

# Economic Survey

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- Economic developments in Norway
- Forecasts 2015-2018

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# Economic trends

Economic growth has picked up slightly in the euro area recently, while developments in the UK, Sweden and the USA are now moving in the opposite direction, following a period of higher economic growth in these countries. On the whole, Norway's trading partners experienced a growth upswing in the second half of last year which was reversed in 2015. The central banks are continuing to stimulate their economies through both low interest rates and quantitative easing, while fiscal policy is generally contractionary. Investment remains low in most countries, curbing growth in both GDP and productivity. The global downturn will be prolonged by the high public and private sector debt in many OECD countries. However, there are signs that investment is beginning to pick up in several places, and this is expected to lead to growth slowly gathering pace again from the end of 2015.

The oil price slump has contributed to reducing inflation from already low levels. Now that oil prices have risen a little again and the immediate effects of the fall in prices are dispelled, the inflation rate can be expected to rise gradually. Although GDP growth will gradually edge up, we expect capacity utilisation to remain low. This, coupled with low inflation, means that central banks' policy rates will remain low for a good while to come.

The Norwegian economy is in a moderate downturn, attributable to three main factors: weak global economic growth is reflected in low export growth; petroleum investment has fallen from a peak in 2013; finally, mainland investment excluding general government has moved on a weak trend. On the other hand, economic policy has been oriented for several years towards stimulating growth in the Norwegian economy, but the impetus from monetary and fiscal policy has not been strong enough to avert the cyclical downturn. In the last few quarters, weaker production growth has meant low employment growth and higher unemployment. The decline in oil prices has resulted in a weaker krone. This has contributed to a somewhat higher rise in consumer prices even though lower energy prices have exerted downward pressure on growth. Weakened manufacturing profitability coupled with higher unemployment have dampened wage growth, which is now at a 20-year low. Growth in real wages remains positive, albeit low.

Weak growth among Norway's trading partners and a further decline in petroleum investment are contributing to low wage growth in Norway in 2015. The decline in petroleum investment is expected to continue next year and place a damper on the growth outlook for the Norwegian economy. Countering this effect are global developments and improved competitiveness due to the weak krone exchange rate. This will have a positive effect on export-oriented business and lead to the growth rate of the Norwegian mainland economy increasing again next year.

We expect economic policy to continue to stimulate growth in the Norwegian economy. As long as interest rates abroad remain low, there is reason to believe that Norges Bank will keep its key policy rate at a historically low level, and we assume that the krone will remain weak, around the level at the end of May. This will cause core inflation in Norway to fall slightly next year, with the waning of the inflationary impulses due to the depreciation of the krone in recent years.

In 2017 and 2018 we believe the negative impulses from petroleum activities will be exhausted. These factors, combined with stronger global growth impulses, will spur growth in the Norwegian economy. We therefore forecast that the Norwegian economy will emerge from the slump in 2018. Unemployment will also be on the way down then, and wage growth, both nominal and in real terms, will have picked up somewhat again.

The Norwegian economy has been substantially boosted by the petroleum sector for a long time. Everyone knew that this could not last forever, so the decline in demand from the petroleum industry comes as no surprise. The extent of the downturn is uncertain, and depends on both the oil price going forward and the extent to which the costs associated with Norwegian offshore activities can be reduced. The petroleum companies have previously demonstrated an ability to adapt to a new operating environment, and now this ability will probably help to stop the decline in petroleum investment in the course of a couple of years. Even after this fall, the level of activity in the petroleum sector will generate extensive impulses to the Norwegian economy and thus remain one of the cornerstones of the economy.

# Economic developments in Norway

Increased investment in the petroleum industry had generated extensive growth impulses to the Norwegian economy for over ten years when investment began to fall at the end of 2013. Reduced profitability due to high cost growth was the initial cause of the decline in investment, and the fall in oil prices in the summer of 2014 prompted a further reduction in investment. The slump in demand from the petroleum sector helped to trigger a cyclical downturn in the Norwegian economy in the third quarter of 2014. Lower housing investment in the second half of 2014 and a fall in

mainland business investment in the winter half-year also contributed to the decline, which continued in the first quarter of 2015. The decline has been moderated by expansionary monetary and fiscal policy. Mainland GDP rose by an annualised 2.0 per cent in the first quarter of this year, and by 1.2 per cent through the last three quarters. By way of comparison, trend growth in mainland GDP is estimated to be 2¼ per cent.

We expect petroleum sector demand to fall markedly through the remainder of 2015 and more moderately

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

	2013*	2014*	Seasonally adjusted			
			14:2	14:3	14:4	15:1
<b>Demand and output</b>						
Consumption in households etc.	2.1	2.0	0.6	0.1	0.8	0.6
General government consumption	1.7	2.7	0.6	0.5	0.7	0.3
Gross fixed investment	6.8	0.6	2.3	-1.2	-3.9	-0.3
Mainland Norway	2.9	1.7	2.9	-0.7	-2.5	-1.1
Extraction and transport via pipelines	17.1	-1.7	-0.2	-3.0	-7.0	0.8
Final domestic demand from Mainland Norway <sup>1</sup>	2.1	2.1	1.1	0.0	0.1	0.2
Exports	-3.0	2.7	0.4	2.6	3.4	-3.8
Crude oil and natural gas	-7.6	1.5	-3.7	4.9	3.9	-5.8
Traditional goods	1.0	2.3	4.2	0.5	0.4	0.8
Imports	4.3	1.9	3.6	3.4	-3.6	2.8
Traditional goods	3.2	-0.3	1.8	0.0	-1.4	4.4
Gross domestic product	0.7	2.2	1.0	0.4	0.9	0.2
Mainland Norway	2.3	2.2	1.1	0.0	0.4	0.5
<b>Labour market</b>						
Man-hours worked	0.7	1.6	0.4	0.2	0.2	-0.1
Employed persons	1.2	1.1	0.3	0.2	0.2	0.0
Labour force <sup>2</sup>	1.0	1.1	0.4	0.5	0.6	0.1
Unemployment rate, level <sup>2</sup>	3.5	3.5	3.2	3.7	3.7	4.1
<b>Prices and wages</b>						
Annual earnings	3.9	3.1	..	..	..	
Consumer price index (CPI) <sup>3</sup>	2.1	2.0	1.8	2.1	2.0	2.0
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>3</sup>	1.6	2.4	2.4	2.4	2.4	2.3
Export prices, traditional goods	3.1	4.1	-1.2	0.8	2.8	2.5
Import prices, traditional goods	2.1	5.5	0.1	1.3	2.0	1.4
<b>Balance of payment</b>						
Current balance, bill. NOK	307.7	297.0	61.6	46.9	83.3	72.6
<b>Memorandum items (unadjusted level)</b>						
Money market rate (3 month NIBOR)	1.8	1.7	1.8	1.7	1.6	1.4
Lending rate, credit loans <sup>4</sup>	4.0	3.9	4.0	3.9	3.8	3.5
Crude oil price NOK <sup>5</sup>	639	621	657	646	526	428
Importweighted krone exchange rate, 44 countries. 1995=100	89.0	93.7	91.5	93.1	97.0	101.0
NOK per euro	7.8	8.4	8.2	8.3	8.6	8.7

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

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

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

<sup>4</sup> Period averages.

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

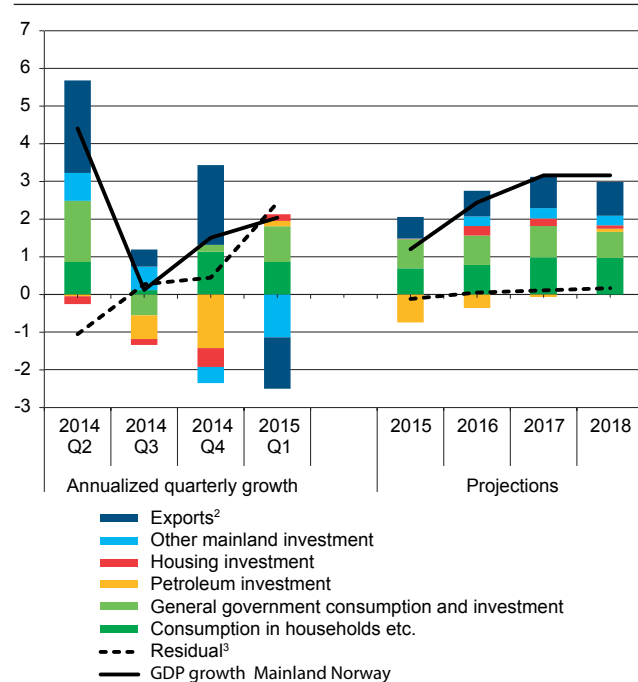
Source: Statistics Norway and Norges Bank.

through 2016. As many industries make deliveries directly or indirectly to the petroleum industry, this implies a broad-based negative impulse to the Norwegian economy. Our projections therefore show very weak developments in mainland GDP through the remainder of 2015. Higher global growth, low interest rates and a weak krone, coupled with relatively high growth in public sector demand and transfers to households will cause both mainland demand and exports to edge up gradually, while the share of imports will decline somewhat. This will counter the negative impulses from the petroleum industry, and from early next year we expect mainland GDP growth to rise above trend. The upswing will contribute in its turn to the Norwegian economy emerging from the slump in the course of 2018.

The downturn in 2014 is now beginning to be reflected more strongly in the labour market. Employment remained unchanged in the first quarter of 2015, and unemployment has risen from 3.2 per cent in spring last year to 4.1 per cent these past few months. Regions with a high level of activity associated with the petroleum industry have experienced a greater increase. We expect unemployment to increase further and rise to 4.3 per cent in 2016 before the expected cyclical upturn contributes to reducing unemployment again. At 3.1 per cent, annual wage growth in 2014 was the lowest for 20 years, and this year's wage bargaining settlement points to even lower wage growth this year. We forecast that average annual wages will increase by 2.8 per cent this year, but that wage growth will pick up a little in subsequent years.

The depreciation of the krone through 2013 and 2014 has contributed to pushing up underlying inflation. Thus the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) rose from 1.6 per cent in 2013 to 2.4 per cent in 2014. After some months with slightly lower growth, we expect that time-lagged effects of the krone depreciation will be reflected in somewhat higher prices and that the rise in the CPI-ATE as an annual average will climb to 2.5 per cent this year. Lower prices for oil products and electricity slowed the rise in the consumer price index (CPI) last year, and this effect is expected to continue

Figure 1. GDP growth Mainland Norway and contribution by final demand components<sup>1</sup>. Percentage points



<sup>1</sup> 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 Economic Survey 1/2014. All variables are seasonally adjusted and at constant prices.

<sup>2</sup> Exports is defined as total exports minus exports of crude oil, natural gas, ships, oil platforms and planes.

<sup>3</sup> 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.

this year. We therefore project that CPI inflation will be the same in 2015 as the previous year, when it was 2.0 per cent. Thus some growth in real wages appears likely this year too, but it will be a little lower than last year.

At present, fiscal policy is clearly expansionary. According to the revised national budget for 2015 (RNB15), the structural non-oil budget deficit (SNOBD) will increase as much as in 2014. We assume that economic policy will be roughly as expansionary in 2016 and 2017, but a little less expansionary in 2018, when the Norwegian economy will have moved into a more cyclically neutral phase.

