in 2009. In 2010, value added per man-hour worked rose by over 2 per cent in the mainland

business sector. Prices measured by the GDP deflator increased by over 3 per cent. These factors combined contributed to higher business sector profitability in 2010. Consumer prices increased by 2.5 per cent last year, somewhat less than the rise in Norwegian producer prices. This is partly attributable to lower prices for imported goods. As a result, wage-earners in Norway experienced an improvement in purchasing power of over 1 percentage point in 2010.

We foresee a further improvement in business sector profitability. Prices in international commodity markets increased especially markedly through 2010, and are expected to feed through into higher prices for traditional Norwegian export goods in 2011. There is also reason to believe that the decline in global markets for Norwegian manufacturing goods has prompted efficiency measures that will continue to yield productivity gains in the business sector. Profitability developments point to profitability picking up next year. However we do not anticipate any clear decline in unemployment before 2012, and it will take some time for a turnaround to increased profitability and a tighter labour market to be reflected in higher wage growth. Annual earnings are projected to increase by 3.6 per cent this year and 4.1 per cent next year.

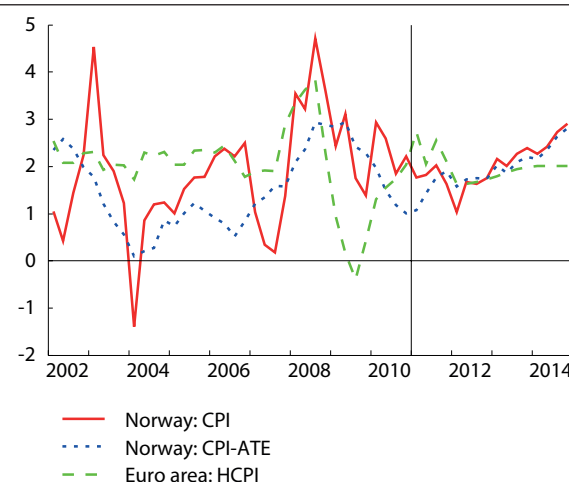
The Norwegian economy will probably be in an expansion in 2013 and 2014. Employment is increasing relatively strongly and according to our projections unemployment will fall to about 2½ per cent. We envisage that Norwegian business sector profitability will then have been increasing for some years. Wage growth will also pick up – probably as early as through the main settlements in 2012. However the effects may be most apparent in the form of increased wage drift in 2013 and relatively large pay increases in 2014. Our projections imply wage growth of 4.6 per cent in 2013 and 5.8 per cent in 2014. This implies real wage growth of about 2½ per cent in 2013 and 3 per cent in 2014.

## Inflation

Underlying inflation was low through 2010. Inflation was particularly low last summer, but has since increased somewhat. Adjusted for normal seasonal variations, the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) through the last three months in 2010 increased by an annualised 1.7 per cent. The increase from December 2009 to December 2010 was 1.0 per cent, while the increase in the annual average from 2009 to 2010 was 1.4 per cent. The seasonally-adjusted figures showed a slight decline in prices from December 2010 to January 2011 and the 12-month change in the CPI-ATE fell to 0.7 per cent.

Broken down by supplier sector, the CPI-ATE shows a tendency to falling year-on-year price inflation for most of the main groups through most of the last two years. There was a slight fall in annualised average prices for imported consumer goods in 2010, whereas prices for

Figur 15. Consumer price indices. Percentage growth from the same quarter previous year



Source: Statistics Norway.

Norwegian agricultural and fish products were roughly unchanged from the previous year. Other Norwegian products increased in price by just over 2 per cent, while the rise in house rents and prices for other services was almost 3 per cent.

The rise in labour costs slowed markedly from 2009 to 2010, while labour productivity in the economy increased. Growth in unit labour costs was accordingly appreciably reduced. This has led to a slower rise in prices for goods and services produced in Norway.

Last year's fall in prices for imported consumer goods is not a new trend. For the past 12 years, prices for this product group have only risen twice, and then in the wake of a substantial depreciation of the krone. This is largely due to a shift towards imports from low-cost countries and productivity growth associated with electronic equipment. In recent years the pronounced global downturn in the wake of the financial crisis has also contributed. Developments in the exchange rate of the Norwegian krone also have a strong bearing on inflation in Norway. The lagged effects of the strengthening of the krone through 2009 probably also contributed to lower inflation last year.

Movements in the import-weighted krone exchange rate were moderate throughout 2010, and will therefore not generate any strong price impulses in the near future. International food prices are rising, however. The UN food price index, measured in NOK, rose by 25 per cent from January 2010 to January 2011.

