Economic Survey

Statistics Norway

Statistisk sentralbyrå

- Economic developments in Norway
- Forecasts 2016-2019

3/2016

Economic developments in Norway

The cyclical trough following the oil downturn is approaching. The oil price has risen appreciably from very low levels in early 2016, but the negative impulses generated by the petroleum sector are still substantial. Mainland economic growth picked up a little through the first half of this year, after almost zero growth through the second half of 2015. The increased growth in activity in the second quarter is a consequence of growth in mainland business investment coupled with a marked increase in residential construction. A slightly smaller fall in petroleum investment and a reduced fall in exports of traditional goods, together with a more pronounced decline in imports, are other important factors underlying developments.

In the second quarter of 2016, mainland GDP growth was an annualised 1.5 per cent, and thus still lower than our estimate for trend growth of 2 per cent. However, underlying growth in the Norwegian economy was probably somewhat higher than 1.5 per cent, given that there was a clear fall in power production in the second quarter, largely as a result of naturally

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

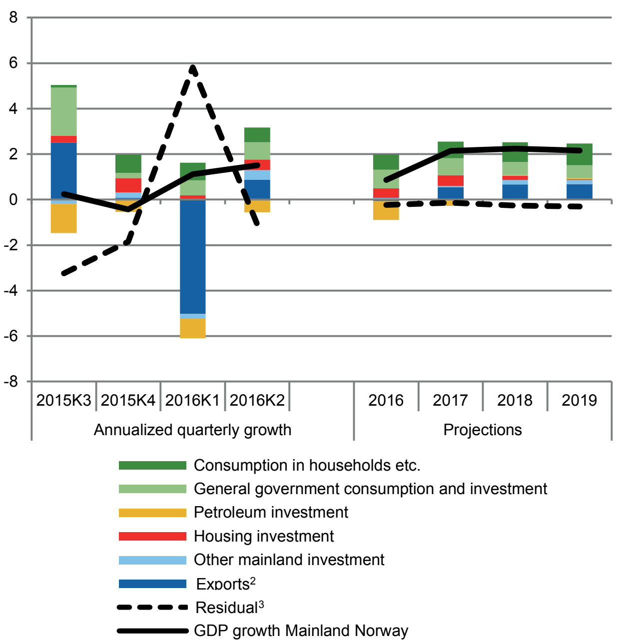
	2014	2015*	Seasonally adjustedt			
			15:3	15:4	16:1	16:2
Demand and output						
Consumption in households etc.	1.9	2.1	0.1	0.5	0.5	0.4
General government consumption	2.7	2.1	0.4	0.6	0.6	0.6
Gross fixed investment	-0.7	-3.8	0.7	-0.6	-1.6	0.1
Mainland Norway	0.4	0.6	3.8	0.2	-0.8	1.7
Extraction and transport via pipelines	-3.2	-15.0	-7.3	-3.3	-5.4	-3.7
Final domestic demand from Mainland Norway[1]	1.8	1.8	0.9	0.5	0.3	0.8
Exports	3.1	3.7	6.1	-2.2	-2.7	-0.3
Crude oil and natural gas	2.7	3.2	9.5	-4.9	2.4	-1.8
Traditional goods	3.1	5.8	0.4	-0.9	-4.6	-0.4
Imports	2.4	1.6	0.5	2.9	-0.9	-1.7
Traditional goods	2.1	1.9	-1.3	3.3	-0.6	-2.4
Gross domestic product	1.9	1.6	1.5	-1.3	1.0	0.0
Mainland Norway	2.2	1.1	0.1	-0.1	0.3	0.4
Labour market						
Man-hours worked	1.4	0.3	-0.2	-0.2	-0.3	-0.5
Employed persons	1.2	0.3	0.0	-0.2	-0.1	-0.1
Labour force[2]	1.1	1.4	0.2	-0.2	0.5	-0.6
Unemployment rate, level[2]	3.5	4.4	4.6	4.6	4.7	4.7
Prices and wages						
Annual earings	3.1	2.8	..	..		
Consumer price index (CPI)[3]	2.0	2.1	2.0	2.5	3.2	3.4
CPI adjusted for tax changes and excluding energy products (CPI-ATE)[3]	2.4	2.7	2.9	3.0	3.2	3.2
Export prices, traditional goods	3.4	2.3	-0.2	-0.3	0.7	2.8
Import prices, traditional goods	4.4	4.7	0.7	-0.1	0.1	1.0
Balance of payment						
Current balance, bill. NOK	346.0	270.0	62.5	52.9	42.8	40.3
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	1.7	1.3	1.2	1.1	1.1	1.0
Lending rate, credit loans[4]	3.9	3.2	3.1	2.8	2.7	2.6
Crude oil price NOK[5]	621	430	421	380	304	388
Importweighted krone exchange rate, 44 countries, 1995=100	93.7	103.4	105.1	107.4	108.1	105.9
NOK per euro	8.4	8.9	9.1	9.3	9.5	9.3

[1] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.
[2] According to Statistics Norway›s labour force survey(LFS).
[3] Percentage change from the same period the previous year.
[4] Period averages.
[5] Average spot price, Brent Blend.
Source: Statistics Norway and Norges Bank.

occurring factors. The preliminary quarterly national accounts figures (QNA) may therefore indicate that the cyclical downturn is coming to an end. There is always great uncertainty associated with developments in the preceding quarter, however, and according to our calculations the turnaround to a cyclical upturn will only occur in early 2017.

Revised QNA figures show a slight decline in employment since the peak in the fourth quarter of 2014, but labour supply developments have also been very modest. Two years of a cyclical downturn have increased unemployment measured by the labour market survey (LFS) by 1.5 percentage points, to 4.8 per cent. Most of the increase in unemployment occurred early in the downturn, and the increase so far this year has only been 0.2 percentage point. According to the figures of the Norwegian Labour and Welfare Organisation (NAV) on the registered fully unemployed, the increase actually came to a halt last autumn, and there has been a slight dip through the past six months. If we add the number of persons on labour market programmes, however, unemployment remains very stable.

Figure 1. **GDP growth Mainland Norway and contribution by final demand components[1]. Percentage points**



[1] Demand components are calculated as the change in each variable, adjusted for the direct and indirect import shares, relative to the level of GDP Mainland Norway in the preceding period. The import shares can be found in box 4. All variables are seasonally adjusted and at constant prices.

[2] Exports is defined as total exports minus exports of crude oil, natural gas, ships, oil platforms and planes.

[3] The residual is the sum of all the demand factors that are left out as well as changes in stocks and statistical discrepancies.

Source: Statistics Norway.

Economic policy has contributed substantially to the oil downturn failing to precipitate a more pronounced decline in the Norwegian economy. The key policy rate has been cut by 1 percentage point in the course of the past two years, most recently in March this year. Household mortgage rates have fallen just as much as the central bank's key rate. Lower interest rates have spurred investment – particularly in dwellings – but have also weakened the krone, thereby stimulating both internationally and domestically exposed industry. The krone has in fact appreciated by about 5 per cent so far this year, measured in terms of the import-weighted krone exchange rate, but the exchange rate on 13 September was still more than 23 per cent weaker than the peak level in February 2013.

Despite the sharp improvement in competitiveness due to the depreciation of the krone, exports of traditional goods edged down 0.4 per cent in the second quarter, following a fall of a whole 4.6 per cent the previous quarter. Refined products account for much of the decline, which follows a corresponding increase in these exports through 2015. We find similar developments in Norway›s imports of the same products. It is reasonable to assume that there has been a fall in international demand for products associated with petroleum extraction which has depressed exports of traditional goods. Underlying developments in exports are therefore probably appreciably better than the figures for traditional merchandise exports indicate. It must also be borne in mind that some time will elapse before changes in cost-competitiveness are fully reflected in exports, since it takes time to expand production capacity. The improved cost-competitiveness also stimulates the

Table 2. **Growth in mainland GDP and contributions from demand components[1]. Percentage points. Annual rate**

	QNA figuresl				Projection			
	15:3	15:4	16:1	16:2	2016	2017	2018	2019
Consumption by households and non-profit organisations	0.1	0.8	0.8	0.7	0.7	0.7	0.9	0.9
General government consumption and investment	2.1	0.2	0.7	0.8	0.8	0.7	0.6	0.6
Petroleum investment	-1.3	-0.5	-0.8	-0.6	-0.8	-0.3	0.0	0.1
Housing investment	0.3	0.6	0.2	0.5	0.4	0.5	0.2	0.0
Other mainland investment	-0.2	0.2	-0.2	0.4	0.1	0.1	0.2	0.2
Exports[1]	2.5	0.1	-5.0	0.9	-0.1	0.5	0.7	0.7
Other deviations[1]	-3.2	-1.9	5.8	-1.1	-0.2	-0.1	-0.3	-0.3
Growth in mainland GDP	0.2	-0.4	1.1	1.5	0.9	2.1	2.2	2.2

[1] See footnotes to Figure 1.
Source: Statistics Norway.

Norwegian economy by making Norwegian companies, more competitive in the domestic market.

Fiscal policy has become steadily more expansionary in recent years. However, it will probably be less expansionary in 2016 than previously assumed because of the sharp decline in the inflow of asylum-seekers. Public sector demand for consumption and investment purposes is nonetheless expected to increase appreciably more in 2016 than trend economic growth. There will be little growth in the real value of transfers this year, owing to high inflation, but the real increase in expenditure will exceed trend economic growth. Added to this is net tax relief, equivalent to about 0.2 per cent of GDP.

We assume that the real fiscal impulses in 2017 will be approximately the same as this year. The increase in public sector consumption and investment, excluding increased purchases of fighter aircraft, will be approximately in line with trend growth in the economy, while real transfers to households will increase somewhat more. We additionally assume that tax relief will be of the same order of magnitude as in 2016. For 2018 and 2019, we assume a weakly contractionary fiscal policy, with real spending growth approximately at trend, but with a concurrent increase in environmental taxes. We have not foreseen any other changes of significance in the tax programme.

If we disregard share dividend, which probably has a low consumption-motivating effect, household real disposable income increased by 2.5 per cent in 2015. Despite the decline in interest rates and high house prices, household consumption increased fairly moderately through the second half of last year and the first half of 2016. Consumption this year is clearly constrained by very modest income developments. According to preliminary figures, real disposable income other than share dividend remained roughly unchanged from the fourth quarter of last year to the second quarter of this year, and we forecast an annualised average increase of only 0.4 per cent from 2015 to 2016. The factors responsible are the fall in employment coupled with low wage growth and high inflation. Households will normally smooth income fluctuations, so that the impact on consumption is substantially smaller. Thus higher income growth in the next few years will only push consumption growth up slightly.

The economic turnaround early next year will be largely driven by the same factors that underlie the increase in growth so far this year: a reduction in the fall in petroleum investment, a high rate of growth in residential construction, increased exports and weak import developments. The expected increase in exports reflects improved competitiveness, but is also partly attributable to slightly higher global growth. At a slightly later stage of the upturn, mainland business investment and household consumption will make a larger contribution. We expect the oil price to pick up gradually in the near term, and assume that investment in the petroleum industry will stabilise in the course of 2017, then increase slightly. We project that annual average mainland GDP will increase by 0.9 per cent this year, rising to 2.1 per cent in 2017. Unemployment is forecast to be 4.7 per cent as an annual average in 2016, and then to fall slightly as employment picks up. The decline in LFS unemployment is expected to come to a halt at the end of 2017, when the labour supply also starts to rise. The unemployment rate is then calculated to be around 4.3 per cent.

We envisage that the developments outlined above will take place without Norges Bank reducing the key rate any further. Our calculations then show that the krone exchange rate will remain at about the current level until the end of 2019. Underlying inflation measured by the CPI adjusted for tax changes and excluding energy products (CPI-ATE) has risen markedly in the past four years. Much of the increase was a result of the weakening of the krone up to January this year, and in August 2016 inflation was 3.3 per cent, after being as high as 3.7 per cent the previous month. The significance of the depreciation of the krone for inflation is expected to gradually decline going forward. Wage growth has fallen continuously since 2011, and appears likely to dip to a record low level this year, which also points towards lower inflation. Electricity prices have remained at a high level in 2016, as a result of which the CPI will rise appreciably more than the CPI-ATE this year. We forecast CPI inflation of 3.4 per cent in 2016. The Confederation of Norwegian Enterprise (NHO), in agreement with the Norwegian Confederation of Trade Unions (LO), has estimated that wage growth in manufacturing will be 2.4 per cent this year, and figures so far suggest that overall annual wage growth may be even lower. Relatively high unemployment, and in particular weak profitability in petroleum-related manufacturing, underlie this weak tendency. Real wages may thus fall by more than 1 per cent in 2016, the largest decline since the early 1980s. As the economic situation gradually improves, growth in real wages will become positive next year already, and will then rise further, to 1.4 per cent in 2019.