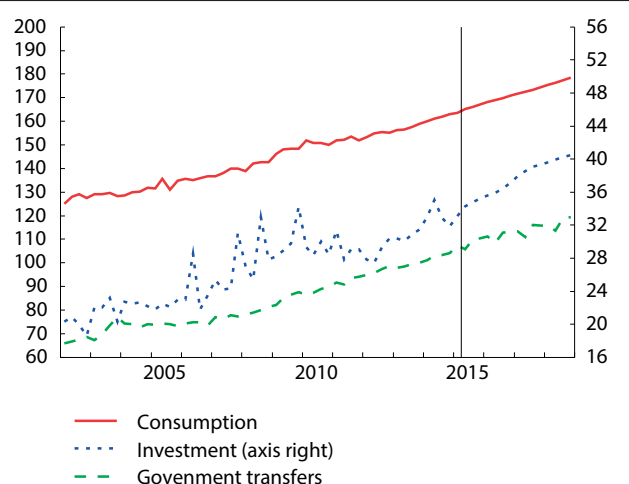
Table 2. Growth in mainland GDP and contributions from demand components<sup>1</sup>. Percentage points, annual rate

	QNA figures				Projection			
	2014:2	2014:3	2014:4	2015:1	2015	2016	2017	2018
Consumption by households and non-profit organisations	0.86	0.11	1.14	0.86	0.69	0.78	0.98	0.97
General government consumption and investment	1.62	-0.55	0.18	0.95	0.77	0.78	0.83	0.69
Petroleum investment	-0.05	-0.63	-1.42	0.15	-0.74	-0.36	-0.07	0.09
Housing investment	-0.21	-0.16	-0.50	0.17	0.01	0.25	0.20	0.09
Other mainland investment	0.75	0.63	-0.43	-1.15	0.01	0.25	0.27	0.25
Exports	2.76	0.51	2.38	-1.53	0.62	0.82	0.93	1.01
Other deviations	-1.36	0.21	0.19	2.62	-0.17	-0.09	0.00	0.06
Growth in mainland GDP	4.41	0.12	1.50	2.04	1.20	2.44	3.16	3.16

<sup>1</sup> See footnotes to Figure 2.1.

Source: Statistics Norway.

Figure 2. **General government. Seasonally adjusted, billion 2012-kr., quarterly**



Source: Statistics Norway.

A weaker outlook for developments in the real economy led to the key policy rate being cut to a record-low 1.25 per cent in December 2014. Our projections are based on the assumption that Norges Bank will make a new cut of 0.25 percentage point at the next monetary policy meeting, as signalled, but that it will not be lowered further. Money market rates are expected to shadow developments in the key rate with the result that the interest rates facing the general public in 2016 will be down to 3.0 per cent, from an average of 3.9 per cent in 2014. This, coupled with tax relief, will contribute positively to household income growth this year and next. The decline in interest rates in itself will stimulate household consumption, and we expect consumption to mirror income developments this year. Consumption growth will thus remain at the same level as last year, and then rise in pace with the upturn.

The improved cost-competitiveness and lower interest rates are some of the factors that will cause mainland business investment to pick up in the period ahead. Because of relatively high surplus capacity in commercial buildings and in the petroleum sector supplier industries, this growth will nonetheless remain very moderate compared with previous cyclical upturns. As a result, the upturn will also be relatively moderate.

### Fiscal policy generates expansionary impetus

Revised figures for general government consumption indicate that growth from 2013 to 2014 was a little higher than previously projected, and is now estimated to be 2.7 per cent. Very high growth in general government gross investment resulted in total consumption and investment growth of 3.6 per cent. Public transfers to households increased by as much as 3.8 per cent in real terms, and also stimulated economic development by increasing household income. This, together with reduced taxes, resulted in the combined fiscal stimulus

in 2014 being the strongest since the financial crisis. The fiscal stimulus, measured in terms of the structural, non-oil budget deficit (SNOBD) as a share of trend mainland GDP, increased by 0.6 percentage point last year, thereby indicating that fiscal policy contributed to slowing the downturn in the Norwegian economy. QNA figures for the first quarter of 2015 show that general government investment is still growing appreciably, while growth in general government consumption is somewhat subdued compared with developments through 2014.

Our fiscal policy projections for 2015 largely mirror those in RNB15, and are close to those we have assumed previously. We assume that general government consumption growth will be 2.5 per cent, while gross investment growth will be just over 4 per cent. Transfers to households will increase substantially as a result of changes in the rules for disability benefits, as these are to be taxed in line with wage income from 2015 onwards. This factor in isolation means that both transfers and taxes will increase by NOK 12 billion more than if the rules from 2014 had been maintained. After adjusting for this change in rules, we assume that real growth in net transfers will be a good 3 per cent in 2015. Higher disbursements of unemployment benefit going forward will contribute to the increase. We estimate combined real growth in consumption, investment and transfers at just under 3 per cent from 2014 to 2015. In addition come lower taxes, such that fiscal policy is generating clear growth impulses to the mainland economy this year too. The fiscal impulse is projected in RNB15 to be 0.6 percentage point in 2015, the same as in 2014.

We assume that the general lines of fiscal policy for 2015 will be maintained in 2016 and 2017. Tax reductions are assumed to be in line with the changes in the current year. Consumption growth and growth in general government investment are also expected to be approximately as in 2015. The exception is increasing investment in military equipment in the form of fighter aircraft. Two aircraft are to be purchased in both 2015 and 2016 for use in training in the USA. From 2017 to 2024, six fighter aircraft are to be delivered to Norway each year. The investment costs of these 52 fighter aircraft are projected to be about NOK 68 billion (in 2015 prices). Growth in non-military investment in 2017 is projected to be approximately as in the two preceding years. Consumption growth is projected to remain close to 2.5 per cent annually, except in 2017 and 2018, when it will be lower because there will be fewer working days as a result of movable public holidays. Real growth in old-age pensions and disability benefits (measured as multiples of the basic amount (G) in constant prices) is forecast to be 2 per cent annually in the projection period. Given wage growth of about 3 per cent and CPI inflation of just under 2 per cent, CPI-adjusted growth in transfers will be just over 3 per cent annually.



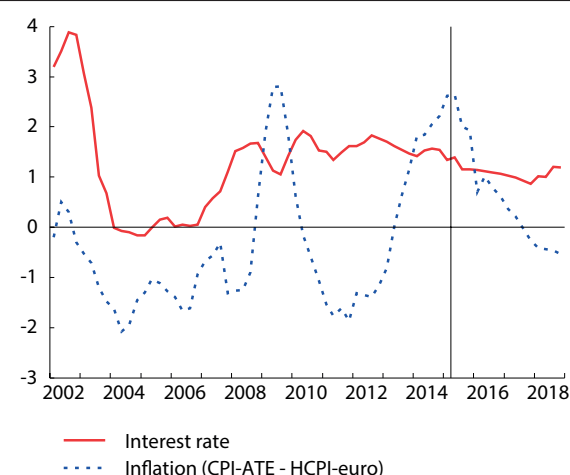
Tabell 3. **Main economic indicators 2014-2018. Accounts and forecasts Percentage change from previous year unless otherwise noted**

	Accounts 2014*	Forecast									
		2015			2016			2017		2018	
		SN	NB	MoF	SN	NB	MoF	SN	NB	SN	NB
<b>Demand and output</b>											
Consumption in households etc.	2.0	1.9	1 3/4	1.8	2.1	2 1/2	..	2.7	3.0	2.7	2 3/4
General government consumption	2.7	2.5	2 1/2	2.4	2.3	2 1/4	..	2.0	..	2.3	..
Gross fixed investment	0.6	-3.2	..	-3.3	1.5	..	..	3.8	..	3.3	..
Extraction and transport via pipelines <sup>1</sup>	-1.7	-14.5	-15	-13.1	-8.3	-10	..	-1.8	-5.0	2.4	5.0
Mainland Norway	1.7	1.2	1.0	..	4.9	6 1/4	..	5.5	..	3.3	..
Industries	0.2	0.1	..	1.1	4.7	..	..	5.0	..	4.5	..
Housing	-1.6	0.2	..	-3.2	5.3	..	..	4.1	..	1.8	..
General government	8.2	4.0	..	4.0	4.8	..	..	7.8	..	3.0	..
Demand from Mainland Norway <sup>2</sup>	2.1	1.9	1 3/4	1.7	2.8	3 1/4	..	3.1	3 1/4	2.7	2 3/4
Stockbuilding <sup>3</sup>	0.2	0.6	..	..	0.2	..	..	-0.5	..	0.0	..
Exports	2.7	1.9	..	1.2	2.1	..	..	2.7	..	3.1	..
Crude oil and natural gas	1.5	-0.5	..	-1.3	-0.7	..	..	-0.1	..	0.3	..
Traditional goods <sup>4</sup>	2.3	3.4	5.0	3.8	4.3	2 1/2	..	5.0	3 3/4	5.3	4 1/4
Imports	1.9	2.7	1 1/2	0.3	3.5	2 3/4	..	1.7	..	3.2	..
Traditional goods	-0.3	1.8	..	1.4	3.0	..	..	4.1	..	4.4	..
Gross domestic product	2.2	1.2	1 1/4	0.8	1.7	1 1/2	1.5	2.5	2.0	2.6	2.0
Mainland Norway	2.2	1.2	1 1/2	1.3	2.4	2.0	2.0	3.2	2 1/2	3.2	2 3/4
<b>Labour market</b>											
Employed persons	1.1	0.2	1/2	0.6	0.2	1/2	..	1.3	1 1/4	1.3	1.0
Unemployment rate (level)	3.5	4.2	4	4.0	4.3	4.0	4.1	4.0	4.0	3.8	3 3/4
<b>Prices and wages</b>											
Annual earnings	3.1	2.8	3.0	2.7	3.0	3 1/4	..	3	3 3/4	3.3	4.0
Consumer price index (CPI)	2.0	2.0	2 1/4	2.1	2.1	2 1/4	..	1.6	2 1/4	1.4	2.0
CPI-ATE <sup>5</sup>	2.4	2.5	2 1/2	2.6	1.9	2 1/4	..	1.5	2 1/4	1.4	2.0
Export prices, traditional goods	4.1	5.5	..	..	1.3	..	..	1.8	..	1.6	..
Import prices, traditional goods	5.5	5.4	..	..	1.9	..	..	1.4	..	1.3	..
Housing prices	2.7	4.6	..	..	2.5	..	..	2.2	..	0.1	..
<b>Balance of payment</b>											
Current balance (bill. NOK)	297.0	209.2	..	..	233.7	..	..	288.1	..	319.9	..
Current balance (per cent of GDP)	9.4	6.6	..	7.7	7.0	..	..	8.2	..	8.7	..
<b>Memorandum items:</b>											
Household savings ratio (level)	8.5	8.7	..	8.4	9.0	..	..	9.2	..	9.5	..
Money market rate (level)	1.7	1.3	1.3	1.3	1.3	1.2	..	1.3	1.3	1.5	..
Lending rate, credit loans (level) <sup>6</sup>	3.9	3.2	..	..	3.0	..	..	3.0	..	3.1	..
Crude oil price NOK (level) <sup>7</sup>	621	478	..	480	523	..	529	548	..	563	..
Export markets indicator	4.4	4.1	..	..	4.7	..	..	5.6	..	6.1	..
Importweighted krone exchange rate (44 countries) <sup>8</sup>	5.3	5.9	6.2	5.6	-0.6	-2.5	..	0.0	-1.3	0.0	-1.0

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

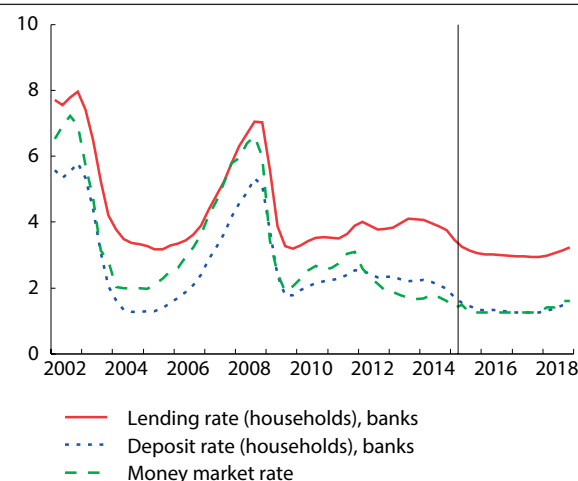
Source: Statistics Norway (SN), Ministry of Finance, St.meld nr. 2 (2014-2015), (MoF), Norges Bank, Pengepolitisk rapport 1/2015 (NB).

