

# Economic survey

## Perspectives

Growth in the Norwegian economy in 2013 was markedly lower than the previous year. The economic recovery through 2011 and 2012 began to falter towards the end of 2012, and last year mainland GDP growth was somewhat lower than trend. Unemployment rose from 3.2 to 3.5 per cent. At the same time, growth is showing signs of picking up in many other countries. Among Norway's most important trading partners, this improvement is most pronounced in the USA, the UK and Sweden, whereas the Danish economy has barely grown for three years. Euro area GDP is now also growing, albeit cautiously, after a long recession. Unemployment levels are very high, but there are signs of improvement in many countries. Because fiscal policy remains tight in much of the OECD area, we do not envisage a cyclical upturn for Norway's trading partners collectively before 2015. Interest rates will therefore remain low in the near term.

Weak growth in demand from abroad in 2013 coincided with low or moderate growth in most domestic demand components. A notable exception was petroleum investment, which grew 18 per cent last year. This investment was the essential reason that mainland economic growth was only slightly below trend, and that the increase in unemployment was not greater. In contrast to other countries, Norway also benefited from the fact that growth in general government demand was on a level with trend growth in the mainland economy.

In the period ahead we expect no significant growth in petroleum investment. Slightly stronger growth in demand from several other areas is expected to compensate for the loss of this powerful stimulus. Exports in particular may increase somewhat more as growth in export markets gathers pace. This development may be boosted by slightly improved cost-competitiveness as a result of the depreciation of the krone through most of 2013. Fiscal policy also appears likely to be more expansionary this year than last. Expansionary impulses may also be expected in the following years, even if the anticipated fiscal policy mix dampens the expansionary effect. Economic growth in the next two years is accordingly expected to remain on a par with last year's, and unemployment is expected to rise even more.

Economic policy involves stimulating the development and efficient use of resources so that they yield the highest possible overall output, with equitable distribution. In the short term, business cycle management by means of monetary and fiscal policy is intended to contribute to the utilisation of available production factors through high and stable employment. Unemployment is a waste of resources, and long-term inactivity depletes knowledge and may thereby also lead to a permanent fall in potential output.

In the slightly longer term, increased labour input and investment in education and real capital may promote economic growth and greater prosperity. Although unemployment in Norway is low, and a relatively large number are in work, there is still a potential for higher labour force participation. However, increased input of production factors is a growth source that will eventually be exhausted. In the long term, productivity growth, i.e. producing more out of a given quantity of factor inputs, will be the most important source of growth. But productivity growth rarely occurs spontaneously. Creating or employing new technology requires knowledge and investment of resources, as well as a willingness and capacity to adjust. At enterprise level, the capacity to adjust implies adapting to and utilising changed market opportunities, creating new products and improving production processes. At socio-economic level, the capacity to adjust additionally means that resources are at all times used in those enterprises and sectors that contribute most to overall welfare.

Norway has a high income level. The purchasing power of the average income is the highest in the OECD by a good margin, and is more equitably distributed than in most other countries. Even excluding the excess return from petroleum activities, Norway has a high per capita income compared with the OECD average. This is largely a result of our high productivity, measured as mainland GDP per hour worked. Since 2005, however, productivity growth has been considerably lower than previously, although it has approached more normal levels in the last two years. The decline in productivity growth is not unique to Norway. The weak trend in Norway over the past decade is fairly similar to what we have seen in other European countries during the same period, while productivity growth has slowed less in the USA. Productivity growth tends to fluctuate in pace with the economic cycle, and the financial crisis may explain some of the decline in productivity growth over the past decade. However, as Norway has not been as hard hit by the financial crisis and its ripple effects as other countries, there is good reason to wonder whether the Norwegian contraction is due to uniquely Norwegian structural forces. Since productivity growth is a key factor for greater material prosperity, and in isolation even moderate differences in annual productivity growth will aggregate into major differences in income level

over time, lower productivity growth may be cause for concern. This is also some of the background to the appointment of the Government Productivity Commission.

But to what extent should productivity be a guideline for fiscal policy? Policy should be oriented towards our achieving maximum welfare from the resources available to us. In many cases this will result in greater productivity. But the criterion for whether a measure or reform should be implemented should not be whether it improves productivity, but whether it is socio-economically profitable. It is the difference between the sum of the gains and costs associated with a project, compared with the alternatives, that is the relevant criterion for whether action should be taken or not. Greater mobilisation of factor inputs may raise the income level and hence be profitable, while not necessarily resulting in increased profitability. A couple of examples may illustrate this: Employing greater numbers from marginal groups will increase overall output, have a favourable effect on government finances and often enhance the quality of life of those who get into work. If their productivity is below average, however, it will cause a slowing of productivity growth, even though the measure is socio-economically profitable. Similarly, an increase in day-care cover for the youngest children, where the staffing per child is higher, will reduce the measured productivity of day-care centres, though such a reform may be socio-economically profitable viewed as a whole.

For an enterprise, it will always be advantageous for production to be as efficient as possible. At the same time, increased productivity is not synonymous with high profitability. An enterprise's profit is determined not only by the efficiency of its production, but also by the prices the enterprise achieves for its products. Many industries are constantly under pressure from international competition to make their production more efficient. These industries must have high productivity growth in order to survive, but over time market competition resulting in lower prices causes the productivity gains to benefit the consumers. At enterprise level, high productivity growth often accompanies a weak or negative rise in product prices. The telecommunications industry is one such example. In the course of 20 years, the productivity of this industry has tripled in Norway, as measured in the national accounts, while at the same time prices have fallen by about 60 per cent. The return on capital, or profitability, has thus remained fairly stable.

On the other hand, a company's profit may increase without it becoming more productive, if prices for what it produces increase and competition does not push them down again. The petroleum industry is an example of this. High prices in this industry have made it profitable to maintain production at a high level and to invest more in fields with low productivity. And whereas prices for petroleum products have tripled in the course of a decade, productivity has almost halved.

At national level, too, differences in income growth may be due to differences in price movements rather than differences in productivity growth. A substantial portion of the growth in Norwegian real disposable income since the turn of the millennium is a result of terms of trade gains; in other words, the prices for what we export have risen more than the prices for what we import.

Lower productivity growth for the country as a whole may be due to reduced growth in many industries, but may also be due to the industry structure shifting towards industries with lower productivity growth. Such shifts in industry structure are not necessarily undesirable; on the contrary, they may be a result of a rise in prosperity. In a historical perspective, the transition from agriculture via industry to services has largely been driven by strong productivity growth in some industries releasing production resources and generating income that has increased demand for goods and services from industries with lower productivity growth. Slightly simplified, it may be said that, over time, high productivity growth that translates into high income growth results in a high level of income that shifts demand towards services that are both relatively labour-intensive and that have relatively limited potential for productivity growth. A good example of this is care for children and the elderly. Such changes in industry structure are a matter of choice, and to some extent a result of a higher level of welfare. Therefore they should not cause concern, even if they result in lower productivity growth.

As the analysis in the current edition of Economic trends shows, a decline in productivity growth in recent years can be largely attributed to developments in some private service segments. There has also been low productivity growth in the construction sector for a number of years. There is reason to believe that this is partly attributable to Norway's strong population and employment growth over the past decade, driven by high immigration in particular. The moderate investment growth, particularly since the financial crisis, has resulted in low growth in value added per hour worked, which pushes down growth in labour productivity. Immigration may also have had a direct effect on productivity growth, in that immigrants have largely been employed in industries with a lower productivity level.

Higher business sector productivity does not bring about an automatic improvement in Norway's competitiveness in relation to other countries. There is a crucial difference between the effects for the individual enterprise and for the economy as a whole. If wage growth is determined by the ability to pay in a sufficiently large internationally exposed sector, there is no correlation between the productivity of Norwegian enterprises and their ability to compete with foreign enterprises. In particular, high productivity growth in Norwegian enterprises is neutralised by equally high wage growth. This correlation is a consequence of the institutional system of wage bargaining, where wage growth in manufacturing is determined by the sum of the rise in prices and the productivity growth of this industry, not of the economy as a whole. Because consumer price inflation has been lower than the rise in product prices since 1990, employee purchasing power has increased but has not been matched by an equal rise in manufacturers' real costs. Since growth in hourly wages in the non-manufacturing sector largely shadows manufacturing, this increase in purchasing power has benefited all Norwegian wage-earners.

Ensuring productivity growth in enterprises is in principle a task for the enterprises themselves. Given smoothly functioning markets, competition among enterprises will ensure the survival of the most efficient and productive. The role of the government is to provide the right operating environment, including sound infrastructure, a smoothly functioning legal and fiscal system, an efficient public administration and a good educational system, and to ensure that there is effective competition. Intervention and regulation to improve business sector productivity should be a result of demonstrable and substantial market failure.

By contrast, the authorities have prime responsibility for ensuring productivity growth in the public sector. This is an important responsibility, both because the Norwegian public sector is large, and because all productivity growth in this sector benefits Norway. A lack of market competition and an absence of well defined profitability targets means that the incentives for efficient production are not the same as for private enterprises. It is then the government itself who must see to the establishment of mechanisms that prompt efficient use of resources and higher productivity. An efficient public sector is not just about doing things correctly (production efficiency). It is also about the result of one's activity being optimal (performance efficiency), which means doing the right things on the right scale. Rapid case processing and efficient production are all very well and good, and comparisons of activities within different types of government service production often show that there may be substantial efficiency gains to be made if activities approach a "national best practice". However, there is reason to remember that there are often large productivity differences also in the private sector between the very efficient and the less efficient enterprises. But the criterion for success in the public sector, in addition to efficient production, must be to effectively achieve the targets of the enterprises. Establishing good incentive structures for public enterprises, to ensure that the right action is taken, is demanding. One such example is higher education, where institutions receive a financial reward for the production of credits. Viewed in isolation, this results in better through-put, which tends to be perceived as higher productivity. However, this does not ensure that students learn what society needs them to know, and what the labour market is demanding. Educational institutions have incentives for offering what students want, but this is not always the same as what society needs. The solution to this is not immediately obvious, and individual freedom of choice is highly valued by society. But this illustrates that although it is important to stimulate public enterprises to be productive, it is equally important to define the end to which they must be productive, and to set up the operating environment and incentives accordingly.

Productivity growth is important. It is nonetheless socio-economic profitability that should govern the authorities' use of resources, even when these resources are being spent on productivity-promoting measures. Mobilising marginal groups in the labour market may increase welfare but, viewed in isolation, it probably reduces productivity. Society may fail to realise substantial wealth if productivity growth becomes an end in itself.

# Economic developments in Norway

Close to two years of a moderate cyclical upturn gave way to a period of slight decline at the end of 2012. Mainland GDP growth increased somewhat through the second half of 2013, and rose in the fourth quarter to slightly under trend growth, estimated at just under 2.5 per cent as an annual rate. Growth in public investment and consumption and housing investment picked up slightly through the second half of last year. A clear increase in household spending in the first quarter of last year was followed by half a year with almost no

increase. In the fourth quarter, consumption picked up somewhat again, but monthly indicators for goods consumption do not show any growth through the last few months of last year and January this year.

The preliminary national accounts figures show that growth in mainland GDP as an annual average was 2.0 per cent in 2013, down from 3.4 per cent the previous year. Growth in 2013 was clearly higher in manufacturing than in the other main categories of the

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

	2012*	2013*	Seasonally adjusted			
			13:1	13:2	13:3	13:4
<b>Demand and output</b>						
Consumption in households etc.	3.0	2.1	1.0	0.2	0.0	0.4
General government consumption	1.8	1.6	0.3	0.1	0.3	0.5
Gross fixed investment	8.3	8.7	1.4	5.4	-0.9	-1.1
Mainland Norway	4.5	4.7	2.6	1.8	-2.7	0.9
Extraction and transport via pipelines	14.6	18.0	1.9	7.8	6.3	-4.5
Final domestic demand from Mainland Norway <sup>1</sup>	2.9	2.4	1.1	0.5	-0.5	0.5
Exports	1.1	-3.9	-1.9	1.9	-0.8	-3.2
Crude oil and natural gas	0.7	-7.3	-4.3	3.0	0.5	-5.5
Traditional goods	1.7	0.8	0.6	0.1	-0.9	-0.1
Imports	2.3	2.5	1.5	1.1	0.9	-1.1
Traditional goods	2.4	2.5	2.3	0.2	0.2	0.4
Gross domestic product	2.9	0.6	-0.4	1.1	0.8	-0.2
Mainland Norway	3.4	2.0	0.6	0.3	0.5	0.6
<b>Labour market</b>						
Man-hours worked	2.0	0.6	0.2	0.4	0.4	0.4
Employed persons	2.2	1.2	0.3	0.3	0.4	0.3
Labour force <sup>2</sup>	1.8	1.0	0.2	0.0	0.6	0.3
Unemployment rate. level <sup>2</sup>	3.2	3.5	3.5	3.5	3.5	3.5
<b>Prices and wages</b>						
Annual earnings	4.0	3.9	..	..	..	..
Consumer price index (CPI) <sup>3</sup>	0.8	2.1	1.2	2.0	3.0	2.3
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>3</sup>	1.2	1.6	1.0	1.4	2.0	2.0
Export prices. traditional goods	-3.6	3.1	1.2	1.9	0.4	2.5
Import prices. traditional goods	0.6	2.1	-0.6	1.2	2.4	1.6
<b>Balance of payment</b>						
Current balance. bill. NOK	417.2	319.5	87.1	78.8	73.1	80.5
<b>Memorandum items (unadjusted level)</b>						
Money market rate (3 month NIBOR)	2.2	1.8	1.9	1.8	1.7	1.7
Lending rate. credit loans <sup>4</sup>	3.9	4.0	3.8	4.0	4.1	4.1
Crude oil price NOK <sup>5</sup>	649	639	634	603	657	663
Importweighted krone exchange rate. 44 countries. 1995=100	87.1	88.9	85.6	87.5	90.1	92.6
NOK per euro	7.48	7.80	7.43	7.62	7.93	8.23

<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.

mainland economy, where developments were very similar. Among non-mainland industries, there was very strong growth in services related to oil and gas extraction, and to some extent also shipping. However, a pronounced decline in petroleum production led to overall GDP only rising by 0.6 per cent last year.

During the past two years, demand in Norwegian export markets has moved on a very weak trend. Coupled with the high cost level in Norway, this has led to a very modest rise in traditional exports. Mainland demand has generally also grown moderately. Growth in household demand fell appreciably from 2012 to 2013, approaching trend growth in mainland output. The same is true of total general government demand. Mainland business investment, which rose by close to 4 per cent in 2012, increased by only 1 per cent last year. This investment thus remained very far below the peak level in 2007.

Petroleum-related investment increased by a full 18 per cent last year, and represented a clear exception from the overall growth picture. This was a major reason why growth in the mainland economy was only slightly below trend. Calculations indicate that about one-third of mainland GDP growth in 2013 can be attributed to the increase in petroleum investment. This is considered in more depth in Box 4 below.

Relatively weak activity growth last year led to employment rising markedly less than the previous year, and unemployment rising from 3.2 to 3.5 per cent. This contributed to wage growth declining by 0.1 percentage point, despite the fact that inflation picked up. A weaker krone in 2013 than in 2012 led to underlying inflation, measured by the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE), rising from 1.2 to 1.6 per cent. Higher electricity prices contributed to a further increase in the total consumer price index, from 0.8 to 2.1 per cent.

We expect the strong growth impulses from petroleum investment to come to an end in the period ahead. The investment level during the projection period is expected to remain virtually unchanged. This strong growth impetus is expected to be replaced by higher growth in several other areas, including increased material inputs in petroleum production. Furthermore, somewhat higher growth is expected in the export markets, which will push up Norwegian exports. This development is supported by signs of improvement in cost-competitiveness as a result of the weakening of the krone that began in February last year and continued into 2014. However, we must wait until 2015 and subsequent years before we can expect the global economy to really gain momentum and boost exports more appreciably. The krone exchange rate is nevertheless expected to continue the appreciation that began in February. In isolation, this will curb activity in internationally exposed industry in the next few years.

Fiscal policy, measured in terms of the structural budget deficit, will probably be as expansionary this year as last year. In the years ahead we foresee growth in general government demand in line with trend growth in the economy, and a gradual slight increase. Newly introduced tax relief – equivalent to an estimated annual loss of revenue amounting to  $\frac{1}{4}$  percentage point of mainland GDP – coupled with clear growth in transfers, will result in a slight increase in mainland economic growth.

Mainland GDP is expected to increase by about as much in 2014 as in 2013, and slightly more in 2015. We do not expect growth to rise appreciably above trend again, thereby introducing a new cyclical expansion, until 2016. Increased household income will lead to higher consumption growth. Mainland business investment is also shadowing the general cyclical upturn that is particularly evident in the growth in traditional export activity. The decline in house prices is most likely nearing the end, and weak real growth is expected as of next year. Housing investment will also start to increase slightly in 2016, following two years of a moderate decline.