Our projections point to a moderate increase in Norwegian inflationary impulses in the short term. There are prospects of a moderate rise in unit labour costs. Commodities and energy products are used in Norwegian production of consumer goods and increased commodity prices, including food and oil, coupled with the lagged effects of the high electricity prices



**Box 2.3 The power market in the period ahead**

In 2010 the average system price for power in the Nord Pool area was 42.5 øre/kWh, up from 30.6 øre/kWh in 2009. The average price for the first 46 days in 2011 was 52.7 øre/kWh. Forward prices on Nord Pool from 15 February this year indicate an average system price of 44.5 øre/kWh for 2011, a price rise of 5 per cent on 2010. Grid rent including electricity tax and value-added tax accounts for almost half of households' electricity expenses. This has increased by over 1 per cent from 2010. Electricity prices as measured in the consumer price index are projected to increase by 3 per cent in 2011, but to fall by 6 per cent in 2012.

2010 was much cooler than both 2009 and the average for the 10-year period 2001-2010. In isolation, this increased electricity consumption by about 4.6 TWh compared with 2009. At the same time, power consumption increased as a result of higher economic activity, also in power-intensive manufacturing, where power consumption increased by almost 2 TWh from 2009 to 2010. Higher power prices in 2010 had the effect of dampening the increase in power consumption to some extent. Total power consumption in 2010 was just under 7 TWh higher than in 2009. The beginning of 2011 has been milder than the meteorological normal level, and appreciably milder than the same period in 2010, with the result that power consumption so far in 2011 has been just under 2 TWh lower than in the same period in 2010. Assuming temperature conditions for the remainder of the year to be the same as the average for the 10-year period 2001-2010, total gross general consumption could be about 4 TWh lower on an annual basis than in 2010, even if increased economic activity in 2011 in isolation is assumed to push up power consumption slightly. Consumption by power-intensive industry appears likely to rise by a total of about 1 TWh, while other consumption, including grid losses, appears likely to remain unchanged. Consequently, the total consumption of power in Norway in 2011 may be about 127 TWh, compared with 130 TWh

last year. At the start of Week 6 this year, reservoirs held 26 percentage points less water than normal. There was somewhat less snow in the mountains than has been normal for this time of year, but slightly more than at the same time in 2010. As a result of low reservoir levels and relatively mild weather in early 2011, power production so far has been considerably (4 TWh) lower than during the same period in 2010. Given normal precipitation in the period ahead, inflow to hydroelectric power reservoirs will be substantially higher in 2011 than in 2010, but somewhat lower than in a normal year. This all implies that hydropower production may be considerably lower than in 2010. On the other hand, expected power prices, which are somewhat higher in 2011 than the level expected in 2012, mean that hydropower producers will produce somewhat more than the low reservoir levels would suggest. With power production of about 7 TWh from wind power, gas power and other thermal power sources, total Norwegian production could be about 113 TWh in 2011, 10 TWh less than in 2010. In such case, net power imports could amount to about 14 TWh in 2011, while net power imports were 7.5 TWh in 2010.

Nord Pool's forward price for 2012 is a good deal lower than observations and forward prices imply for 2011, but after that forward prices indicate initially stable and subsequently gradually rising system prices. The forward price for 2016 is nonetheless somewhat lower than for 2011. Although forward prices for the next few years do not vary much, the outcome range for future power prices in Norway is wide. Variations in inflow may have a strong impact on Norwegian power prices. Future coal, gas and CO<sub>2</sub> quota prices are also uncertain. These prices largely determine the power prices on the Continent, and indirectly affect Norwegian and Nordic power prices. In the coming five-year period it is not improbable that power prices in Norway for an individual year may be as low as 20 øre/kWh or as high as 60 øre/kWh.

last year and into 2011, will therefore probably push up the rise in prices for goods and services produced in Norway. At the same time, the negative impulses from imported consumer goods will probably wane. Norwegian inflation measured by the CPI-ATE may accordingly increase slightly going forward, probably as early as February. On an annual basis, we expect about the same growth as in 2010.

Given a further improvement of the economic situation in the period ahead, we will gradually see slightly stronger Norwegian inflationary impulses. Developments in energy prices and a stronger krone will probably have a dampening effect in 2012, and then inflation will not be much higher than in 2011. In 2013, inflation will rise further, and in 2014 we expect the rise in the CPI-ATE to approach 2.5 per cent. Increased wage growth as a result of the boom will contribute to this.

The overall consumer price index (CPI) is the most relevant index of developments in household purchasing

power. The difference between developments in the CPI-ATE and the CPI has for many years been dominated by developments in energy prices, and particularly electricity prices. A very sharp rise in prices at the beginning and end of 2010 contributed to electricity prices rising by over 21 per cent in 2010. This added 0.9 percentage point to CPI inflation. The oil price also rose, and pushed the CPI up to an annualised 2.5 per cent.

Electricity spot prices fell sharply from December last year to January this year, and forward prices indicate that they will probably fall further. We expect an annualised rise this year of about 3 per cent in electricity prices including grid rent and taxes. The year-on-year rise in the CPI in December was 2.8, and this was reduced to 2.0 per cent in January this year. It is likely to fall sharply in February, however, because of developments in electricity prices both last year and this year.