Expansionary fiscal policy in 2016

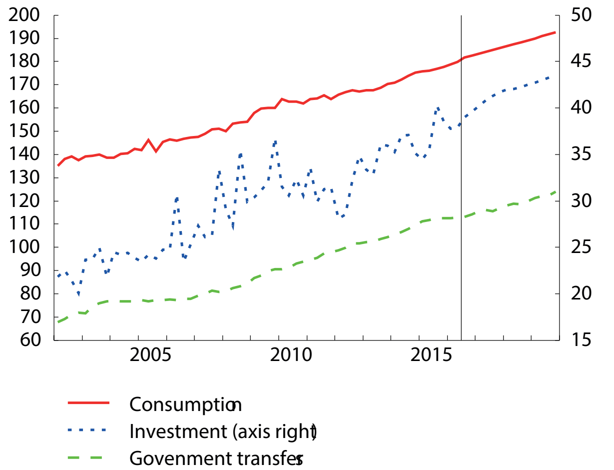
According to recently revised national accounts figures, general government consumption rose by 2.1 per cent in 2015. The growth rate increased through 2015, and has been fairly stable for the past four quarters. Gross general government investment increased by 3.0 per cent in 2015. Much of this growth is due to the purchase of fighter aircraft for the Armed Forces. Transfers to households increased by 7 per cent in 2015. This means that after adjustment for changes in the rules for taxation of disability pensions, and given consumer price inflation of just over 2 per cent in 2015, real growth in transfers was about 2 per cent. Total real growth in public consumption, gross investment and transfers was thus just over 2 per cent in 2015. Reduced tax rates led to fiscal policy being somewhat more

Table 3. **Main economic indicators 2015-2019. Accounts and forecasts. Percentage change from previous year unless otherwise noted**

	Accounts	Forecasts									
	2015*	2016			2017			2018		2019	
		SN	NB	MoF	SN	NB	MoF	SN	NB	SN	NB
Demand and output											
Consumption in households etc.	2.1	1.9	1.5	1.0	2.0	2.0	1.7	2.4	2.1	2.6	2.1
General government consumption	2.1	2.6	..	3.0	1.9	..	2.0	1.8	..	1.8	..
Gross fixed investment	-3.8	-1.7	..	-1.8	2.4	..	1.9	3.1	..	2.4	..
Extraction and transport via pipelines[1]	-15.0	-19.1	-14.0	-14.0	-8.0	-5.0	-8.0	1.0	-1.0	1.8	4.0
Mainland Norway	0.6	4.3	..	..	5.1	..	..	3.2	..	2.2	..
Industries	-1.6	1.6	..	0.3	1.3	..	4.9	3.8	..	3.5	..
Housing	1.6	8.4	6.5	4.2	9.1	2.8	3.4	3.3	1.3	0.5	0.5
General government	3.0	4.0	..	3.9	6.2	..	6.1	2.5	..	2.4	..
Demand from Mainland Norway[2]	1.8	2.6	2.3	1.9	2.6	2.4	2.4	2.4	2.3	2.3	2.3
Stockbuilding[3]	0.2	0.0	..	..	0.0	..	..	0.0	..	0.0	..
Exports	3.7	-0.1	..	-0.9	1.2	..	1.2	1.7	..	1.9	..
Crude oil and natural gas	3.2	0.6	..	-4.0	-1.0	..	-1.4	-1.0	..	-0.8	..
Traditional goods[4]	5.8	-1.4	-1.3	3.1	3.3	2.9	4.2	4.4	3.6	4.3	3.5
Imports	1.6	0.8	0.4	0.8	2.3	3.2	3.0	3.5	2.7	3.6	3.5
Traditional goods	1.9	-0.6	..	1.5	2.5	..	3.3	3.6	..	3.8	..
Gross domestic product	1.6	0.8	0.1	0.1	1.6	1.0	1.1	1.7	1.4	1.7	1.8
Mainland Norway	1.1	0.9	0.8	1.0	2.1	1.6	1.7	2.2	2.1	2.2	2.3
Labour market											
Employed persons	0.3	-0.2	0.2	0.2	0.7	0.4	0.7	1.0	0.8	0.7	1.1
Unemployment rate (level)	4.4	4.7	4.6	4.7	4.5	4.4	4.6	4.3	4.1	4.3	3.9
Prices and wages											
Annual earnings	2.8	2.3	2.5	2.4	2.7	2.7	2.8	3.1	3.1	3.4	3.6
Consumer price index (CPI)	2.1	3.4	3.3	2.8	2.0	2.2	2.1	2.1	1.9	2.0	1.7
CPI-ATE[5]	2.7	3.0	2.9	2.8	1.9	2.3	2.2	2.0	2.0	1.8	1.7
Export prices, traditional goods	2.3	2.9	..	..	2.7	..	..	2.8	..	2.1	..
Import prices, traditional goods	4.7	1.4	..	..	1.6	..	..	1.7	..	1.5	..
Housing prices	6.1	7.1	..	..	5.4	..	..	2.6	..	2.5	..
Balance of payment											
Current balance (bill. NOK)	270.0	190.3	..	..	220.5	..	..	253.5	..	284.9	..
Current balance (per cent of GDP)	8.7	6.1	..	..	6.7	..	..	7.3	..	7.9	..
				..		..	..		..		..
Memorandum items:				..		..	..		..		..
Household savings ratio (level)	10.4	6.2	..	..	6.3	..	..	6.2	..	5.9	..
Money market rate (level)	1.3	1.0	0.9	0.9	1.0	0.6	0.8	1.0	0.6	1.2	..
Lending rate, credit loans (level)[6]	3.2	2.6	..	..	2.5	..	..	2.5	..	2.6	..
Crude oil price NOK (level)[7]	430	377	..	346	419	..	396	452	..	485	..
Export markets indicator	4.9	3.2	..	..	4.1	..	..	4.6	..	4.8	..
Importweighted krone exchange rate (44 countries)[8]	10.4	2.5	3.0	2.4	-1.3	-0.8	-0.1	0.0	-1.4	0.0	-1.1

[1] Forecasts from Ministry of Finance incl. service activities incidential to extraction.
[2] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.
[3] Change in stockbuilding. Per cent of GDP.
[4] Norges Bank estimates traditional exports, which also includes some services.
[5] CPI adjusted for tax changes and excluding energy products (CPI-ATE).
[6] Yearly average.
[7] Average spot price, Brent Blend.
[8] Increasing index implies depreciation. Ministry of Finance forecasts trade-weighted exchange rate.
Source: Statistics Norway (SN), Ministry of Finance, St.meld. nr.2 (2015-2016), (MoF), Norges Bank, Pengepolitisk rapport 2/2016 (NB).

Figure 2. **General government. Seasonally adjusted, billion 2014-kr., quarterly**



Source: Statistics Norway.

expansionary on balance than indicated by the developments in the expenditure mentioned above in isolation. Growth in local government consumption was clearly lower than growth in central government consumption in 2015, so that the effect of the expansionary fiscal policy on central government consumption was stronger than that expressed by the overall general government figures. The Revised National Budget for 2016 estimates that the structural, non-oil budget deficit (SNOBD) as a share of trend mainland GDP increased by half a percentage point from 2014 to 2015.

Projections for fiscal policy in 2016 are based on the Revised National Budget for 2016 and QNA figures for the first half of 2016. In the Revised National Budget for 2016, the government proposed further measures to fight the high unemployment in Southern and Western Norway. The Ministry of Finance forecast that growth in general government consumption would be 3 per cent in 2016, and growth in gross general government investment would be a bare 4 per cent. Total tax relief in 2016 is projected to be just over NOK 6 billion, of which some NOK 5 billion will benefit companies as a result of the reduction from 27 per cent to 25 per cent in the tax rate on ordinary income. We have now revised down general government consumption in 2016 by about NOK 3 billion compared with the projections in the Revised National Budget. This is because the flow of refugees to Norway has nearly come to a complete halt, lowering expenses for reception and settlement in 2016 appreciably compared with previous projections by the government. We now assume real growth in household transfers to be only about 1 per cent in 2016 as a result of high consumer price inflation this year. Real growth in public consumption, investment and transfers combined is expected to be 2.2 per cent this year. Given lower taxes, fiscal policy will then be approximately as expansionary in 2016 as in 2015, and SNOBD (as a share of trend mainland GDP) will increase by about 1 percentage point.

No fiscal policy has been adopted for 2017–2019. The costs associated with asylum-seekers now appear likely to be appreciably lower in the near term than previously projected, although the expenses associated with settling those who have already arrived will be high also in 2017. Accommodation expenses in particular will mean higher public transfers in 2017. We have assumed that growth in general government purchases of goods for consumption purposes will be barely 2 per cent annually in the period 2017–2019. When it comes to gross general government investment, 2017 is the first year in which six new fighter aircraft are being purchased, and the increase in investment in 2017 reflects this. We have also assumed a further increase in investment in civil infrastructure. Most of the parties in the Storting have agreed on a tax compromise based on the Scheel Committee›s study, resulting in a reduction in the tax rate on ordinary income from 25 per cent at present to 23 per cent. We expect this to happen in 2017, and that this reduction will be combined with an increase in tax rates for personal taxation, so that only mainland enterprises are affected by the change. The loss of revenue can be projected at close to NOK 6 billion in 2017. The budget agreement for 2016 contained plans for increased environmental charges in the near term. We have decided to do this by increasing taxes on fuel in 2017, which will have an annual revenue effect of NOK 3 billion. Corresponding increases are also projected for 2018 and 2019. This adds about 0.2 percentage point to CPI inflation every year. We assume that other taxes that target households will be reduced by an amount equivalent to the increase in taxes in 2017, so that the total tax relief will be about NOK 6 billion. Fiscal policy is thus expected to be approximately as expansionary in 2017 as in 2016.

We assume that real growth in pension transfers to households will be about 2 per cent annually in the period 2017 to 2019. Other transfers will increase slightly less in real terms, except for in 2017, when transfers related to asylum-seekers will push up growth. Total growth in transfers will then be about 1.5 per cent annually, but slightly higher in 2017. We have not assumed changes in the rates for direct taxes in 2018 and 2019. The projected increase in environmental charges means that our projections result in a slight increase in overall taxes in 2018 and 2019. Coupled with a continuation of projections for growth in expenditure, our projections therefore imply a slight tightening of fiscal policy in 2018 and 2019.

The Government Pension Fund Global (GPFG) comprised almost NOK 7 460 billion at the beginning of 2016. According to the 2016 Revised National Budget, the Fund may be reduced in 2016 as a result of the appreciation of the krone during the year, and at the same time petroleum tax receipts will be at a low level. At the beginning of September this year, the Fund was slightly reduced compared with the beginning of the year. Given our assumptions regarding oil prices, the krone exchange rate and developments in the international economy, the value of the GPFG will move on a weak trend for the next few years. We thus project SNOBD at about 3 per cent of the Fund›s value in 2017. Our projection scenario shows that the Norwegian economy will enter a moderate upturn from 2017 to 2019. Despite our assumptions of a slight tightening of fiscal policy in 2018 and 2019, SNOBD will remain above 3 per cent during these years, as a result of low oil prices and weak developments in the value of the Fund.

A long period of low interest rates and a weak krone

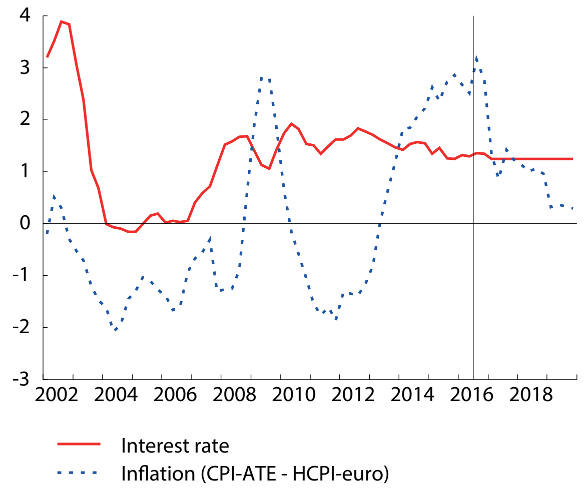
Following the 0.25 percentage point interest rate cut in March this year, the key rate is now 0.5 per cent. The money-market rate was 1.1–1.2 per cent in the months prior to the cut in the key rate. Following the interest rate cut, the money-market rate fell to 1.0 per cent before remaining at almost 1.1 per cent since the beginning of August. The spread between the key rate and the money-market rate has increased from 0.25 percentage point in 2014 and early 2015 to over half a percentage point now. Before the financial crisis, this spread was about 0.25 percentage point, but it was much higher during the financial crisis and during certain periods later. The money-market rate in Norway is closely linked to the US money market rate and the krone-dollar forward rates. The premium in the US money market has increased lately and can be linked to new regulations applying to US money-market funds. This premium has had an extensive spillover effect on the spread between the key rate and the money-market rate in Norway.