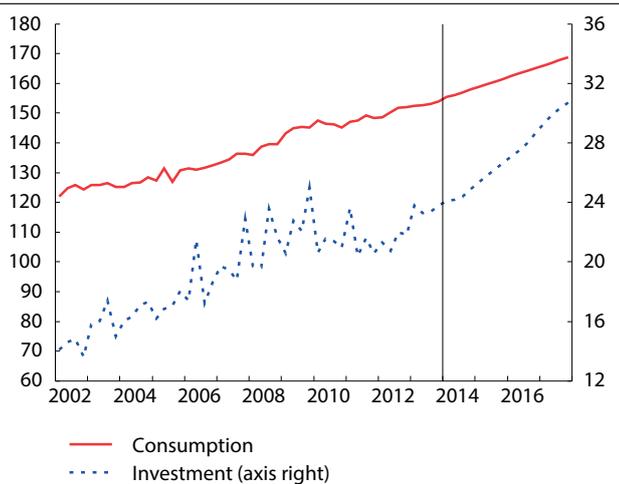
Continued weak growth in activity is expected to contribute to a modest increase in employment during the next few years. Unemployment may therefore continue to rise to 3.9 per cent in 2015. The cyclical upturn in 2016 and 2017 is expected to result in slightly higher employment growth, but not enough to reduce unemployment until 2017, as the labour supply will also increase. A somewhat weaker labour market will cause wage growth to be slightly lower than during the past three years. Squeezed profitability in a more cost-conscious petroleum sector, and eventually impulses from a slightly stronger krone, will curb the positive price and volume impulses from Norwegian export markets. We nevertheless expect the profitability in the sector to improve through the projection period.

Inflation in Norway will to a large extent reflect last year's exchange rate depreciation, and will rise somewhat in 2014. The effect will be temporary, and several years of more moderate nominal wage growth will gradually lead to underlying inflation (CPI-ATE) falling from 2.5 per cent in 2014 to just under or equal to 2 per cent during the next few years. Lower electricity and oil prices will lead to the consumer price index (CPI) rising by 2.3 per cent this year, and then shadowing the path of the CPI-ATE.

### **Fiscal policy**

General government consumption has risen by 1.5 to 2 per cent during the past two years. There has been slightly higher growth in civilian government spending, while military spending has remained virtually unchanged. Gross general government investment varied greatly through 2013, and preliminary estimates from the quarterly national accounts (QNA) show growth of a full 9.5 per cent from 2012 to 2013. The high growth

Figure 1. **General government. Seasonally adjusted, billion 2011-kr., quarterly**



Source: Statistics Norway.

last year was mainly due to central government investment. Real growth in public transfers to households increased by just 2.5 per cent in 2013. This is roughly a halving of real growth, compared with the two previous years. All in all, real growth in these three main components of public spending that make up just over half of mainland GDP, was 2.5 per cent in 2013. This is approximately the same growth as in the two previous years.

According to the New Balanced Central Government Budget for 2013, the Ministry of Finance estimates a structural, non-oil budget deficit (SNOBD) of just under NOK 119 billion for 2013. This is 3.1 per cent of the Government Pension Fund Global (GPF), and represents 5.1 per cent of trend mainland GDP, an increase of 0.4 percentage point on the previous year. The New Balanced Budget for 2013 shows a slightly smaller deficit than the adopted budget, which is due to lower than projected growth in expenditures.

The central government budget for 2014 is estimated to provide roughly the same stimulus as in 2013 when the increase in SNOBD, calculated as a share of trend mainland GDP, is used as an indicator of the fiscal policy stance. Calculated in relation to the GPF at the beginning of 2014, the deficit is 2.8 per cent. Our projections for fiscal policy in 2014 are based on the adopted budget. The tax rate on ordinary income is being reduced from 28 to 27 per cent from 2013 to 2014, while the national insurance contribution is being increased by 0.4 percentage point. The highest wealth tax rate is being reduced by 0.1 percentage point, and inheritance tax is being abolished completely. In general, tax rates have been adjusted in accordance with projected inflation, except for mineral oil tax, which is increasing sharply, and electricity tax, which will also be increased in real terms. These tax increases will push up CPI inflation slightly, but the developments in the CPI and CPI-ATE so far in 2014 show that the effect is insignificant. Projections for growth in general government consumption and gross investment are about the same as in the national budget for 2014. Transfers

to households may increase slightly more in 2014 than the previous year, and we therefore expect government procurement of goods and services and the real value of transfers to households to increase by about 3 per cent in 2014. This is half a percentage point higher than growth last year. Taking into account tax relief for businesses and individuals, fiscal policy in 2014 will be more expansionary than during the past four years measured in this way.

No fiscal policy has been adopted for the period 2015–2017. This means that our detailed projections for these three years are more uncertain than the projections for 2014. In general we have maintained the stimulus from the 2014 budget. General government consumption is expected to grow by just over 2 per cent annually throughout the period. In both 2014 and the two subsequent years, changes in the number of man-hours worked per employee as a result of changes to movable public holidays and the like will push up consumption growth by about  $\frac{1}{4}$  percentage point. The high growth in gross civilian government investment will be maintained for the next two years. F-35 aircraft will be delivered to Norway between 2017 and 2024, so military investment will increase again following only small changes up to 2016. This will increase growth in overall investment in 2017.

The real value of transfers is projected to be about 3 per cent in the near term. The aging population will contribute to increased real growth in pensions, as well as increased real transfer value per pensioner. The number of disability pensioners is expected to increase slightly in 2014, while neither the number of disability pensioners nor the real amount of sickness benefit will increase much after 2014. We assume annual tax relief of about NOK 6 billion from 2015 to 2017, compared with an alternative scenario with unchanged real tax rates. We make the technical assumption that the tax relief will take the form of reduced personal tax, and not a reduction of indirect taxes or lower company tax. The combined growth impulses from spending increases and tax relief will be fairly stable over time from 2014 to 2016. The stimulus will be slightly lower in 2017, but still expansionary compared estimated trend mainland GDP growth of a bare 2.5 per cent annually.

We assume that oil prices will fall somewhat in the near term. As petroleum production will not change much before 2017, the fall in prices will lead to a decline in government petroleum revenue. Transfers to the GPF will then be reduced, and consequently the fiscal scope for manoeuvre will increase slightly less than in 2013 and 2014. The calculations nevertheless show that SNOBD, as a share of GPF, will remain near 3 per cent in the period 2015–2017.

### Monetary policy

The key policy rate has been 1.5 per cent since March 2012, only 0.25 percentage point above the record low level of the summer of 2009. The three-month

money-market rate has fallen since the last reduction in the key rate, from 2.3 per cent in April 2012 to a stable level of 1.7 per cent since the summer of 2013. The money-market rate was a record low annualised 1.75 per cent in 2013.

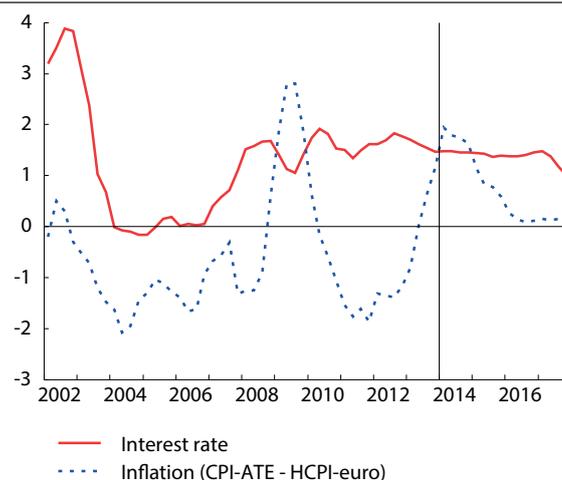
Interest rates are even lower in many other countries. In the euro area, the money-market rate for the period September 2012 to November 2013 was under 0.2 per cent. It rose slightly towards the end of 2013, and has remained at around 0.25 per cent since December.

Experience shows that, in isolation, a higher interest rate in Norway than in the euro area strengthens the krone. However, through 2013 the krone depreciated by about 10 per cent measured against the import-weighted krone exchange rate. The krone weakened against the euro from an exchange rate of close to 7.30 at the beginning of 2013 to about 8.40 at the end of 2013. Some of the weakening can be explained by the market making a downward adjustment in its expectations of future interest rates in Norway through 2013, making it less attractive to invest in Norwegian kroner. Somewhat higher inflation in Norway than in the euro area may also have been a factor in the weakening of the krone. The reduction in quantitative easing in the USA may also have influenced international capital movements in the direction of lower demand for Norwegian kroner. More moderate credit growth in Norway may also have led to a weaker krone exchange rate.

At the end of 2012, the average lending rate of financial institutions for credit loans secured on dwellings was 3.8 per cent. The interest rate on credit loans rose to 4.1 per cent through the second quarter of 2013, and remained at that level for the rest of the year. The lending margin of financial institutions has increased substantially during the past couple of years. While the interest rate on credit loans was 2.4 percentage points higher than the money-market rate at the end of 2013, this premium was less than 1 percentage point in 2010 and 2011. Some of the increase after 2011 was due to the interest rate on credit loans rising more than other interest rates for loans secured on dwellings. Whereas the interest rate on repayment loans secured on dwellings was 0.3–0.4 percentage point more than the interest rate on credit loans secured on dwellings until the end of 2012, this premium was virtually non-existent in 2013. The general lending margin – the difference between the average interest rates on all loans and the money-market rate – has increased less than for loans with this type of security during the past few years.

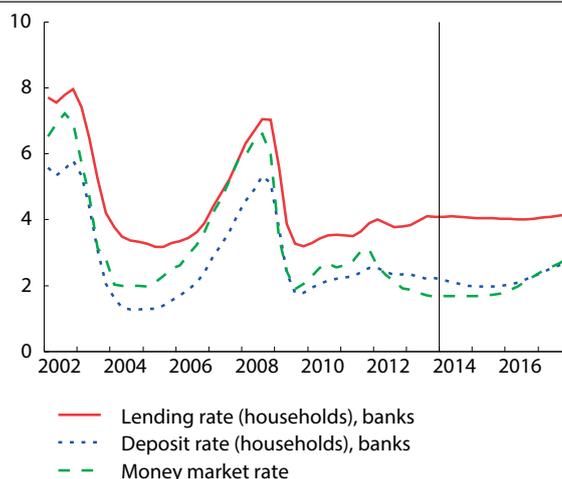
Banks' average deposit rate was 2.4 per cent at the end of 2012. It declined to 2.2 per cent at the end of the second quarter of last year, and remained at this level for the remainder of 2013. The deposit margin was thus unchanged through 2013. The interest rate margin (the total of the deposit and lending margins) at banks

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



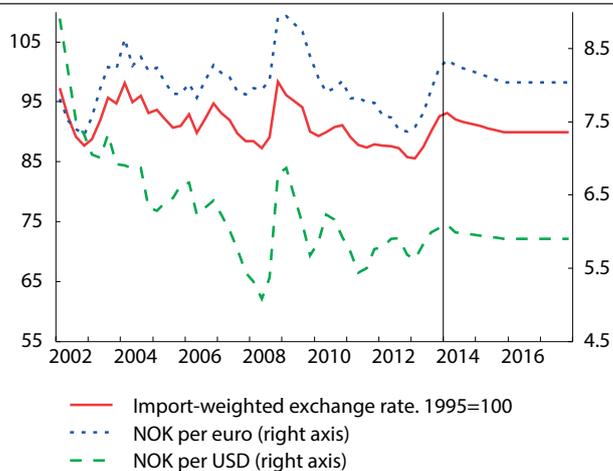
Source: Norges Bank and Statistics Norway.

Figure 3 Norwegian interest rates. Per cent



Source: Norges Bank and Statistics Norway.

Figure 4. Exchange rates



Source: Norges Bank.

Table 2. Interest rates and interest margins in banks and credit institutions, year-end

	All lending	4.0	4.2	4.6	4.3	4.3
Flexi-loans secured on dwellings	3.2	3.5	4.0	3.8	4.1	4.1
Repayment loans secured on dwellings	3.7	4.0	4.3	4.0	4.1	4.1
Deposit rate	1.9	2.2	2.6	2.4	2.2	2.2
Money-market rate (year-end)	2.2	2.7	3.0	1.9	1.7	1.7
Lending margin, all loans <sup>1</sup>	1.7	1.6	1.7	2.4	2.6	2.6
Lending margin, flexi-loans <sup>1</sup>	1.0	0.9	1.1	2.0	2.4	2.4
Deposit margin <sup>1</sup>	0.4	0.4	0.4	-0.5	-0.5	-0.5
Interest rate margin <sup>2</sup>	2.1	2.0	2.0	1.9	2.1	2.1

<sup>1</sup> Measured against the money-market rate.

<sup>2</sup> Sum of deposit and lending margin (all loans).

Source: Statistics Norway.

and mortgage companies was 2.1 percentage points at the end of 2013. This is a slight increase compared with previous years.

Growth in gross domestic household debt (C2) has fallen in recent months. In the third quarter of 2013, gross domestic household debt rose by a seasonally adjusted and annualised 6.1 per cent compared with the previous quarter. Growth in the fourth quarter fell to 5.5 per cent. The latest figures show that in the period November 2013 to January 2014 growth declined further to 4.4 per cent. The three-month growth in gross household debt has not been lower since the end of 2009.

Debt growth in both local government and non-financial enterprises fell from the third to the fourth quarter of 2013. Whereas growth in gross debt in non-financial enterprises in the third quarter was a seasonally-adjusted, annualised 5.2 per cent, it fell to 3.7 per cent in the fourth quarter. The decline continued into the last three-month period. For the past year, growth in gross household debt has remained around 7 per cent, and was 7.2 per cent in the fourth quarter of 2013. During the last three-month period, growth in household debt slowed slightly, and was 6.5 per cent during the period November 2013 – January 2014.

We assume that Norges Bank will not change the current key rate before the end of 2015, in view of both weak domestic growth and low interest rates in other countries. Slower debt growth and a levelling off of house prices – at the same time as inflation may rise briefly to slightly over the inflation target – means that there no longer will be strong objections to keeping interest rates so low. Domestic growth will eventually pick up, and house prices will begin rising slightly again. The interest rate level in the euro area is also expected to rise gradually. This points to somewhat higher key rates from the end of 2015. The money-market rate is assumed to shadow the key rate and be 2.8 per cent at the end of 2017.

We assume some of the weakening of the krone through much of 2013 and up to the beginning of February this year to be temporary, and that the krone

measured against the import-weighted krone exchange rate will strengthen by about 2 per cent over the next few years. Our projection implies an annualised weakening of the krone from 2013 to 2014 of 3.5 per cent, measured by the import-weighted krone exchange rate. In 2015 and 2016, the krone will appreciate by slightly less than 2.5 per cent overall.

There is great uncertainty as to how lending rates will develop in the near term in relation to the money-market rate. This depends partly on the nature of the competitive situation between the banks and on how quickly the countercyclical core capital buffer in the banks must be accumulated. The premium between the money-market rate and the interest rate on credit loans was 0.7–0.8 percentage point following the broad introduction of such loans in 2006, and lasted until the end of 2011. Over the past few years, the interest rate on credit loans has risen more than the interest on repayment loans. If this new level becomes permanent, the long-term premium between the money-market rate and the interest rate on credit loans will be 1.1–1.2 percentage points. The current premium is twice this, and we expect it to gradually fall back towards the new long-term level. The projections for the interest rate on credit loans are based on a premium of 1.4 percentage points on the money-market rate at the end of 2017. This means that the interest rate on credit loans will be 4.1 per cent at the end of 2017, while the money-market rate will rise by 1 percentage point during the same period.

### Household income, spending and saving

Household real disposable income rose by 3.1 per cent in 2013, about the same as the previous year. Wage income, which is the largest source of household income, contributed 2 percentage points to income growth last year. This is half the contribution to growth made by wage income in 2012. Employment then rose by a full 2.2 per cent, whereas employment growth was 1.2 per cent last year. Higher public transfers, mainly as a result of increased pension payments and sickness benefit, also played an important role in income growth in 2013. High inflation of 2.7 per cent, measured by the consumption deflator in the national accounts, substantially curbed developments in real income. Net interest

**Box 1. Import-weighted krone exchange rate and trade-weighted exchange rate index**

Approximately 60 per cent of Norway's foreign trade in traditional goods (e.g. exports and imports of goods excluding oil, gas, ships and platforms) takes place with countries that are in the European monetary union. The krone exchange rate against the euro therefore provides limited information about the international value of the Norwegian krone. It is therefore important to supplement with alternative exchange rate indicators that provide a more accurate expression of the breadth of our trading pattern. Examples of these are the trade-weighted exchange rate index and the import-weighted exchange rate. The trade-weighted exchange rate index is calculated on the basis of the exchange rate of the Norwegian krone against the currencies of Norway's 25 most important trading partners, and is a geometrical average based on the OECD's current trade weights. The weights in the import-weighted krone exchange rate are calculated on the basis of the composition of imports of traditional goods from Norway's 44 most important trading partners. Both indices are structured in such a way that high values mean a weak krone and low values a strong krone.