The oil price measured in NOK increased markedly through the fourth quarter of 2010 and into 2011. Even

### Box 2.4 Direct and indirect import shares

Consumption of goods and services can be divided into final deliveries – i.e. for consumption, investment and exports – and material inputs, which constitute a production factor. Some final deliveries are covered directly through imports, and this share is called the direct import share. The other deliveries come from domestic producers. However, domestic producers also use imported material inputs. The material input that is delivered by vendors and which is imported is defined as the indirect import share. It thus includes imported inputs from all vendors associated with the delivery in question. The total share of imports in a final delivery is thus at least as high as the direct share. Because the size of the import shares differs for the different products, a given change in a final delivery component will generate different impulses to Norwegian production.

Import shares are calculated by studying the effects on the import of the individual final delivery component in a static matrix model. This means excluding the effects of changes in relative prices, the ripple effects of changes in revenue earning, the need for changes in production capacity (investment) and possible effects on interest and exchange rates. The import shares in the table have been calculated for the years 2002-2007 and have been published earlier in different editions of Economic Survey. Because of the main revision of the national accounts (NR), final figures for 2008 are not yet available, and we have therefore been unable to calculate import shares for the current year.

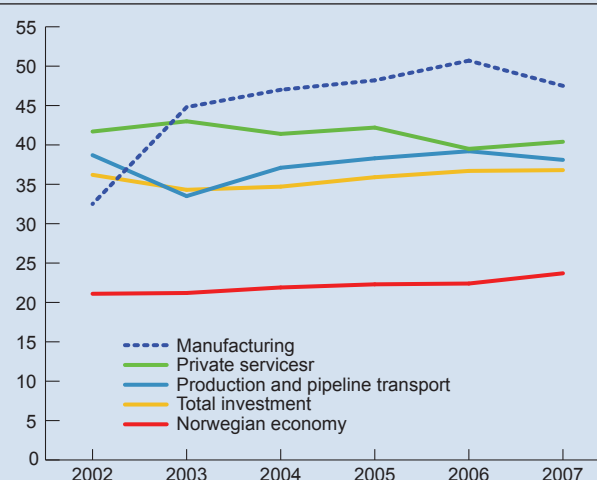
#### Change in import shares 2002-2007

The share of imports in the Norwegian economy increased appreciably through the last economic upturn. There may be several reasons for this. The strong growth in domestic demand led to capacity problems and loss of cost-competitiveness. Another contributory factor is the composition of the demand components in the Norwegian economy. Household consumption, by far the largest demand component, varies little in the course of an economic cycle compared to investment. The import share of capital goods is generally higher than for the other demand components, so that rising investment through

cyclical expansions generally helps to explain some of this increase.

In the table, the investment figures are broken down, and it is clear that manufacturing's share of imports increased. There is also a faint increase in petroleum production and pipeline transport, while the share for mainland private service industries fell. The service industries are roughly as large as the two other industries combined, and are thus important for understanding developments in overall import shares. The import shares in building and construction are substantially lower than for the other types of investment, and in the course of this period the share of investment in capital goods fell, which partly explains the increase in import shares.

**Import shares for various industries' investment, total investment and for the Norwegian economy as a whole 2002-2007**



Source: Statistics Norway.

**Import shares for various industries' investment, total investment and for the Norwegian economy as a whole 2002-2007**

	Manufacturing			Petroleum production and pipeline transport			Mainland private services			Investment Total share of imports	Norwegian economy Total share of imports
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total		
2002	18.4	14.1	32.5	25.6	13.1	38.7	28.9	12.8	41.7	36.2	21.1
2003	23.4	21.4	44.8	19.3	14.2	33.5	14.8	28.2	43.0	34.3	21.2
2004	34.8	12.2	47.0	20.6	16.5	37.1	29.9	11.5	41.4	34.7	21.9
2005	35.3	12.9	48.2	20.3	18.0	38.3	30.1	12.1	42.2	35.9	22.3
2006	37.2	13.5	50.7	23.7	15.5	39.2	25.3	14.2	39.5	36.7	22.4
2007	34.8	12.7	47.5	20.7	17.4	38.1	25.6	14.8	40.4	36.8	23.7

Source: Statistics Norway.

given a certain decline through the coming months, we assume that the average oil price will be markedly higher this year than last. This will lead to a slightly higher rise in the CPI than in the CPI-ATE this year. Increased indirect taxation will add slightly to this effect.

We assume that indirect taxes will be adjusted for inflation from 2012 to 2014. The situation in the power market is expected to be more normal in 2012, and electricity prices may therefore be lower. Oil prices may also be slightly under this year's level, calculated in NOK. CPI inflation will then be somewhat lower than CPI-ATE inflation in 2012.

In the calculations, we assume approximately unchanged real prices for electricity in 2013 and 2014. This is roughly in line with prices in the forward market and a slight increase in grid rent to finance the upgrading of the grid. Electricity prices so far ahead in time are shrouded in uncertainty, since precipitation and temperature are important factors in the development. Oil prices are assumed to increase somewhat more than the general rise in prices during these years. Overall this implies parallel developments in the CPI and the CPI-ATE in 2013 and 2014, but with a slightly higher rise in the CPI.