The krone strengthened during the first four months of the year, after three years of depreciation. While the euro exchange rate was NOK 9.60 in January, it declined to NOK 9.30 as a monthly average in April. The dollar exchange rate moved from NOK 8.80 to NOK 8.20 and the krone, measured in terms of the import-weighted krone exchange rate, appreciated by almost 3 per cent in the same period. The krone depreciated slightly until August this year, and then strengthened as a result of high inflation figures, which reduced market expectations of a further interest rate cut.

Deposit and lending rates have declined more than the money-market rate following the cut in the key rate. The average interest rate on credit lines secured on dwellings fell from 2.7 per cent at the end of the first quarter to 2.5 per cent at the end of the second quarter. The deposit rate declined from 0.9 per cent to 0.8 per cent during the same period.

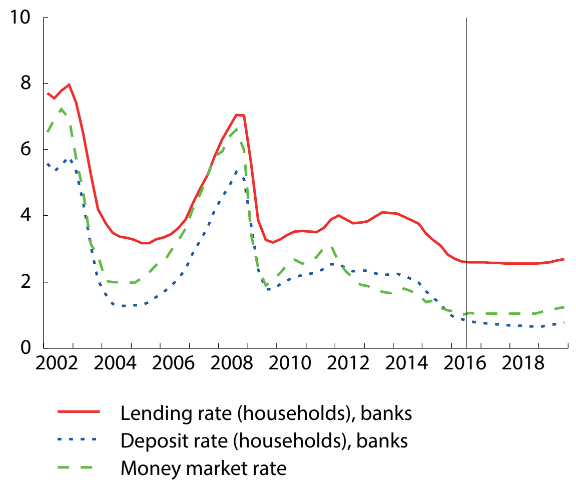
According to the LFS, unemployment has risen to 4.8 per cent. We expect that it will not increase any further this year, and that it will subsequently decline. Growth in mainland GDP appears to be under 1 per cent this year, but will rise to over 2 per cent as an annual rate from next year. Underlying inflation measured by the CPI-ATE is projected to be 3.0 per cent this year, but about 2.0 per cent for the next few years. The rise in

Figure 3. **Interest rate and inflation differential between NOK and the euro. Percentage points**



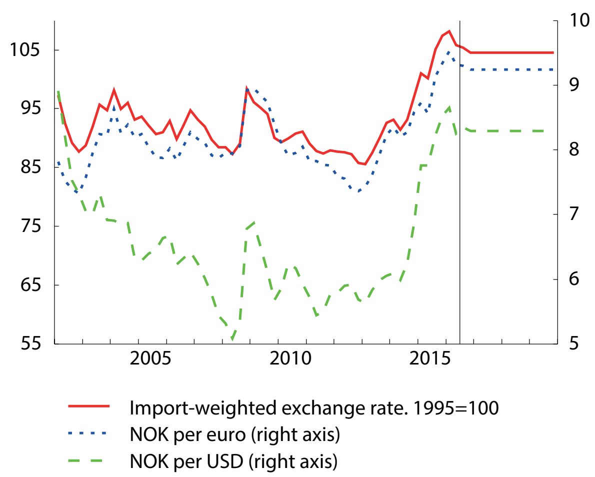
Source: Norges Bank and Statistics Norway.

Figure 4. **Norwegian interest rates. Per cent**



Source: Norges Bank and Statistics Norway.

Figure 5. **Exchange rates**



Source: Norges Bank.

house prices is high, and is projected to be over 7 per cent as an annual rate this year, but to slow the near term. In isolation, low growth and high unemployment imply further cuts in the key rate, while the high inflation and rise in house prices point the other way. We therefore assume that interest rates will remain unchanged for the next couple of years, with a weak increase not beginning until 2019.

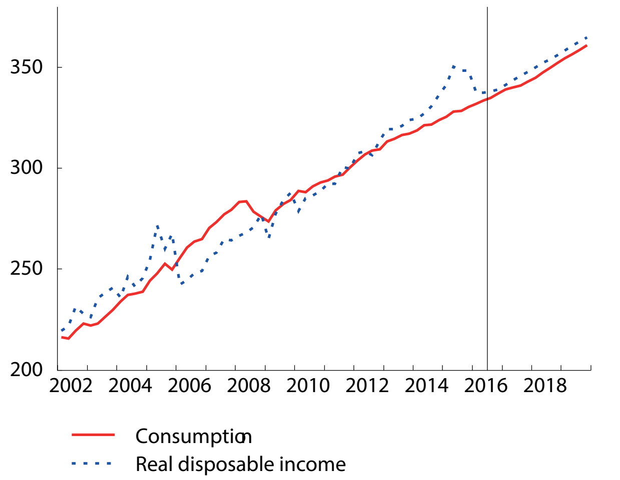
The estimated ten-year government bond yield dipped below 1.0 per cent this summer. It has risen slightly since then, and was 1.3 per cent in mid-September. This level is still very low, and indicates that the market expects interest rates to remain low for a good while ahead.

Both increased oil prices and higher interest rates in Norway than in the euro area point to a strengthening of the krone, while higher inflation in Norway suggests otherwise. The krone exchange rate is thus expected to remain virtually unchanged in the near term. Owing to fluctuations in the krone exchange rate through 2015 and so far this year, this means a depreciation of 2.5 per cent this year measured by the import-weighted krone exchange rate.

Consumption growth continues at a moderate pace

The moderate growth in household consumption and non-profit organisations last year continued into the first half of 2016. According to the QNA, consumption edged up only 0.4 per cent in the second quarter, roughly the same as in the two previous quarters. Goods consumption as a whole was virtually unchanged. Consumption of consumer durables like furniture, white goods and means of transport declined. Non-durable consumer goods such as clothing and footwear and electricity also showed weak growth, while purchase of food – which constitutes about 10 per cent of total consumption – helped push up goods consumption by 0.3 percentage point. Seasonally adjusted figures show that goods consumption fell by 0.8 per cent from June to July, following a slight decline the previous month. The latest fall is the result of a decline in all product groups excluding electricity and fuel, which points to weak developments in goods consumption also in the third quarter of this year. However, service consumption increased by a full 1.1 per cent in the second quarter of this year, or an annualised 4.5 per cent. This growth is broad-based, and in line with or slightly higher than the previous three quarters. It is thus primarily service consumption that maintained growth in total consumption at a high level last year and so far in 2016.

Figure 6. **Income and consumption in households. Seasonally adjusted, billion 2014–kr., qarterlyl**



Source: Statistics Norway.

Developments in consumption are largely determined by movements in household income, assets and interest rates. Households› income accounts now show that household real disposable income rose by a full 5.2 per cent in 2015, about double the increase in the previous year; see Table 2.4. The sharp growth can be attributed to a strong increase in share dividend disbursements last year. This was probably largely tax-motivated and based on expectations of higher taxes on such income from 2016. Real disposable income, excluding share dividend disbursements, which do not motivate consumption appreciably, rose by a moderate 2.5 per cent in 2015, slightly higher than the previous year.

Wage income is the most important source of household income. Even though annual wage growth was lower than it has been for a long time and employment growth was limited, wage income together with public transfers still contributed most to income growth last year. As a result of lower interest rates, net interest income also made a clear contribution to income growth. According to the quarterly income and capital accounts, the seasonally adjusted increase in real disposable income, excluding share dividends, was close to 2 per cent in the second quarter of this year, following a corresponding decline in the previous quarter. In addition to a strong increase in prices, a slight decline in wage income and fairly weak growth in public transfers accounts for developments in the first half of this year.

Table 4. **Household real disposable income. Percentage growth compared with previous year**

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total	8.3	-6.6	6.0	3.4	3.2	2.3	4.1	4.4	3.8	2.7	5.2	-2.5	2.2	2.4	2.4
Excluding share dividends	4.2	4.4	4.8	2.6	3.4	1.8	4.1	4.3	3.7	2.2	2.5	0.4	2.3	2.4	2.4

Source: Statistics Norway.

Box 1: **Uncertainty surrounding house price developments**

House prices in Norway have been rising strongly since as far back as the early 1990s, interrupted only by brief periods of unchanging or falling prices. The overall rise in house prices from the first quarter of 1992 to the second quarter of 2016 was a whole 470 per cent. Consumer price inflation in the same period was slightly over 60 per cent, the rise in construction costs just on 120 per cent, and annual wage growth was 163 per cent in the period 1992 to 2015. The real rise in house prices has thus also been strong, almost irrespective of how it is measured. Today's dwellings are admittedly of a generally higher quality than in the past, and it is unlikely that the house price indices fully capture this quality enhancement. This means that the real price increase, for a hypothetical comparable house quality, is lower than indicated by the statistics.

Basically, price formation in the housing market is a matter of supply and demand. On the demand side, income, interest rates, tax rules, demographic developments, location preferences, access to credit, prices for other goods, rents, and general economic outlooks are all important factors. The supply side is governed by factors such as building costs, productivity, supply of building sites and government regulations in the widest sense. Many of these factors are incorporated in our simplified representation of the Norwegian economy in the KVARTS macroeconomic model; see Økonomiske analyser 5/2013 Box 2.2 for a more detailed description.

Sites for residential buildings are in limited supply, and as a result resale home prices may follow a very different course from building costs. As a result of a shortage of sites in high-pressure areas, the supply side changes slowly, and the demand side therefore has a strong bearing on resale home prices. Three demand-side factors in particular have contributed to the sharp rise in house prices:

- Households have become far more affluent, which has resulted in higher housing consumption
- The population has increased markedly, and the number of households even more so
- The nominal interest rate level has fallen sharply and is expected to remain low for a long time to come

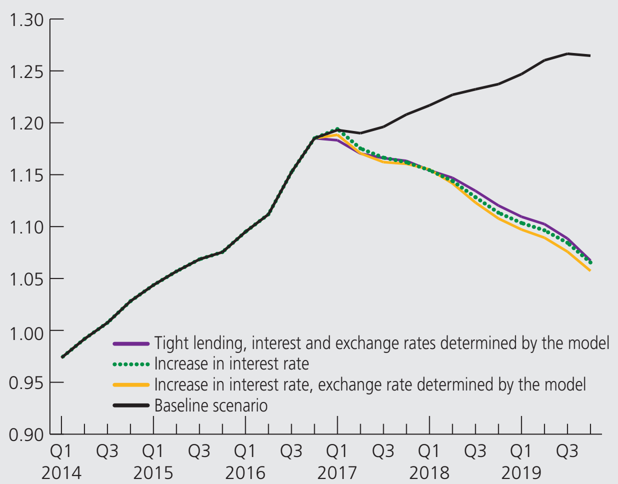
However, many maintain that the recent surge in house prices is a bubble. We understand a bubble to be price movements that cannot be explained in terms of changes in fundamental factors. In situations like this, expectations of future price inflation will be an important factor in itself. If speculators primarily purchase dwellings with a view to realising a financial gain at a later date, the stage is set for a steep fall in prices sooner or later. A price fall of this kind may be initiated by a negative shock in the economy. Once dwellings begin to fall in value, the effect may be self-reinforcing, because many of the speculators will be forced to sell as the security for their loans vanishes. This did not happen in connection with the financial crisis, which may be an indication that at that time at least there was no housing bubble in the above sense in Norway. The fact that our model is largely capable of explaining the price movements points the same way. Recently prices have admittedly risen a little more than the model would indicate, but the difference is still no larger than must be expected in such an aggregate relationship. We forecast that house prices will continue to rise fairly markedly for a while to come, but that the rise will slow in 2018 and 2019.

Although we do not believe there is a housing bubble in Norway, it is important to point out that house prices may fall nevertheless. To illustrate how changes in the fundamentals can change house price developments, we conducted some sensitivity calculations using the KVARTS model.