In the figure, both indices show that the krone has been generally stronger since around 2000 than in the 1990s, that it was record-strong in early 2013 and that over the past year it has depreciated by about 10 per cent. However, the paths of the two indices do not quite coincide. For example, at the beginning of 2014 the krone was around 9 per cent stronger than the average for the 1990s measured by the import-weighted exchange rate, whereas according to the trade-weighted index it was only 2 per cent stronger. This reflects the fact that the two indices are designed for slightly different purposes: the trade-weighted exchange rate index is intended to reflect the competitiveness of Norwegian industry in both the export and the domestic market, whereas the import-weighted krone exchange rate reflects prices for an average of Norwegian imported

**Import-weighted krone exchange rate and trade-weighted krone exchange rate. Index. 1995=1**

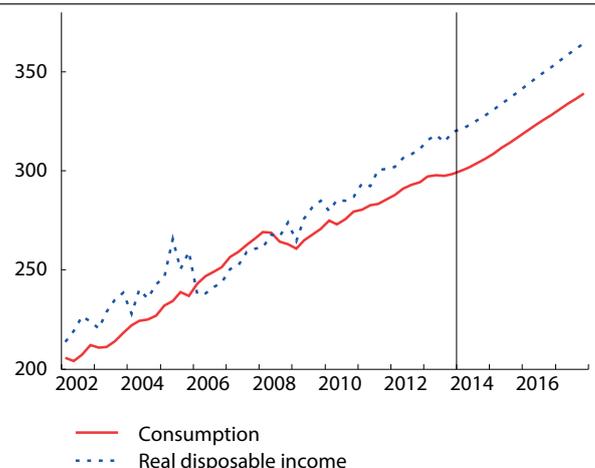
goods. The different movements are due to the fact that, especially since 2000, the krone has strengthened considerably less in relation to countries Norway exports to than to countries from which Norway imports. The international purchasing power of the krone was accordingly strengthened more than the international competitiveness of Norwegian manufacturing weakened.

The krone weakened markedly through 2013. Compared with the annual average for 2013, the krone was about 5 per cent weaker at the beginning of 2014, measured by the import-weighted exchange rate, and 6 per cent weaker measured by the trade-weighted exchange rate index. This means that again, the international competitiveness of Norwegian manufacturing was strengthened more than the krone's international purchasing power was weakened.

income also made a minor, negative contribution to growth, as interest income on bank deposits increased slightly less than interest expenses on loans.

Consumption growth has been fairly weak in the wake of the financial crisis, and was generally weaker than real income growth. Consumption growth in 2013 was just over 2 per cent, while goods consumption rose by only 0.9 per cent. Consumption of food products, clothing and footwear, as well as electricity, pushed up growth. However, growth in vehicle purchases was weak in line with the previous year, following strong growth throughout 2010 and 2011. Other important groups of consumer goods like furniture and household articles also moved on a weak trend compared with the previous year. Seasonally adjusted figures show that these product groups, which are classified as durables, fell considerably through the last three quarters of last year, thereby contributing to the relatively weak annualised growth in goods consumption. Service consumption, on the other hand, rose by 2.5 per cent in 2013, with leisure services, rent, and hotel and restaurant services contributing in particular to growth.

Figure 5. **Income and consumption in households. Seasonally adjusted, billion 2011-kr., quarterly**



Source: Statistics Norway.

Norwegians' spending abroad continued to grow strongly for the fourth year in a row, at 7.8 per cent last year. This contributed 0.5 percentage point to growth in total consumption. Norwegians' spending abroad

### Box 2. Factors underlying changes in consumption 2009-2013

In Statistics Norway's KVARTS macroeconomic quarterly model, household consumption excluding housing and health services is determined by developments in household real disposable income, real interest rates after tax and real wealth, which includes both the real value of dwellings and net financial wealth<sup>1</sup>.

The consumption relationship – which models approximately three fourths of household consumption – is documented in a number of research works<sup>2</sup>. These demonstrate that this consumption relationship provides a good explanation of changes in consumption in the years 1971–2008.

Consumption growth has been considerably lower since the financial crisis than indicated by this consumption function. This was evident towards the end of 2009 already, and since the report in Economic Survey 1/2010, we have been adjusting our projections for consumption growth down compared with what the consumption relationship in KVARTS would have indicated.

A preliminary analysis of the consumption relationship shows that the coefficients, which were stable in the estimation period, are unstable when the dataset is expanded to include observations from and including 2009. The stability of the relationship is regained when we introduce a correction factor after the financial crisis which reduces consumption growth. In the relationship this appears as a reduction in the level which consumption changes towards in an equilibrium some years ahead. Consumption growth will then rise again to the same level as income growth. In our projections this will be from 2015.

There are several possible explanations for this change in macroeconomic consumption. The lower consumption growth is reflected in the saving ratio, which has increased from a level of close to 4 per cent in 2008 to 9 per cent in 2013. During this period, both net financial investment and net fixed investment – largely in dwellings – increased.

Household investment in financial assets (including insurance reserves) increased during this period, but the overall contribution to household saving is lower because household debt also increased. It is probably fairly rare for the same households to increase their bank deposits and at the same time take out loans for housing investment. The households that have increased their financial assets may have done so because the global recession has created uncertainty about future developments in both personal financial situations and the country's economy, as we have pointed out previously in our analyses.

We have also pointed out that there is statistical uncertainty associated with the figures underlying the calculation of the saving ratio. The transfer of income to other countries by immigrants may be higher than estimated in the national accounts. Similarly, an altered trading pattern with strongly growing trade over the internet, which replaces similar purchases in retail outlets, may be contributing to an underestimation of consumption growth.

Other possible explanations for reduced consumption growth and increased saving are associated with demographic and institutional changes in recent years. A change in consumption and saving behaviour may be attributable to systematic behavioural differences between groups on the basis of income, age and ethnic background.

There has been substantial immigration in recent years – between 40 000 and 50 000 persons annually, in net figures. If this population group regards their income as being of a more temporary nature, it may exhibit a different consumption pattern and somewhat higher saving than the rest of the population.

The number of persons in the age group 65–69 increased by about 83 000 or almost 45 per cent in the period 2008–2013. This displacement in the age pyramid may in itself affect the consumption pattern.

Figures from NAV show a growing number of persons have taken the opportunity of drawing an old-age pension from the Norwegian National Insurance Scheme from the age of 62. At the end of the third quarter of 2013, this applied to 67 500 persons, or 23 per cent of this group. Two of three early pensioners combine a pension with work. They know that drawing a pension early means a lower pension later, and have good reason to save a large portion of their pension. Another factor is that when pension income is additional to wage income, the propensity to consume will probably be lower in most cases.

All workers have a stronger incentive to save – or, alternatively, to remain in work longer – since the new pension system was first announced in 2008, and since it was introduced in 2011. Life-span adjustment of pensions means a lower pension as the average life-span increases.

Taken individually, these factors cannot explain the change we have seen in the macroeconomic consumption function. But if they all have the same effect, their combined effect may provide an answer to why consumption – and hence saving – in recent years has not followed the path the consumption function in its original form would imply.

It is also a well established fact that propensity to consume falls with increasing income. Household real disposable income has risen substantially over the past ten years. If there is a redistribution of income – in that a larger portion of the increase in income accrues to high income households, for example through taxation changes – this will also contribute to increasing the saving ratio on a macroeconomic level. This factor may have increased significance for consumption going forward.

<sup>1</sup> Health consumption is determined outside the model because it is to a large extent directly affected by public transfers and political decisions. Housing consumption is determined as a share of home equity, which is the means of calculation used in the national accounts, albeit somewhat simplified

<sup>2</sup> See for example, Jansen (2009). «Kan formueseffekter forklare utviklingen i privat konsum?», [Can wealth effects explain developments in private consumption?] Samfunnsøkonomen, 63 (2009/5).

rose by over 45 per cent in the period 2010–2013. The strong growth must be seen in the context of increased cross-border trade and travel, partly as a result of a strong krone, which made it relatively less expensive to shop abroad. It is likely that the depreciation of the krone through 2013 dampened growth somewhat, compared with previous years.

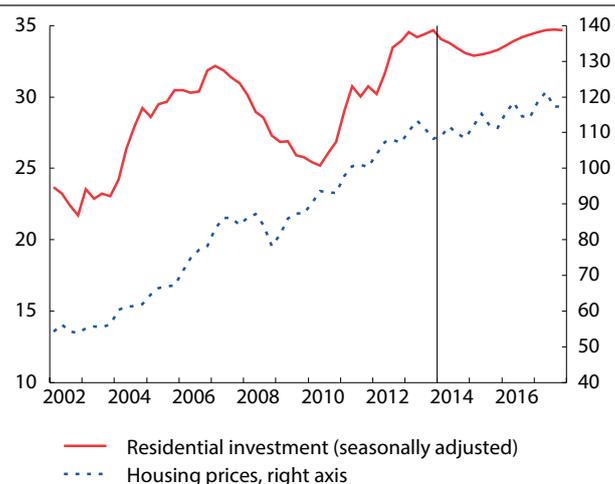
Household saving in the form of financial and housing investment, calculated as a share of disposable income, rose from a level of close to 4 per cent in 2008 to about 9 per cent in 2013. If we count purchases of consumer durables, including cars, as investment rather than spending, the saving ratio was 10.8 per cent in 2013, which is about the same as the previous year.

Since the financial crisis, we have assumed that the higher saving ratio is attributable to precautionary saving behaviour. This means that households reduce spending because they view the future as uncertain, in terms of both their own financial situation and the national economy. However, it is possible that the saving ratio trend of the past few years may also to some extent be attributed to the pension reform that was introduced on 1 January 2011. This is discussed in depth in Box 2.

Developments in household income, housing wealth and interest rates are important drivers of consumption. Wage income and public transfers are expected to continue to make a relatively considerable contribution to real disposable income growth during the projection period. At the same time, lower inflation for the next few years and a gradually larger rise in deposit rates than in lending rates will lead to increased growth in real disposable income, and thus also in spending. We expect annual growth in real disposable income of about 2.5 per cent this year and approximately 3.5 per cent in the period 2015 to 2017. Even though house prices will rise during the period 2015 to 2017, following a slight fall in prices this year, real house prices will remain almost constant from 2013 to 2017. In real terms, housing wealth will therefore only increase in pace with housing investment, thus stimulating consumption less than previously. Our projections for income, housing wealth and interest rates indicate that consumption growth this year will be just over 2 per cent, approximately the same as last year, and will subsequently rise to about 3.5 per cent.

The saving ratio is now projected to remain close to 10 per cent from 2014 to 2017. This is historically high, and the saving ratio has not been at a similar level since 2005. The saving ratio at that time was 9.8 per cent as a result of high, tax-motivated share dividend disbursements. The fact that we now envisage a further increase in the saving ratio of about 1 percentage point through the projection period must be seen primarily against the backdrop of weak developments in real house prices and continued precautionary saving until the

Figure 6. Residential market. Left axis adj. indices. 2011=100. Right axis per cent



Source: Statistics Norway.

Norwegian economy enters a definite cyclical upturn in 2016.

### Housing investment and house prices

Housing investment reached a record level in the fourth quarter of 2013. Housing investment for the year as a whole was about 6.5 per cent higher than in 2012. However, developments through 2013 show that growth levelled off after a continuous period of rising housing investment since mid-2009. This is consistent with housing starts which, after seasonal adjustment, showed a weak decline during the first half of the year and a slight increase through the second half of 2013. Housing start figures for January this year show a pronounced fall, in terms of both useful floor area and number of dwellings. However, it is too early to determine whether this is an erratic statistical effect or forewarning of a clear decline in housing investment in the near term. Sluggish sale of new dwellings so far this year and a tendency for resale homes to take longer to sell may indicate that lower housing starts will push down housing investment slightly in the near term. We expect housing investment to fall by about 2 per cent in both 2014 and 2015, before rising again by close to 3 per cent in 2016 and 2 per cent in 2017. This would cause housing investment in 2017 to exceed the record level of 2013.

The rise in house prices showed a clearly falling tendency through 2013, from annual growth of 6 per cent in the first quarter to 1 per cent in the fourth quarter, according to Statistics Norway's house price index. According to the real estate industry's house prices statistics, new seasonally adjusted figures show a decline from month to month, from June until the end of the year. The overall fall in prices in the second half of the year was 1.6 per cent, according to this index. After the end of the year, virtually unchanged seasonally adjusted house prices were reported in January, while they rose by 0.3 per cent in February.

Table 3. Main economic indicators 2012-2016. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Accounts 2013	Forecasts								
		2014			2015		2016		2017	
		SN	NB	MoF	SN	NB	SN	NB	SN	
<b>Demand and output</b>										
Consumption in households etc.	2.1	2.1	1 3/4	2.4	3.4	3	3.6	3	3.3	
General government consumption	1.6	2.3	2 1/4	2.1	2.3	..	2.3	..	2.1	
Gross fixed investment	8.7	1.2	..	4.8	1.4	..	3.0	..	2.3	
Extraction and transport via pipelines <sup>1</sup>	18.0	2.5	4	7.5	-0.7	1	0.7	1	-2.0	
Mainland Norway	4.7	0.9	1 3/4	..	2.5	..	4.3	..	4.4	
Industries	1.0	2.1	..	3.7	2.7	..	4.0	..	3.6	
Housing	6.4	-2.2	..	3.0	-1.8	..	3.1	..	1.9	
General government	9.5	3.3	..	4.8	7.9	..	6.3	..	8.9	
Demand from Mainland Norway <sup>2</sup>	2.4	1.9	2	2.6	2.9	3	3.3	3	3.2	
Stockbuilding <sup>3</sup>	0.0	0.4	..	..	-0.1	..	0.0	..	0.0	
Exports	-3.9	2.9	..	3.3	1.6	..	2.2	..	2.8	
Crude oil and natural gas	-7.3	3.1	..	4.2	0.0	..	0.4	..	0.6	
Traditional goods <sup>4</sup>	0.8	1.3	1 3/4	2.5	3.0	..	4.2	..	5.7	
Imports	2.5	3.5	3 1/2	3.8	3.5	..	4.3	..	4.3	
Traditional goods	2.5	1.5	..	2.9	2.8	..	4.0	..	4.2	
Gross domestic product	0.6	2.1	2 1/4	2.6	1.8	2 1/2	2.3	2 1/2	2.2	
Mainland Norway	2.0	1.9	2	2.5	2.4	2 1/2	2.9	3	2.8	
<b>Labour market</b>										
Employed persons	1.2	0.7	1	1.0	0.7	1	1.1	1	1.6	
Unemployment rate (level)	3.5	3.7	3 3/4	3.6	3.9	4	3.9	4	3.8	
<b>Prices and wages</b>										
Annual earnings	3.9	3.8	3 1/2	3 1/2	3.5	3 3/4	3.5	4	3.6	
Consumer price index (CPI)	2.1	2.3	2	1.9	1.6	2	1.7	2	2.1	
CPI-ATE <sup>5</sup>	1.6	2.5	2	2.0	1.8	2	1.7	2	2.0	
Export prices, traditional goods	3.1	2.3	..	..	0.4	..	1.2	..	2.5	
Import prices, traditional goods	2.1	4.3	..	..	0.2	..	0.8	..	1.7	
Housing prices	3.9	-0.9	..	..	2.7	..	2.8	..	2.5	
<b>Balance of payment</b>										
Current balance (bill. NOK)	319.5	340.3	..	..	293.7	..	258.6	..	266.6	
Current balance (per cent of GDP)	10.6	10.9	..	10.6	9.2	..	7.8	..	7.7	
<b>Memorandum items:</b>										
Household savings ratio (level)	9.0	9.6	..	..	9.7	..	9.8	..	10.0	
Money market rate (level)	1.8	1.7	1.7	1.8	1.7	1.9	2.1	..	2.6	
Lending rate, credit loans (level) <sup>6</sup>	4.0	4.1	..	..	4.0	..	4.0	..	4.1	
Crude oil price NOK (level) <sup>7</sup>	639	633	..	600	583	..	572	..	584	
Export markets indicator	1.3	3.8	..	..	4.6	..	5.7	..	6.3	
Importweighted krone exchange rate (44 countries) <sup>8</sup>	2.2	3.5	2.5	3.6	-1.7	-1.6	-0.6	-0.3	0.0	

<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).