Table 5. **National accounts: Final expenditure and gross domestic product. At constant 2007 prices. Million kroner**

	Unadjusted		Seasonally adjusted							
	2009	2010	09:1	09:2	09:3	09:4	10:1	10:2	10:3	10:4
Final consumption expenditure of households and NPISHs	956 360	991 131	234 138	238 021	240 646	243 623	245 572	245 265	248 271	251 106
Household final consumption expenditure	916 510	950 158	224 375	228 148	230 628	233 405	235 497	235 066	237 977	240 687
Goods	469 721	488 628	113 526	116 453	118 815	120 695	120 977	120 585	121 996	123 966
Services	415 841	425 336	103 205	103 833	104 256	104 632	105 223	105 918	106 814	107 390
Direct purchases abroad by resident households	55 602	62 454	13 781	13 876	13 620	14 523	15 601	15 170	15 722	16 047
Direct purchases by non-residents	-24 654	-26 260	-6 138	-6 014	-6 063	-6 446	-6 304	-6 607	-6 555	-6 716
Final consumption expenditure of NPISHs	39 849	40 973	9 763	9 873	10 017	10 218	10 075	10 198	10 293	10 420
Final consumption expenditure of general government	487 046	497 770	120 217	121 401	122 939	122 478	122 270	123 758	125 847	126 402
Final consumption expenditure of central government	252 608	251 970	62 345	62 885	63 419	63 959	61 551	62 373	63 646	64 258
Central government, civilian	220 367	219 483	54 360	54 574	55 325	56 110	53 571	54 372	55 559	55 841
Central government, defence	32 241	32 487	7 985	8 311	8 095	7 849	7 980	8 001	8 087	8 418
Final consumption expenditure of local government	234 438	245 800	57 871	58 516	59 519	58 520	60 719	61 385	62 201	62 143
Gross fixed capital formation	476 379	433 878	124 682	118 160	112 049	121 056	103 628	112 038	104 590	113 067
Extraction and transport via pipelines	120 322	105 129	32 626	30 681	28 648	28 396	26 453	27 837	23 267	27 580
Service activities incidental to extraction	10 674	1 222	4 757	-143	1 593	4 467	249	420	341	213
Ocean transport	18 464	15 118	4 371	4 711	4 502	4 787	2 876	5 185	4 027	2 935
Mainland Norway	326 920	312 408	82 928	82 912	77 306	83 405	74 050	78 595	76 956	82 339
Mainland Norway excluding general government	247 139	237 326	66 120	63 661	58 829	58 469	56 993	59 972	58 861	61 307
Industries	175 542	168 232	46 704	45 473	41 517	41 686	40 169	42 967	41 439	43 709
Manufacturing and mining	23 834	19 679	6 944	6 823	5 356	4 730	5 510	5 085	4 448	4 810
Production of other goods	28 806	30 017	7 427	7 188	7 186	6 995	7 094	7 496	7 525	7 729
Services	122 902	118 535	32 333	31 462	28 975	29 962	27 566	30 386	29 465	31 169
Dwellings (households)	71 597	69 095	19 415	18 188	17 312	16 783	16 823	17 005	17 422	17 598
General government	79 780	75 081	16 809	19 250	18 477	24 936	17 058	18 623	18 095	21 032
Changes in stocks and statistical discrepancies	-33 383	42 362	-9 746	-4 201	-3 149	-13 966	5 221	19 651	6 674	11 991
Gross capital formation	442 996	476 240	114 936	113 959	108 899	107 091	108 850	131 689	111 264	125 058
Final domestic use of goods and services	1 886 401	1 965 142	469 291	473 381	472 484	473 192	476 692	500 712	485 382	502 566
Final demand from Mainland Norway	1 770 325	1 801 309	437 283	442 333	440 890	449 507	441 893	447 618	451 073	459 847
Final demand from general government	566 826	572 851	137 025	140 651	141 416	147 414	139 328	142 381	143 942	147 434
Total exports	1 007 996	994 886	252 737	245 460	254 173	255 600	255 862	244 367	247 935	246 244
Traditional goods	289 338	303 721	70 081	69 878	74 487	74 812	75 452	75 632	77 972	74 998
Crude oil and natural gas	464 838	434 643	118 674	112 900	118 339	115 166	112 339	110 104	105 054	105 977
Ships, oil platforms and planes	14 756	15 538	5 145	3 450	2 900	3 247	7 908	2 782	2 728	2 119
Services	239 065	240 984	58 836	59 233	58 448	62 376	60 163	55 848	62 181	63 150
Total use of goods and services	2 894 398	2 960 027	722 028	718 841	726 657	728 792	732 554	745 079	733 316	748 810
Total imports	638 407	693 948	155 100	157 373	161 562	164 663	164 972	177 613	174 169	176 011
Traditional goods	396 194	429 546	99 807	97 687	99 488	99 340	102 811	108 835	107 184	109 662
Crude oil and natural gas	4 893	5 927	619	818	1 873	1 602	835	1 931	2 201	971
Ships, oil platforms and planes	27 569	35 479	4 584	6 580	5 719	10 685	7 852	10 321	8 875	8 431
Services	209 751	222 996	50 090	52 287	54 481	53 036	53 475	56 526	55 910	56 946
Gross domestic product (market prices)	2 255 990	2 266 079	566 928	561 468	565 095	564 130	567 581	567 465	559 147	572 799
Gross domestic product Mainland Norway (market prices)	1 731 784	1 769 970	432 371	432 650	432 186	435 717	438 476	440 443	445 179	446 655
Petroleum activities and ocean transport	524 207	496 110	134 556	128 818	132 908	128 413	129 106	127 023	113 968	126 144
Mainland Norway (basic prices)	1 484 520	1 515 670	370 826	370 841	369 872	372 285	374 866	377 350	381 035	382 163
Mainland Norway excluding general government	1 143 877	1 167 398	286 123	285 953	284 648	286 480	288 409	290 215	293 553	294 478
Manufacturing and mining	201 844	206 117	50 555	49 845	50 352	50 902	50 776	51 119	51 907	52 252
Production of other goods	167 637	169 483	42 152	41 085	42 185	42 294	41 936	41 429	42 903	42 854
Services incl. dwellings (households)	774 395	791 797	193 416	195 023	192 111	193 284	195 698	197 668	198 743	199 371
General government	340 644	348 273	84 703	84 888	85 224	85 805	86 456	87 134	87 482	87 686
Taxes and subsidies products	247 263	254 299	61 545	61 810	62 314	63 432	63 610	63 093	64 144	64 492