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



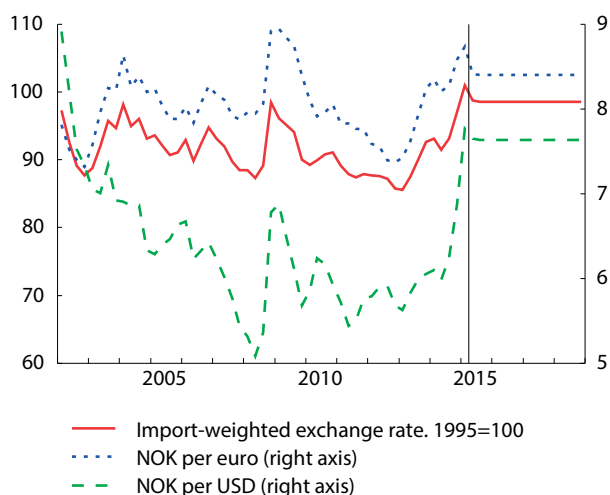
Source: Norges Bank and Statistics Norway.

Figure 4. Norwegian interest rates. Per cent



Source: Norges Bank and Statistics Norway.

Figure 5. Exchange rates



For 2018, we have largely extended the projections for growth in public consumption and investment from the three previous years, but have not assumed a further reduction in the tax level. After a couple of years with a clear upturn in the Norwegian economy, bringing it into a more cyclically neutral situation, it is reasonable for fiscal policy to generate less expansionary impulses to avoid interest rates being increased more and the krone strengthening. In the period 2015–2018, when oil prices are assumed to be appreciably lower than in previous years, the Government Pension Fund Global will grow less. We forecast that at the beginning of 2018, SNOBD as a share of the Fund's value will be around 3 per cent, compared with 2.6 per cent in 2015.

### Interest rate a little lower still

Following the interest rate cut in December last year, the key policy rate is 1.25 per cent, and hence back at the record-low level of the summer of 2009. A further interest rate cut was expected before the monetary policy meeting in March this year. When it did not come, money market rates rose from 1.2 per cent to 1.5 per cent, a level they remained at until the end of May.

The krone depreciated sharply through 2013 and 2014. Measured in terms of the import-weighted krone exchange rate, the krone depreciated by 20 per cent from January 2013 to January 2015. The US dollar appreciated considerably during this period, from NOK 5.60 to NOK 7.70. The krone exchange rate has varied substantially so far this year. It weakened in the run-up to the March monetary policy meeting, and then strengthened because the interest rate was not cut. Since then it has weakened again, and at the beginning of June the value of the krone was about the same as at the beginning of the year, measured in terms of the import-weighted krone exchange rate.

Interest rates facing households fell through 2014 and into 2015. Whereas the average interest rate on credit loans secured on dwellings offered by banks and mortgage companies was 4.06 per cent at the end of 2013, it had fallen to 3.29 per cent by the end of March 2015. Interest rates on bank deposits fell during the same period, from 2.26 per cent to 1.59 per cent. New monthly interest rate statistics show that the largest interest rate reductions occurred in June and December last year and in March this year. The reductions in deposit and lending rates have been far larger than the reduction in money market rates, which may indicate increased competition in the credit market this past year.

Despite low interest rates, debt growth has not been particularly high. Growth in private and municipal sector debt, measured as gross domestic debt (C2) was around 7 per cent in 2012, and around 6 per cent in 2013. It fell further through 2014, and at the end of last year the three-month growth was down to a seasonally adjusted and annualised 5.0 per cent. Debt growth, measured in the same way, reached 6.6 per cent in the period February–April this year. Household debt



growth has increased somewhat, while debt growth in non-financial enterprises has slowed.

Norges Bank has signalled through its published interest rate paths that there will be an interest rate cut in June. The money market has priced in a fall in the money market rate to 1.2 per cent this autumn, which is consistent with an interest rate cut. In light of the cyclical downturn through the previous three quarters and prospects of low growth going forward, we base our projections on a single interest rate cut to 1.0 per cent at the next monetary policy meeting. The key policy rate may be kept at this record-low level for almost the whole of the projection period. The money market rate is accordingly assumed to remain at 1.25 per cent from the autumn of 2015 and through 2017. Lower money market rates will translate into lower bank lending rates. We believe that the interest rate on credit loans secured on dwellings will fall to 3.0 per cent in the course of the autumn, and remain at that level through 2017.

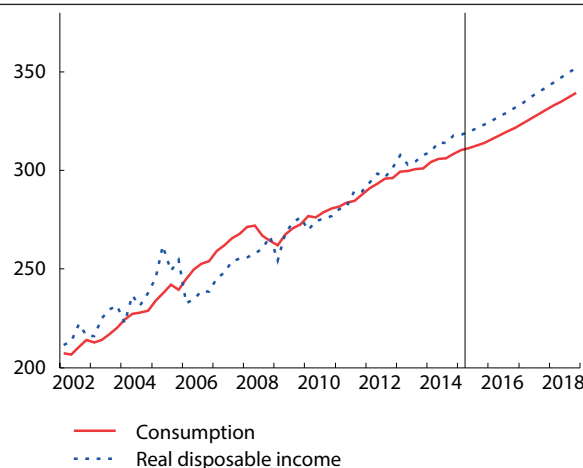
We assume that the krone-euro exchange rate will remain at around 8.40 in the near term and through the projection period. Exchange rates between the euro and other currencies are assumed to remain unchanged in the near term. The krone will depreciate by an annual average of almost 6 per cent in 2015 measured by the import-weighted krone exchange rate.

### Moderate consumption growth

According to QNA figures, consumption in households and non-profit organisations rose by 0.6 per cent in the first quarter of 2015, or an annualised 2.4 per cent. Growth in consumption was also moderate through 2014, except in the third quarter, when a decline in goods consumption caused weak developments. Goods consumption rose by 0.5 per cent in the first quarter, mainly as a result of a marked increase in purchases of vehicles, clothing and footwear. However, purchases of non-durable consumer goods were unchanged in the same period. Service consumption showed more stable growth last year, which continued with growth of 0.9 per cent in the first quarter of 2015. Rent, indirectly measured banking services, financial services, post and telecommunications services, and hotel and restaurant services pushed up growth. Following several years of strong growth in household consumption abroad, growth levelled off through last year, and this consumption declined by half a per cent in the first quarter of this year. The depreciation of the krone through the second half of 2014 and into 2015, which has made it relatively more expensive to shop abroad, explains much of this development.

Changes in consumption are largely determined by movements in household income, housing wealth and interest rates. Real disposable income rose by 2.6 per cent in 2014, a little less than the previous year. Wage income, which is the most important source of income for households, pushed up income growth last year by

Figure 6. **Income and consumption in households. Seasonally adjusted, billion 2012-kr., quarterly**



Source: Statistics Norway.

almost 2 percentage points. Annual wage growth was lower in 2014 than for a long time. Employment growth of 1.1 per cent was also lower than in the previous three years. Higher public transfers, mainly as a result of increased disbursements of pensions and sickness benefit, made relatively large contributions to income growth last year. However, net interest income did not make a contribution of any importance to growth. Inflation of 2.3 per cent, measured by the consumption price index in the National Accounts, curbed growth in real income last year.

Real disposable income continued to rise by 0.8 per cent in the first quarter of this year, or an annualised

#### Box 1. Household consumption and Norwegian economic activity

The volume of consumption by households etc. is equivalent to a good 50 per cent of mainland GDP. In 2012, 71 per cent of consumption could be traced back to Norwegian value added, while the remainder consisted of direct and indirect imports (see Box 3, Economic Survey 1/2015). Thus approximately 36 per cent of Norwegian value added is attributable to this consumption. However, the share of imports varies across the different product categories.

In the QNA, household consumption is broken down into the following main groups: goods consumption, services consumption, Norwegians' consumption abroad and consumption by non-profit organisations. Norwegians' consumption abroad is regarded in its entirety as imports, and changes in this consumption thus have no direct effects on Norwegian production. For important goods consumption categories such as food and beverages, own vehicles and various other products, including clothing and footwear, electronics and furniture and white goods, however, import leakages are considerably smaller, with import shares of 30, 35 and 45 per cent, respectively. Import leakages in service consumption are generally even smaller, and the effects of changes in service consumption on Norwegian production are thus greater than for goods consumption.

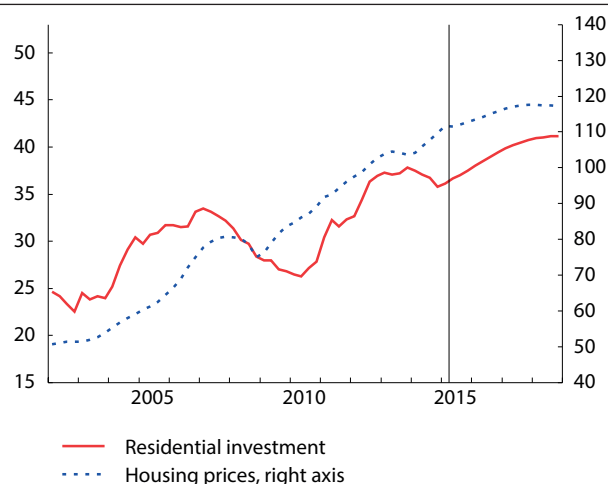
3.2 per cent. Like last year, the contributions to growth made by wage income and public transfers were relatively large. However, some of the increase in public transfers is intended to offset the effects of new rules for taxation of National Insurance disability benefit. We particularly expect public transfers to continue to make relatively clear contributions to growth in real disposable income during the projection period. Conversely, wage income will move on a weak trend through 2015 as a result of weak growth in annual wages and employment, but will pick up later in the projection period, as the economic situation improves. Net interest income will provide a clear stimulus to growth in 2015 as a result of a pronounced decline in lending rates. Inflation will not change much from 2014 to 2015, but during the remainder of the projection period, lower inflation will lead to higher real income growth. We expect annual growth in real disposable income of just over 2 per cent in 2015, about 2.5 per cent in 2016, and 3 per cent in both 2017 and 2018. Relatively weak developments in real house prices will result in lower growth impulses to consumption through the projection period.

Our projections for income, housing wealth and interest rates indicate that consumption growth this year and next will be about 2 per cent, and will subsequently rise to just over 2.5 per cent in 2017 and 2018. While average annual growth in goods and service consumption is likely to remain fairly stable throughout the projection period, Norwegians' consumption abroad may move on a weak trend until 2018, due to a relatively weak krone exchange rate. Developments in Norwegians' consumption abroad have no effect on Norwegian production, however; see box 1. Household saving in the form of financial and housing investment, calculated as a share of disposable income, rose from a level of close to 4 per cent in 2008 to 9.1 per cent in the fourth quarter of 2014. Even though the saving ratio declined to 8.4 per cent in the first quarter of this year, it is still high, and in line with the annual average in 2014. We anticipate that the saving ratio will not increase appreciably this year, but that a gradual relative weakening of developments in real house prices may result in it edging up in the period 2016 to 2018 to a level of close to 9.5 per cent. This is historically high, and the saving ratio has not been at a similar level since 2005. The saving ratio at the time was 9.7 per cent, partly as a result of high, tax-motivated share dividend disbursements.

### Weaker rise in house prices and higher housing investment

Seasonally adjusted house prices rose by 1.7 per cent from the fourth quarter of 2014 to the first quarter of 2015, and were 7.2 per cent higher than in the first quarter of last year, according to the Statistics Norway's house price index. After a decline in nominal prices through the last half of 2013, they have now risen for five quarters in a row. This tendency is consistent with the monthly figures from Norsk Eiendom (the Norwegian Property Federation), where seasonally adjusted house prices have risen every month since

Figure 7. **Residential market. Left axis adj. indices. 2012=100. Right axis per cent**



Source: Statistics Norway.

February 2014. House prices also rose by 0.5 per cent in April, following a certain levelling off in March, when they rose 0.2 per cent. The figures provided are national averages, and developments in house prices show wide geographical variation.

The rise in house prices was stimulated by the 0.25 percentage point interest rate cut in December last year, which was fully reflected in lending rates into the first quarter of 2015. Lower real interest rates stimulate household borrowing, and household borrowing and house prices mutually influence each other. Three-month growth in gross household debt (C2) rose by a seasonally adjusted and annualised 0.4 percentage point from the fourth quarter of 2014 to the first quarter of this year, following a decline in the pace of growth through 2014. Quarterly growth of as much as 0.8 per cent in household real disposable income in the first quarter also contributed to the rise in house prices. According to our model, this means, in sum, that house prices are rising, but the increase so far this year is higher than can be explained by the model.