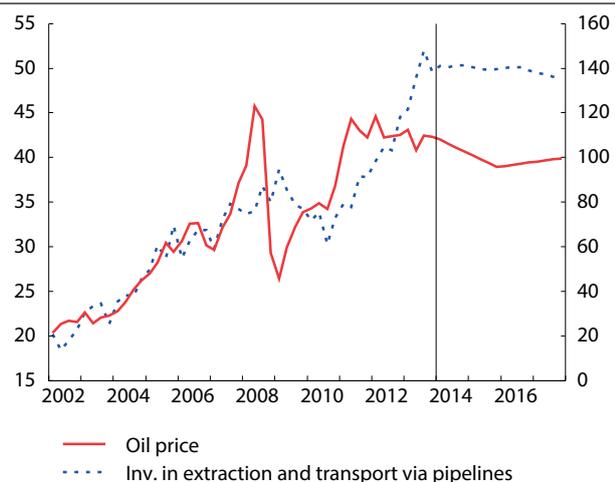
<sup>6</sup> Yearly average.

<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 (2013-2014), (MoF), Norges Bank, Pengepolitisk rapport 4/2013 (NB).

Figure 7. Petroleum investments and oil price in USD. Seasonally adjusted, billion 2011-kr., quarterly



Source: Statistics Norway.

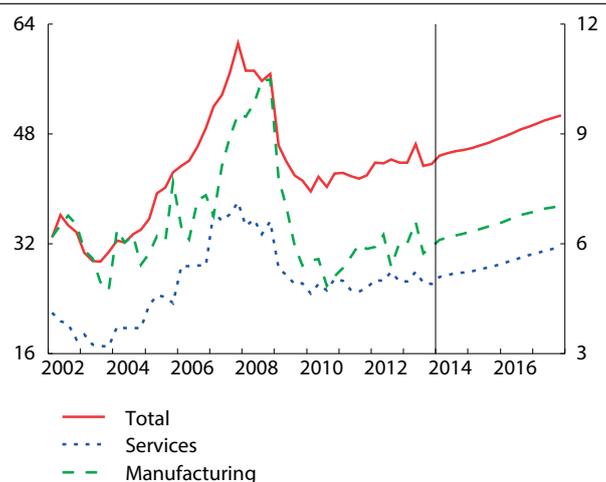
In the short-term, house prices will be affected by changes in household expectations regarding developments in both their own financial situation and in the national economy. In the autumn of 2013, the Norwegian consumer confidence indicator *Norsk Trendindikator* developed by TNS Gallup and Finance Norway showed a clear negative tendency that is consistent with the weak developments in house prices. However, in the first quarter of 2014 the indicator was virtually unchanged compared with the previous quarter.

In the long-term, house prices depend on fundamental factors. An increase in household disposable income and low interest rates will have a positive impact on houses prices, while an increased supply of new dwellings curbs prices. Research also shows that household borrowing and house prices mutually influence each other.<sup>1</sup>

Our calculations take account of this interaction. In isolation, lower housing investment in 2014 and 2015 will lead to lower growth in gross household debt. With a weakly rising, albeit relatively low, interest rate level, we expect growth in gross household debt to fall from 7 per cent this year to 5 per cent in 2016, and then to rise to close to 6 per cent in 2017. However, housing investment is still substantial, and will curb the rise in house prices.

In the short-term, we assume that household expectations will remain unchanged for the next half-year. We envisage that the indicator will then gradually move in a positive direction once growth picks up in the euro area and growth in the Norwegian economy increases slightly. In light of falling house prices in the autumn of 2013 and relatively moderate growth in household real disposable income, we expect house prices in 2014 to

Figure 8. Investments. Mainland Norway. Seasonally adjusted, billion 2011-kr., quarterly



Source: Statistics Norway.

be just under 1 per cent lower for the year as a whole. Most of this is due to house prices falling during the second half of 2013, and our projection is based on virtually unchanged house prices for the rest of this year. According to our estimates, house prices will show a new upswing well into the projection period, as growth in real disposal income increases while the real interest rate remains relatively low. We believe that house prices will rise by about 2.5 per cent every year from 2015 to 2017. In real terms, this means that house prices will barely rise enough during these three years to compensate for a fall of over 3 per cent in 2014.

### Petroleum activities

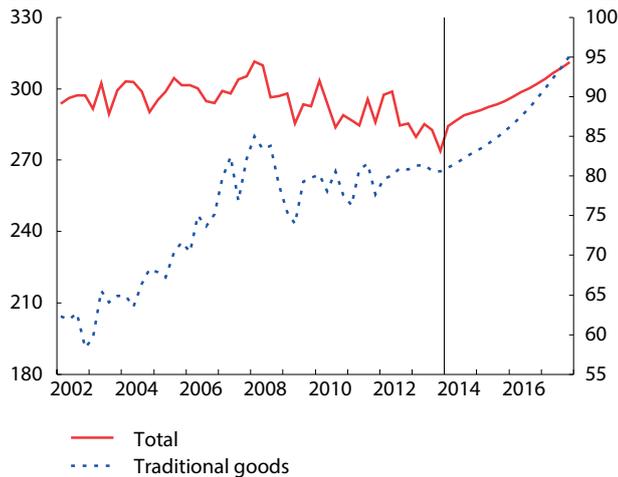
Petroleum investment as an annual average increased at an even higher rate in 2013 than in the previous year, despite a 3.8 per cent decline in the fourth quarter. Petroleum investment as a share of the mainland economy has never been as high as in 2013, when it was equivalent to 8.9 per cent of mainland GDP. Growth was also very high during the previous two years. Whereas 2012 saw a sharp increase in investment in platforms, growth is now mainly a result of increased drilling and investment in pipelines. Production drilling has increased gradually over a long period of time, partly as a result of field reserves diminishing and new fields being put into operation, with activity increasing sharply last year.

2013 will probably be the beginning of a period of new investment in gas pipelines, following several years without any significant investment. Investment in platforms has risen steadily since 2011. This is the result of both field developments and upgrading of operating fields, as the increased life of several of the early oil and gas fields has made it necessary to upgrade them.

We now assume that petroleum investment will not continue to grow. Field development will probably continue at the same high pace and, together with production and exploration drilling, this will help

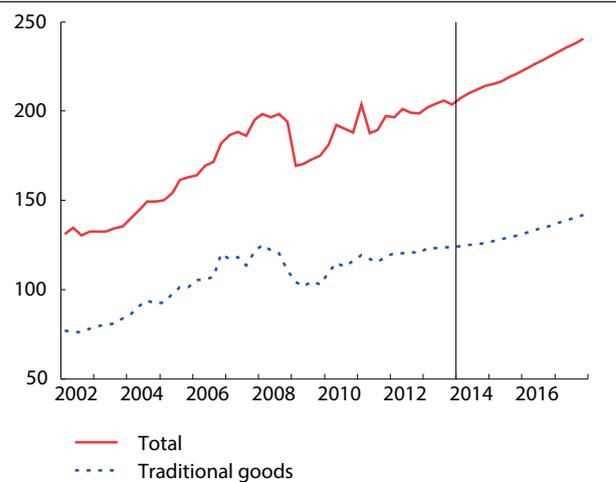
<sup>1</sup> See the article «Boligpris- og kredittvekst forsterker hverandre» [Rise in house prices and credit growth mutually reinforcing] in *Økonomiske analyser* 5/2013.

Figure 9. Exports. Seasonally adjusted, billion 2011-kr., quarterly



Source: Statistics Norway.

Figure 10. Imports. Seasonally adjusted, billion 2011-kr., quarterly



Source: Statistics Norway.

keep investment at a high level for the next few years. Pipeline investment will probably increase, but represent a modest share of total investment. Investment in fields in operation will decline slightly, however, thereby reducing overall investment. Several factors will affect the situation in the near term, principally oil and gas prices. Substantial exploration areas are still being awarded to oil companies with a view to maintaining exploration activity. This winter has been characterised by discussions regarding the profitability and high investment costs of companies. We have assumed that the downward adjustment of investment activity announced by Statoil will give new players an opportunity to acquire stakes in Norwegian offshore operations and thus help keep investment high.

Combined oil and gas recovery, measured as oil equivalent, fell last year. Gas recovery, measured as energy units, has risen steadily since the 1980s. However, gas recovery declined in 2013 compared with the previous year, as was also the case in 2011. Gas recovery is expected to continue to rise in the near term, but the growth rate will be slower than earlier in the 2000s. On the other hand, oil production has declined every year since 2001. Several new field developments are now bringing this trend to a halt. Oil production is therefore expected not to decline any further, but to maintain approximately the current production level for the next decade. Demand from the industry to the rest of the economy will therefore remain high for a good while to come.

Export prices for oil have remained virtually unchanged for the past three years. There is a time lag between developments in oil and gas prices, and this helps to explain why export prices for gas have increased weakly during the same period. We expect the real oil price to decline during the next two years, before levelling off at USD 95 in 2015 prices. Gas prices lag behind developments in oil prices, and may therefore rise slightly in 2014 before they too decline.

## Business investment

Underlying growth in business investment has been moderate since the fall in investment came to a halt in the first half of 2010. We expect continued modest growth in both service and manufacturing industries in the years ahead.

Investment in the food industry has fallen by about 30 per cent during the past two years. The decline must be seen in the context of a high investment level in 2010 and 2011, and that a number of major projects, like Tine's facility in Jæren and Nortura's slaughterhouse in Malvik, are now completed. During the same period, investment in shipbuilding and transport equipment, chemicals, and repair and installation of machinery and equipment reported positive growth. In 2013, manufacturing investment was 10.8 per cent higher than the level in 2010. Statistics Norway's survey of companies' investment intentions points to moderate development in the next few years. At the time of reporting, in the first quarter of 2014, manufacturing companies' estimates indicated volume growth of about 5 per cent in 2014 after adjustment for normal under-reporting.

There is also great variation in investment among service industries. A 1.4 per cent decline in the sale and operation of real property was recorded in the fourth quarter. The investment level in this sector has now more than halved since the peak in the fourth quarter of 2007. Sale and operation of real property account for about 25 per cent of investment in services, and developments in this sector are therefore important to mainland business investment. The weak tendency in sale and operation of real property has nevertheless been more than counterbalanced by higher investment in administrative and support services, where the investment level has doubled since 2010.

Growth in investment in power supply has been high for a long time. The investment level more than tripled

**Box 3. Direct and indirect import shares**

Consumption of goods and services can be divided into final deliveries – i.e. consumption, investment and exports – and intermediate input, which constitute a production factor. Some of the final deliveries are covered directly through imports, while the remainders are delivered by Norwegian producers. However, imported intermediate input is also used in Norwegian production. The share that imported intermediate input constitutes of a final delivery is defined as the indirect import share. It includes imported intermediate input from all vendors associated with the delivery in question. The total share of imports in a final delivery is thus higher than the direct share. Because the import shares are different, a given change in final delivery components 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 2011, which is the last year for which final national accounts figures are available.

Exports have the lowest direct import share of the main groups of final delivery categories. When indirect imports are included as well, the import share for exports is close to the average for final deliveries, however. Investment has decidedly the highest import shares, both direct and total.

There are large differences between sub-groups of final deliveries. The direct import shares for investments in the form of buildings and infrastructure are moderate. The indirect import shares are relatively high, however. As regards other types of investment, machinery and oil platforms, drilling and vehicles account for about a third of direct imports, while total imports constitute slightly under half of these investments. Broken down by industry, investment in shipping has the highest total import share, at 62 per cent. The import share of petroleum-related activities increased appreciably in 2011, and is slightly over the average for investments as a whole, while housing investment is appreciably lower.

Half of the final deliveries are associated with consumption, Public consumption, which consists largely of labour costs, is the component with clearly the lowest total import share. Within household consumption there are major variations in the import shares of the different product categories. Norwegians' consumption abroad is naturally regarded as a direct import in its entirety. Purchase of «own vehicles» and «miscellaneous goods» are distinguished by high direct import shares. As very few cars are produced in Norway, the total import share for own vehicles of almost 34 per cent is perceived as surprisingly low. The explanation lies in dealer mark-ups, and in the high level of excise duty on these goods. Approximately two thirds of the expenses associated with car purchases relate to dealer mark-ups and excise duty. The import share is highest for the group

“miscellaneous goods”. This group includes clothing and footwear, consumer electronics and furniture. Energy products are largely produced in Norway, but despite Norway's high oil production, a substantial amount of petrol and diesel fuel is imported. In periods of low electricity production, electricity is imported from neighbouring countries. In all, 16 per cent of energy products are imported.

There are large variations in the import shares in exports. Exports of shipping and traditional goods have a high import content due to the fact that much of the material input is purchased outside Norway. Exports of oil and gas are distinguished by the low share of imports involved. This can be largely attributed to the fact that a large share of the production value consists of petroleum rent, which is the portion of the surplus in the petroleum industry that exceeds normal return on capital.

**Import shares 2011**

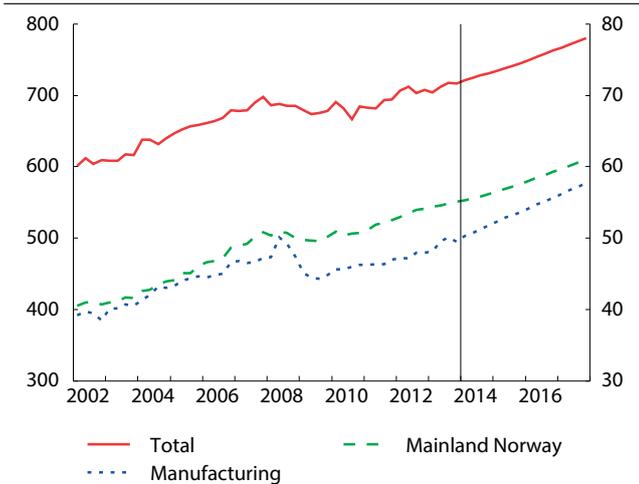
	Share <sup>1</sup>	Direct	Indirect	Total
Total final deliveries <sup>2</sup>	0.996	9.9	13.1	23.0
<b>Consumption</b>	<b>0.504</b>	<b>11.8</b>	<b>9.7</b>	<b>21.5</b>
Consumption by households and non-profit org.. <sup>3</sup>	0.331	18.0	9.9	27.9
Food products and beverages	0.053	12.9	14.3	27.2
Energy products etc.	0.024	11.5	4.7	16.2
Own vehicles	0.016	25.1	9.0	34.1
Misc. goods	0.066	35.2	9.0	44.2
Housing	0.053	0.1	5.9	6.0
Other services	0.107	2.2	15.5	17.7
Norwegians' consumption abroad	0.020	100.0	0.0	100.0
Public consumption	0.173	0.1	9.3	9.4
<b>New investment</b>	<b>0.165</b>	<b>20.0</b>	<b>17.8</b>	<b>37.8</b>
By type:				
Buildings and infrastructure	0.067	1.2	20.2	21.4
Ships	0.009	46.3	16.7	63.0
Other types	0.075	33.5	15.8	49.3
By industry:				
Mainland Norway	0.117	15.4	17.7	33.1
Manufacturing	0.014	30.3	3.3	33.6
Other goods-producing industries	0.011	23.6	17.8	41.4
General government	0.025	11.5	18.8	30.3
Dwellings	0.035	1.2	20.2	21.4
Other service industries	0.031	25.2	13.7	38.9
Production and pipeline transport	0.042	23.5	20.0	43.5
Shipping	0.006	45.9	16.5	62.4
<b>Exports</b>	<b>0.326</b>	<b>1.8</b>	<b>16.0</b>	<b>17.8</b>
Traditional goods	0.106	3.7	28.5	32.2
Oil and natural gas	0.163	0.0	4.4	4.4
Other goods	0.002	0.0	27.9	27.9
Shipping etc.	0.024	0.0	41.7	41.7
Other services	0.032	5.8	14.5	20.3

<sup>1</sup> Shares in column 1 do not add up to 1 because changes in stocks have been excluded.

<sup>2</sup> Share of the value of final deliveries.

<sup>3</sup> Household consumption corrected for Norwegians' consumption abroad. Sale of used fixed assets has been excluded from exports.

Figure 11. **Gross domestic product. Seasonally adjusted , billion 2011-kr., quarterly**



Source: Statistics Norway.

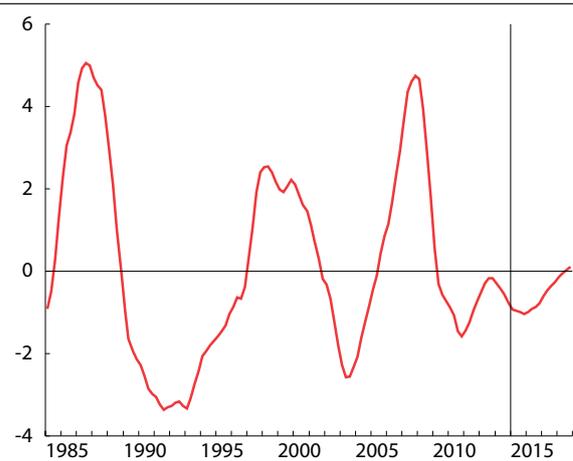
from 2000 to 2013, and the level of new investment is now in line with manufacturing investment. The reported estimates from power companies in the fourth quarter indicate that investment growth is now levelling off. In the near term, strong growth in district heating and a stable, high level of electricity transmission and distribution are expected to compensate for declining investment in electricity production.