Source: Statistics Norway.

Table 6. **National accounts: Final expenditure and gross domestic product. At constant 2007 prices. Percentage change from the previous period**

	Unadjusted		Seasonally adjusted							
	2009	2010	09:1	09:2	09:3	09:4	10:1	10:2	10:3	10:4
Final consumption expenditure of households and NPISHs	0.2	3.6	-0.5	1.7	1.1	1.2	0.8	-0.1	1.2	1.1
Household final consumption expenditure	0	3.7	-0.6	1.7	1.1	1.2	0.9	-0.2	1.2	1.1
Goods	-0.2	4	-0.9	2.6	2	1.6	0.2	-0.3	1.2	1.6
Services	0.8	2.3	-0.2	0.6	0.4	0.4	0.6	0.7	0.8	0.5
Direct purchases abroad by resident households	-6.8	12.3	-3	0.7	-1.8	6.6	7.4	-2.8	3.6	2.1
Direct purchases by non-residents	-7	6.5	-6.4	-2	0.8	6.3	-2.2	4.8	-0.8	2.5
Final consumption expenditure of NPISHs	3.4	2.8	1.9	1.1	1.5	2	-1.4	1.2	0.9	1.2
Final consumption expenditure of general government	4.7	2.2	2.3	1	1.3	-0.4	-0.2	1.2	1.7	0.4
Final consumption expenditure of central government	4.9	-0.3	2.3	0.9	0.8	0.9	-3.8	1.3	2	1
Central government, civilian	5.6	-0.4	3.2	0.4	1.4	1.4	-4.5	1.5	2.2	0.5
Central government, defence	0.5	0.8	-3	4.1	-2.6	-3	1.7	0.3	1.1	4.1
Final consumption expenditure of local government	4.6	4.8	2.3	1.1	1.7	-1.7	3.8	1.1	1.3	-0.1
Gross fixed capital formation	-7.4	-8.9	-5.4	-5.2	-5.2	8	-14.4	8.1	-6.6	8.1
Extraction and transport via pipelines	5.8	-12.6	11.6	-6	-6.6	-0.9	-6.8	5.2	-16.4	18.5
Service activities incidental to extraction	98.2	-88.5	289.2	-103	..	180.5	-94.4	68.6	-18.9	-37.6
Ocean transport	-25.4	-18.1	-53.3	7.8	-4.4	6.3	-39.9	80.3	-22.3	-27.1
Mainland Norway	-11.7	-4.4	-9.9	0	-6.8	7.9	-11.2	6.1	-2.1	7
Mainland Norway excluding general government	-16.4	-4	-8.9	-3.7	-7.6	-0.6	-2.5	5.2	-1.9	4.2
Industries	-15.4	-4.2	-10.3	-2.6	-8.7	0.4	-3.6	7	-3.6	5.5
Manufacturing and mining	-30	-17.4	-20.2	-1.7	-21.5	-11.7	16.5	-7.7	-12.5	8.1
Production of other goods	-17.4	4.2	-9	-3.2	0	-2.7	1.4	5.7	0.4	2.7
Services	-11.3	-3.6	-8.2	-2.7	-7.9	3.4	-8	10.2	-3	5.8
Dwellings (households)	-18.9	-3.5	-5.1	-6.3	-4.8	-3.1	0.2	1.1	2.5	1
General government	7	-5.9	-13.7	14.5	-4	35	-31.6	9.2	-2.8	16.2
Changes in stocks and statistical discrepancies	-231.2	-226.9	-321.8	-56.9	-25	343.5	-137.4	276.4	-66	79.7
Gross capital formation	-17.9	7.5	-15.6	-0.9	-4.4	-1.7	1.6	21	-15.5	12.4
Final domestic use of goods and services	-3.7	4.2	-4	0.9	-0.2	0.1	0.7	5	-3.1	3.5
Final demand from Mainland Norway	-1.1	1.8	-1.7	1.2	-0.3	2	-1.7	1.3	0.8	1.9
Final demand from general government	5	1.1	0	2.6	0.5	4.2	-5.5	2.2	1.1	2.4
Total exports	-4	-1.3	-2.9	-2.9	3.5	0.6	0.1	-4.5	1.5	-0.7
Traditional goods	-8.2	5	-6.3	-0.3	6.6	0.4	0.9	0.2	3.1	-3.8
Crude oil and natural gas	-1.2	-6.5	-0.6	-4.9	4.8	-2.7	-2.5	-2	-4.6	0.9
Ships, oil platforms and planes	3.9	5.3	39.9	-33	-15.9	12	143.6	-64.8	-1.9	-22.3
Services	-4.5	0.8	-5.8	0.7	-1.3	6.7	-3.5	-7.2	11.3	1.6
Total use of goods and services	-3.8	2.3	-3.6	-0.4	1.1	0.3	0.5	1.7	-1.6	2.1
Total imports	-11.4	8.7	-13.9	1.5	2.7	1.9	0.2	7.7	-1.9	1.1
Traditional goods	-13.1	8.4	-5.4	-2.1	1.8	-0.1	3.5	5.9	-1.5	2.3
Crude oil and natural gas	31.5	21.1	-63.1	32.3	128.9	-14.5	-47.9	131.3	14	-55.9
Ships, oil platforms and planes	-30.1	28.7	-73.2	43.6	-13.1	86.8	-26.5	31.4	-14	-5
Services	-5.5	6.3	-10.2	4.4	4.2	-2.7	0.8	5.7	-1.1	1.9
Gross domestic product (market prices)	-1.4	0.4	-0.4	-1	0.6	-0.2	0.6	0	-1.5	2.4
Gross domestic product Mainland Norway (market prices)	-1.3	2.2	-0.4	0.1	-0.1	0.8	0.6	0.4	1.1	0.3
Petroleum activities and ocean transport	-1.7	-5.4	-0.3	-4.3	3.2	-3.4	0.5	-1.6	-10.3	10.7
Mainland Norway (basic prices)	-1	2.1	-0.5	0	-0.3	0.7	0.7	0.7	1	0.3
Mainland Norway excluding general government	-2.1	2.1	-1.1	-0.1	-0.5	0.6	0.7	0.6	1.1	0.3
Manufacturing and mining	-5.9	2.1	-3.6	-1.4	1	1.1	-0.2	0.7	1.5	0.7
Production of other goods	-3	1.1	0	-2.5	2.7	0.3	-0.8	-1.2	3.6	-0.1
Services incl. dwellings (households)	-0.8	2.2	-0.6	0.8	-1.5	0.6	1.2	1	0.5	0.3
General government	2.6	2.2	1.5	0.2	0.4	0.7	0.8	0.8	0.4	0.2
Taxes and subsidies products	-3.1	2.8	-0.1	0.4	0.8	1.8	0.3	-0.8	1.7	0.5