In the first calculation we increased the short-term interest rates faced by households by 2 percentage points from the beginning of 2017. Assuming that fiscal policy and the exchange rate remain unaffected, higher interest rates mean that house prices will fall almost immediately, and that the decline will accelerate over time. According to the calculation, and as shown in the figure, prices will fall by almost 11 per cent from the first quarter of 2017 to the fourth quarter of 2019, which means a fall of almost 16 per cent in real terms. Table 1 shows how the alternative scenario with higher interest rates deviates from the baseline (projection) scenario as an annual average. The annual rise in house prices is reduced by about 2 percentage points in 2017, and by 6–7 percentage points in both 2018 and 2019. The effects on other aspects of the real economy are also relatively substantial. Mainland GDP growth is reduced by around 0.7 percentage point annually for the first three years, and the unemployment rate in 2019 is 0.6 percentage point higher than in the baseline scenario. This is not due solely to effects through the housing market, where lower housing investment weighs down on economic growth. Higher interest rates also reduce household consumption and business investment. The calculations show that debt growth is gradually reduced in relation to the baseline scenario, by more than 3 percentage points in 2019. It takes time for the household debt burden, measured as gross debt as a share of disposable income, to fall. For the first two years, the percentage reduction in income is larger than the reduction in debt, with the result that the debt burden increases. The debt burden is not reduced compared with the baseline scenario until 2019.

If we change the assumption of an unaffected krone exchange rate, and allow the model to determine the exchange rate, the calculation shows that the rise in interest

Figure 1. House price developments in the baseline scenario compared with the three alternative house price scenarios. 2014 =1



rates leads to an appreciably stronger krone (see Table 2). This dampens the activity level further. The impact on household income and consumption is slightly reduced by the fact that real wages decline less, while the effects on business sector investment and export are reinforced. The effects on the housing market remain roughly the same, however.

In the second calculation, we have reduced the growth of household debt. Many are concerned that the high rise in house prices is leading households to incur "too much" debt. Debt has grown strongly relative to household income, and this may exacerbate a possible future cyclical downturn. In the interests of financial stability, the Financial Supervisory Authority of Norway, Finanstilsynet, has therefore recommended that the Ministry of Finance tighten the residential mortgage lending regulations.[1] We do not know what decision will be reached, nor is our model suitable for provide a clear answer as to how the different measures affect the housing market and real economy in other respects. We have assumed in our projections that there will be no tightening of any significance. The calculation below shows some macroeconomic effects if a sharp tightening of the mortgage regulations translates into a strong reduction in household debt growth. We calculate the consequences, in isolation, of a 1.25 percentage point reduction of quarterly debt growth. We choose this particular tightening because it has approximately the same effect on house prices as the interest rate increase described above. This also enables us to compare how the two measures affect the economy in other respects, but the model cannot predict what must be done to achieve this precise reduction in debt growth.

Tighter lending curbs housing investment and house prices. This dampens activity in the whole economy, and hence also household income, all in relation to the baseline scenario. The fall in house prices also reduces the underlying collateral for mortgages. Thus the effect on debt growth gradually becomes greater than the initial decline. In this case, the debt burden decreases immediately, and in 2019 the change is 14.5 per cent compared with the baseline scenario.

As also shown in Table 3, the tightening of lending has substantially less effect on the real economy than the increase in interest rates. Housing investment is indeed dampened on the same scale, but the negative impact on consumption and mainland business investment is far less. This is because the interest rate change directly impacts household income and influences business sector investment decisions, whereas the tightening of lending to households primarily has an indirect effect on these variables. The increase in interest rates also strengthens the krone, which in turn weakens cost-competitiveness and the current account. However, the tightening of credit has only negligible effects on both the krone exchange rate and interest rates, according to the calculation. Monetary policy is a relatively simple, but blunt instrument for braking the rise in house prices and in debt, while fiscal policy is a more complex, but also potentially selective and targeted instrument. Different ways of tightening access to credit will also have distribution effects that our macroeconomic model can say little about.

[1] Letter of 8 September 2016 from Finanstilsynet to the Ministry of Finance; see https://www.regjeringen.no/no/aktuelt/brev-om-boliglansforskriften/id2510700/

Table 1 **Effects of higher interest rates from 2017 Q1, unchanged exchange rate. Percentage deviation from the baseline scenario unless otherwise indicatedr**

	2016	2017	2018	2019
Mainland GDP	0.0	-0.7	-1.5	-2.1
Mainland business investment	0.0	-3.6	-6.1	-7.5
Housing investment	0.0	-0.1	-2.0	-6.8
Household consumption	0.0	-1.8	-3.6	-4.7
Household real disposable income	0.0	-3.0	-3.2	-3.4
Unemployment rate. % points	0.0	0.3	0.4	0.6
House prices	0.0	-1.9	-7.6	-13.7
Rise in house prices. % points	0.0	-2.0	-6.0	-6.7
Debt growth. % points	0.0	-0.3	-1.9	-3.1
CPI inflation. % points	0.0	0.2	0.0	0.1
Import-weighted krone exchange rate	0.0	0.0	0.0	0.0
Debt as a share of disposable income	0.0	2.7	1.0	-1.7
Memo:				
Mortgage rate. % points	0.0	2.0	2.0	2.0

Table 2 **Effects of higher interest rates from 2017 Q1, exchange rate determined by model. Percentage deviation from the baseline projection scenario unless otherwise indicated**

	2016	2017	2018	2019
Mainland GDP	0	-1.1	-2.1	-2.7
Mainland business investment	0.0	-4.8	-9.2	-10.2
Housing investment	0.0	-0.2	-2.0	-6.5
Household consumption	0.0	-1.2	-3.1	-4.1
Household real disposable income	0.0	-2.1	-2.4	-2.6
Unemployment rate. % points	0.0	0.6	0.8	0.9
House prices	0.0	-2.2	-7.8	-14.3
Rise in house prices. % points	0.0	-2.3	-5.9	-7.1
Debt growth. % points	0.0	-0.4	-2.7	-3.7
CPI inflation. % points	0.0	-1.1	-0.5	-0.2
Import-weighted krone exchange rate	0.0	-8.4	-7.7	-6.9
Debt as a share of disposable income	0.0	3.6	1.6	-1.6
Memo:				
Mortgage rate. % points	0.0	2.0	2.0	2.0

Table 3 **Effects of slower debt growth from 2017 Q1, interest and exchange rates determined by model. Percentage deviation from the baseline projection scenario unless otherwise indicated**

	2016	2017	2018	2019
Mainland GDP	0.0	-0.1	-0.4	-0.9
Mainland business investment	0.0	-0.1	-0.4	-0.9
Housing investment	0.0	-0.2	-2.2	-6.7
Household consumption	0.0	-0.4	-1.1	-1.9
Household real disposable income	0.0	0.1	0.2	0.2
Unemployment rate, % points	0.0	0.0	0.1	0.2
House prices	0.0	-2.2	-7.2	-13.2
Rise in house prices, % points	0.0	-2.3	-5.3	-6.6
Debt growth, % points	0.0	-3.3	-5.8	-6.9
CPI inflation, % points	0.0	0.0	0.0	0.0
Import-weighted krone exchange rate	0.0	0.0	0.1	0.3
Debt as a share of disposable income	0.0	-3.2	-8.6	-14.5
Mortgage rate, % points	0.0	0.0	0.0	-0.1

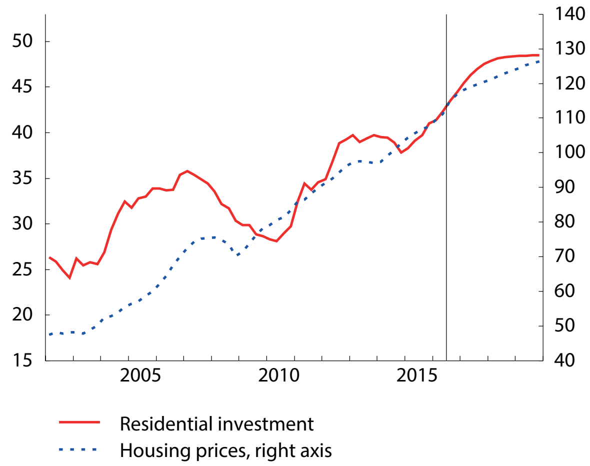
We expect wage income to continue to move on a weak trend in the near term, mainly due to low annual wage growth. Fairly moderate employment growth will also curb growth in total wage income. On an annual basis, public transfers will continue to make clear contributions to growth in real disposable income through the whole projection period. Net interest income will contribute to income growth this year and next as a result of a continued decline in lending rates. Substantially higher inflation this year will curb growth in real income, however, while lower inflation for the next three years will be reflected in much higher real income growth. We now expect modest growth in real disposable income excluding share dividends of 0.4 per cent this year, rising to almost 2.5 per cent in the period 2017–2019. Considerably higher income growth in the near term will push up consumption growth. Higher real house prices will also provide some positive stimuli to consumption this year and next, as a result of an increase in assets. On the whole, we expect consumption growth of 2 per cent this year and in 2017, and about 2.5 per cent in 2018 and 2019. This is far weaker than the cyclical upturn before the 2008 financial crisis, when consumption rose at a rate peaking at almost 5.5 per cent annually.

Household saving – in the form of financial and housing investment – calculated as a share of disposable income rose from a level of just under 3.5 per cent in 2008 to just over 10 per cent in 2015. The seasonally adjusted saving ratio declined to a level of close to 6 per cent in the past two quarters. The saving ratio, excluding dividends, declined from a level of about 5 per cent in 2015 to approximately 3 per cent in the first two quarters of the year. We assume that the total saving ratio will remain at about 6 per cent as an annual average this year and for the next few years.

The rise in house prices increases housing investment

House prices have risen sharply so far in 2016. According to Statistics Norway›s house price index, house prices rose by 1.7 per cent in the first quarter compared with the previous quarter, and by 1.8 per cent in the second quarter. Unchanged house prices from the second quarter through the year will result in an annualised house price increase of 4.5 per cent in 2016. The monthly house price statistics from Real Estate Norway (the National Association for Norwegian Realtor Brokerages) show an even stronger rise in house prices in the first half of the year, and the rise in prices has increased further during the summer months. If we assume that these house price statistics will remain constant from August until the end of the year, and that Statistics Norway›s house price index will rise at the same rate as Real Estate Norway›s index in the second half of the year, Statistics Norway›s index will show an annualised average increase in house prices of just over 6 per cent in 2016.

Figur 2.7. **Boligmarkedet. Sesongjustert. Venstre akse mrd. 2014-kr., kvartal, høyre akse indeks, 2014=100**



Source: Statistics Norway.

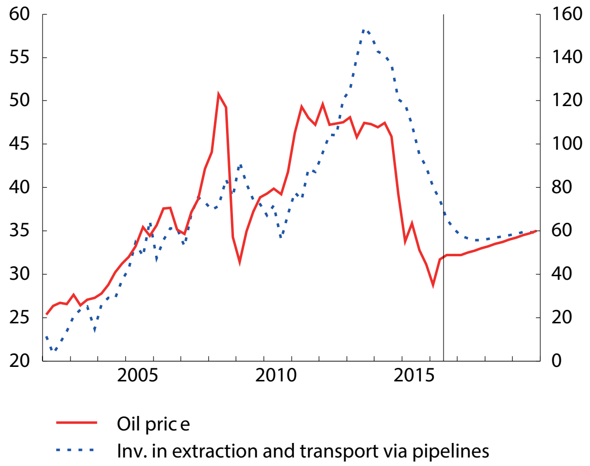
In the long term, an increase in household real disposable income and lower real interest rates after tax will have a positive impact on house prices, while an increased supply of new dwellings will dampen prices. Our projections also take into account the fact that there is a positive correlation between household borrowing and house prices, and that they mutually influence each other.

Lending rates fell through last year, and declined further in the first half of 2016. This stimulates lending, but the growth may have been curbed by lower underlying wage growth. Gross household debt is rising, but debt growth calculated from the same quarter one year earlier declined from about 6.5 per cent in the first three quarters of 2015 to about 6 per cent in the fourth quarter and in the first two quarters of 2016.

In the short term, house prices are affected by changes in household expectations regarding developments in both their own financial situation and the national economy. The consumer confidence indicator from Kantar TNS and Finance Norway fell for six consecutive quarters, from the third quarter of 2014 to the first quarter of this year. The unadjusted index for the second quarter shows a slight improvement on the first quarter, however, while the index rose sharply from the second to the third quarter. Household expectations regarding the Norwegian economy one year ahead have changed perceptibly in a positive direction, and the survey reveals that there are now as many optimists as there are pessimists.

We have assumed that households will only gradually alter their assessment of the economic outlook, and that the consumer confidence indicator will therefore rise slowly through the entire projection period, in pace with improvement in the economic situation. Nominal debt growth is projected at about 6 per cent in 2016 and will remain stable in the range of 6 to 6.5 per cent

Figure 8. **Petroleum investments and oil price in USD. Seasonally adjusted, billion 2014-kr., quarterly**



Source: Statistics Norway.

annually from 2017 to 2019. The extraordinarily low and falling real interest rates provide some explanation for the accelerated rise in house prices so far in 2016, but the increase in prices is somewhat higher than can be explained by our model with the aid of developments in interest rates, incomes and the size of housing capital. Household real disposable income, excluding share dividends, will increase to only a limited extent in 2016, which will lead to a slightly weaker rise in house prices towards the end of the year after adjustments for normal seasonal variation. Because house prices rose through 2015 and because the increase in house prices has been high so far this year, we now expect house prices to rise by about 7 per cent in 2016.