The consumer confidence indicator from TNS Gallup and Finance Norway, which measures households' expectations regarding their own finances and the national economy, fell slightly from the first to the second quarter of this year, following a pronounced decline in the previous two quarters. We have assumed that households will continue to view the financial outlook as relatively weak and that the consumer confidence indicator will therefore remain at approximately the present level until the end of the year. We then expect the mood to change, in line with increased activity growth, and to provide weakly positive impulses to developments in house prices. We expect real income growth of 2 per cent in 2015, which is lower than in the preceding years. House prices are expected to rise by just over an annualised 4.5 per cent in 2015. This corresponds to a real increase of just over 2 per cent. As we have seen strong growth in house prices so far this year, this may

entail a levelling off or a moderate nominal decline in prices in the second half of this year. This may serve as a correction to the high price level, and slightly tighter credit practices by banks in the second half of the year may contribute to the correction. Further ahead, we foresee higher growth in real disposable income and real credit growth of about 4 per cent in 2016 and 2017, so that the increase in house prices picks up again, to 2.5 per cent in 2016 and just over 2 per cent in 2017. This is slightly higher than inflation in both 2016 and 2017. In 2018 we expect a nearly zero nominal rise in house prices – and thus a slight decline in real house prices – following two years of high housing investment and slightly higher real interest rates.

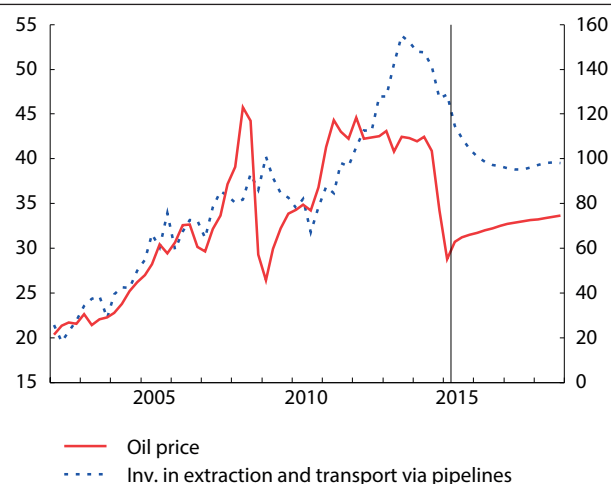
Housing investment rose by almost 1 per cent in the first quarter after falling through 2014. The Norwegian Home Builders' Association has reported both an increase in housing starts and an increase in the sale of new dwellings in the first quarter of 2015. An increase in housing starts was first seen in Statistics Norway's building statistics for April. We estimate that housing investment, which follows housing starts with a time lag, will remain at about the same level in 2015 as the previous year, while we will see housing investment increase by over 5 per cent in 2016 and almost 4 per cent in 2017. This increase is due to the high level of house prices and to the rise in house prices being higher than the increase in building costs during these years. As house prices will fall in real terms in 2018, growth in housing investment will be reduced to about 2 per cent that year.

### Petroleum investment continues to decline

Preliminary QNA figures show that petroleum investment increased slightly in the first quarter of 2015, following a continuous decline since the third quarter of 2013. There was a relatively strong increase in investment in pipeline transport, while investment in oil and gas production was unchanged. Investment in platforms, drilling rigs and modules remained at the same level as in the fourth quarter of last year. Exploration investment declined slightly, while production drilling increased. As information is limited, there is always great uncertainty associated with projections for petroleum investment in the QNA for the last quarter. Revised investment figures for the first quarter will be published in the oil and gas investment survey on 12 June.

The decline in petroleum investment during the past one and a half years is expected to gather pace as a result of the fall in oil prices in the summer of 2014. Investment cuts in the winter of 2013–2014 were motivated by a desire to improve profitability by cutting costs. The decline in prices and changed expectations regarding prices mean that cost savings will be greater than initially planned. This will likely push down investment, especially in 2016, before the investment level stabilises towards the end of the projection period.

Figure 8. **Petroleum investments and oil price in USD. Seasonally adjusted, billion 2012-kr., quarterly**



Source: Statistics Norway.

Even though lower capacity utilisation will push down prices for domestically manufactured investment products, so that domestic industries supplying the petroleum sector can increase their market shares, deliveries from the Norwegian economy will be lower. With as many as 150,000 man-years directly and indirectly associated with Norwegian manufacture of investment products for the petroleum sector, the mainland economy is sensitive to developments in these investments.

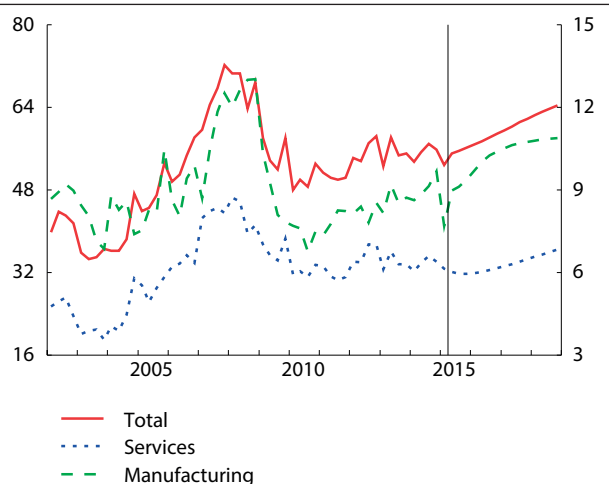
The number of exploration wells declined slightly in 2014, and a stronger decline is expected this year and next as a result of the lower revenues of the oil companies and lower expectations regarding oil prices in the near term. The decline in exploration will be markedly larger than after the fall in oil prices in 2008–2009, when prices picked up quickly following a sharp fall through the winter. We do not believe that that will happen this time. Drilling is important for maintaining production, and this activity is not likely to be affected much by relatively low oil and gas prices.

While several fields are being completed, a reduction in the number of new developments is expected. This will contribute to a clear decline in investment in new fields. Several upgrades and extensions of operating fields have also been completed, which also points to lower investment this year and next.

Investment in the next few years will be maintained at a high level by major investments associated with development of the Johan Sverdrup field. The first phase of the field is to be in production in 2019. However, investment in this field is unlikely to be high enough to prevent a clear decline in investment in the near term.

In the first quarter, gas production rose by 5 per cent, measured in energy equivalent, while oil exploration fell by just under 1 per cent. Oil production, which fell markedly through the previous decade, appears to have stabilised. Virtually unchanged production is expected

Figure 9. **Investments. Mainland Norway. Seasonally adjusted, billion 2012-kr., quarterly**



Source: Statistics Norway.

for the next few years. The completion of several new field developments has helped prevent a further decline. The impact of the fall in oil prices on the export value will be offset by the depreciation of the krone. Oil prices in USD were roughly halved, measured from the summer of 2014 to the first quarter of 2015, while the export price of oil in NOK only fell by just over one-third. The export price of gas has remained at a high level during the same period, and the price is now higher than in the summer of 2014. Oil prices are expected to gradually rise from the present level, and reach USD 75 per barrel by the end of 2018.

### Moderate growth in mainland business investment

Business investment has been relatively stable for two years. The preliminary QNA figures, indicating that business investment fell by 5.3 per cent in the first quarter of 2014, do not change this picture. The decline can be mainly attributed to a sharp, 20.4 per cent reduction in manufacturing investment. Also service investment moved on a weak trend, and declined by 3.7 per cent. However, the information content for service investment is more uncertain than for manufacturing, as there are few short-term statistics for service industries. One exception is investment in commercial buildings, etc., which is based on building statistics. Sale and management of real property, mainly in the form of investment in commercial buildings, showed a 1.1 per cent decline in the first quarter. Investment in other goods production than manufacturing rose by 3.1 per cent; which can be attributed to strong growth in the power supply.

Statistics Norway's latest survey of manufacturing companies' future investment intentions points to moderate investment also in 2015, but to investment growth picking up considerably in 2016. Companies' expectations for 2016, after adjustment for normal under-reporting, are investment growth of about 10 per cent (see Box 1

in Economic Survey 4/2014). High growth is particularly expected in food and chemicals. In power supply, the projections for future investment indicate 10 per cent growth in both 2015 and 2016 from already high levels. Previously, growth has mainly been in electricity transmission and distribution. Now strong growth is also expected in electricity production. The proposed change to five-year linear depreciation for wind power implies improved profitability, and may lead to continued investment growth in electricity production also after 2016.

We expect mainland business investment to remain virtually unchanged this year. An improved economic situation from 2016 means that in the near term we expect a higher level of investment in manufacturing, services and other goods production. We estimate total growth in business investment of about 5 per cent annually starting in 2016 and through the projection period. Compared with previous cyclical upturns, this will nevertheless generate moderate growth impulses, and the investment level will accordingly be about 6 per cent lower in 2018 than the investment peak in 2008.

### Lower trade surplus this year

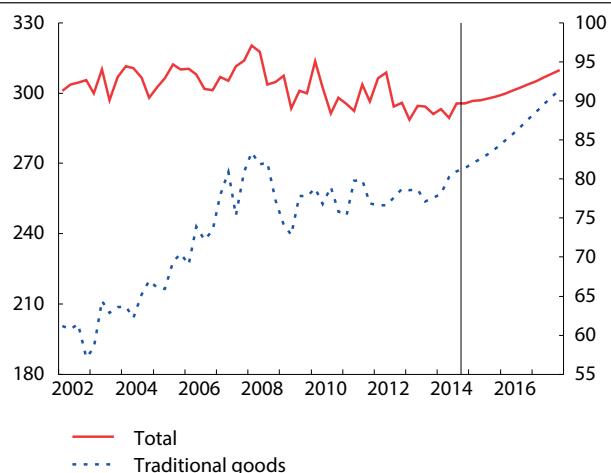
Traditional goods exports measured in constant prices rose slightly through the second half of last year. Growth picked up a little in the first quarter of 2015 according to seasonally adjusted quarterly QNA figures. Exports of products from large product groups like farmed fish, metals, and refined petroleum products in particular showed high growth in the first quarter, following a decline in the previous quarter, while exports of engineering products continued to rise for the fourth quarter in a row. Exports of oil and gas declined sharply in the first quarter following strong growth in the second half of last year. The decline was greatest for oil exports. Following growth in the last three quarters of 2014, service exports declined in the first quarter of this year. The decline was broad-based, but must be seen in the context of a sharp rise in the previous quarter, and the relatively high level of uncertainty associated with foreign trade in services.

The rise in prices for traditional goods exports came to a halt in 2014, but in the fourth quarter of 2014 and the first quarter of 2015, a high rise in prices for large groups of export goods like food and beverages, metals and engineering products boosted the rise in prices for traditional export goods. Broadly-based inflation for exported services in 2013 and 2014 continued in the first quarter of 2015. Much of the increase in export prices is directly linked to the depreciation of the krone. While the price of natural gas has risen slightly in the past two quarters, oil prices have continued to fall, playing an important role in the decline in prices for overall exports. Here the depreciation of the krone has helped curb the decline in oil prices in NOK.

A weak krone and increasing growth in Norwegian export markets from next year is likely to stimulate



Figure 10. Exports. Seasonally adjusted, billion 2012-kr., quarter



Source: Statistics Norway.

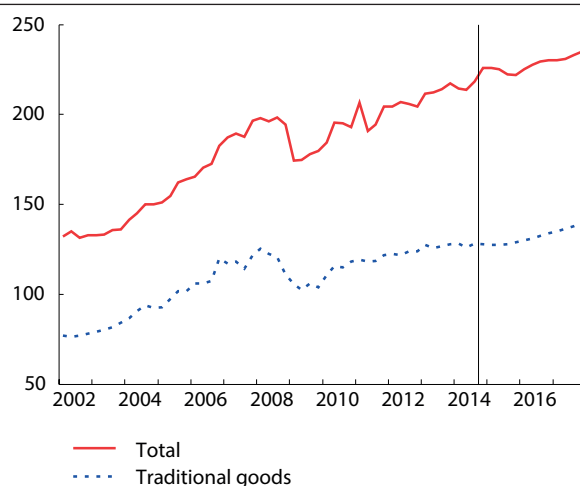
exports. We estimate that growth in mainland exports will rise from 3–4 per cent to 5–6 per cent during the projection period. This is slightly less than global market growth, and means that Norwegian exporters are continuing to lose market shares, despite improved cost-competitiveness this year, like last year. The loss of market shares may be due to time-lagged effects of the high level to which costs have risen. Production-based oil and gas exports are not expected to change much.