Given an improved economic situation domestically and among our most important trading partners, slightly higher investment is expected somewhat further ahead. Business investment is expected to grow from 1.0 per cent in 2013 to about 4 per cent in 2016 and 2017. This development is very moderate compared with earlier cyclical upturns, which were normally characterised by two-figure growth rates. While manufacturing investment will increase most in 2014, the contribution from service investment is expected to gradually pick up later in the projection period.

### Balance of payments

The period from the turn of the millennium and up to the financial crisis was characterised by higher growth in export prices than in import prices. Terms-of-trade gains compensated for lower growth in the volume of exports than of imports, and rising oil and gas prices for a production-based reduction in oil and gas exports. The trade surplus doubled. Following the financial crisis, exports and imports fell in line with the international cyclical downturn. While imports rapidly recovered to former levels, exports have remained at a lower level than before the financial crisis. The high cost level in Norway weakens competitiveness, and Norwegian export goods are losing market shares. Relatively favourable developments in export prices, not least for oil and gas, have nevertheless kept the trade surplus at a high level. However, developments during the past few years and the outlook ahead point towards a substantially lower and declining current account surplus during the next few years.

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



Source: Statistics Norway.

Developments in Norwegian exports were subdued in 2012 and even weaker in 2013. The volume of traditional exports has not changed much, while exports of services and oil and gas have fallen through the past two years. Through the second half of last year, all three export groups showed quite a pronounced decline. In the fourth quarter, exports of both crude oil and natural gas fell by over 5 per cent, service exports fell by a good 2 per cent, while traditional goods exports were virtually unchanged compared with the previous quarter. Oil and gas exports declined even more year-on-year, and continued a declining trend that has lasted for many years. The decline in service exports through 2013 was fairly broad-based. Among traditional goods, engineering products, which is a large and important group of products, showed strong growth in exports for two years in a row, while exports of fish and electrical power pushed down growth in traditional goods exports.

Export prices for traditional goods and services rose through 2013 and were higher than in 2012. Aquaculture, a major export industry, has reported persistent high growth in export prices for the past six quarters. The price index for oil and gas exports has fluctuated through the past two years and the average for 2013 was barely lower than in 2012. This year already we expect increasing global market growth to contribute to growth in exports of traditional goods and to services picking up slightly. A weaker krone exchange rate stimulates exports, but this improvement in competitiveness is temporary. Export growth is expected to lie just under market growth, causing the loss of market shares to continue. Oil and gas exports are limited by production, and are expected to rise slightly after a slight rebound this year following last year's decline.

Relatively strong growth in the Norwegian economy has kept import growth at a high level after the sharp fall in the wake of the financial crisis. Import growth has declined for the past two years, and the

**Box 4. How important has petroleum investment been?**

There was low or moderate growth in almost all demand components in the Norwegian economy through 2013. The clear exception was petroleum investment, which has increased by 50 per cent since the trough in 2010, and in 2013 increased by a full 18 per cent. For the period 2014–2017 viewed as a whole, we assume that this growth will come to a halt. This begs the question: How important is petroleum investment for mainland economic growth?

In order to answer this, we have calculated a counterfactual scenario in which petroleum investment is maintained at the 2012 level in the period 2013–171. This provides an indication of the course that might have been taken by the economy if we had not had high growth in petroleum investment after 2012. The calculations have been carried out using a version of KVARTS in which the krone exchange rate and interest rate level are endogenous. This has a stabilising effect because the interest rate falls and the krone exchange rate weakens when economic growth slows. Fiscal policy, on the other hand, is assumed not to be affected by lower petroleum investment.

The table shows that without the demand stimulus generated by petroleum investment, mainland GDP would have been 0.7 per cent lower in 2013 than it was in reality. The mainland economy would then have grown by 1.3 per cent instead of 2.0 per cent from 2012 to 2013, which means that about a third of last year's growth can be attributed to higher petroleum investment. The bulk of the effects occur in 2013 already. For 2014, the alternative scenario is 0.8 per cent lower than the baseline, so that the counterfactual growth rate for the mainland economy from 2013 to 2014 is 0.1 percentage point lower (1.8 per cent, compared with our projection of 1.9 per cent)<sup>2</sup>.

Consistent with lower economic activity, unemployment throughout the period is 0.2 percentage point higher than in the baseline scenario, which in the course of 2015 would have resulted in an unemployment rate projection of over 4 per cent. Consumption falls, but with a lag.

Petroleum investment creates demand in the mainland economy for both manufacturing goods and services, and services are most important for understanding the changes in the activity level. About half of the fall in mainland GDP compared with the baseline scenario is due to lower growth in private services. Only a small portion of this is due to lower consumption in the alternative scenario, and this shows that petroleum investment to a large extent influences the mainland economy by stimulating commercial services and professional, scientific and technical services.

The deviation from the baseline scenario is wider for manufacturing output than for mainland GDP. At the same time, manufacturing only accounts for about 10 per cent of mainland GDP, so a fall in manufacturing output of 1 per cent relative to the baseline scenario only explains a small portion of the change in the level of activity in the mainland economy. Within the industry, the manufacture of engineering products and machinery and equipment change roughly as much as manufacturing as a whole, while the difference from the baseline scenario is around 10 per

cent for the production of drilling rigs and modules for oil platforms.

Another part of the Norwegian economy that is strongly affected by petroleum investment, but that is classified as non-mainland GDP, is services associated with petroleum production. A broader term that also covers these services is GDP exclusive of petroleum production. If we measure the activity in the economy in this way, the effect of less growth in petroleum investment becomes one-tenth of a percentage point greater in 2013.

A fall in imports dampens the effect of a change in petroleum investment on the mainland economy. Substantial imports are connected directly or indirectly to petroleum investment, and imports would have been 1.6 per cent lower in 2013 than in the baseline scenario if petroleum investment had not increased. The continuing fall in imports in 2014–2015 is largely driven by lower consumption.

When production is lower and unemployment higher, the interest rate level will fall throughout the projection period. In 2013, the money-market rate would be 0.1 percentage point lower in our alternative scenario. A lower interest rate level results in a weaker krone (measured relative to the euro), and the weakening in 2013 is 0.3 per cent. Because of this, there is an increase in manufacturing exports, which are somewhat higher than in the baseline scenario for 2015–2016.

House prices in real terms are 0.3 per cent lower in the alternative scenario in 2013, a deviation that increases to 2.1 per cent in 2016, despite a lower interest rate level. This is due to the fall in household real disposable income. Lower real house prices also result in lower housing investment. The investment level in mainland Norway is also reduced.

<sup>1</sup> We have disregarded the effects on production of lower investment

<sup>2</sup> For the years following 2013, the difference between the petroleum investment in the two scenarios increases somewhat because the baseline scenario forecasts weak growth in 2014, while the alternative scenario has unchanged investment. But it is primarily the lagged effects of impulses from 2013 that drive the results.

**Effects of unchanged petroleum investment from and including 2103. Deviation from baseline scenario, as a percentage unless otherwise indicated**

	2013	2014	2015	2016
Mainland GDP	-0.7	-0.8	-0.8	-0.8
GDP excl. petroleum production	-0.8	-1.0	-0.9	-0.8
Manufacturing output	-1.0	-0.8	-0.7	-0.5
Household consumption	-0.3	-0.7	-1.1	-1.2
Investment, mainland	-0.1	-0.2	-0.2	-0.3
Investment, housing	0.0	-0.2	-0.7	-1.3
Exports, manufacturing	-0.1	0.0	0.1	0.3
Imports	-1.6	-2.2	-2.5	-2.8
Unemployment, level	0.2	0.2	0.2	0.2
House prices	-0.2	-0.8	-1.5	-1.9
CPI	0.1	0.1	0.2	0.2
Interest rate, level	-0.1	-0.1	-0.2	-0.3
NOK per euro <sup>1</sup>	0.3	0.6	1.0	1.2
Memo:				
Petroleum investment	-15.3	-17.3	-16.7	-17.3

<sup>1</sup> An increase reflects a depreciated krone exchange rate.

performance of both traditional goods and services was weak last year. Growth in traditional goods imports excluding refined oil products (with high growth), fell in 2013 from 2.5 per cent to 1.2 per cent. This is lower than growth in service imports, where Norwegians' spending abroad constitutes a large and growing component. Import prices, which rose weakly throughout 2011 and 2012, climbed sharply through 2013. The weakening of the krone was a factor in the rise in prices.

Developments in imports this year and until the end of the projection period will greatly depend on the growth in and composition of household consumption and investment (see Box 3). We expect moderate rising growth; somewhat higher for total imports than for total exports. Together with a slightly higher rise in prices for total imports than for total exports, this will contribute to lowering the trade surplus from over NOK 300 billion in 2013 down to NOK 200 billion in 2017. Returns from a large and growing petroleum fund are expected to contribute to a larger income and transfers surplus. This will curb the reduction in the current account surplus, which is expected to fall from over 10 per cent of GDP in 2013 to under 8 per cent in 2017.

## Output

Growth in the mainland economy has been fairly moderate since the end of 2012, when the growth rate fell appreciably after a cyclical upturn lasting about two years. Mainland GDP was 1.7 per cent higher in the fourth quarter of 2013 than one year earlier, while annual growth was just under 2 per cent. This is weaker than estimated trend growth of a bare 2.5 per cent per year. In the fourth quarter of 2013, output rose by an annualised 2.4 per cent, but if we adjust for very good fishing, growth was somewhat lower.

Aggregate activity may deviate from the underlying business cycle if the activity in industries that are not cyclically sensitive change substantially. Electricity production and traditional fishing in particular are currently having this effect on the Norwegian economy. In isolation, a decline in electricity production through 2013 made a negative contribution of 0.2 percentage point to annual mainland GDP growth. In addition, electricity production rose to abnormal levels in 2012. Both of these factors imply that the cyclical situation changed slightly less from 2012 to 2013 than a comparison of GDP growth might seem to indicate. Weak development in the primary industries (agriculture, forestry and fishing) also made a negative contribution to GDP growth through 2013, but this was less important than the change in electricity production.

Through 2013, activity in mainland Norway increased most in construction, the industries supplying the petroleum sector, and the engineering industry. Other industry moved on a weak trend, which is also the case for service industries as a whole. However, there

is a mixed picture also within the service industries. Growth in general government activity has been close to the average.

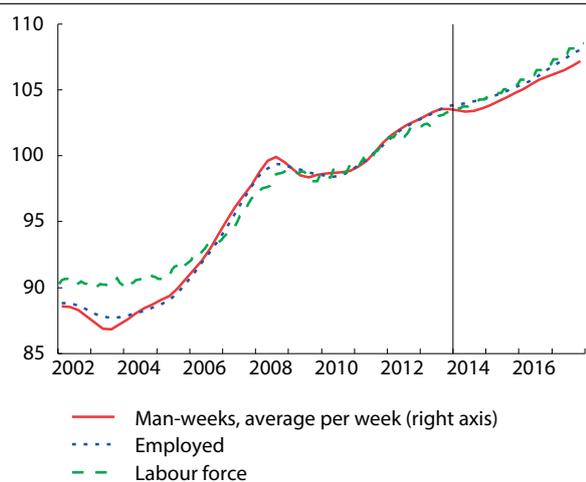
Annual growth in value added in manufacturing as a whole was over 3 per cent in 2013, but certain industries are growing much more strongly than others. Annual growth of 8.7 per cent was reported for production of metal goods, electrical equipment and machinery. This was even higher than the already substantial growth in 2011 and 2012. Towards the end of the year there were signs of lower activity, and production fell in the fourth quarter, resulting in a fairly flat tendency through the second half of the year. This industry delivers extensively to the petroleum industry, but even more of its production is exported. Industries that primarily deliver to the petroleum industry are the shipbuilding industry and repair and installation of machinery and equipment. Both sectors grew through 2013, especially the shipbuilding industry. Repairs activity slowed somewhat throughout the last half of 2013, while the shipbuilding industry more than reversed the third-quarter decline with strong growth in the last part of 2013.

In 2013, the activity level of manufacturing as a whole reached the level of the first half of 2008 for the first time since the financial crisis. Apart from the supplier industries and manufacture of metal goods, electrical equipment and machinery, only the food industry, oil refinement, chemicals and pharmaceuticals industry had risen to a higher level. The activity reported by the other industries was in some cases considerably lower, and all of them experienced some decline in activity through the year. The industries experiencing the greatest slump were the furniture industry and the pulp and paper industry. The activity level in pulp and paper is now more than 70 per cent below a peak in 2007.

Growth in other goods production was high through 2013. This was mainly driven by construction, where activity has grown strongly for the past two years. Fourth quarter growth was somewhat lower than in the third quarter, but still more than an annualised 5 per cent. Aquaculture experienced high activity growth in 2011 and 2012, but this came to a halt in 2013. Natural-occurring factors play a large role in traditional fishing. Developments were negative also in fishing, although the decline in growth was slower than in the previous two years, largely attributable to very good fishing in the fourth quarter.

In general, the service industries had a weaker year in 2013 than in 2012, following strong growth in the previous year for several of the industries. There are nevertheless wide differences across industries. Growth in retail trade, which is by far the largest service industry, fell markedly in 2012 already, and was 1.2 per cent in 2013. In contrast, in professional, scientific and technical services and administrative and support services, growth continued in 2013, albeit not at the same pace as the previous year. We also find fairly high growth in

Figure 13. **Labour force, employment and number of man-hours.** Seasonally adjusted and smoothed indices. 2011=100



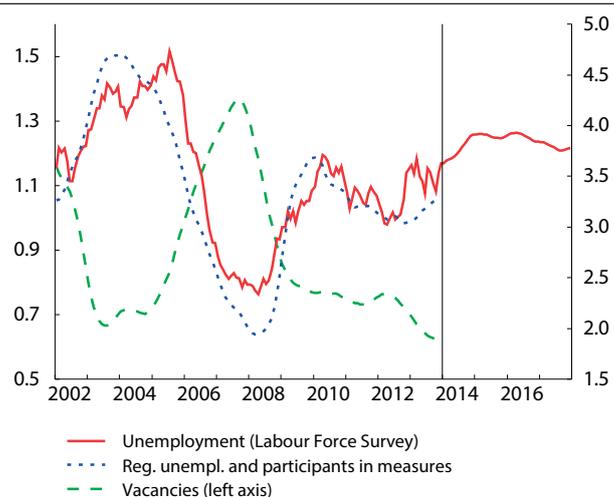
Source: Statistics Norway.

telecommunications and ICT services. The hotel and restaurant segment and transport other than shipping also reported strong growth in 2013. However, these sectors were distinguished by a steeper fall during the financial crisis than other industries, and have only now reached approximately the same level as before the crisis. Finance and insurance activities increased in both 2012 and 2013, following a long period of growth after the financial crisis. Industries that experienced a decline in activity in 2013 were publishing and postal and distribution services.

Services associated with petroleum production are classified as a non-mainland industry. Activity in this industry has increased substantially during the past couple of years, following some years of decline in the wake of the financial crisis, and annual growth in 2013 was over 12 per cent. However, developments during the second half of the year were markedly more moderate, and growth from the third to the fourth quarter was just under 0.5 per cent as an annual rate. Production of crude oil and natural gas fell from 2012 to 2013. This contributed to overall GDP increasing much less than mainland GDP.

For the next four years, we expect mainland output to improve gradually compared with the situation in 2013. In the case of manufacturing, an expected improvement in the international economic situation and an already weakened krone will boost Norwegian exports. At the same time, we expect growth in the manufacturing segments supplying the petroleum industry to decline as petroleum investment levels off after many years of strong growth. We expect these two factors to result in a reversal of some of the double-tracking we have seen in Norwegian manufacturing. The importance of petroleum investment is considered in more depth in Box 4. We expect total manufacturing growth to increase slightly in 2014, compared with 2013, and lie between 3.5 and 3.9 per cent for the next few years. The production of metal goods, electrical equipment and machinery will continue to stimulate mainland

Figure 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.

economic growth throughout the projection period, although the contribution to growth will decline compared with 2013. Other manufacturing exports are also expected to increase. Among domestic demand components, we expect consumption growth to pick up in 2015, while the orientation of fiscal policy will provide some growth impetus in 2014 already. Public sector activity will accordingly make a stable contribution to growth. In line with this, most production growth will be a result of fairly broad-based growth in market-oriented services. Housing investment is expected to fall in both 2014 and 2015, as a result of which construction growth will level off in 2014–2015 before picking up slightly in subsequent years.