Source: Statistics Norway.



Table 7. **National accounts: Final expenditure and gross domestic product. Price indices. 2007=100**

	Unadjusted		Seasonally adjusted							
	2009	2010	09:1	09:2	09:3	09:4	10:1	10:2	10:3	10:4
Final consumption expenditure of households and NPISHs	106.2	108.2	105.4	106.4	106.4	106.1	108.6	107.8	107.8	108.8
Final consumption expenditure of general government	109.5	111.5	109	109.6	109.6	109.6	111.4	111	111.4	112.3
Gross fixed capital formation	109.1	114.3	108.1	108.9	111	108.5	112.6	112.6	115.6	116.6
Mainland Norway	108.1	110.8	107.5	108.1	109.3	107.7	109.5	110.2	111.6	112
Final domestic use of goods and services	107.5	110.1	107.4	107.7	107.2	107.3	110.1	109.7	109.5	110.6
Final demand from Mainland Norway	107.4	109.6	106.8	107.6	107.8	107.4	109.5	109.1	109.5	110.3
Total exports	100.1	105.6	102.3	98.8	99.1	99.2	101.8	105.8	104.9	110.3
Traditional goods	96.1	99.6	97.6	95.9	97.3	94	95.2	99	100.9	103.3
Total use of goods and services	104.9	108.6	105.6	104.6	104.4	104.5	107.2	108.4	107.9	110.5
Total imports	102.8	102.1	105.3	104.3	102.6	98.8	102.5	102	101.3	102.9
Traditional goods	103.3	102.9	106	104	102.9	99.9	101.3	103.3	102.3	105
Gross domestic product (market prices)	105.5	110.5	105.7	104.7	104.9	106.1	108.6	110.4	110	112.9
Gross domestic product Mainland Norway (market prices)	106.6	109.9	105.2	106.6	107.2	107.2	108.6	109.8	110.2	110.7

Source: Statistics Norway.