The volume of traditional goods imports was virtually flat through 2013 and 2014, while seasonally adjusted QNA figures showed strong growth in the first quarter of this year. Imports of food and beverages, refined oil products, engineering products and vehicles – all large product groups – increased the most. However, growth in imports of services through the last three quarters of last year reversed into a decline in the first quarter of this year. Prices for service imports also fell during this period, while prices for traditional import goods continued to rise for the eighth consecutive quarter. The weakening of the krone has made a substantial contribution to the rise in import prices.

Projected moderate growth in domestic demand for goods and services for consumption and investment is expected to provide moderate growth impulses to imports in the next few years. A levelling off of the krone exchange rate will gradually curb the rise in import prices. In addition, imports of one platform this year and two to six fighter aircraft every year of the projection period will boost imports, which otherwise reflect moderate growth in domestic demand and improved cost-competitiveness.

The trade surplus fell in 2013 and 2014 by a total of almost 30 per cent as a result of greater growth in volume and prices for total imports than for total exports. Lower oil exports and oil prices this year will lead to a decline in net exports and to further terms of trade losses. As from next year, the projections show an

Figure 11. Imports. Seasonally adjusted, billion 2012-kr., quarterly



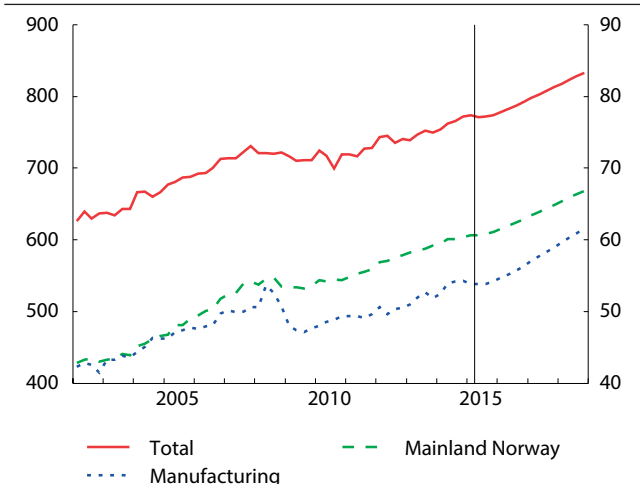
Source: Statistics Norway.

annual terms of trade gain, with substantial input from assumed moderately rising oil prices. The trade surplus will then rise again. An increasing net factor income and transfers surplus will also lead to the current account surplus as a share of GDP not falling below 6 per cent during the projection period.

### Weak activity development through 2015

Mainland GDP rose by an annualised 2.0 per cent in the first quarter of 2015. This was the third quarter in a row with economic growth below trend growth, estimated at 2¼ per cent. Growth through the second half of last year was adjusted slightly downwards in May from the preliminary figures published in February, so that the turnaround to a cyclical downturn that began in the third quarter of last year now appears even clearer than before. Annualised growth in mainland GDP through the last three quarters only rose by 1.2 per cent. Naturally occurring factors certainly pushed down activity growth through the second half of last year, but the corresponding growth in mainland GDP excluding power supply, fishing and aquaculture was not over 1.5 per cent either.

Manufacturing growth declined sharply through the second half of last year, but from a high level, and there was a pronounced decline in value added in the first quarter of this year. Without this decline, mainland GDP would have increased more than trend growth in the first quarter. Unsurprisingly, general government growth was much steadier. Growth has increased slightly in the past few quarters, and in the first quarter of 2015 was at the trend level for mainland GDP growth. Value added in other service industries increased in the first quarter a little more than this trend growth following slightly lower than trend growth through the second half of last year. Developments in other mainland goods production excluding manufacturing are dominated by industries that are influenced to a large extent by naturally occurring factors. Apart from primary industries and power supply, the group

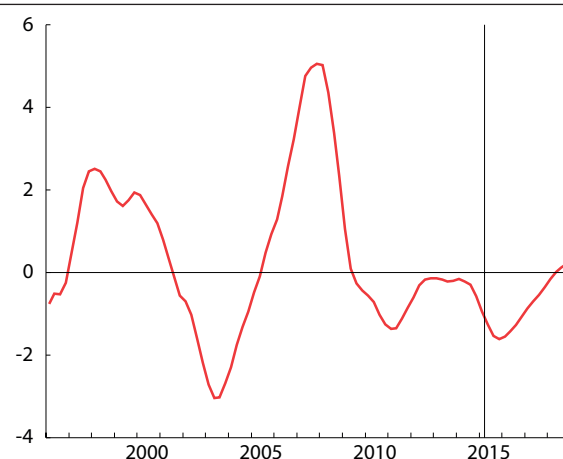
Figure 12. **Gross domestic product. Seasonally adjusted , billion 2012-kr, quarterly**

Source: Statistics Norway.

mainly consists of construction. Value added in construction also rose more than trend growth in the first quarter, following a decline in activity the previous quarter. Total growth through the last three quarters was clearly below trend growth.

The decline in demand from the petroleum sector is now making a considerable impact on production. Value added in all of the industries that mainly supply the petroleum sector declined in the first quarter of the year. The greatest decline was in the manufacturing industry repair and installation of machinery and equipment, with a decline of more than 5 per cent, following strong growth last year. In the shipbuilding industry, value added declined for the second consecutive quarter, and the decline through the two quarters was just over 5 per cent. Value added in services associated with petroleum production declined by 2.5 per cent in the first quarter. This was the fourth consecutive quarter of decline, so that the level was close to 9 per cent lower than the level of one year earlier. However, the effect on the economy of the impulses from the petroleum sector reaches far beyond these industries. Most industries make deliveries to the petroleum sector, the supplier industry or their subsuppliers. There are also effects in the form of impact on household income and household and business sector expectations regarding developments in the near term.

However, the decline in the petroleum sector and in oil prices has also led to lower interest rates and improved cost-competitiveness, primarily because the krone has depreciated, but also because of lower wage growth. The situation for enterprises outside the petroleum sector has also improved in that there is better access to highly-qualified manpower. Low interest rates stimulate demand for dwellings and other real capital, and are an important factor underlying the recent growth in construction. In the first quarter there was high growth in the hotel and restaurant segments, which may be due to improved cost-competitiveness inducing Norwegians

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

Source: Statistics Norway.

to holiday in Norway to a greater extent. The manufacturing industry manufacture of metal goods, electronic equipment and machinery delivers extensively to the petroleum sector, but even more to exports. Growth in the segment declined sharply in the first quarter, following very high growth last year, but is still positive. Deliveries to the petroleum sector are likely reduced, while exports have risen.

We expect demand from the petroleum sector to decline in the near term, and that activity in the industries supplying the petroleum sector will fall across the board through 2016. Much of this decline affects manufacturing, but on the other hand this industry benefits from three years of improvement in cost-competitiveness and increased international demand. For manufacturing as a whole, we expect activity to continue to fall further in the near term before picking up at year-end. The negative impulses from the petroleum sector will probably wane over time, and then become positive in 2018. According to our calculations, this factor coupled with higher demand growth in Norwegian export markets and increased capacity in commodity-based manufacturing will lead to clear activity growth from 2016 and onwards.

The rest of the business sector will also be affected by the impulses from the petroleum industry but the ripple effects will be less than for manufacturing as a whole, with the exception of services associated with petroleum production. Household demand is important to many industries other than manufacturing. Slightly higher growth in both consumption and household investment in the near term will help push up activity growth. The same is true of mainland business investment. Growth in general government demand is expected to remain at a stable high level, and thus curb the current cyclical downturn. General government will thus represent a growing share of GDP this year, but the share will then decline.



## Box 2. The effects of a decline in petroleum investment

Since the 1970s, activity in the petroleum industry has been an important factor underlying cyclical fluctuations in Norway. It contributed to the sharp cyclical upturn before the financial crisis, and to activity growth in the Norwegian economy remaining at a high level in the period afterwards. Petroleum investment peaked in the third quarter of 2013 and has been falling since, with the exception of a little growth in the first quarter of this year. We have assumed that this investment will fall further through 2015 and 2016, and then undergo little change in the following two years. In this box, we will consider the effects of the observed fall from the end of 2013 and through 2014, and the assumed fall in our projection. We do this by comparing our projection scenario with a counterfactual scenario where we allow petroleum investment to increase in pace with trend growth in the Norwegian economy (projected to be 2¼ per cent) from and including the fourth quarter of 2013.

The difference between the investment levels in the two scenarios is regarded here as the economic impetus generated by petroleum investment. This negative economic impulse will gradually increase, reaching a maximum in 2017. The calculation shows that the fall in investment reduced the level of mainland GDP by 0.6 per cent in 2014, and that it contributes to a reduction of as much as 2.6 per cent in 2018. This implies an annual average decline in growth of 0.6 percentage point in 2014, 1.2 percentage points in 2015 and 0.8 percentage point in 2016. Growth is only slightly affected in 2017 and 2018.

Reduced demand from the petroleum sector affects the Norwegian economy on a broad basis, as the great majority of industries make either direct or indirect deliveries to the petroleum industry. A lower activity level reduces employment compared with what it would otherwise have been. As a consequence of this, unemployment increased by 0.1 percentage point in 2014, rising to 0.5 percentage point in 2018. The effect on employment is considerably stronger, but increased unemployment leads to some withdrawal from the labour market and to a reduction in inward labour migration.

Household income is dampened both directly, by the reduced employment, and through wage reduction in response to the reduced pressure in the labour market. Wages were reduced by 0.2 per cent in 2014 as a result of the negative impulses. The negative impulses are expected to push down the wage level by 0.6 per cent in 2015 compared with the counterfactual scenario. This effect will increase to 1.8 per cent in 2018. Reduced income is reflected in lower consumption and lower demand for dwellings, which depresses both prices and investment in the housing market.

Table 1. Effects of cyclical impetus from petroleum investment after the third quarter of 2013. Percentage deviation from the counterfactual scenario unless otherwise indicate

	2013	2014	2015	2016	2017	2018
Mainland GDP	0.0	-0.6	-1.7	-2.4	-2.6	-2.6
Manufacturing	0.2	-0.3	-2.8	-3.2	-3.1	-3.0
Mainland business investment	0.0	0.0	-0.3	-0.5	-0.6	-0.9
Consumption by households etc.	0.0	-0.3	-1.2	-1.6	-1.8	-2.3
Housing investment	0.0	-0.2	-1.2	-3.6	-5.2	-5.2
House prices	-0.2	-1.0	-4.2	-5.0	-4.2	-4.9
Annual wages	0.0	-0.2	-0.6	-0.9	-1.4	-1.8
Real disposable income	0.0	-0.4	-1.2	-1.8	-2.2	-2.5
CPI	0.0	0.0	0.2	0.3	0.3	0.2
Employment	0.0	-0.1	-0.5	-0.9	-1.1	-1.1
Labour supply	0.0	0.0	-0.2	-0.5	-0.6	-0.6
Rate of unemployment (level)	0.0	0.1	0.3	0.4	0.5	0.5
Memo:						
Investment in petroleum extraction and pipeline transport	-0.5	-10.3	-25.0	-32.7	-35.4	-35.3

In the short term, the sectoral production effects are closely related to the actual and subsequently projected composition of petroleum investment in various kinds of capital. A generally weaker activity level results in reduced business investment, also in other parts of the economy, compared with what it would otherwise have been. Spillover effects in the form of weaker mainland demand come with a time lag. Initially, therefore, impulses from petroleum investment are dominant. The spillover effects gradually grow stronger, and because they involve imports to a lesser extent than petroleum investment does, they have a stronger effect on the Norwegian activity level per krone of weakened demand. In 2015 and 2016, the relatively largest decline in activity will be in manufacturing, while the effects on other mainland industries as a whole are stronger towards the end of the projection period.