With clearly higher growth in household real disposable income in the near term and persistent low real interest rates, we expect the rise in house prices to be close to 5.5 per cent in 2017. High housing investment in 2016 and 2017 will gradually increase the supply of new dwellings and this, together with slightly higher real interest rates, means that the annual increase in house prices will be about 2.5 per cent in 2018 and 2019. When we adjust for inflation, this corresponds to an increase in real house prices of about 3.5 per cent in 2016 and 2017, while it results in a 0.5 per cent increase in 2018 and 2019.

There is uncertainty attached to our house price forecasts. Many experts claim that we are in a housing bubble that may burst, and the Financial Supervisory Authority of Norway has recently submitted a proposal to amend the mortgage regulations in order to curb growth in both house prices and household debt. This uncertainty will be discussed in greater detail in Box 1, where we look at the effect of higher interest rates and tightening of credit for mortgages on both house prices and other variables in the Norwegian economy.

According to the QNA, housing investment increased by 1.6 per cent in 2015 after declining through 2014. Housing investment rose by over 3 per cent in the first half of 2016. Statistics Norway›s building statistics also show a clear tendency to an increase in building start permits for dwellings through 2015 and the first half of 2016. Given unchanged seasonally adjusted housing starts from the second quarter and through the year, this indicator will rise by close to 6.5 per cent. According to our projections, housing investment will be pushed up further by the strong increase in house prices through 2016 and 2017. We estimate volume growth in housing investment to be close to 8.5 per cent in 2016, and 9 per cent in 2017. The reduced rise in house prices in 2018 and 2019 will lead to growth in housing investment declining to slightly over 3 per cent in 2018 and 0.5 per cent in 2019.

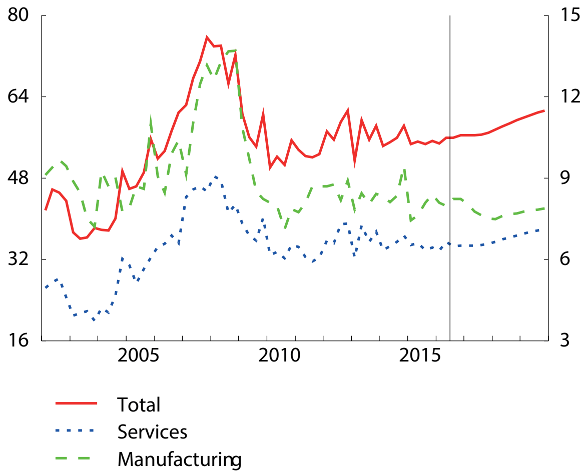
Petroleum investment will bottom out in 2017

Petroleum investment is continuing to fall markedly. Since the peak in the third quarter of 2013, investment has declined by 3.7 per cent per quarter on average. Investment also decreased by 3.7 per cent in the second quarter of this year, which constituted a decline of NOK 1.5 billion in 2014 kroner compared with the previous quarter. Investment in drilling, exploration and pipelines contributed to the decline. Investment in production platforms, drilling rigs and modules increased, however, albeit from a particularly low level the previous quarter.

In line with developments in the first two quarters of this year, oil companies have reported that they expect substantially lower investment this year than last. The expected decline is mainly due to lower investment in field development and operating fields, as well as in exploration. This year petroleum investment is expected to decline by about 19 per cent, measured in constant prices, compared with 2015. Some of the field developments that had been expected in 2016 have now been postponed until 2017. The decline is nonetheless expected to continue next year, but at a slowing pace. For fields in the development phase, a reduction in investment in capital goods is expected, while for operating fields investment in services and production drilling is expected to fall.

Several factors need to be taken into consideration when interpreting the investment forecasts from the consumer confidence indicator; see Economic Survey 3/2014, Box 1. First, we make forecasts of volume developments, while the survey registers planned investments in current prices. In order to convert to constant 2014 prices, we must thus adjust for inflation. Given the increased focus on cost reductions, we believe that price developments in petroleum investment will be moderate in the near term. Second, licensees have long underpredicted actual investment levels, especially for projections more than one year ahead. We have taken this into consideration in our previous forecasts, by assuming that this year›s underprediction will be repeated next year. However, as expectations regarding

Figure 9. **Investments. Mainland Norway. Seasonally adjusted, billion 2014-kr., quarterly**



Source: Statistics Norway.

investment in 2016 were sharply revised down through 2015, this assumption means an investment level in 2017 that we view as unrealistically low.

The investment scenario we forecast for the years ahead is also coloured by the developments we foresee in the global economy. A weak cyclical upturn and weakly rising oil prices mean that the decline in investment will reverse into a moderate upturn after 2017. The steep fall through 2016 means that the investment level for 2017, as an annual average, will still be about 8 per cent lower than in 2016. Annual growth in 2018 and 2019 is projected at between 1 and 2 per cent.

Extraction of oil and gas was higher in the first half of the year than the average for 2015. Both oil and gas extraction have contributed to this. In the near term, however, we expect oil production to decline, while gas extraction will increase moderately. On balance, this means a moderate overall decline in oil and gas extraction through the projection period.

Moderately rising business investment

The decline in mainland business investment slowed through 2015. We have previously pointed out that there have been signs of growth in investment in 2016, and the national accounts figures for the second quarter confirm this, with growth of 2.1 per cent.

Business investment growth took place in the service industries. Investment growth was high in professional, scientific and technical services, property sales and management, business services and retail trade. Conversely, the investment level in manufacturing and other goods production was lower. The decline in other goods production must be seen in the light of a high investment level in the first quarter, however.

Statistics Norway›s latest survey of manufacturing companies› future investment intentions indicates growth of about 5 per cent in 2016. This will entail a very sharp increase in the pace of investment through the second half of the year. Manufacturing companies expect investment to fall in 2017. Most of this projected decline may be explained by some large projects nearing completion in oil refinement and chemicals and pharmaceuticals. In the power supply sector, the projections regarding future investment indicate an escalation of growth from about 10 per cent in 2016 to about 15 per cent in 2017. The upswing is largely attributable to investment associated with electricity production, such as wind power development, and further growth in the transmission and distribution of electricity. The increase must be seen in relation to green electricity certificates, the subsidy scheme for increasing power production from renewable energy sources, and the new rules regarding faster depreciation of fixed assets in wind farms that were approved by the ESA in July.

Norges Bank›s Regional Network charts economic developments in Norway – including expected investment in the near term – by gathering information from enterprises and activities throughout the country. Reports from September indicate rising investment in retail trade, while approximately unchanged investment is expected in other services for the next 12 months.

An improved global economic situation, a weak krone exchange rate, very low interest rates and corporate tax relief lead us to expect moderately rising business investment in the near term. A particular increase is expected in sectors with few ties to the petroleum industry. However, surplus capacity in a number of industries will curb developments. We forecast increasing growth in business investment as a whole, from about 1.5 per cent in 2016 to 3.5 per cent in 2019. These growth rates are very low compared with previous cyclical upturns, and are due to the current global upturn being very moderate. Even given these factors, the investment level will be about 10 per cent lower in 2019 than the peak in 2008.

Reduced exports and imports

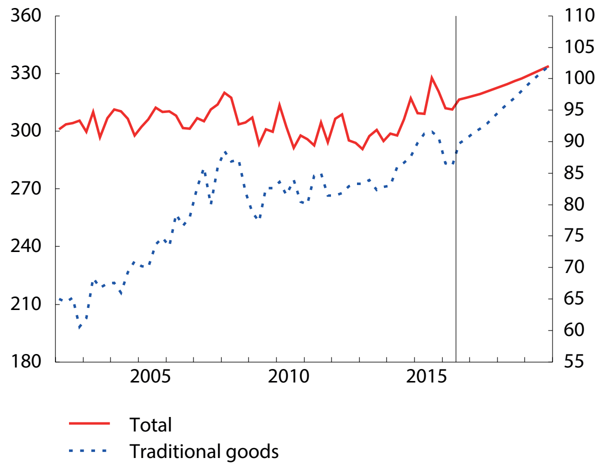
The increasing growth in traditional goods exports of recent years has come to a halt. The growth rate declined through 2015 and has become negative this year. According to seasonally adjusted figures from the QNA, the volume of exports of traditional goods in the first half of this year was 4.3 per cent lower than in the same period last year. Exports of refined petroleum products, which is an export product group of a substantial size, was 11 per cent lower in the first six months of this year than in the first half of 2015. This has been counterbalanced to a large extent by a corresponding decline in imports of the same products, and is thus less a consequence of the economic situation or competitiveness. Exports of traditional goods, excluding refined products, have been virtually unchanged for the past three quarters. Much of the reduction in traditional goods exports can also be attributed to the fall in oil prices and the global cyclical downturn in the oil and gas sector. Engineering products are mainly exported to oil and gas enterprises in other countries, and demand from this sector has fallen as a result of the decline in oil prices. Total exports of engineering products were thus down by a full 14 per cent in the first half of the year compared with the same period last year. Most of the decline was in the first quarter, but exports have fallen in all of the last four quarters.

Exports of farmed fish have also declined for four consecutive quarters. However, exports of fish and fish products increased in the first two quarters of the year. Exports of chemical products continued their trend growth, following a slight dip in the first quarter of this year.

Following an increase for the last two years, there has also been a tendency through the past four quarters for growth in the volume of oil and gas exports. In the second quarter of this year, oil and gas exports declined slightly, however. Service exports edged up a couple of per cent following a large decline the previous quarter. Transport services contributed most to the growth, albeit after a considerable fall in the first quarter. Growth in non-residents› consumption in Norway, prompted by the krone depreciation of recent years, also boosted the growth in service exports substantially. The rise in prices of recent years for both traditional goods exports and service exports levelled off in 2015. The price index for traditional goods exports rose again through the first half of this year, while the export price index for services has been more stable. Oil prices rose in the second quarter, after falling for over two years. Gas prices, which to some extent appear to shadow oil prices with a time lag, continued to decline in the second quarter of this year.

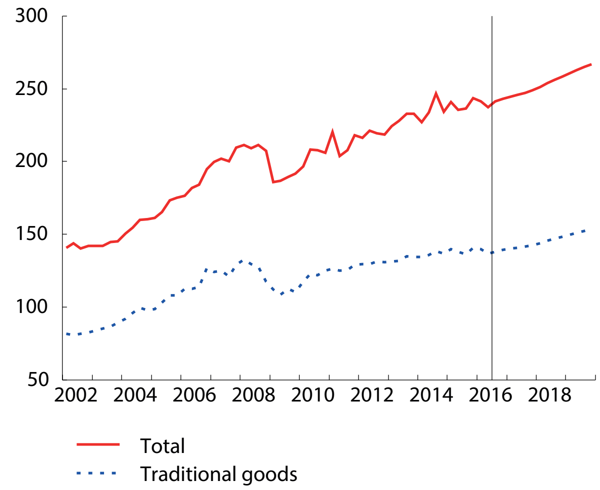
The cost-competitiveness of export companies has been boosted by the depreciation of the krone in recent years. This year the krone exchange rate as an annual average is expected to undergo a further slight weakening compared with last year, which in isolation will stimulate exports. On the other hand, growth in Norwegian export markets this year appears to be even slightly lower than previously projected. The slump in oil prices, which has weighed on the value of the krone, has also led to reduced demand as a result of lower activity and investment among oil and gas producers in many countries. Industries that export products and services related to oil and gas production may thus experience lower demand from abroad. Developments in traditional exports are expected to be weak this year. From next year, however, we expect positive and slightly rising growth rates, which will be augmented by higher global market growth. Export growth is expected to be slightly lower than market growth so that exporters of traditional goods will lose market share each year in the period 2016–2019. Extraction-based exports of oil and gas are likely to grow slightly this year, as in the previous two years, and then decline slightly through the projection period.

Figure 10. **Exports. Seasonally adjusted, billion 2014-kr., quarterly**



Source: Statistics Norway.

Figure 11. **Imports. Seasonally adjusted, billion 2014-kr., quarterly**

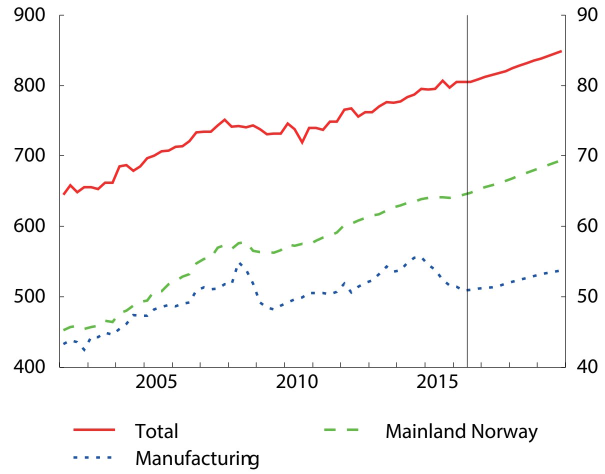


Source: Statistics Norwav.