We project mainland GDP growth of 1.9 per cent in 2014, which is marginally lower than in 2013. Growth is then expected to pick up gradually. We forecast 2.4 per cent growth in 2015, and 2.9 per cent in 2016. Our baseline scenario therefore implies that the moderate cyclical downturn will shift to a clear cyclical upturn in 2016.

### The labour market

The QNA show steady quarterly employment growth of about 0.3 per cent in 2013. The Labour Force Survey (LFS) shows appreciably stronger employment growth in the third quarter but appreciably lower growth in the other quarters. In contrast to the LFS, the QNA also include employment among short-term immigrants and persons not resident in Norway. According to the LFS, employment as a share of the population declined by 0.5 percentage point from 2012 to 2013, while employment according to the QNA showed a decline of 0.2 percentage point. The difference in employment figures indicates that there was still an increase in employment among short-term immigrants and persons who did not reside in Norway in 2013.

For the past few years, there have been considerable differences in employment growth rates across

industries. Construction, other services, and oil and gas production and associated services showed strong employment growth in 2012. As a result of the high level of growth in construction in the fourth quarter of 2012, the annual average was also high in 2013. Manufacturing also contributed to employment growth, but there are great differences across industries. Employment in shipbuilding and other transport equipment and in production of metals and metal products increased in 2013. There was a decline in production of pulp and paper products and furniture and other manufacturing production.

Developments in the labour force are affected by demographic factors like changes in the size and composition of the population (including immigration), but also by changes in behaviour. According to the LFS, the labour force increased by 48 000 and 27 000 persons in 2012 and 2013, respectively. Immigration is responsible for a large part of the increase, and the 2012 statistics on the reasons for immigration show that almost half of all those who immigrated that year came to Norway to work. Although the immigration level is still high, 3 000 fewer people immigrated in 2013 than in 2012. Citizens of Poland, Lithuania and Sweden are the largest immigrant groups.

Labour force participation was 70.9 per cent in the fourth quarter of 2013. This quarter saw a decline in labour force participation for men of all age groups, while women's labour force participation rose slightly or was unchanged, except for the group aged 65 to 74. There is also underlying trend growth in both women's and men's labour force participation in the group aged 60 to 64. This probably reflects a rise in educational levels, the effects of the pension reform and generally improved health among the elderly. The work to promote an inclusive working life may also have been a factor.

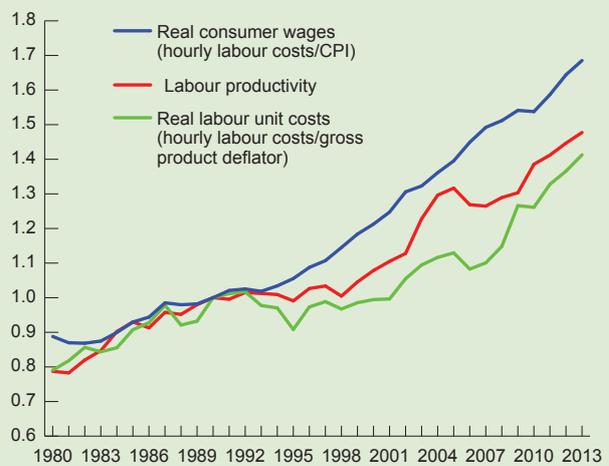
LFS unemployment increased towards the end of 2012, and through 2013 the unemployment rate ranged from 3.3 to 3.7 per cent. The average unemployment for the fourth quarter of 2013 and for the year as a whole was 3.5 per cent. This last observation indicates a weak increase in unemployment. The statistics of the Norwegian Labour and Welfare Organisation (NAV) for registered unemployment, as well as the total of registered unemployed and persons on labour market programmes, show a steady increase through 2013, but a levelling off so far this year. At end-February 2014, over 96 100 persons were either on labour market programmes or registered as unemployed. There has been an upswing in unemployment among all occupational groups. The increase was largest for occupations such as tourism and transport, retail and sales, and construction, while engineering and ICT had the largest percentage-wise increase on the same period in 2013. Seasonally adjusted unemployment in construction declined. This may be attributable to the mild winter in much of Norway.

#### Box 5. Real wages and productivity in manufacturing

In Norway it is usual to assume that wage growth in manufacturing must shadow the rise in prices<sup>1</sup> and labour productivity, which is generally called the «main course» for wage formation. This means that real labour unit costs – hourly wage divided by producer prices (gross product deflator) – over time must reflect productivity development. The figure shows that these two variables have followed a fairly similar path since the mid-1990s, but that productivity fell less than real labour unit costs prior to this. Much of the variation in real producer wages is associated with developments in commodity prices, while changes in productivity are more complex.

At the same time, it is real consumer wages - hourly wage divided by consumer prices (CPI) – that determine employee purchasing power. The figure shows that this has grown appreciably more than real labour unit costs since 1990. This must be viewed in conjunction with the fact that CPI inflation has been lower than the rise in producer prices. During parts of this period, Norway has had terms of trade gains because prices for export goods increased more than prices for imported goods. Thus the purchasing power of manufacturing employees has improved without being counterbalanced by an equally large increase in real labour unit costs.

#### Developments in real labour unit costs, real consumer wages and productivity in manufacturing. (1995=1)



<sup>1</sup> Cost of intermediate goods

Unemployed persons who have not been in work or on labour market programmes with a duration of 26 weeks or longer are regarded by NAV as long-term unemployed. This definition does not include persons who have been on labour market programmes for a period and who remain unemployed after the programme is over. Thus it may be more difficult for some groups of workers to find work than long-term unemployment according to NAV's definition may indicate to be the case. All persons unemployed for more than 26 weeks, including persons who have been on labour market programmes, but who are still unemployed, accounted for

about 43 percent of the unemployed in February 2014. This is higher than at the same time last year.

The number of vacancies in the public and private sector announced in the media or reported to NAV were reduced on an annual basis to 17 per cent in January and 13 per cent in February. Since 2010, Statistics Norway has published vacancy figures (based on a sample survey). The level in the fourth quarter of 2013 was lower than ever previously, and now accounts for only 2 per cent of the total of all employment relationships and vacancies. The fact that the number of vacancies is falling while the population is rising indicates that the job prospects for the unemployed worsened last year. The largest decline in the number of announced vacancies was in retail trade and commercial services. The number of vacancies in manufacturing and oil and gas production also declined.

The average growth in hours worked in mainland Norway in 2013 is on a par with growth in the number employed, if the rise in hours worked is adjusted for the number of business days. There were two less working days in 2013 than in 2012, which reduce the number of hours worked per employee. On the other hand, lower sickness absence in the third quarter of 2013 pushed up the number of hours worked. The decline in the number of lay-offs registered by NAV compared with the same period in 2013 also boosts the number of hours worked.

We forecast that employment growth will be weak throughout the projection period. However, there are forces pulling in different directions. Activity in the petroleum industry is important to manufacturing, and impulses from this industry to Norwegian manufacturing are expected to be much weaker than in previous years. On the other hand, a weaker krone will improve competitiveness and increase employment in

Table 4. **Average wage for the economy as a whole. Growth from the previous year in per cent. differences in growth and estimates of contributions in percentage points**

	2010	2011	2012	2013
Wages per hour worked	3.1	4.1	4.0	4.7
Annual earnings, accumulated	3.7	4.2	4.0	3.9
Estimated contribution to the difference from changes in:				
Number of working days	-0.4	0.0	0.4	0.8
Sickness absence	-0.2	-0.1	-0.2	0.0
Overtime	0.0	0.0	-0.2	0.0
Wage costs per hour worked	2.6	4.5	4.2	4.8
Wages per hour worked	3.1	4.1	4.0	4.7
Estimated contribution to the difference from changes in:				
Pension costs	-0.5	0.4	0.2	0.1
Employer's contributions	0.0	0.0	0.0	0.0

Source: Statistics Norway.

internationally exposed industry in the current year. Other private service production will push up growth, while growth in retail trade and domestic transport and communications is expected to remain weak throughout the projection period. There will be very slow growth in construction this year and in 2015 before activity picks up again towards the end of the projection period. The decline in the number of vacancies also indicates somewhat higher unemployment in the near term. We project that LFS unemployment will increase slightly this year and rise further to 3.9 per cent in 2015. Unemployment is expected to remain at this level in 2016 and then fall back slightly.

## Wages

From 2012 to 2013, annual earnings for full-time equivalents rose by an average of 3.9 per cent for all wage-earners. In addition to fixed salary, annual wages

Table 5. **Wages. Percentage growth compared with previous year**

	Annual earnings, full-time equivalents			Wages and salaries per hour worked			Compensation of employees per hour worked		
	2011	2012	2013	2011	2012	2013	2011	2012	2013
<b>Total</b>	<b>4.2</b>	<b>4.0</b>	<b>3.9</b>	<b>4.1</b>	<b>4.0</b>	<b>4.7</b>	<b>4.5</b>	<b>4.2</b>	<b>4.8</b>
Petroleum activities and ocean transport	5.5	5.1	5.6	6.2	5.2	6.4	7.0	6.7	7.4
Mainland Norway	4.1	3.9	3.8	3.9	3.9	4.6	4.3	4.0	4.6
Mainland Norway excluding general government	4.0	3.7	3.8	3.9	3.8	4.7	4.0	4.2	4.8
Production of goods	3.7	3.8	3.7	3.7	4.1	4.6	4.0	4.1	4.5
Manufacturing and mining	3.9	4.3	3.9	4.1	4.5	4.8	4.5	4.4	4.7
Construction	3.2	3.3	3.3	3.5	3.8	4.2	3.5	3.8	4.2
Production of other goods	4.3	3.6	4.7	3.5	3.8	5.4	3.7	3.8	5.5
Production of services	4.2	3.6	3.8	4.0	3.7	4.8	4.0	4.3	4.9
Wholesale and retail trade, repair of motor vehicles	3.6	3.2	3.5	3.7	2.9	5.1	3.3	2.9	5.1
Accommodation and food service activities	3.0	2.8	3.5	2.3	2.6	3.8	2.5	2.6	3.8
Financial and insurance activities	6.6	0.5	4.9	6.5	1.0	5.8	4.8	4.1	6.8
Production of other services	4.3	4.2	3.8	4.0	4.4	4.6	4.5	5.0	4.6
General government	4.1	4.4	3.7	4.0	4.2	4.4	4.9	3.7	4.4
Central government	4.1	4.0	3.9	4.2	4.0	4.7	4.7	4.2	4.2
Civil government	4.1	4.6	3.7	3.8	4.3	4.1	5.0	3.4	4.5

Source: Statistics Norway.

include back pay, holiday pay, bonus and variable additional allowances, while overtime pay is not included. The increase in annual wages was the same as the increase in manufacturing wages, and in line with wage growth in recent years. Wage growth in the traditional service industries and the public sector was also about on a par with manufacturing. In some service industries, such as professional, scientific and technical services, real estate activities, and finance and insurance, wage growth was somewhat higher. Wage growth in construction, accommodation and food service activities and retail trade was somewhat lower. This has also been the general pattern in previous years, and is largely consistent with the workforce composition in these industries.

Developments in wages and labour costs per hour worked are affected by changes in overtime, sickness absence and contractual working hours per year. Annual variations in the number of business days also lead to developments in hourly wages differing from annual earnings for full-time equivalents. Growth in hourly wages was 0.8 percentage point higher than annual wage growth in 2013. Table 2.4 shows that this increase corresponds in its entirety to the effect of there being two fewer working days in 2013 than in 2012. In contrast to previous years, a decline in sickness absence did not push down growth in hourly wages. Labour costs reflect the amount employers have to pay for each hour worked. This differs from hourly wages in that employer's social insurance and pension contributions are also included in this wage concept. The rise in hourly labour costs was 0.1 percentage point higher than hourly wage growth in 2013, and was due to increased pension costs. This component pushed up labour costs in 2011 and 2012 even more, while substantially reducing costs in 2010. Table 2.5 shows developments in annual wages, hourly wage and hourly labour costs in the various industries in those same years. Measures of wage growth vary from one industry to the next, but on the whole the table shows that growth in wages and labour costs per hour worked was approximately the same in the different industries in 2013. The exceptions are petroleum activities and finance and insurance, where growth in hourly labour costs was appreciably higher than growth in hourly wages. These are also the industries in which wage growth has been highest.

The union settlements start with the Norwegian United Federation of Trade Unions and the Federation of Norwegian Industries negotiating the framework for growth in manufacturing wages. The Norwegian United Federation of Trade Unions has announced that they want to bring pensions into this year's collective wage bargaining by establishing a new agreement on the management of pension assets from mandatory occupational pensions (MOP). This would be done by the Norwegian United Federation of Trade Unions and the Federation of Norwegian Industries setting up a joint pension fund for managing the employees' pension deposits. The employer side has rejected such a scheme

up to the present, pointing out that pensions are not supposed to be brought into the wage settlements until after 2017, when the pension reform is to be evaluated. The disagreement prior to this year's wage settlement relates more to the institutional aspects of wage setting, and will probably not have any appreciable effect on the framework for annual wage growth that the parties aim to achieve in the wage settlement. If pensions are brought into collective wage bargaining to a greater extent in the future, this factor in isolation appears likely to result in lower annual wage growth. The way wage formation has functioned in the past, it is the share of value added in manufacturing represented by labour costs that is of importance to hourly wage growth. Higher labour costs in the form of pension costs point to lower growth in disbursed wages.

Developments in manufacturing wage growth through 2013 resulted in a relatively low carry-over into 2014. The estimated carry-over of 1.5 per cent for clerical employees in manufacturing is particularly low. Given an unemployment level that is higher than for a long time, wage drift may also be moderate. The total wage growth framework for manufacturing workers, which the parties will negotiate in the union settlements, may therefore be lower than in previous years, even given a normal pay increase. After many years of pressure on the profitability of the export industry, we now expect slightly higher demand from abroad. The depreciation of the krone is also resulting in increased earnings for export companies. This may provide a basis for stronger wage growth in manufacturing, but on the other hand margins have been narrow in this segment of manufacturing for a number of years. The viability of these companies will probably be a major consideration also in this year's wage settlements. Given markedly lower growth in petroleum sector investment, a substantial demand impulse to the supplier industry will also be curbed. We project annual wage growth of 3.8 per cent in 2014. Assuming relatively high inflation, this will result in slightly lower real wage growth than in 2013, and half that in 2012.

Real wage growth is expected to increase somewhat in 2015 and 2016. Nominal wage growth will moderate, since inflation is expected to slow, and a stronger krone, in isolation, will detract from manufacturing profitability. Even if externally exposed manufacturing experiences increased demand in accordance with our projections, the labour costs associated with the workers will still be appreciably higher than those of our trading partners, and export companies will lose market shares in all the years of the projection period. It is therefore likely that the parties will aim for moderate wage settlements, also going forward. Increased unemployment will also act as a damper on wage growth outside collective bargaining. We forecast that wage growth will fall further to about 3.5 per cent in 2015 and 2016 before edging up again in 2017. This implies that share of value added in manufacturing represented by labour cost will fall throughout the projection period. As

Table 6. Consumer price index adjust for tax changes and excluding energy products (CPI-ATE) by to delivery sector

	Weights <sup>1</sup>	Percent change from previous year					
		2010	2011	2012	2013	jan.14	feb.14
Agricultural products	1 000	1.4	0.9	1.2	1.6	2.4	2.4
Fish products	63.2	-0.3	-2.3	0.0	0.6	2.3	3.3
Other consumer goods produced in Norway	12.8	0.0	3.7	0.9	0.5	4.5	7.3
Imported consumer goods	101.6	2.1	2.1	1.6	3.1	4.1	3.5
Rent, including holiday homes	312	-0.7	-0.8	-0.7	-0.2	1.6	1.3
Other services	194.3	2.8	2.1	1.8	3.0	3.3	3.1
- with wages as the dominant price factor	316	2.8	2.0	2.7	2.3	2.2	2.2
- also including other important price components	68.1	4.1	3.8	3.1	3.4	3.1	3.3
- også med andre viktige priskomponenter	247.9	2.3	1.4	2.5	2.0	1.9	1.9

<sup>1</sup> The weighs apply from January 2014 to Decembe 2014.  
Source: Statistics Norway.