In order to focus on the direct effects of the weak developments in petroleum investment, the analysis has been made partial and stylised. However, we have chosen to keep the consumer confidence indicator unchanged at the level in the third quarter of 2013 in the counterfactual simulation. We have assumed that the decline in investment will not impact extraction in the petroleum industry within our time horizon. This assumption may be reasonable in the short term, but in the slightly longer term it is clearly unrealistic. Less real capital will result in reduced petroleum extraction, which will have a negative impact on demand for intermediate inputs and on employment. On the other hand, there are a number of counteracting forces that we have ignored. Monetary and fiscal policy, like the exchange rate and the oil price, are assumed to follow the same path in the two scenarios. Thus there are no major impulses along the lines of a change from improved cost-competitiveness. Hourly labour costs will admittedly be reduced somewhat, but at the same time productivity will deteriorate within the projection horizon.

Figure 1. Petroleum investment. Seasonally adjusted, in billions of 2012-NOK, quarterly

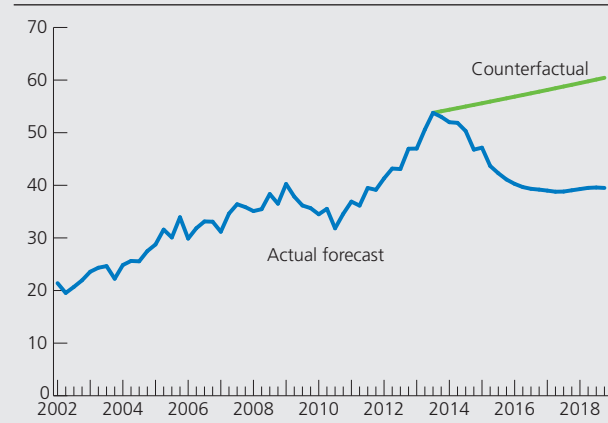
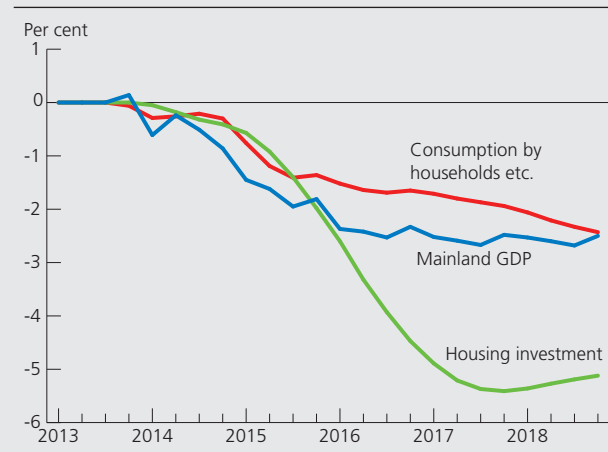


Figure 2. Percentage deviation from the counterfactual path



According to our analysis, following moderate activity growth through 2015, many mainland industries will experience fairly favourable developments through 2016 and on through 2018. This means that mainland GDP growth may rise above trend early next year. This cyclical upturn will last throughout the period 2016–2018.

### Low employment growth leads to higher unemployment

In the first quarter of 2015, unemployment was unchanged compared with the fourth quarter of 2014, following two years of steady growth of just over 1 per cent. Population growth in the first quarter was very moderate, so that employment as a share of the population continued to decline. Changes in the age distribution of the population are a factor underlying these developments. Labour force participation by the elderly is rising. This group has lower labour force participation than the average for all age groups, and helps explain the tendency.

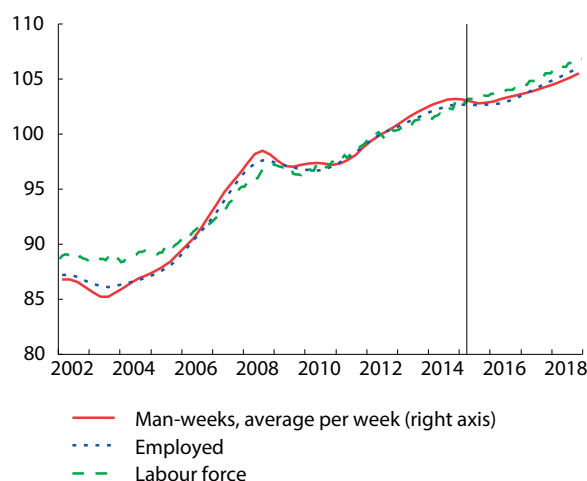
In recent years, there have been considerable differences in employment growth rates across industries. For a long time there was particularly strong employment growth in services associated with crude oil and natural gas production, but employment has been falling in this segment as of the second quarter of last year. There was previously also high employment growth in manufacturing that primarily supplies the petroleum sector, like shipbuilding and transport equipment, and repair and installation of machinery and equipment. In the second half of 2014, this tendency reversed, and average employment in these industries declined. The decline was exacerbated by lower employment, also in the first quarter of this year. Employment growth in the other manufacturing segments was slightly lower than for the economy as a whole.

Construction employment rose in the first quarter, but declined in retail trade. This has been the tendency for these two large industries through the past three to four years. In the first quarter, employment growth in local government was somewhat higher than in central government. The situation was the reverse in 2014, when central government employment rose by a bare 2 per cent, while employment growth in local government was slightly below average employment growth.

As a result of the financial crisis, the unemployment rate increased to 3.6 per cent in the fourth quarter of 2010, according to the Labour Force Survey (LFS). Unemployment then declined a little way into 2012, and fluctuated for a long time between 3.3 and 3.7 per cent. In the spring of 2014, unemployment was down to 3.2 per cent, but it then rose through the second half of the year and into 2015. Average unemployment from February to April was 4.1 per cent.

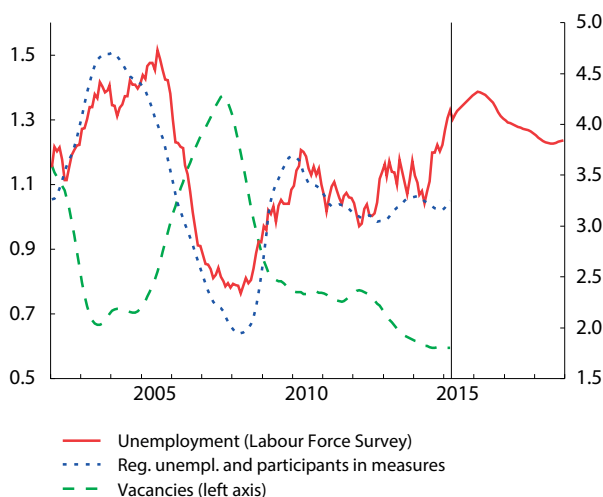
The statistics of the Norwegian Labour and Welfare Organisation (NAV) for registered unemployed and the

Figure 14. **Labour force, employment and number of man-hours.** Seasonally adjusted and smoothed indices. 2012=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.

total number of persons registered as unemployed or on labour market programmes showed approximately unchanged unemployment through 2014. At the end of May, some 88 600 persons were either on labour market programmes or registered as unemployed. So far this year, unemployment has risen for almost all occupational groups, but the greatest percentage increase in unemployment is in engineering and ICT. Unemployment has increased most in counties with close ties to the petroleum sector, while it has declined in other counties.

Statistics Norway has published figures for vacancies since 2010. With one exception (the fourth quarter of 2014), the number of vacancies has declined for a long time, but amounts only to just over 2 per cent of all employment relationships. Vacancies have declined in many service industries, like professional, scientific and technical services that make substantial deliveries to the petroleum sector. The number of vacancies also declined in manufacturing and oil and gas production.

**Box 3. Why is the increase in unemployment according to the LFS higher than that registered in NAV?**

The Labour Force Survey (LFS) shows that unemployment increased by 21 000 persons from the first quarter of 2014 to the first quarter of 2015, while figures for unemployed persons registered with the Norwegian Labour and Welfare Administration (NAV) in the same period only increased by about 3 000 persons.

By linking NAV's ARENA register to the LFS, we can see how the rise in LFS unemployment relates to registrations with NAV.<sup>1</sup> The difference of 18 000 unemployed can be broken down as follows:

- 2 000 are not registered with NAV at all
- 7 000 persons are registered with NAV, but in groups other than the wholly unemployed group (for example, on labour market programmes)
- The remaining 9 000 persons can be explained in two ways: the share of registered unemployed who respond in the LFS that they do not want a job has declined. The same applies to the share of registered unemployed who respond in the LFS that they have a job. This leads to the share of those registered as unemployed who are also classified as unemployed in the LFS being higher in the first quarter of 2015 than in the first quarter of 2014.

The fact that the share of registered unemployed who respond in the LFS that they have a job is lower may be because it is more difficult to obtain short-term casual work. It may also be due to the fact that less of the registered unemployed work at the same time as they are claiming a daily cash allowance for being wholly unemployed.

In addition to the uncertainty associated with sampling, the difference between developments in the two sets of statistics may be attributed to different definitions of unemployment, changes in inclination to register in NAV, and that the

<sup>1</sup> This mechanical decomposition to smaller groups implies that the uncertainty associated with the LFS increases because the LFS is a random sample survey, and there is greater uncertainty associated with smaller groups.

understanding of the requirements for being regarded as unemployed in the LFS may vary amongst those interviewed.

Normally, however, there is consistency between developments in the LFS, NAV and the economic picture generally; see Fig. 2.15 and Sparrman (2012). However, Fig. 2.15 also shows minor variations in the figures for registered unemployed. It should be borne in mind that the NAV statistic for registered unemployed consists of an overall total, and that this unemployment rate changes relatively little from month to month. Conversely, the unemployment rate in the LFS can vary somewhat from one month to the next as a result of this being a sample survey.

Pronounced turnarounds in the labour market, such as we are seeing now, may show up earlier in the LFS, particularly if unemployment affects people with little work experience. This group often has no right to unemployment benefit, and they therefore have less incentive to register as unemployed with NAV; see Næsheim (2006). In light of the current economic situation we therefore expect to see higher unemployment in regions with close connections with the petroleum sector. Both the LFS and NAV show increased unemployment in the counties of Hordaland, Rogaland and Vest-Agder, while the LFS increase is more than twice as large in terms of numbers of persons as the increase in registered unemployment in these counties. According to the LFS, 8 000 more have become unemployed in these three counties, while the registered unemployment statistics show an increase of only 3 100.

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Victoria Sparrman (2012) «Arbeidsledighet som konjunkturindikator og forklaringsfaktor i makromodeller» [Unemployment as an economic indicator and explanatory factor in macro-models], Statistics Norway, *Økonomiske analyser* 5/2012.

The number of man-hours fell slightly in the first quarter of 2015. NAV reports that the number of persons laid off has risen so far this year, thereby slowing the increase in man-hours. The increase in the number of man-hours worked in mainland Norway in 2014 was somewhat higher than growth in the number employed, even after adjustment for one working day more in 2014 than in 2013. According to NAV, there was a slight decline in persons laid off in 2014 compared with the previous year. The LFS also showed a relative increase in the number of persons who work full-time. Both these factors, in isolation, boost the number of man-hours worked per employee. However, an increase in sickness absence and the 2014 strike had an offsetting effect.

Employment is projected to remain virtually unchanged compared with last year and to show a moderate increase next year, and then increase somewhat more in 2017 and 2018. This must be seen in the context of

the general economic situation. However, there are great differences in employment growth in sheltered and internationally exposed industries. The negative impulses from the petroleum sector are expected to cause a sharp decline in employment in a number of manufacturing segments in 2015. Considerable growth in export markets and gradually improved competitiveness point to increased manufacturing production and higher employment, but will not be enough to prevent a decline in manufacturing employment before 2017. In construction, employment growth will be slightly lower this year, but increased activity in the next couple of years will stimulate employment growth in 2016 and 2017. Employment in services associated with oil production will decline markedly up to and including 2016. On the other hand, employment growth in transport and communications will be higher than average, and pick up somewhat from 2016. Fairly stable growth in general government employment is expected to continue through the projection period.