Imports of both traditional goods and services declined through the first half of this year, and the decline has been broad-based. The reductions reflect weak developments in import-intensive aspects of both household consumption and business investment, not least as a result of a continued decline in petroleum sector demand. A weak krone has also curbed growth in imports, while lower demand from the oil and gas sector has led to reduced imports of services related to the petroleum sector. Norwegians› consumption abroad declined slightly in the second quarter, and the level has barely increased in the course of a year.

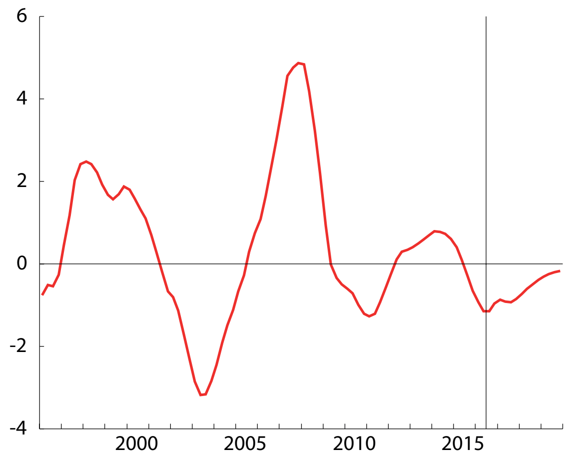
Exports of mainland goods and services have a substantial import share: about 20 to 30 per cent in recent years. Reduced exports have thus also had a negative impact on imports so far this year. A weak krone means that consumption and investments shift from imports to domestic deliveries. Traditional imports are thus poised to break a prolonged growth trend, and will be reduced this year for the first time in six years. Imports of two

Figure 12. **Gross domestic product. Seasonally adjusted, billion 2014-kr., quarterly**



Source: Statistics Norway.

Figure 13. **Output gap. Mainland Norway. Deviation from trend. Per cent**



Source: Statistics Norway.

fighter aircraft and an oil platform may nonetheless lift total imports to positive growth this year. In the near term, the expected increase in domestic demand will further boost imports.

The decline in oil prices contributed most to reducing the trade surplus, which fell by over NOK 100 billion from 2014 to 2015. A major reduction is expected again this year. From next year we expect slightly higher oil prices and improved terms of trade to increase the trade surplus. The balance of income and current transfers will be strengthened by low growth in the Norwegian economy resulting in reduced payments to other countries. A weak krone exchange rate will also lead to higher payments from abroad, measured in Norwegian kroner. The current account surplus as a share of GDP is thus expected to rise from 6 per cent in 2016 to 8 per cent in 2019.

Weak cyclical upturn next year

Mainland economic activity has picked up recently. Mainland GDP increased by 0.4 per cent from the first to the second quarter following growth of 0.3 per cent the previous quarter and close to zero growth through much of 2015. Second-quarter growth is still lower than what we estimate to be trend growth, so the current cyclical downturn has now lasted for almost two years. Electricity production fell sharply in the second quarter, pushing growth down by just over 0.1 percentage point. The fall can be largely attributed to an abnormally high production level the previous quarter, which contributed over 0.2 percentage point to mainland GDP growth in the first quarter of 2016. If these contributions are disregarded, the rise in the pace of growth in the Norwegian economy in the past quarter becomes even more apparent.

The higher growth through the first half of 2016 was not attributable to manufacturing. Value-added in this sector fell by around 0.8 per cent in the second quarter – the sixth consecutive quarter with a decline. There are nonetheless signs that the decline, which is largely due to reduced petroleum sector demand, is slowing. Statistics Norway›s industrial production index for July showed a relatively solid increase, and overall developments are more mixed than previously as the petroleum-related industries no longer differ so markedly from other manufacturing. Some of the typically oil-dependent industries, such as shipbuilding and other transport equipment, are reporting solid growth, while others, like manufacturing of metal goods, electrical equipment and machinery, are still in a slump. The same applies to manufacturing segments that are less dependent on the petroleum industry. They are benefiting to various degrees from the pronounced improvement in competitiveness ensuing from the weakening of the krone and moderate wage growth. Some industries, such as metals production, are experiencing relatively healthy development.

The picture for other goods production was also weak, but mixed, in the second quarter. Growth in construction is high. The industry has long been an important driver of the Norwegian economy, and growth appears to be continuing this year too: Value-added rose by just over 1 per cent in the second quarter, approximately on a par with the first quarter. Growth in residential construction, driven by low interest rates and a sharp rise in house prices, coupled with extensive public sector investment in building and construction, are probably important factors underlying this upturn. Conversely, developments in other goods-producing mainland industries moved on a weak trend in the second quarter. However, the common factor in these industries is that the activity level is largely governed by naturally occurring factors. The change from one quarter to the next therefore does not tell us much about underlying economic developments. As mentioned, power production declined in the second quarter, as did value-added in fishing and aquaculture. The overall value-added for the primary industries therefore fell back somewhat in the second quarter.

Value added in service industries excluding general government increased by 0.7 per cent from the first to the second quarter. The rise followed a slight dip in the first quarter and virtually zero growth through 2015. The increase in mainland economic growth can thus be ascribed largely to this group of industries. Here too, however, developments varied from one industry to the next. On the positive side, growth in the hotel and restaurant industry continued in the second quarter. Value-added in this industry has surged by about 10 per cent since the fourth quarter of 2014. The weak krone exchange rate attracts more foreign tourists, and also results in more Norwegians spending their holidays in Norway. The finance and insurance industry also reported second-quarter growth, as did petroleum-related services and retail trade. On the negative side, the decline in commercial services continued.

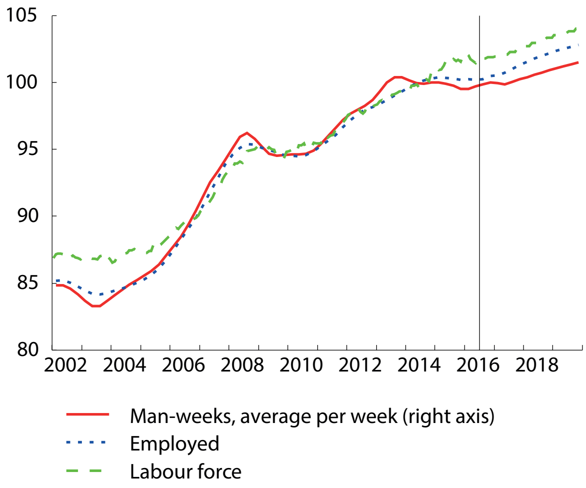
General government value-added edged up only 0.3 per cent in the second quarter, following weak growth in the first quarter as well. This is well under the average growth in 2015, and also less than we estimate to be trend mainland GDP growth.

We assume demand from the petroleum sector will continue to fall, but at a declining rate, and that the negative impulses will gradually give way to weakly positive impulses. The foundation will thus be laid for gradually improved output in the Norwegian economy.

Large segments of manufacturing are closely linked to the petroleum industry, and the turnaround in manufacturing as a whole will therefore take time. We foresee more or less flat output developments for the rest of the year, followed by increasing, but moderate growth. The anticipated upturn must be viewed in light of the improvement in competitiveness of recent years. The positive effects of this factor on the level of manufacturing activity are probably not yet exhausted. Activity in other mainland industries is expected to pick up further in 2016 already, driven largely by increased housing and business investment. The construction sector has enjoyed solid growth for a long period, and we forecast that the high growth will continue for a good while to come. This sector will thus be an important growth driver for the Norwegian economy, also in the period ahead. Growth in general government value-added will probably remain stable, but somewhat lower than trend mainland GDP growth.

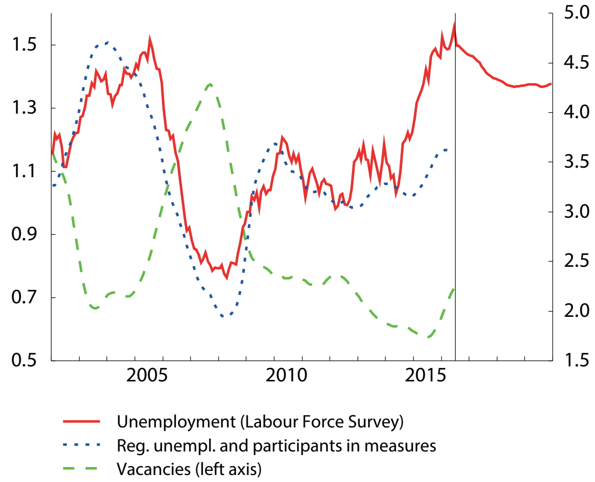
On balance, we forecast that mainland GDP growth will be 0.9 per cent as an annual average this year, and slightly over 2 per cent for the next three years. Given trend mainland economic growth of 2 per cent, this implies that we will be entering a tentative cyclical upturn from 2017.

Figure 14. **Labour force. employment and number of man-hours. Seasonally adjusted and smoothed indices. 2014=100**



Source: Statistics Norway.

Figure 15. **Unemployment and number of vacancies. Per cent of labour force. Seasonally adjusted and smoothed**



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

Persistently high unemployment

According to the QNA, employment began to decline in the second half of 2015, and the decline continued in the first half of this year. Growth in the labour force has also slowed, however, so that unemployment has only risen moderately, following a more pronounced increase in the first year of the cyclical downturn.

Employment growth is still characterised by the slowdown in activity in petroleum-related industries. Employment in crude oil and natural gas extraction has decreased in every quarter since the second quarter of 2014, and the decline has been particularly pronounced so far this year. Employment also declined in 2015 and the first half of this year in manufacturing industries that primarily deliver to the petroleum sector, like shipbuilding and transport equipment, and repair and installation of machinery and equipment. Overall, manufacturing employment decreased by just over 1 per cent in each of the first two quarters of 2016.

High housing and public sector investment helped to keep employment growth in construction at a stable level in the first half of the year. Retail trade employment fell through 2015, however, and except for a slight increase in the first quarter of 2016, the decline continued in the second quarter. Employment rose somewhat in both central and local government in the second quarter.

The labour force has moved on a weak trend for the last few quarters, largely as a result of low net immigration. Population statistics for the second quarter of this year show that inward labour migration is slowing, while emigration has increased. A weak krone and higher unemployment have made the Norwegian labour market less attractive in relative terms. Short-term immigration is particularly sensitive to developments in the Norwegian labour market in relation to the situation in European labour markets. Thus the number of employed who are not settled declined last year. Immigration from countries with conflicts is rising, on the other hand, but experience shows that it will take longer for these people to enter Norwegian working life.

According to the LFS, unemployment has only risen by 0.2 percentage point so far this year, after increasing more markedly up to the summer of 2015. From May to July, unemployment averaged 4.8 per cent after adjustment for normal seasonal variations.

The NAV statistics for those registered as fully unemployed and persons on labour market programmes also reveal stable developments in unemployment so far this year. Although there were 1000 fewer persons registered as fully unemployed from July to August this year, the number of persons on labour market programmes rose by 700. However, there were great variations across counties, also in August: unemployment rose in counties with considerable petroleum-related activity, while it declined in almost all other counties. The strong negative impulse generated by reduced activity in the petroleum sector is also reflected in the unemployment figures by occupation. Unemployment in August rose in manufacturing and in engineering and ICT, while falling for most other occupational groups. The increase in unemployment in engineering and ICT is a continuation of recent developments. It is also in these occupations that the number of vacant positions has declined most. On the whole, there was a slight reduction in the number of vacant positions in the second quarter of 2016, but the reduction was very modest compared with previous quarters.

We expect employment growth to decline slightly this year, and to pick up a little in the next few years. Growth in the labour force will remain at a low level in the short term. Thus annualised average unemployment will not increase beyond the current level. We expect labour force growth to increase slightly in the last two years of the projection period, but nonetheless to remain low compared with growth in recent years. This is partly because we expect inward labour migration to be low for the next few years. The labour force may increase somewhat more towards the end of the projection period, both because of an improved economic situation and because the asylum-seekers who arrived in Norway last year will enter the labour force. As employment growth increases over the next two years, unemployment will decline somewhat, but in our calculations it will remain at over 4 per cent throughout the projection period.