Table 8. **National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous period**

	Unadjusted		Seasonally adjusted							
	2009	2010	09:1	09:2	09:3	09:4	10:1	10:2	10:3	10:4
Final consumption expenditure of households and NPISHs	2.5	1.9	0	0.9	0	-0.2	2.4	-0.7	0	0.9
Final consumption expenditure of general government	3.5	1.9	0.2	0.6	0	0	1.6	-0.3	0.3	0.8
Gross fixed capital formation	2.7	4.8	-1.5	0.8	1.9	-2.2	3.7	0	2.7	0.9
Mainland Norway	2.5	2.5	0	0.6	1.1	-1.4	1.7	0.6	1.3	0.3
Final domestic use of goods and services	3.5	2.4	1.6	0.3	-0.4	0.1	2.6	-0.3	-0.3	1
Final demand from Mainland Norway	2.8	2	0	0.7	0.2	-0.4	2	-0.4	0.3	0.8
Total exports	-14.1	5.5	-9.5	-3.4	0.3	0.1	2.6	3.9	-0.9	5.2
Traditional goods	-6.1	3.6	-6.6	-1.8	1.5	-3.5	1.3	4	2	2.4
Total use of goods and services	-3.1	3.5	-2.4	-0.9	-0.2	0.1	2.6	1.2	-0.5	2.4
Total imports	-0.2	-0.7	0.4	-1	-1.6	-3.8	3.8	-0.4	-0.7	1.5
Traditional goods	-1.3	-0.3	-2.4	-1.9	-1.1	-2.9	1.4	2	-1	2.7
Gross domestic product (market prices)	-4	4.7	-3.3	-0.9	0.2	1.2	2.3	1.7	-0.4	2.6
Gross domestic product Mainland Norway (market prices)	3.3	3	0.2	1.4	0.6	0	1.2	1.1	0.4	0.4

Source: Statistics Norway.

# Main economic indicators 2001-2014

Accounts and forecasts. Percentage change from previous year unless otherwise noted