Table 7. Consumer price index. Goods and services by consumption group

	Weights <sup>1</sup>	Percent change from previous year					
		2010	2011	2012	2013	jan.14	feb.14
<b>Totalt</b>	<b>1 000</b>	<b>2.5</b>	<b>1.2</b>	<b>0.8</b>	<b>2.1</b>	<b>2.3</b>	<b>2.1</b>
Food and non-alcoholic beverages	132.5	0.2	-0.1	1.2	1.1	3.1	3.7
Alcoholic beverages and tobacco	40.5	3.5	6.4	3.2	4.3	4.5	3.6
Clothing and footwear	53.2	-4.0	-3.0	-1.3	-2.0	1.4	0.4
Housing, lighting and fuel	215.9	5.3	0.9	-1.8	5.3	2.5	2.0
Of which: Electricity, fuel oil and other fuels	35.2	18.8	-4.0	-17.5	14.7	-0.7	-2.9
Furniture and household appliances, etc.	58.7	-0.4	-0.6	0.1	0.4	4.5	2.4
Healthcare	29.6	2.6	2.3	3.0	2.6	2.4	2.2
Transport	149.5	2.1	2.4	2.5	1.4	1.5	1.4
Postal and telecom services	25.8	-2.2	-1.8	-5.9	-2.1	-2.6	-2.6
Recreation and culture	126.9	2.2	-0.1	0.3	0.9	1.3	1.7
Education	3.8	2.9	2.9	5.4	7.5	4.1	4.1
Hotel and restaurant services	52.1	3.0	2.9	3.2	2.9	3.0	2.6
Miscellaneous goods and services	111.5	3.2	2.8	3.3	1.9	2.3	2.5

<sup>1</sup> The weighs apply from January 2014 to Decembe 2014.  
Source: Statistics Norway.

previously, we assume that wage growth in non-manufacturing industries will largely shadow developments in the wage leader. There is particular reason to expect that lower oil prices will curb wage growth in petroleum-related activities.

## Inflation

The consumer price index (CPI) rose by 2.1 per cent from 2012 to 2013. This is a pronounced increase from the very low inflation rate of 0.8 per cent the previous year. Inflation was thereby back at a higher level after several years of very low inflation. The consumer price index adjusted for taxes and excluding energy products (CPI-ATE) increased by 1.6 per cent in the same period, i.e. 0.4 percentage point more than the rise in 2012. Higher electricity prices in 2013 than in 2012 were the main reason that the rise in the CPI ended appreciably higher than the rise in the CPI-ATE. Last year's increase in energy prices largely reversed the low electricity prices in 2012 that were due to abnormally high precipitation that year. Despite rising markedly, electricity prices including grid charges were lower on average in 2013 than in the years 2010–2011. In January and February the 12-month increase in the CPI-ATE rose to 2.4 per cent, while CPI inflation remained slightly under this

level as a result of a new fall in electricity prices at the beginning of the year.

Low global inflation coupled with an almost unbroken appreciation of the krone in previous years contributed to low domestic inflation. With stable wage developments, the depreciation of the krone was an important factor behind the substantial rise through 2013 in underlying inflation measured by the 12-month increase in the CPI-ATE. Measured in terms of the import-weighted krone exchange rate, the krone depreciated by a total of 10.3 per cent from February 2013 to January 2014. As a result of the competitive situation and contracts made in Norwegian kroner, it will take time before exchange rate changes translate into higher consumer prices. This also applies to products manufactured in Norway with imported material inputs. Margins will narrow in the short term as a result of the postponement of price rises due to higher import prices. In the longer term, consumer prices will have to be raised to meet increased labour costs and an increase in other factor prices. The year-on-year rise in the CPI-ATE was 1.3 per cent on average during the first half of 2013, but still as low as 1.4 per cent in June. Excluding a peak of 2.5 per cent in August that was due to special circumstances, the inflation rate rose gradually from

1.8 per cent in July to 2.4 per cent in February. During this period, the CPI-ATE increased by 0.6 percentage point. Half of this increase can be attributed to the sub-index for imported consumer goods.

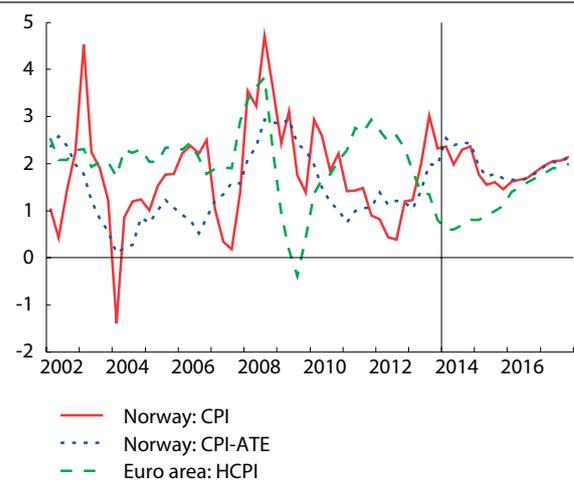
Rents contributed appreciably to pushing up average inflation in 2013. Actual rent, which shows developments in actual rents for tenants, and imputed rent, which shows the rise in prices for unit holders and owner-occupiers, rose by 3.1 and 2.9 per cent, respectively. The year-on-year rise picked through the year, but inflation in January and February was somewhat lower than in December, measured in relation to the same period the previous year. We assume that the rise in rents will stabilise this year, and that the annual rise in the rent index will be approximately the same as last year.

The rise in prices in the product group food and non-alcoholic beverages has been moderate for several years, and rose on aggregate by 1.1 per cent from 2012 to 2013. Prices rose moderately in the first half of the year, but then gathered pace. Thus the 12-month rise in January had climbed to 3.1 per cent. The depreciation of the krone may explain a rise in prices for fruit and vegetables. However, movements in prices for imported goods were not always consistent. Falling global commodity prices caused the price of coffee to drop by 7 per cent in 2013, and consumer prices have continued to fall in 2014. The price of sugar also dropped considerably at the beginning of 2014. This commodity constitutes an essential share of material inputs in the food industry, and may influence the prices of a number of finished products later in 2014. A commodity shortage and high demand resulted in a substantial upswing in prices for butter and cream in 2013.

At the beginning of 2013, the customs duty on beef and lamb and some types of cheese was changed from a krone-based rate to a percentage rate. Prices for beef and ground meat have increased in the past year. The increase in the price of cheese was probably reduced because the bulk of the cheese on which the duty was changed was brought in under duty-free quotas. Lamb is now allowed to be imported at reduced duty rates.

The krone exchange rate also influences movements in prices for a number of consumer durables. Prices for audiovisual and telecommunications equipment fell less in 2013 than in the preceding years, while prices for white goods and cars exhibited a stable, low rise. Despite the weakening of the krone, prices for private cars rose by only 0.1 per cent from 2012 to 2013, and were almost unchanged from 2011. The low rise in prices must be viewed against the background of the substantial stockpiles accumulated by car manufacturers as a result of the financial crisis in Europe. This has led to strong price competition between manufacturers that has probably spread to Norwegian dealers and exerted pressure on margins. In 2013, electric cars also accounted for a significant share of new car sales for the first time. According to the CPI, car prices rose

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



Source: Statistics Norway.

moderately into early 2014. The introduction of new models and the battle for market shares indicate that the rise in prices will remain slow.

Airfares rose 0.5 per cent on average from 2012 to 2013, after varying considerably through 2013 as a result of seasonal fluctuations. Airfares have shown a falling tendency through the winter, and according to the CPI sank to very low levels in the first two months of the year. The fall in airfares must be viewed in conjunction with the large increase in capacity in this market over the past year. Trading of both goods and services over the internet is also on the rise. Air travel transactions are routinely made over the internet. Freely available online information about prices from different suppliers contributes to intensifying competition, also for air travel.

Electricity production capacity in the Nordic countries will increase sharply going forward through the Norwegian-Swedish subsidy scheme of green certificates for renewable energy, and as a result of nuclear power development in Finland. If prices for long-term forward contracts in the Nord Pool area are realised, electricity prices will remain at a low level for many years to come. However, there may be wide fluctuations in electricity prices also in the years ahead, even though well-founded long-term projections indicate that prices will remain low. Both Norwegian and an increasing share of foreign electricity production is dependent on naturally occurring factors. On the basis of the Nord Pool forward prices, we expect the price of electricity, including grid charges, to fall by about 6 per cent this year. Coupled with an expected fall in oil prices, this will result in CPI inflation being somewhat lower than CPI-ATE inflation in 2014.

The depreciation of the krone through 2013 will continue to augment inflationary impulses from imported goods for a while to come. Underlying inflation measured by the CPI-ATE is therefore expected to rise towards

the summer. We assume that the krone will strengthen somewhat through the year and going forward in the projection period, which will contribute to a fall in inflation in 2015. Labour productivity also appears likely to pick up in the near term, partly because investment in industries will then have reached a higher level.

According to our calculations, changes in wages, labour productivity and import prices will bring CPI-ATE inflation to an average for the year of 2.5 per cent in 2014, while CPI inflation is projected to be 2.3 per cent. In 2015, somewhat lower wage growth and lower rise in import prices will depress CPI-ATE inflation to 1.8 per cent. Given a somewhat stronger global economic situation, CPI-ATE inflation may rise to 2.0 per cent again in 2017. On the basis of our assumptions regarding developments in energy prices and taxes, CPI inflation will lie 0.2 percentage point under CPI-ATE inflation this year, and is expected largely to shadow movements in the CPI-ATE in the period 2015–2017.

Table 9. National accounts: Final expenditure and gross domestic product. At constant 2011 prices. Million kroner

	Unadjusted		Seasonally adjusted							
	2012	2013	12.1	12.2	12.3	12.4	13.1	13.2	13.3	13.4
Final consumption expenditure of households and NPISHs	1 163 689	1 187 774	287 981	290 890	292 879	294 149	297 103	297 647	297 542	298 598
Household final consumption expenditure	1 109 433	1 132 494	274 281	277 375	279 411	280 604	283 419	283 762	283 673	284 723
Goods	554 323	559 463	137 398	139 575	139 607	139 890	141 924	141 549	139 509	139 806
Services	509 682	522 671	125 890	126 765	128 325	128 747	129 372	130 092	131 164	131 849
Direct purchases abroad by resident households	76 268	82 188	18 663	18 787	19 184	19 665	19 852	20 014	21 024	21 243
Direct purchases by non-residents	-30 841	-31 828	-7 670	-7 752	-7 706	-7 698	-7 728	-7 894	-8 025	-8 176
Final consumption expenditure of NPISHs	54 256	55 280	13 700	13 515	13 468	13 545	13 684	13 885	13 869	13 876
Final consumption expenditure of general government	602 683	612 140	148 635	150 255	151 760	152 019	152 515	152 677	153 071	153 883
Final consumption expenditure of central government	304 762	309 023	75 137	76 019	76 626	76 973	77 138	77 019	77 161	77 707
Central government, civilian	266 268	270 787	65 539	66 424	66 991	67 315	67 535	67 426	67 569	68 267
Central government, defence	38 493	38 236	9 598	9 595	9 635	9 657	9 603	9 593	9 592	9 440
Final consumption expenditure of local government	297 921	303 117	73 499	74 236	75 134	75 047	75 377	75 658	75 910	76 175
Gross fixed capital formation	583 849	634 773	141 852	143 243	146 708	151 507	153 576	161 812	160 428	158 690
Extraction and transport via pipelines	166 092	195 989	39 605	41 181	40 784	44 533	45 386	48 947	52 007	49 646
Service activities incidental to extraction	2 765	2 000	395	331	958	1 081	-477	1 182	741	554
Ocean transport	23 724	27 181	6 575	5 577	5 227	6 360	6 544	7 698	6 543	6 401
Mainland Norway	391 268	409 603	95 277	96 154	99 739	99 532	102 123	103 985	101 137	102 090
Mainland Norway excluding general government	305 178	315 302	73 973	75 390	77 748	77 695	78 315	80 688	77 769	78 283
Industries	175 817	177 630	43 756	43 695	44 265	43 784	43 756	46 518	43 347	43 618
Manufacturing and mining	23 515	24 364	5 899	6 238	5 365	6 036	6 012	6 584	5 741	5 917
Production of other goods	44 573	46 437	11 224	10 849	11 001	11 269	11 283	12 007	11 330	11 583
Services	107 729	106 829	26 632	26 608	27 898	26 479	26 461	27 926	26 276	26 119
Dwellings (households)	129 361	137 671	30 217	31 695	33 483	33 911	34 560	34 170	34 422	34 665
General government	86 090	94 301	21 304	20 764	21 990	21 837	23 807	23 297	23 368	23 807
Changes in stocks and statistical discrepancies	110 659	109 342	27 512	29 743	26 485	23 122	23 284	18 834	29 580	34 849
Gross capital formation	694 507	744 115	169 364	172 986	173 192	174 629	176 860	180 646	190 007	193 539
Final domestic use of goods and services	2 460 880	2 544 029	605 980	614 131	617 831	620 797	626 478	630 970	640 620	646 020
Final demand from Mainland Norway	2 157 640	2 209 517	531 893	537 299	544 378	545 700	551 741	554 309	551 749	554 571
Final demand from general government	688 773	706 441	169 939	171 019	173 750	173 856	176 322	175 974	176 439	177 689
Total exports	1 165 804	1 120 686	297 340	298 849	284 474	285 278	279 787	285 146	282 725	273 768
Traditional goods	321 677	324 303	79 638	80 117	80 966	80 782	81 290	81 384	80 632	80 555
Crude oil and natural gas	572 367	530 479	149 271	149 330	136 640	137 445	131 504	135 441	136 069	128 587
Ships, oil platforms and planes	8 765	8 242	1 892	3 132	2 327	1 400	1 928	1 663	2 331	2 303
Services	262 994	257 661	66 538	66 271	64 541	65 651	65 066	66 658	63 693	62 323
Total use of goods and services	3 626 684	3 664 715	903 320	912 980	902 305	906 075	906 265	916 116	923 345	919 788
Total imports	796 233	816 476	196 606	201 292	199 204	198 825	201 904	204 064	205 842	203 584
Traditional goods	482 523	494 655	120 274	120 538	120 983	120 460	123 181	123 419	123 610	124 060
Crude oil and natural gas	14 206	15 728	3 308	5 045	2 975	3 001	3 740	3 575	4 843	2 904
Ships, oil platforms and planes	26 330	28 079	6 150	6 771	6 584	6 750	6 732	6 588	7 493	7 248
Services	273 174	278 014	66 874	68 936	68 662	68 615	68 250	70 482	69 896	69 373
Gross domestic product (market prices)	2 830 451	2 848 239	706 714	711 689	703 102	707 249	704 362	712 052	717 503	716 203
Gross domestic product Mainland Norway (market prices)	2 146 145	2 188 113	529 967	534 615	539 233	540 936	544 011	545 414	548 044	551 274
Petroleum activities and ocean transport	684 305	660 126	176 746	177 073	163 868	166 314	160 351	166 638	169 459	164 929
Mainland Norway (basic prices)	1 842 887	1 879 719	455 802	458 970	462 193	464 045	466 634	468 538	470 920	474 367
Mainland Norway excluding general government	1 403 632	1 432 178	346 879	349 570	352 048	353 241	355 378	356 987	358 862	361 680
Manufacturing and mining	190 639	196 872	47 212	47 123	47 965	47 949	48 144	49 532	50 122	49 478
Production of other goods	243 959	248 613	60 916	61 615	60 788	60 740	61 271	61 835	62 307	63 116
Services incl. dwellings (households)	969 034	986 693	238 751	240 832	243 294	244 552	245 963	245 620	246 433	249 086
General government	439 255	447 541	108 923	109 400	110 145	110 803	111 256	111 551	112 058	112 686
Taxes and subsidies products	303 258	308 394	74 166	75 645	77 040	76 891	77 377	76 876	77 124	76 907

Source: Statistics Norway.