Although immigration will be somewhat lower than in Statistics Norway's medium scenario and than assumed in our last report, the labour supply will increase slightly more than employment this year and next, resulting in higher unemployment. Average LFS employment in 2015 is estimated at 4.2 per cent, and will peak at 4.3 per cent in 2016. The unemployment rate has not been at a similar level since 2005. Employment will pick up a little way into 2016, in pace with an improved economic situation, so that unemployment drops to 3.8 per cent in 2018.

### Low wage growth in the near term

Following annual wage growth of about 4 per cent during the period 2009 to 2013, annual wage growth in 2014 declined to 3.1 per cent, the lowest nominal wage growth in 20 years. Real wage growth was just over 1 per cent. On the basis of last year's wage settlement, the parties projected manufacturing wage growth of 3.3 per cent in 2014. National accounts figures show that actual wage growth in manufacturing was very close to this projection; 3.1 per cent. Wage developments in other industries show that the norm from the wage settlements in the wage leader was generally followed in the other sectors of the economy. There are therefore very small differences in wage growth across industries in 2014. Higher unemployment through the second half of last year, particularly in occupations related to the petroleum sector, has contributed to pushing down growth in average wages for the whole economy.

In manufacturing, the wage carry-over into 2015 is a little lower than last year. According to the social partners, the manufacturing wage settlement has an upper limit of 2.7 per cent. The year's settlement thus indicates that annual wage growth for manufacturing workers will be even lower in 2015 than in 2014. Outside manufacturing, the wage carry-over into 2015 and the results of several of the wage settlements are also moderate. The central government has the same limit as manufacturing, while it is somewhat higher in local government, at 3.2 per cent. In retail trade, the partners have agreed to keep approximately the same negotiated increases as last year. In other words, the wage settlement outside manufacturing will be moderate this year. Growth in average annual wages is also affected by structural changes. Several companies have reported lower employment. Cutbacks generally affect persons with short seniority and low pay, so that growth in average annual wages in 2015 may be slightly higher than the wage settlements would indicate in isolation. The composition of employment across industries may have an offsetting effect, with a weak tendency in some industries with very high wage levels. We estimate wage growth in 2015 at 2.8 per cent. Since our projections for consumer price inflation are unchanged from last year, real wage growth in 2015 will be somewhat lower compared with 2014.

We estimate that wage growth will remain at about 3 per cent until 2018. The moderate wage growth must

be viewed in conjunction with the fact that parts of the economy have been quite severely negatively impacted by the decline in oil prices. The diminished demand from the petroleum sector and fall in oil prices will reduce profitability in segments of the wage leading industry, and unemployment will increase. This will reduce wage growth, both through a dampening of the demands made in the central wage negotiations and a decline in wage drift. Composition effects will also have an impact, in the form of lower employment in petroleum-related activities in Norway. The wage level in the petroleum sector is generally higher than in the rest of the economy, and reduced employment will curb growth in average wages in 2016. However, inflation in the near term is also projected to be low, so that real wage growth rises somewhat in 2016, and through the end of the projection period.

### Prospects of lower inflation

Despite the depreciation of the krone in recent years, the underlying rise in prices for goods and services in the Norwegian economy remains slightly under Norges Bank's inflation target. The year-on-year rise in the consumer price index, adjusted for tax changes and excluding energy products (CPI-ATE) was 2.4 per cent in January and February, the same as the annual average for 2014. The inflation rate then fell to 2.3 per cent in March, and a further 2 percentage points to 2.1 per cent in April. The main reason for this last drop was a pronounced fall in prices for air travel from April 2014 to April 2015, which must be viewed bearing in mind that the measurement point in 2014 coincided with Easter. The 12-month rise in the consumer price index (CPI) was 2.0 per cent in both March and April. Electricity prices including grid rental increased in these months compared with last year. The decline in prices for petroleum products is the reason that 12-month CPI inflation is lower than 12-month CPI-ATE inflation.

Underlying inflation rose markedly in autumn 2013 from very low levels, and the depreciation of the krone was an important factor underlying this development. The krone, measured by the import-weighted krone exchange rate, was 19 per cent weaker at the beginning of June than in February 2013. Measured by the CPI-ATE sub-index for imported consumer goods, the change in prices for this product group was -0.2 per cent and 1.4 per cent as an annual average for 2013 and 2014, respectively. It was not until March this year that the inflation rate crept up to an annualised 2 per cent, rising further to 2.4 per cent in April. Thus, for the first time in history, the sub-index for import goods rose more than the 12-month rise in the CPI-ATE as a whole. Owing to technical advances, prices for product categories such as audiovisual and telecommunications equipment have frequently fallen steeply in the past. At the beginning of the year, prices for these two categories also began to rise, at annualised rates of 3.7 and 12.2 per cent, respectively, in April. Because it takes time for changes in the krone exchange rate to be fully



reflected in Norwegian prices, it appears likely that the rise in prices for imported consumer goods will continue to accelerate for a while to come.

Wage growth has slowed appreciably and is helping to curb inflation. It takes time for changes in wage growth to feed fully through into consumer prices. However, the significance of lower wage growth is clearly reflected in the 12-month rise in the sub-index “Services with wages as the dominant factor” in the CPI-ATE. Inflation for this group of services fell from 3.7 per cent to 2.9 per cent from April last year to April this year. While import prices pushed up unit costs, subdued wage growth thus had the opposite effect. The domestic service component of products that we usually call imported products is also significant, in the form of mark-ups and transport margins. Lower wage growth and higher domestic productivity are helping to curb the rise in prices for these product groups.

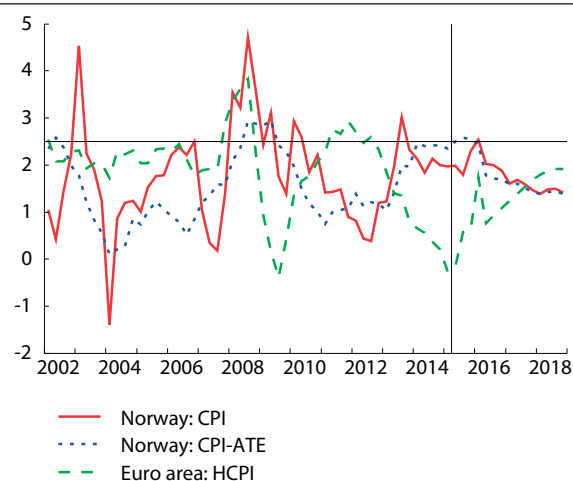
Whereas the rise in prices for services excluding rents has slowed in the current year, the rise in rents has remained relatively stable. From April last year to April this year, imputed rents for owner-occupied dwellings rose by 2.5 per cent, while actual rent paid by tenants increased by 3.0 per cent during the period, thereby pushing up CPI inflation.

The Norwegian Farmers’ Union and the state have reached agreement on the agricultural agreement for 2015–2016. According to the Ministry of Agriculture and Food, the isolated effect on consumer prices of the changes in target prices will be about a quarter per cent. However, food prices also depend to a large extent on global market prices and exchange rate movements. The rise in food prices has slowed recently, and is expected to remain moderate in the near term.

Whereas the CPI rose by 2.0 per cent in the first quarter compared with the same period in 2014, the household consumption deflator in the QNA rose by 2.2 per cent. The difference can be attributed mainly to the item “Norwegians’ consumption abroad”, which is not a part of the basis for the CPI. The price index for this product group is derived from inflation and exchange rates at the most usual travel destinations. This index will vary with fluctuations in the exchange rate to an even greater extent than prices for domestic consumption.

The spot price on the Nordic power exchange has been low since the summer of 2011. Low prices through 2014 resulted in lower CPI inflation than CPI-ATE inflation. The price of electricity, including grid rental, was somewhat higher in the first quarter of 2015 than in the first quarter of 2014, but prices for forward contracts in the Nord Pool area indicate that electricity prices, including grid rental, will be lower than last year’s levels in the last three quarters of the current year compared with the same periods in 2014. On the basis of the forward prices, we expect the price of electricity, including grid charges, to fall by about 3 per cent as

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



Source: Statistics Norway.

an annual average from 2014 to 2015, but that the fall will be reversed to a rise in 2016. Prices for petroleum products fell in the wake of the fall in crude oil prices, and in 2015 have contributed to CPI inflation being lower than CPI-ATE inflation. Prices for fuel rose from March to April, however, and have risen further up to June. The increase may be partly attributed to a strong dollar exchange rate and partly to strikes at US refineries. We assume that a normalisation of the market may cause fuel prices to fall back somewhat in the second half of the year, before the effects of the fall in crude oil prices are exhausted. Given an expected rise in crude oil prices, we assume that prices for petroleum products will rise somewhat in the years immediately ahead, but a weak increase in electricity prices will mean that overall energy prices rise at about the same rate as the general increase in prices in the years 2017–2018.

Although wage growth has slowed, low productivity growth and the time lag associated with the weakening of the krone will add to underlying inflation for the remainder of the current year. According to our calculations, CPI-ATE inflation for 2015 will be an annual average of 2.5 per cent. Given our assumptions regarding developments in import prices, wages and productivity growth, underlying inflation, measured in relation to the same quarter the previous year, will again dip below 2 per cent in the second quarter of 2016. Productivity growth normally picks up when the activity level increases. Even given increased wage growth in the next few years, higher productivity and lower imported inflation will cause CPI-ATE inflation to fall from an annual average of 1.9 per cent in 2016 to 1.5 and 1.4 per cent in 2017 and 2018, respectively. Given our assumptions about developments in energy prices and indirect taxes, CPI inflation will be 0.5 percentage point lower than CPI-ATE inflation this year and end at 2.0 per cent in 2016 before slowing. According to our calculations, CPI inflation will be 1.6 per cent in 2017 and 1.4 per cent in 2018.

Table 3. National accounts: Final expenditure and gross domestic product. At constant 2012 prices. Million kroner