	2001	2002	2003	2004	2005	2006	2007	2008*	2009*	2010*	Forecasts			
											2011	2012	2013	2014
<b>Demand and output</b>														
Consumption in households etc.	2.1	3.1	2.8	5.6	4.0	4.8	5.4	1.6	0.2	3.6	3.7	4.0	4.5	3.4
General government consumption	4.6	3.1	1.7	1.5	0.7	1.9	3.0	4.1	4.7	2.2	2.3	2.7	2.5	2.8
Gross fixed investment	-1.1	-1.1	0.2	10.2	13.3	11.7	12.5	2.0	-7.4	-8.9	7.7	8.2	6.6	4.8
Extraction and transport via pipelines	-4.6	-5.4	15.9	10.2	18.8	4.3	6.3	5.1	5.8	-12.6	10.5	6.8	2.0	3.2
mainland Norway	3.9	2.3	-3.6	9.3	12.7	11.9	15.7	-1.4	-11.7	-4.4	6.8	9.0	8.4	5.5
Industries	2.5	4.0	-11.6	8.4	19.2	17.1	25.5	1.7	-15.4	-4.2	6.4	8.0	7.1	6.4
Housing	8.1	-0.7	1.9	16.3	10.8	4.1	2.9	-12.1	-18.9	-3.5	8.7	9.3	11.0	5.2
General government	2.7	1.7	10.4	2.5	1.3	11.6	9.6	4.7	7.0	-5.9	6.0	10.8	9.0	3.7
Demand from Mainland Norway <sup>1</sup>	3.0	3.0	1.4	5.0	4.6	5.3	6.7	1.6	-1.1	1.8	3.8	4.6	4.7	3.6
Stockbuilding <sup>2</sup>	-1.6	0.2	-0.3	1.4	0.5	0.1	-1.4	-0.3	-2.6	3.4	-0.1	0.0	0.0	0.0
Exports	4.3	-0.3	-0.2	1.1	1.1	0.0	2.3	1.0	-4.0	-1.3	0.4	1.3	1.3	2.3
Crude oil and natural gas	6.6	2.4	-0.6	-0.5	-5.0	-6.5	-2.4	-2.0	-1.2	-6.5	-1.8	0.1	-1.4	-0.4
Traditional goods	1.8	0.6	2.9	3.4	5.0	6.2	8.5	4.2	-8.2	5.0	3.6	1.9	3.1	4.7
Imports	1.7	1.0	1.4	8.8	8.7	8.4	8.6	4.3	-11.4	8.7	5.0	5.5	6.2	5.2
Traditional goods	4.5	3.0	5.2	10.9	8.1	11.5	8.2	-0.5	-13.1	8.4	6.2	7.7	7.6	6.3
Gross domestic product	2.0	1.5	1.0	3.9	2.7	2.3	2.7	0.8	-1.4	0.4	2.1	2.9	2.5	2.4
Mainland Norway	2.0	1.4	1.3	4.4	4.6	4.9	5.6	1.8	-1.3	2.2	3.3	3.8	3.6	3.2
Manufacturing	-0.5	-0.4	3.0	5.7	4.2	3.1	3.2	2.6	-5.9	2.1	4.5	3.9	2.5	2.7
<b>Labour market</b>														
Total hours worked. Mainland Norway	-1.6	-0.9	-2.1	1.7	1.4	3.1	4.3	3.4	-1.9	0.6	1.5	2.0	1.8	2.0
Employed persons	0.4	0.4	-1.0	0.5	1.2	3.6	4.1	3.2	-0.4	-0.2	1.5	2.1	2.2	1.6
Labor force <sup>3</sup>	0.5	0.7	-0.1	0.3	0.8	1.6	2.5	3.4	0.0	0.5	1.8	1.8	2.0	1.3
Participation rate (level) <sup>3</sup>	73.5	73.5	72.9	72.6	72.4	72.0	72.8	73.9	72.8	71.9	72.3	72.7	73.4	73.6
Unemployment rate (level) <sup>3</sup>	3.5	3.9	4.5	4.5	4.6	3.4	2.5	2.6	3.2	3.6	3.6	3.2	2.9	2.6
<b>Prices and wages</b>														
Wages per standard man-year	4.8	5.7	4.5	3.5	3.3	4.1	5.4	6.3	4.2	3.6	3.6	4.1	4.6	5.8
Consumer price index (CPI)	3.0	1.3	2.5	0.4	1.6	2.3	0.8	3.8	2.1	2.5	1.8	1.5	2.2	2.6
CPI-ATE <sup>4</sup>	2.6	2.3	1.1	0.3	1.0	0.8	1.4	2.6	2.6	1.4	1.5	1.7	2.0	2.5
Export prices. traditional goods	-1.8	-9.1	-0.9	8.5	4.1	11.4	2.7	2.4	-6.1	3.6	8.0	3.3	2.9	3.7
Import prices. traditional goods	-1.6	-7.2	-0.4	4.0	0.5	4.0	4.1	4.7	-1.3	-0.3	1.5	-0.2	1.7	2.5
Housing prices <sup>5</sup>	7.0	5.0	1.7	7.7	9.5	13.7	12.6	-1.1	1.9	8.3	6.8	6.3	6.5	5.8
<b>Income, interest rates and exchange rate</b>														
Household real income	-0.3	8.0	4.4	3.6	7.6	-6.4	6.3	3.6	4.5	3.8	3.1	4.2	3.6	3.8
Household saving ratio (level)	3.1	8.4	9.1	7.4	10.2	0.1	1.5	3.8	7.5	7.4	6.9	7.3	6.5	7.0
Money market rate (level)	7.2	6.9	4.1	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.8	3.8	4.8	5.8
Lending rate. banks (level) <sup>6</sup>	8.8	8.4	6.5	4.2	3.9	4.3	5.7	7.3	4.9	4.5	4.8	5.4	6.2	7.1
Real after-tax lending rate. banks (level)	3.3	4.8	2.2	2.5	1.3	0.7	3.3	1.5	1.4	0.9	1.7	2.4	2.3	2.6
Importweighted krone exchange rate (44 countries) <sup>7</sup>	-3.1	-8.5	1.3	3.0	-3.9	0.7	-1.8	0.0	3.3	-3.8	-0.2	-1.0	0.2	0.6
NOK per euro (level)	8.05	7.51	8.00	8.37	8.01	8.05	8.02	8.22	8.73	8.01	7.89	7.82	7.84	7.89
<b>Current account</b>														
Current balance (bill. NOK)	247.5	192.3	195.9	221.6	316.6	372.1	320.5	449.1	311.8	323.0	325.5	321.7	319.6	351.5
Current balance (per cent of GDP)	16.1	12.6	12.3	12.7	16.3	17.2	14.1	17.8	13.1	12.9	12.3	11.5	10.8	11.1
<b>International indicators</b>														
Exports markets indicator	0.8	1.3	3.4	7	6.3	8.6	5.5	0.7	-11.3	10.4	4.3	3.6	5.0	7.5
Consumer price index. euro-area	2.3	2.3	2.1	2.1	2.2	2.2	2.2	3.3	0.3	1.7	2.4	1.7	1.9	2.0
Money market rate. euro(level)	4.2	3.3	2.3	2.1	2.2	3.1	4.3	4.6	1.2	0.7	1.1	1.6	2.4	3.2
Crude oil price NOK (level) <sup>8</sup>	223	198	201	255	355	423	422	536	388	484	529	516	560	609

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

<sup>2</sup> E2 Change in stockbuilding. Per cent of GDP. <sup>3</sup> According to Statistics Norway's labour force survey(LFS). Break in data series in 2006.

<sup>4</sup> CPI adjusted for tax changes and excluding energy products. <sup>5</sup> Break in data series in 2004. <sup>6</sup> Yearly average.

<sup>7</sup> Increasing index implies depreciation. <sup>8</sup> Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was 15. February.