Table 10. National accounts: Final expenditure and gross domestic product. At constant 2011 prices. Percentage change from the previous period

	Unadjusted		Seasonally adjusted							
	2012	2013	12.1	12.2	12.3	12.4	13.1	13.2	13.3	13.4
Final consumption expenditure of households and NPISHs	3,0	2,1	0,8	1,0	0,7	0,4	1,0	0,2	0,0	0,4
Household final consumption expenditure	3,0	2,1	0,7	1,1	0,7	0,4	1,0	0,1	0,0	0,4
Goods	2,1	0,9	0,2	1,6	0,0	0,2	1,5	-0,3	-1,4	0,2
Services	3,1	2,5	1,1	0,7	1,2	0,3	0,5	0,6	0,8	0,5
Direct purchases abroad by resident households	9,7	7,8	3,5	0,7	2,1	2,5	1,0	0,8	5,0	1,0
irect purchases by non-residents	3,7	3,2	2,8	1,1	-0,6	-0,1	0,4	2,2	1,6	1,9
Final consumption expenditure of NPISHs	1,9	1,9	1,8	-1,4	-0,3	0,6	1,0	1,5	-0,1	0,0
Final consumption expenditure of general government	1,8	1,6	0,2	1,1	1,0	0,2	0,3	0,1	0,3	0,5
Final consumption expenditure of central government	1,8	1,4	0,2	1,2	0,8	0,5	0,2	-0,2	0,2	0,7
Central government, civilian	2,0	1,7	0,4	1,4	0,9	0,5	0,3	-0,2	0,2	1,0
Central government, defence	0,5	-0,7	-1,2	0,0	0,4	0,2	-0,6	-0,1	0,0	-1,6
Final consumption expenditure of local government	1,8	1,7	0,2	1,0	1,2	-0,1	0,4	0,4	0,3	0,3
Gross fixed capital formation	8,3	8,7	4,1	1,0	2,4	3,3	1,4	5,4	-0,9	-1,1
Extraction and transport via pipelines	14,6	18,0	4,7	4,0	-1,0	9,2	1,9	7,8	6,3	-4,5
Service activities incidental to extraction	..	-27,7	-271,5	-16,3	189,8	12,9	-144,1	-347,9	-37,3	-25,2
Ocean transport	14,6	14,6	18,9	-15,2	-6,3	21,7	2,9	17,6	-15,0	-2,2
Mainland Norway	4,5	4,7	2,2	0,9	3,7	-0,2	2,6	1,8	-2,7	0,9
Mainland Norway excluding general government	5,9	3,3	1,9	1,9	3,1	-0,1	0,8	3,0	-3,6	0,7
Industries	4,9	1,0	4,4	-0,1	1,3	-1,1	-0,1	6,3	-6,8	0,6
Manufacturing and mining	3,1	3,6	0,8	5,7	-14,0	12,5	-0,4	9,5	-12,8	3,1
Production of other goods	5,1	4,2	6,5	-3,3	1,4	2,4	0,1	6,4	-5,6	2,2
Services	5,2	-0,8	4,4	-0,1	4,8	-5,1	-0,1	5,5	-5,9	-0,6
Dwellings (households)	7,3	6,4	-1,6	4,9	5,6	1,3	1,9	-1,1	0,7	0,7
General government	-0,4	9,5	3,6	-2,5	5,9	-0,7	9,0	-2,1	0,3	1,9
Changes in stocks and statistical discrepancies	-3,0	-1,2	-22,9	8,1	-11,0	-12,7	0,7	-19,1	57,1	17,8
Gross capital formation	6,3	7,1	-1,5	2,1	0,1	0,8	1,3	2,1	5,2	1,9
Final domestic use of goods and services	3,6	3,4	0,0	1,3	0,6	0,5	0,9	0,7	1,5	0,8
Final demand from Mainland Norway	2,9	2,4	0,9	1,0	1,3	0,2	1,1	0,5	-0,5	0,5
Final demand from general government	1,5	2,6	0,6	0,6	1,6	0,1	1,4	-0,2	0,3	0,7
Total exports	1,1	-3,9	4,0	0,5	-4,8	0,3	-1,9	1,9	-0,8	-3,2
Traditional goods	1,7	0,8	2,5	0,6	1,1	-0,2	0,6	0,1	-0,9	-0,1
Crude oil and natural gas	0,7	-7,3	7,6	0,0	-8,5	0,6	-4,3	3,0	0,5	-5,5
Ships, oil platforms and planes	-35,6	-6	-26,2	65,5	-25,7	-39,8	37,7	-13,7	40,1	-1,2
Services	3,0	-2,0	-0,8	-0,4	-2,6	1,7	-0,9	2,4	-4,4	-2,2
Total use of goods and services	2,8	1,0	1,3	1,1	-1,2	0,4	0,0	1,1	0,8	-0,4
Total imports	2,3	2,5	-0,4	2,4	-1,0	-0,2	1,5	1,1	0,9	-1,1
Traditional goods	2,4	2,5	1,4	0,2	0,4	-0,4	2,3	0,2	0,2	0,4
Crude oil and natural gas	4,6	10,7	1,0	52,5	-41,0	0,9	24,6	-4,4	35,5	-40,0
Ships, oil platforms and planes	-17,9	6,6	41,7	10,1	-2,8	2,5	-0,3	-2,1	13,7	-3,3
Services	4,4	1,8	-6,2	3,1	-0,4	-0,1	-0,5	3,3	-0,8	-0,7
Gross domestic product (market prices)	2,9	0,6	1,8	0,7	-1,2	0,6	-0,4	1,1	0,8	-0,2
Gross domestic product Mainland Norway (market prices)	3,4	2,0	1,0	0,9	0,9	0,3	0,6	0,3	0,5	0,6
Petroleum activities and ocean transport	1,3	-3,5	4,2	0,2	-7,5	1,5	-3,6	3,9	1,7	-2,7
Mainland Norway (basic prices)	3,5	2,0	1,2	0,7	0,7	0,4	0,6	0,4	0,5	0,7
Mainland Norway excluding general government	4,0	2,0	1,4	0,8	0,7	0,3	0,6	0,5	0,5	0,8
Manufacturing and mining	2,7	3,3	0,4	-0,2	1,8	0,0	0,4	2,9	1,2	-1,3
Production of other goods	8,2	1,9	3,8	1,1	-1,3	-0,1	0,9	0,9	0,8	1,3
Services incl. dwellings (households)	3,2	1,8	0,9	0,9	1,0	0,5	0,6	-0,1	0,3	1,1
General government	2,2	1,9	0,7	0,4	0,7	0,6	0,4	0,3	0,5	0,6
Taxes and subsidies products	2,8	1,7	-0,5	2,0	1,8	-0,2	0,6	-0,6	0,3	-0,3

Kilde: Statistisk sentralbyrå.

Table 11. **National accounts: Final expenditure and gross domestic product. Price indices. 2011=100**

	Unadjusted		Seasonally adjusted							
	2012	2013	12.1	12.2	12.3	12.4	13.1	13.2	13.3	13.4
Final consumption expenditure of households and NPISHs	101.1	103.8	101.2	100.4	100.5	101.6	102.2	102.9	104.3	104.7
Final consumption expenditure of general government	103.0	107.3	101.9	102.7	102.8	104.3	106.1	106.8	107.7	108.5
Gross fixed capital formation	103.3	107.4	102.1	102.7	103.4	104.9	105.9	106.7	107.6	109.2
Mainland Norway	103.2	108.0	102.0	102.4	103.6	105.1	106.5	107.2	108.7	109.2
Final domestic use of goods and services	102.5	105.9	101.9	102.5	102.6	103.0	104.8	105.4	106.7	107.1
Final demand from Mainland Norway	102.0	105.5	101.6	101.4	101.7	103.0	104.1	104.8	106.1	106.6
Total exports	102.0	102.9	104.4	101.1	101.0	101.5	100.7	101.2	104.5	105.3
Traditional goods	96.4	99.4	98.4	96.6	94.9	95.8	97.0	98.8	99.2	101.7
Total use of goods and services	102.3	105.0	102.7	102.1	102.1	102.5	103.5	104.1	106.0	106.6
Total imports	100.7	103.4	100.6	101.0	101.3	100.4	101.3	102.5	105.1	105.7
Traditional goods	100.6	102.7	100.5	100.5	100.9	100.8	100.3	101.4	103.8	105.5
Gross domestic product (market prices)	102.8	105.5	103.3	102.4	102.3	103.1	104.2	104.5	106.3	106.8
Gross domestic product Mainland Norway (market prices)	102.1	106.0	101.2	101.8	102.1	103.4	104.6	105.7	106.5	107.1

Source: Statistics Norway.

Table 12. **National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous peri**

	Unadjusted		Seasonally adjusted							
	2012	2013	12.1	12.2	12.3	12.4	13.1	13.2	13.3	13.4
Final consumption expenditure of households and NPISHs	1.1	2.7	1.3	-0.8	0.1	1.0	0.6	0.7	1.3	0.4
Final consumption expenditure of general government	3.0	4.1	-0.2	0.8	0.0	1.5	1.7	0.6	0.8	0.8
Gross fixed capital formation	3.3	4.0	-0.5	0.6	0.7	1.4	0.9	0.8	0.9	1.5
Mainland Norway	3.2	4.6	-0.2	0.5	1.2	1.4	1.3	0.7	1.4	0.5
Final domestic use of goods and services	2.5	3.4	1.6	0.6	0.0	0.4	1.7	0.5	1.2	0.4
Final demand from Mainland Norway	2.0	3.5	0.6	-0.1	0.3	1.2	1.1	0.7	1.2	0.5
Total exports	2.0	0.8	0.9	-3.1	-0.1	0.5	-0.8	0.5	3.3	0.8
Traditional goods	-3.6	3.1	-1.0	-1.8	-1.8	1.0	1.2	1.9	0.4	2.5
Total use of goods and services	2.3	2.6	1.4	-0.7	0.0	0.4	1.0	0.5	1.9	0.5
Total imports	0.7	2.7	0.8	0.4	0.3	-0.8	0.9	1.2	2.5	0.6
Traditional goods	0.6	2.1	0.1	0.1	0.4	-0.1	-0.6	1.2	2.4	1.6
Gross domestic product (market prices)	2.8	2.6	1.5	-0.9	-0.1	0.8	1.0	0.3	1.7	0.5
Gross domestic product Mainland Norway (market prices)	2.1	3.8	0.6	0.6	0.3	1.2	1.2	1.1	0.8	0.5

Source: Statistics Norway.

Table 13. Main economic indicators 2003-2017. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012*	2013*	Forecasts			
												2014	2015	2016	2017
<b>Demand and output</b>															
Consumption in households etc.	3.2	5.4	4.4	5.0	5.4	1.8	0.0	3.8	2.6	3.0	2.1	2.1	3.4	3.6	3.3
General government consumption	1.3	1.2	1.4	1.9	2.7	2.7	4.3	1.3	1.1	1.8	1.6	2.3	2.3	2.3	2.1
Gross fixed investment	0.8	11.1	13.5	9.8	11.4	0.2	-7.5	-8.0	7.7	8.3	8.7	1.2	1.4	3.0	2.3
Extraction and transport via pipelines	15.9	10.4	19.2	4.0	6.1	5.2	3.4	-9.5	11.3	14.6	18.0	2.5	-0.7	0.7	-2.0
mainland Norway	-2.9	10.6	12.2	10.5	13.3	-1.3	-13.2	-4.5	6.3	4.5	4.7	0.9	2.5	4.3	4.4
Industries	-11.2	10.6	18.6	15.2	21.9	0.8	-23.1	-5.1	2.3	4.9	1.0	2.1	2.7	4.0	3.6
Housing	1.8	16.3	9.7	4.0	2.7	-9.0	-8.2	-1.6	16.1	7.3	6.4	-2.2	-1.8	3.1	1.9
General government	12.5	3.9	2.0	9.7	8.0	4.5	7.4	-6.8	2.2	-0.4	9.5	3.3	7.9	6.3	8.9
Demand from Mainland Norway <sup>1</sup>	1.6	5.1	4.9	5.2	6.3	1.4	-1.6	1.5	2.8	2.9	2.4	1.9	2.9	3.3	3.2
Stockbuilding <sup>2</sup>	-1.1	2.3	-0.1	1.1	-0.2	-0.1	-2.8	3.5	-0.1	-0.1	0.0	0.4	-0.1	0.0	0.0
Exports	-0.1	1.0	0.5	-0.8	1.4	0.1	-4.2	0.4	-0.7	1.1	-3.9	2.9	1.6	2.2	2.8
Crude oil and natural gas	-0.8	-0.7	-5.0	-6.6	-2.4	-1.3	-2.0	-6.9	-5.6	0.7	-7.3	3.1	0.0	0.4	0.6
Traditional goods	3.7	3.6	5.3	6.1	9.2	3.5	-8.0	3.4	-0.1	1.7	0.8	1.3	3.0	4.2	5.7
Imports	1.2	9.7	7.9	9.1	10.0	3.9	-12.5	9.0	3.8	2.3	2.5	3.5	3.5	4.3	4.3
Traditional goods	5.7	12.8	8.4	11.6	7.2	1.2	-12.9	9.1	4.1	2.4	2.5	1.5	2.8	4.0	4.2
Gross domestic product	1.0	4.0	2.6	2.3	2.7	0.1	-1.6	0.5	1.3	2.9	0.6	2.1	1.8	2.3	2.2
Mainland Norway	1.3	4.5	4.4	4.8	5.3	1.5	-1.6	1.7	2.6	3.4	2.0	1.9	2.4	2.9	2.8
Manufacturing	2.9	5.1	3.9	2.6	3.5	2.9	-7.4	2.4	1.5	2.7	3.3	3.8	3.9	3.5	3.7
<b>Labour market</b>															
Total hours worked, Mainland Norway	-2.1	1.9	1.5	3.3	4.3	3.5	-2.3	0.0	1.8	1.9	0.5	0.9	1.0	1.4	1.1
Employed persons	-1.2	0.5	1.3	3.5	4.1	3.3	-0.4	-0.5	1.6	2.2	1.2	0.7	0.7	1.1	1.6
Labor force <sup>3</sup>	-0.1	0.3	0.8	1.6	2.5	3.4	0.0	0.5	1.0	1.8	1.0	0.9	1.0	1.4	1.5
Participation rate (level) <sup>3</sup>	72.9	72.6	72.4	72.0	72.8	73.9	72.8	71.9	71.4	71.5	71.2	70.9	70.7	70.8	71.0
Unemployment rate (level) <sup>3</sup>	4.5	4.5	4.6	3.4	2.5	2.6	3.2	3.6	3.3	3.2	3.5	3.7	3.9	3.9	3.8
<b>Prices and wages</b>															
Wages per standard man-year	4.5	3.5	3.3	4.1	5.4	6.3	4.2	3.7	4.2	4.0	3.9	3.8	3.5	3.5	3.6
Consumer price index (CPI)	2.5	0.4	1.6	2.3	0.8	3.8	2.1	2.5	1.2	0.8	2.1	2.3	1.6	1.7	2.1
CPI-ATE <sup>4</sup>	..	0.4	1.0	0.8	1.4	2.6	2.6	1.4	0.9	1.2	1.6	2.5	1.8	1.7	2.0
Export prices, traditional goods	-1.0	8.4	4.0	11.3	2.4	2.8	-6.0	4.5	5.8	-3.6	3.1	2.3	0.4	1.2	2.5
Import prices, traditional goods	0.0	3.7	0.3	4.0	3.7	3.9	-1.5	0.1	4.0	0.6	2.1	4.3	0.2	0.8	1.7
Housing prices <sup>5</sup>	1.7	10.1	8.2	13.7	12.6	-1.1	1.9	8.3	8.0	6.7	3.9	-0.9	2.7	2.8	2.5
<b>Income, interest rates and exchange rate</b>															
Household real income	4.6	3.3	7.8	-6.4	6.3	4.0	4.1	2.7	4.6	3.2	3.2	2.6	3.5	3.7	3.5
Household saving ratio (level)	9.0	7.0	9.8	-0.5	0.9	3.8	7.1	5.8	7.8	8.6	9.0	9.6	9.7	9.8	10.0
Money market rate (level)	4.1	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.9	2.2	1.8	1.7	1.7	2.1	2.6
Lending rate, credit loans(level) <sup>6</sup>	6.5	4.2	3.9	4.3	5.0	6.8	4.0	3.4	3.6	3.9	4.0	4.1	4.0	4.0	4.1
Real after-tax lending rate, banks (level)	2.2	2.5	1.3	0.7	2.9	1.1	0.7	0.1	1.3	2.1	0.7	0.7	1.3	1.2	0.9
Importweighted krone exchange rate (44 countries) <sup>7</sup>	1.3	3.0	-3.9	0.7	-1.8	0.0	3.3	-3.7	-2.4	-1.2	2.2	3.5	-1.7	-0.6	0.0
NOK per euro (level)	8.0	8.4	8.0	8.1	8.0	8.2	8.7	8.0	7.8	7.5	7.8	8.3	8.1	8.0	8.0
<b>Current account</b>															
Current balance (bill. NOK)	195.2	220.6	322.8	357.7	287.4	408.3	279.3	303.2	372.2	417.2	319.5	340.3	293.7	258.6	266.6
Current balance (per cent of GDP)	12.3	12.6	16.5	16.4	12.5	16.0	11.7	11.9	13.5	14.3	10.6	10.9	9.2	7.8	7.7
<b>International indicators</b>															
Exports markets indicator	-7.6	7.7	7.0	9.6	5.7	1.1	-10.3	11.0	5.6	1.4	1.3	3.8	4.6	5.7	6.3
Consumer price index, euro-area	2.1	2.1	2.2	2.2	2.2	3.3	0.3	1.7	2.7	2.5	1.3	0.7	1.0	1.6	1.9
Money market rate, euro(level)	2.3	2.1	2.2	3.1	4.3	4.6	1.2	0.8	1.4	0.5	0.2	0.2	0.3	0.7	1.4
Crude oil price NOK (level) <sup>8</sup>	201	255	356	423	423	536	388	484	621	649	639	633	583	572	584

<sup>1</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.<sup>2</sup> Change in stockbuilding. Per cent of GDP.<sup>3</sup> 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. Lending rate, banks until 2006<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 11 March 2014.