Fall in real wages

Annual wage growth has been very low for the past two years. Nominal annual wage growth fell from 3.9 per cent in 2013 to 3.1 per cent in 2014 and down to 2.8 per cent last year, the lowest annual wage growth since World War II. Growth in real wages fell from almost 2 per cent to just over 0.5 per cent last year. National accounts figures show that there were small differences in annual wage growth across industries in 2015.

Growth in average annual wage can be decomposed into carry-over from the previous year and contributions from pay increases, and wage drift, which encompasses all other factors that influence registered wage growth. In manufacturing, the carry-over into 2016 was 1.1 per cent, which is slightly lower than the preceding year. Although pay increases in manufacturing are slightly higher in the main settlement and the depreciation of the krone has improved competitiveness, NHO, in agreement with LO, arrived at an upper limit for wage growth of only 2.4 per cent for this year›s wage settlement. Given the calculated carry-over in manufacturing, wage drift needs to be very moderate this year.

On the one hand, the fact that there are fewer employees in petroleum-related activities pushes down wage drift, because these employees have higher than average wages. On the other hand, the employees remaining after cutbacks will have high seniority and this, coupled with relatively few new hires at a low wage level, augments wage drift. The wage index for average contractual monthly wage for the first half of 2016 indicates that composition effects so far this year are suppressing wage growth. The wage index for contractual monthly wages showed only a moderate increase in the first two quarters of the year.

The non-manufacturing wage carry-over into 2016 is also low. The Technical Reporting Committee on Income Settlements (TBU) has calculated the carry-over for several negotiations areas. The carry-over in retail businesses in the Enterprise Federation of Norway (Virke) is 0.7 per cent, and in state and municipal government 0.4 and 0.7 per cent, respectively. This year’s wage settlement for these groups is moderate.

In our projections, we now assume that on balance the composition effects make a weak negative contribution, with the result that average annual wage growth in 2016 will be 2.3 per cent.

Given our projection for consumer price inflation, real wages will fall by 1.1 per cent in 2016. Nominal wage growth will be low next year too. The decline in wage growth must be seen bearing in mind that parts of the economy have suffered a considerable negative shock through the fall in oil prices. Furthermore, lower demand from the petroleum sector is expected to persist, resulting in a greater need for restructuring. This will reduce wage growth, both because the demands in the centralised wage negotiations will be under pressure and because local pay increases will be reduced. Countering this effect, however, are improved profitability ensuing from the weaker krone exchange rate and a certain improvement in the global economic situation. Lower immigration will also push up wage growth, but this effect is marginal in the short term.

We assume that the wage settlement in manufacturing will continue to provide guidelines for wage formation in other industries, so that non-manufacturing wage settlements will also be moderate. After a while, the improved economic situation will translate into greater profitability, so that wages as a share of labour costs will decrease a little in the projection period. Higher profitability and somewhat lower unemployment will cause wage growth to pick up moderately towards the end of the projection period. Growth in real wages will increase appreciably more than nominal growth going forward, because consumer price inflation will fall back to a lower level from next year.

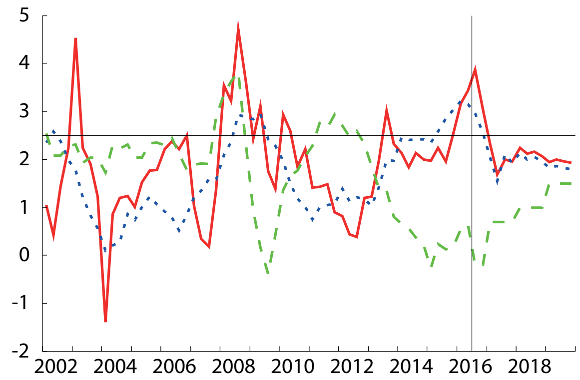
Exchange-rate driven rise in inflation

Underlying inflation, measured by the 12-month rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-APE), has been rising in fits and starts for almost three and a half years. It bottomed out in March 2013 at 0.9 per cent, and in August 2016 was 3.3 per cent, after being as high as 3.7 per cent the previous month. The high July index came after CPI-ATE inflation had remained close to 3.0 per cent for over a year.

During the previous three years, movements in prices for energy products and tax changes led to the rise in the overall consumer price index (CPI) remaining stable at around 2.0 per cent, despite the increase in underlying inflation. This year that changed, and the 12-month rise in the CPI picked up markedly. The rise in August was 4.0 per cent, compared with 2.3 per cent at the end of 2015. Whereas CPI-ATE inflation was higher than CPI inflation at the beginning of the year, this situation changed in May, and the 12-month rise in the CPI now appears likely to be higher than the rise in the CPI-ATE for the remainder of this year.

Developments in underlying inflation are dominated by the movements of the krone exchange rate. In early 2013, the krone began a long period of depreciation

Figure 16. **Consumer price indices. Percentage growth from the same quarter previous year**



Source: Statistics Norway.

that was rapidly reflected in higher prices for imported goods. Whereas the 12-month rise in prices for imported consumer goods resulted in a contribution to CPI-ATE inflation of -0.3 percentage point in March 2013, the contribution in August 2016 was +1.5 percentage points. However, a breakdown of the CPI-ATE by supplier sector shows that all the main sectors excluding rents also contributed to the rise in CPI-ATE inflation in this period. The increase in the rise in prices for goods and services produced in Norway may be attributable to exchange rate movements, however, as imported intermediate inputs are an important cost component in most production activities. Prices for some goods produced in Norway are also determined by prices in the global market. As a result, changes in the exchange rate will in principle be fully reflected in prices for these products in the Norwegian market. The increase in price inflation from January to July this year has been clearly highest for imported agricultural products, while the increase for other imported goods, agricultural products produced in Norway and rents, representing an overall weight of over 50 per cent, is barely perceptible. In August 2016, prices for imported consumer goods were 4.4 per cent higher than 12 months earlier. Prices for goods produced in Norway were 4.1 per cent higher, while prices for services excluding rents had risen 2.9 per cent. At 1.8 per cent, the rise in rents was clearly lowest of the main groups.

Electricity prices play a very large part in developments in the CPI. Apart from the fact that they peaked in January and fell slightly in February, electricity prices so far this year have followed a very unusual course. From February to July, prices rose every month, whereas the norm is for them to gradually fall to a low in July, when there is not normally a need for much electricity for heating. In July this year electricity prices were thus almost 39 per cent higher than 12 months earlier, but they subsided a little into August. Tax changes are currently also pushing CPI inflation up a little. Conversely, oil price developments have led to lower prices than one year previously for fuel and lubricants. On balance, movements in prices for energy products and tax changes led to CPI inflation being 0.4 percentage point higher than CPI-ATE inflation in August 2016.

There are prospects of continued low growth in Norwegian salaries and very moderate global inflation. The time-lagged effects of the depreciation of the krone will now become steadily weaker. In the slightly longer term, inflation will be strongly influenced by the path taken by the krone exchange rate, and to a lesser extent by changes in inflationary impulses attributable to developments in the Norwegian economy. We assume that the krone will remain approximately unchanged through the remainder of the projection period.

A slower rise in prices for imported consumer goods will have the effect of lowering inflation through the next half year. According to our projections, the annualised rise in the CPI-ATE will be 3.0 per cent in 2016, i.e. slightly higher than last year. CPI-ATE inflation then appears likely to remain fairly stable at or just under 2 per cent. The effect of slightly higher domestic price impulses may be countered by the fact that the time-lagged effects of the previous weakening of the krone continue to wane.

In 2016, increases in taxation rates will in isolation have the effect of pushing up CPI inflation by 0.2 percentage point. We assume that increased environmental and carbon taxes in subsequent years will generate inflationary impulses of the same magnitude. According to the CPI, electricity prices were almost 19 per cent higher in the first eight months of the year than in the same months in 2015. On the basis of forward prices in the power market, we now forecast that annualised average electricity prices will be close to this level in 2016. Forward prices for the next few years indicate steadily lower power prices, but this may be neutralised to some extent by increasing grid rental. However, the expected rise in oil prices and taxes will lead to CPI inflation being generally slightly higher than CPI-ATE inflation for the next few years, but at a considerably lower level than this year.

Table 5. **National accounts: Final expenditure and gross domestic product. At constant 2014 prices. Million kroner**

	Unadjusted		Seasonally adjusted							
	2014	2015*	14.3	14.4	15.1	15.2	15.3	15.4	16.1	16.2
Final consumption expenditure of households and NPISHs	1 284 876	1 311 465	321 559	323 918	325 628	328 090	328 367	330 163	331 911	333 402
Household final consumption expenditure	1 220 052	1 245 216	305 187	307 559	309 148	311 766	311 680	313 406	315 255	316 465
Goods	574 308	579 798	143 499	144 679	144 412	146 315	145 262	144 877	145 428	145 391
Services	583 933	604 358	146 187	147 675	149 304	150 266	151 483	152 996	154 151	155 861
Direct purchases abroad by resident households	96 942	99 797	24 323	24 355	24 548	24 766	25 115	25 345	25 521	25 566
Direct purchases by non-residents	-35 131	-38 737	-8 823	-9 151	-9 116	-9 581	-10 180	-9 812	-9 845	-10 353
Final consumption expenditure of NPISHs	64 824	66 249	16 373	16 360	16 481	16 324	16 686	16 757	16 656	16 937
Final consumption expenditure of general government	691 969	706 366	173 849	175 213	175 812	176 109	176 731	177 715	178 818	179 949
Final consumption expenditure of central government	346 561	354 962	87 226	88 004	88 345	88 451	88 813	89 354	90 057	90 913
Central government, civilian	304 455	313 292	76 663	77 500	77 892	78 089	78 436	78 881	79 702	80 421
Central government, defence	42 106	41 670	10 562	10 505	10 453	10 362	10 378	10 473	10 355	10 492
Final consumption expenditure of local government	345 408	351 404	86 623	87 208	87 467	87 659	87 918	88 361	88 761	89 036
Gross fixed capital formation	739 271	711 392	186 778	181 896	177 727	177 628	178 784	177 719	174 841	175 011
Extraction and transport via pipelines	215 413	183 085	54 157	50 164	49 604	47 274	43 807	42 364	40 079	38 579
Ocean transport	822	1 959	668	559	775	562	300	413	888	315
Mainland Norway	523 036	526 349	131 952	131 173	127 348	129 791	134 677	134 942	133 874	136 117
Industries	223 026	219 501	55 963	58 208	54 633	55 149	54 644	55 312	54 736	55 880
Service activities incidential to extraction	4 891	4 205	1 161	1 158	1 332	1 504	760	609	484	575
Other services	135 454	133 822	34 266	35 497	33 434	33 677	33 126	33 691	33 205	34 859
Manufacturing and mining	34 098	31 447	8 338	9 445	7 440	7 615	8 091	8 380	8 076	7 980
Production of other goods	48 583	50 027	12 198	12 109	12 428	12 353	12 667	12 632	12 971	12 467
Dwellings (households)	155 517	158 051	38 929	37 831	38 278	39 146	39 748	41 016	41 386	42 318
General government	144 493	148 796	37 060	35 133	34 438	35 496	40 284	38 614	37 752	37 919
Acquisitions less disposals of valuables	333	334	81	86	85	82	81	87	83	84
Changes in stocks and statistical discrepancies	144 327	151 488	45 211	31 256	46 631	39 561	31 894	33 860	48 689	42 902
Gross capital formation	883 931	863 215	231 988	213 152	224 358	217 189	210 678	211 579	223 530	217 913
Final domestic use of goods and services	2 860 776	2 881 046	727 396	712 283	725 798	721 388	715 776	719 458	734 259	731 264
Final demand from Mainland Norway	2 499 881	2 544 180	627 360	630 304	628 789	633 990	639 774	642 821	644 603	649 468
Final demand from general government	836 462	855 163	210 908	210 346	210 249	211 606	217 015	216 330	216 570	217 868
Total exports	1 220 367	1 265 859	306 033	317 171	309 249	309 031	327 868	320 750	312 048	311 174
Traditional goods	343 183	363 233	86 638	87 640	89 815	91 232	91 561	90 719	86 563	86 177
Crude oil and natural gas	551 366	569 005	137 639	145 216	138 281	137 594	150 669	143 316	146 692	144 094
Ships, oil platforms and planes	9 967	7 471	1 242	2 499	1 919	1 477	1 994	2 052	1 581	2 066
Services	315 851	326 150	80 513	81 816	79 234	78 728	83 645	84 663	77 211	78 836
Total use of goods and services	4 081 143	4 146 904	1 033 429	1 029 454	1 035 047	1 030 419	1 043 644	1 040 208	1 046 307	1 042 438
Total imports	940 772	955 940	246 783	234 133	240 728	235 329	236 555	243 420	241 203	237 176
Traditional goods	544 337	554 823	138 274	136 579	139 668	138 003	136 230	140 782	139 919	136 546
Crude oil and natural gas	13 651	13 471	3 564	3 884	3 778	3 441	2 923	3 316	3 342	2 757
Ships, oil platforms and planes	33 277	29 368	16 070	4 970	8 406	6 699	7 985	6 299	7 274	9 023
Services	349 507	358 279	88 875	88 701	88 875	87 187	89 418	93 023	90 668	88 850
Gross domestic product (market prices)	3 140 371	3 190 964	786 647	795 321	794 318	795 090	807 089	796 788	805 104	805 261
Gross domestic product Mainland Norway (market prices)	2 533 302	2 561 433	635 083	638 740	640 199	640 914	641 295	640 596	642 370	644 788
Petroleum activities and ocean transport	607 069	629 530	151 564	156 581	154 120	154 176	165 794	156 192	162 735	160 473
Mainland Norway (basic prices)	2 200 788	2 223 947	552 217	554 943	555 905	556 846	556 732	555 400	556 767	558 052
Mainland Norway excluding general government	1 663 062	1 676 707	417 717	419 648	420 003	420 508	419 683	417 397	418 454	419 313
Manufacturing and mining	218 628	211 627	55 564	55 618	54 517	53 829	52 427	51 566	51 387	50 902
Production of other goods	268 615	276 050	67 418	67 321	68 036	69 321	69 951	68 977	71 043	70 400
Services incl. dwellings (households)	1 175 819	1 189 030	294 735	296 709	297 450	297 358	297 306	296 855	296 024	298 011
General government	537 726	547 240	134 500	135 295	135 902	136 337	137 048	138 003	138 313	138 740
Taxes and subsidies products	332 514	337 486	82 866	83 797	84 294	84 069	84 563	85 196	85 603	86 736

Source: Statistics Norway.

Table 6. **National accounts: Final expenditure and gross domestic product. At constant 2013 prices. Percentage change from the previous periodg fra foregående kvartal**

	Unadjusted		Seasonally adjusted							
	2014	2015*	14.3	14.4	15.1	15.2	15.3	15.4	16.1	16.2
Final consumption expenditure of households and NPISHs	1.9	2.1	0.1	0.7	0.5	0.8	0.1	0.5	0.5	0.4
Household final consumption expenditure	1.7	2.1	0.0	0.8	0.5	0.8	0.0	0.6	0.6	0.4
Goods	0.9	1.0	-0.2	0.8	-0.2	1.3	-0.7	-0.3	0.4	0.0
Services	2.3	3.5	0.6	1.0	1.1	0.6	0.8	1.0	0.8	1.1
Direct purchases abroad by resident households	3.9	2.9	-0.5	0.1	0.8	0.9	1.4	0.9	0.7	0.2
Direct purchases by non-residents	3.9	10.3	4.8	3.7	-0.4	5.1	6.3	-3.6	0.3	5.2
Final consumption expenditure of NPISHs	6.9	2.2	1.6	-0.1	0.7	-1.0	2.2	0.4	-0.6	1.7
Final consumption expenditure of general government	2.7	2.1	0.9	0.8	0.3	0.2	0.4	0.6	0.6	0.6
Final consumption expenditure of central government	3.4	2.4	1.0	0.9	0.4	0.1	0.4	0.6	0.8	1.0
Central government, civilian	3.9	2.9	1.1	1.1	0.5	0.3	0.4	0.6	1.0	0.9
Central government, defence	0.3	-1.0	0.2	-0.5	-0.5	-0.9	0.2	0.9	-1.1	1.3
Final consumption expenditure of local government	1.9	1.7	0.7	0.7	0.3	0.2	0.3	0.5	0.5	0.3
Gross fixed capital formation	-0.7	-3.8	0.0	-2.6	-2.3	-0.1	0.7	-0.6	-1.6	0.1
Extraction and transport via pipelines	-3.2	-15.0	-2.0	-7.4	-1.1	-4.7	-7.3	-3.3	-5.4	-3.7
Ocean transport	-4.9	138.3	412.1	-16.3	38.5	-27.4	-46.6	37.6	114.7	-64.5
Mainland Norway	0.4	0.6	0.4	-0.6	-2.9	1.9	3.8	0.2	-0.8	1.7
Industries	-0.7	-1.6	1.8	4.0	-6.1	0.9	-0.9	1.2	-1.0	2.1
Service activities incidential to extraction	-14.7	-14.0	-24.4	-0.2	15.0	13.0	-49.5	-19.9	-20.5	18.7
Other services	-1.9	-1.2	3.7	3.6	-5.8	0.7	-1.6	1.7	-1.4	5.0
Manufacturing and mining	4.2	-7.8	2.9	13.3	-21.2	2.4	6.2	3.6	-3.6	-1.2
Production of other goods	1.0	3.0	-0.9	-0.7	2.6	-0.6	2.5	-0.3	2.7	-3.9
Dwellings (households)	-1.4	1.6	-1.3	-2.8	1.2	2.3	1.5	3.2	0.9	2.3
General government	4.4	3.0	0.2	-5.2	-2.0	3.1	13.5	-4.1	-2.2	0.4
Acquisitions less disposals of valuables	-10.1	0.4	-1.3	6.6	-1.0	-3.8	-1.4	7.4	-4.8	2.2
Changes in stocks and statistical discrepancies	4.6	5.0	15.6	-30.9	49.2	-15.2	-19.4	6.2	43.8	-11.9
Gross capital formation	0.2	-2.3	2.7	-8.1	5.3	-3.2	-3.0	0.4	5.6	-2.5
Final domestic use of goods and services	1.6	0.7	1.1	-2.1	1.9	-0.6	-0.8	0.5	2.1	-0.4
Final demand from Mainland Norway	1.8	1.8	0.4	0.5	-0.2	0.8	0.9	0.5	0.3	0.8
Final demand from general government	3.0	2.2	0.7	-0.3	0.0	0.6	2.6	-0.3	0.1	0.6
Total exports	3.1	3.7	2.7	3.6	-2.5	-0.1	6.1	-2.2	-2.7	-0.3
Traditional goods	3.1	5.8	0.7	1.2	2.5	1.6	0.4	-0.9	-4.6	-0.4
Crude oil and natural gas	2.7	3.2	4.6	5.5	-4.8	-0.5	9.5	-4.9	2.4	-1.8
Ships, oil platforms and planes	-2.2	-25.0	-33.3	101.1	-23.2	-23.1	35.0	2.9	-22.9	30.6
Services	4.0	3.3	2.7	1.6	-3.2	-0.6	6.2	1.2	-8.8	2.1
Total use of goods and services	2.0	1.6	1.6	-0.4	0.5	-0.4	1.3	-0.3	0.6	-0.4
Total imports	2.4	1.6	5.6	-5.1	2.8	-2.2	0.5	2.9	-0.9	-1.7
Traditional goods	2.1	1.9	1.7	-1.2	2.3	-1.2	-1.3	3.3	-0.6	-2.4
Crude oil and natural gas	-11.8	-1.3	15.9	9.0	-2.7	-8.9	-15.1	13.4	0.8	-17.5
Ships, oil platforms and planes	13.1	-11.7	149.7	-69.1	69.1	-20.3	19.2	-21.1	15.5	24.0
Services	2.6	2.5	0.7	-0.2	0.2	-1.9	2.6	4.0	-2.5	-2.0
Gross domestic product (market prices)	1.9	1.6	0.4	1.1	-0.1	0.1	1.5	-1.3	1.0	0.0
Gross domestic product Mainland Norway (market prices)	2.2	1.1	0.3	0.6	0.2	0.1	0.1	-0.1	0.3	0.4
Petroleum activities and ocean transport	1.0	3.7	0.8	3.3	-1.6	0.0	7.5	-5.8	4.2	-1.4
Mainland Norway (basic prices)	2.2	1.1	0.4	0.5	0.2	0.2	0.0	-0.2	0.2	0.2
Mainland Norway excluding general government	2.3	0.8	0.4	0.5	0.1	0.1	-0.2	-0.5	0.3	0.2
Manufacturing and mining	2.8	-3.2	1.4	0.1	-2.0	-1.3	-2.6	-1.6	-0.3	-0.9
Production of other goods	3.9	2.8	-1.0	-0.1	1.1	1.9	0.9	-1.4	3.0	-0.9
Services incl. dwellings (households)	1.8	1.1	0.6	0.7	0.2	0.0	0.0	-0.2	-0.3	0.7
General government	1.9	1.8	0.2	0.6	0.4	0.3	0.5	0.7	0.2	0.3
Taxes and subsidies products	2.0	1.5	-0.4	1.1	0.6	-0.3	0.6	0.7	0.5	1.3

Source: Statistics Norway.

Table 7. **National accounts: Final expenditure and gross domestic product. Price indices. 2014=100**

	Unadjusted		Seasonally adjusted									
	2014	2015*	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1	16.2
Final consumption expenditure of households and NPISHs	100,0	102,3	99,4	99,7	100,0	100,6	101,5	101,3	102,3	103,6	104,7	105,7
Final consumption expenditure of general government	100,0	103,0	99,1	99,7	100,0	101,1	102,3	102,9	103,1	103,8	104,4	104,8
Gross fixed capital formation	100,0	102,6	99,0	99,8	100,2	101,0	102,0	103,1	101,5	103,6	103,5	105,2
Mainland Norway	100,0	102,7	98,9	99,4	100,4	101,2	101,5	102,1	103,1	103,8	104,0	104,9
Final domestic use of goods and services	100,0	102,3	99,1	99,5	100,3	101,1	102,3	101,3	101,7	104,0	105,0	103,6
Final demand from Mainland Norway	100,0	102,5	99,2	99,6	100,1	100,9	101,7	101,9	102,7	103,7	104,4	105,3
Total exports	100,0	92,1	104,5	100,8	97,8	95,9	93,6	94,7	92,9	87,7	81,1	84,2
Traditional goods	100,0	102,3	100,2	98,7	99,0	101,6	103,0	102,3	102,1	101,8	102,5	105,3
Total use of goods and services	100,0	99,2	100,7	99,9	99,5	99,5	99,7	99,4	99,0	99,0	97,8	97,8
Total imports	100,0	104,2	99,7	97,9	100,2	102,4	103,9	103,4	105,6	105,3	106,8	105,3
Traditional goods	100,0	104,7	99,1	99,1	99,9	101,7	104,0	104,5	105,2	105,1	105,2	106,3
Gross domestic product (market prices)	100,0	97,7	101,0	100,5	99,3	98,7	98,4	98,2	97,0	97,0	95,2	95,6
Gross domestic product Mainland Norway (market prices)	100,0	102,3	98,6	99,6	100,3	100,9	101,6	101,8	102,4	103,2	104,1	104,7

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted									
	2014	2015*	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1	16.2
Final consumption expenditure of households and NPISHs	2.2	2.3	0.9	0.3	0.3	0.6	0.9	-0.2	1.0	1.2	1.1	1.0
Final consumption expenditure of general government	3.3	3.0	1.5	0.6	0.3	1.1	1.1	0.6	0.2	0.7	0.6	0.4
Gross fixed capital formation	3.8	2.6	1.7	0.8	0.5	0.7	1.0	1.2	-1.6	2.0	0.0	1.6
Mainland Norway	3.6	2.7	1.6	0.5	1.0	0.8	0.3	0.7	0.9	0.7	0.1	0.9
Final domestic use of goods and services	2.7	2.3	0.7	0.4	0.8	0.8	1.2	-0.9	0.4	2.2	1.0	-1.3
Final demand from Mainland Norway	2.8	2.5	1.2	0.4	0.4	0.8	0.8	0.2	0.8	1.0	0.7	0.8
Total exports	-1.7	-7.9	-0.2	-3.5	-3.0	-1.9	-2.5	1.2	-2.0	-5.5	-7.6	3.8
Traditional goods	3.4	2.3	1.4	-1.5	0.3	2.7	1.4	-0.7	-0.2	-0.3	0.7	2.8
Total use of goods and services	1.4	-0.8	0.5	-0.8	-0.4	0.0	0.2	-0.3	-0.4	0.0	-1.1	0.0
Total imports	4.9	4.2	2.1	-1.8	2.4	2.2	1.5	-0.5	2.1	-0.3	1.5	-1.4
Traditional goods	4.4	4.7	0.9	0.1	0.8	1.8	2.3	0.5	0.7	-0.1	0.1	1.0
Gross domestic product (market prices)	0.3	-2.3	0.0	-0.5	-1.2	-0.7	-0.3	-0.3	-1.2	0.0	-1.9	0.5
Gross domestic product Mainland Norway (market prices)	2.5	2.3	0.6	0.9	0.7	0.7	0.6	0.2	0.6	0.8	0.9	0.5

Source: Statistics Norway.

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