	Unadjusted		Seasonally adjusted								
	2013	2014	13:1	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1
Final consumption expenditure of households and NPISHs	1 201 060	1 225 090	299 275	299 687	300 569	301 064	304 133	305 943	306 183	308 584	310 412
Household final consumption expenditure	1 144 644	1 166 561	285 326	285 479	286 403	286 957	289 636	291 339	291 424	293 897	295 932
Goods	554 754	558 843	140 069	138 924	137 767	137 661	139 048	139 944	139 377	140 461	141 175
Services	540 065	556 836	133 021	134 452	135 979	136 443	137 792	138 637	139 377	140 800	142 048
Direct purchases abroad by resident households	82 559	85 065	20 239	20 234	20 878	21 200	21 078	21 256	21 334	21 352	21 252
Direct purchases by non-residents	-32 734	-34 183	-8 003	-8 131	-8 221	-8 347	-8 281	-8 498	-8 664	-8 716	-8 543
Final consumption expenditure of NPISHs	56 416	58 529	13 949	14 208	14 165	14 107	14 496	14 604	14 759	14 687	14 480
Final consumption expenditure of general government	629 119	646 281	156 127	156 622	157 525	159 085	160 161	161 149	161 969	163 110	163 645
Final consumption expenditure of central government	314 723	324 680	78 542	78 271	78 604	79 588	80 036	81 009	81 615	82 131	82 472
Central government, civilian	275 637	285 579	68 746	68 482	68 771	69 922	70 306	71 233	71 822	72 331	72 677
Central government, defence	39 087	39 100	9 796	9 789	9 832	9 666	9 729	9 776	9 792	9 800	9 795
Final consumption expenditure of local government	314 395	321 601	77 585	78 351	78 922	79 497	80 125	80 140	80 354	80 979	81 173
Gross fixed capital formation	704 846	709 082	169 448	178 331	178 388	179 034	177 370	181 361	179 105	172 065	171 549
Extraction and transport via pipelines	204 477	201 025	46 981	50 593	53 771	53 017	51 990	51 872	50 319	46 778	47 145
Ocean transport	8 125	7 607	2 202	2 436	1 878	1 628	1 483	2 047	2 233	1 859	2 300
Mainland Norway	492 244	500 451	120 266	125 303	122 739	124 388	123 897	127 443	126 553	123 428	122 103
Industries	220 588	221 107	52 609	58 146	54 635	55 083	53 412	55 284	56 885	55 781	52 831
Service activities incidental to extraction	3 244	2 610	-318	1 381	920	1 261	551	749	673	636	536
Other services	132 497	132 693	32 843	34 729	32 694	32 257	31 683	33 112	34 559	33 391	32 140
Manufacturing and mining	34 591	36 200	8 159	9 177	8 515	8 724	8 624	8 836	9 140	9 673	7 703
Production of other goods	50 255	49 604	11 925	12 859	12 506	12 841	12 554	12 587	12 512	12 081	12 452
Dwellings (households)	149 206	146 886	37 269	37 060	37 206	37 808	37 464	37 075	36 769	35 816	36 149
General government	122 450	132 458	30 388	30 097	30 897	31 497	33 020	35 083	32 899	31 831	33 123
Changes in stocks and statistical discrepancies	140 216	145 351	34 761	31 045	34 431	39 737	30 600	38 236	42 585	34 366	52 309
Gross capital formation	845 062	854 434	204 209	209 376	212 820	218 770	207 970	219 597	221 690	206 431	223 858
Final domestic use of goods and services	2 675 241	2 725 805	659 611	665 684	670 914	678 920	672 264	686 689	689 841	678 125	697 916
Final demand from Mainland Norway	2 322 423	2 371 822	575 667	581 611	580 833	584 537	588 191	594 535	594 704	595 122	596 161
Final demand from general government	751 568	778 739	186 515	186 719	188 423	190 582	193 181	196 232	194 868	194 941	196 769
Total exports	1 168 538	1 200 168	288 915	296 235	296 801	286 380	292 702	293 791	301 337	311 440	299 663
Traditional goods	312 541	319 642	78 213	79 021	77 494	77 244	77 190	80 437	80 857	81 192	81 842
Crude oil and natural gas	564 225	572 871	140 742	144 423	144 849	134 830	142 175	136 879	143 639	149 246	140 564
Ships, oil platforms and planes	8 512	8 291	1 880	1 624	2 389	2 589	3 517	1 571	1 074	2 102	1 732
Services	283 260	299 364	68 079	71 167	72 069	71 717	69 819	74 905	75 767	78 900	75 525
Total use of goods and services	3 843 779	3 925 973	948 525	961 919	967 715	965 300	964 966	980 481	991 179	989 565	997 579
Total imports	856 565	872 783	209 560	214 760	215 895	215 679	210 893	218 557	226 027	217 863	223 983
Traditional goods	508 128	506 464	126 099	126 842	127 893	127 166	125 465	127 684	127 733	125 885	131 409
Crude oil and natural gas	16 437	14 676	3 830	4 010	4 754	3 255	3 628	3 401	3 599	4 215	4 024
Ships, oil platforms and planes	25 211	27 575	6 325	6 736	6 732	5 466	4 634	5 908	12 359	4 642	5 867
Services	306 790	324 068	73 306	77 173	76 516	79 792	77 166	81 565	82 335	83 121	82 682
Gross domestic product (market prices)	2 987 214	3 053 190	738 965	747 159	751 820	749 621	754 073	761 923	765 152	771 702	773 596
Gross domestic product Mainland Norway (market prices)	2 347 170	2 399 701	582 373	585 023	587 988	591 691	594 511	600 953	601 138	603 383	606 433
Petroleum activities and ocean transport	640 044	653 489	156 592	162 137	163 832	157 930	159 562	160 971	164 013	168 319	167 163
Mainland Norway (basic prices)	2 030 965	2 078 469	503 882	506 227	508 705	512 262	514 879	520 359	521 133	522 520	525 091
Mainland Norway excluding general government	1 541 130	1 580 518	382 455	384 116	386 014	388 640	390 725	396 057	396 681	397 486	399 361
Manufacturing and mining	207 747	215 079	51 006	51 963	52 675	51 876	52 482	53 893	54 216	54 316	53 861
Production of other goods	246 140	257 369	61 677	61 022	60 651	62 651	63 099	65 445	64 650	64 414	64 892
Services incl. dwellings (households)	1 087 243	1 108 070	269 771	271 132	272 688	274 113	275 145	276 719	277 814	278 756	280 608
General government	489 835	497 951	121 427	122 111	122 691	123 621	124 154	124 303	124 452	125 034	125 730
Taxes and subsidies products	316 205	321 232	78 491	78 795	79 283	79 429	79 632	80 593	80 006	80 863	81 342

Source: Statistics Norway.å.



Table 4. **National accounts: Final expenditure and gross domestic product. At constant 2012 prices. Percentage change from the previous period**

	Ujustert		Sesongjustert								
	2013	2014	13:1	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1
Final consumption expenditure of households and NPISHs	2.1	2.0	1.0	0.1	0.3	0.2	1.0	0.6	0.1	0.8	0.6
Household final consumption expenditure	2.1	1.9	1.0	0.1	0.3	0.2	0.9	0.6	0.0	0.8	0.7
Goods	1.1	0.7	1.3	-0.8	-0.8	-0.1	1.0	0.6	-0.4	0.8	0.5
Services	2.4	3.1	0.4	1.1	1.1	0.3	1.0	0.6	0.5	1.0	0.9
Direct purchases abroad by resident households	7.8	3.0	3.6	0.0	3.2	1.5	-0.6	0.8	0.4	0.1	-0.5
Direct purchases by non-residents	3.4	4.4	1.9	1.6	1.1	1.5	-0.8	2.6	2.0	0.6	-2.0
Final consumption expenditure of NPISHs	2.0	3.7	1.1	1.9	-0.3	-0.4	2.8	0.7	1.1	-0.5	-1.4
Final consumption expenditure of general government	1.7	2.7	0.7	0.3	0.6	1.0	0.7	0.6	0.5	0.7	0.3
Final consumption expenditure of central government	1.4	3.2	0.9	-0.3	0.4	1.3	0.6	1.2	0.7	0.6	0.4
Central government, civilian	1.8	3.6	1.1	-0.4	0.4	1.7	0.5	1.3	0.8	0.7	0.5
Central government, defence	-0.9	0.0	-0.2	-0.1	0.4	-1.7	0.7	0.5	0.2	0.1	-0.1
Final consumption expenditure of local government	1.9	2.3	0.4	1.0	0.7	0.7	0.8	0.0	0.3	0.8	0.2
Gross fixed capital formation	6.8	0.6	-2.8	5.2	0.0	0.4	-0.9	2.3	-1.2	-3.9	-0.3
Extraction and transport via pipelines	17.1	-1.7	0.1	7.7	6.3	-1.4	-1.9	-0.2	-3.0	-7.0	0.8
Ocean transport	18.2	-6.4	26.0	10.6	-22.9	-13.3	-8.9	38.0	9.1	-16.8	23.7
Mainland Norway	2.9	1.7	-4.3	4.2	-2.0	1.3	-0.4	2.9	-0.7	-2.5	-1.1
Industries	-1.1	0.2	-9.8	10.5	-6.0	0.8	-3.0	3.5	2.9	-1.9	-5.3
Service activities incidental to extraction	-69.3	-19.6	-108.1	-534.1	-33.4	37.1	-56.3	35.9	-10.1	-5.5	-15.8
Other services	0.1	0.1	-2.0	5.7	-5.9	-1.3	-1.8	4.5	4.4	-3.4	-3.7
Manufacturing and mining	5.6	4.7	-4.3	12.5	-7.2	2.5	-1.1	2.5	3.4	5.8	-20.4
Production of other goods	6.2	-1.3	-3.5	7.8	-2.7	2.7	-2.2	0.3	-0.6	-3.4	3.1
Dwellings (households)	6.4	-1.6	0.9	-0.6	0.4	1.6	-0.9	-1.0	-0.8	-2.6	0.9
General government	6.5	8.2	0.1	-1.0	2.7	1.9	4.8	6.2	-6.2	-3.2	4.1
Changes in stocks and statistical discrepancies	10.6	3.7	31.1	-10.7	10.9	15.4	-23.0	25.0	11.4	-19.3	52.2
Gross capital formation	7.4	1.1	1.7	2.5	1.6	2.8	-4.9	5.6	1.0	-6.9	8.4
Final domestic use of goods and services	3.6	1.9	1.1	0.9	0.8	1.2	-1.0	2.1	0.5	-1.7	2.9
Final demand from Mainland Norway	2.1	2.1	-0.2	1.0	-0.1	0.6	0.6	1.1	0.0	0.1	0.2
Final demand from general government	2.4	3.6	0.6	0.1	0.9	1.1	1.4	1.6	-0.7	0.0	0.9
Total exports	-3.0	2.7	-1.5	2.5	0.2	-3.5	2.2	0.4	2.6	3.4	-3.8
Traditional goods	1.0	2.3	-0.5	1.0	-1.9	-0.3	-0.1	4.2	0.5	0.4	0.8
Crude oil and natural gas	-7.6	1.5	-3.2	2.6	0.3	-6.9	5.4	-3.7	4.9	3.9	-5.8
Ships, oil platforms and planes	-1.5	-2.6	33.3	-13.6	47.1	8.4	35.8	-55.3	-31.6	95.6	-17.6
Services	2.9	5.7	0.3	4.5	1.3	-0.5	-2.6	7.3	1.2	4.1	-4.3
Total use of goods and services	1.5	2.1	0.3	1.4	0.6	-0.2	0.0	1.6	1.1	-0.2	0.8
Total imports	4.3	1.9	2.1	2.5	0.5	-0.1	-2.2	3.6	3.4	-3.6	2.8
Traditional goods	3.2	-0.3	2.2	0.6	0.8	-0.6	-1.3	1.8	0.0	-1.4	4.4
Crude oil and natural gas	11.2	-10.7	22.9	4.7	18.6	-31.5	11.5	-6.3	5.8	17.1	-4.5
Ships, oil platforms and planes	23.0	9.4	14.4	6.5	-0.1	-18.8	-15.2	27.5	109.2	-62.4	26.4
Services	4.5	5.6	0.1	5.3	-0.9	4.3	-3.3	5.7	0.9	1.0	-0.5
Gross domestic product (market prices)	0.7	2.2	-0.2	1.1	0.6	-0.3	0.6	1.0	0.4	0.9	0.2
Gross domestic product Mainland Norway (market prices)	2.3	2.2	0.6	0.5	0.5	0.6	0.5	1.1	0.0	0.4	0.5
Petroleum activities and ocean transport	-4.4	2.1	-2.9	3.5	1.0	-3.6	1.0	0.9	1.9	2.6	-0.7
Mainland Norway (basic prices)	2.2	2.3	0.5	0.5	0.5	0.7	0.5	1.1	0.1	0.3	0.5
Mainland Norway excluding general government	2.5	2.6	0.7	0.4	0.5	0.7	0.5	1.4	0.2	0.2	0.5
Manufacturing and mining	3.2	3.5	1.0	1.9	1.4	-1.5	1.2	2.7	0.6	0.2	-0.8
Production of other goods	2.5	4.6	1.8	-1.1	-0.6	3.3	0.7	3.7	-1.2	-0.4	0.7
Services incl. dwellings (households)	2.3	1.9	0.3	0.5	0.6	0.5	0.4	0.6	0.4	0.3	0.7
General government	1.4	1.7	0.1	0.6	0.5	0.8	0.4	0.1	0.1	0.5	0.6
Taxes and subsidies products	2.5	1.6	0.9	0.4	0.6	0.2	0.3	1.2	-0.7	1.1	0.6

Source: Statistics Norway..

Table 5. **National accounts: Final expenditure and gross domestic product. Price indices. 2012=100**

	Unadjusted		Seasonally adjusted								
	2013	2014	13:1	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1
Final consumption expenditure of households and NPISHs	102.8	105.2	101.5	102.5	103.5	103.9	104.2	104.9	105.7	106.1	107.1
Final consumption expenditure of general government	103.9	106.8	103.2	103.2	104.3	104.7	105.7	106.6	107.0	108.1	109.1
Gross fixed capital formation	103.0	105.4	102.0	102.4	103.2	104.0	104.5	104.7	105.9	106.5	107.7
Mainland Norway	102.6	104.6	101.6	102.0	103.2	103.4	103.8	103.8	105.2	105.3	106.3
Final domestic use of goods and services	103.0	105.5	101.9	102.4	103.6	104.3	104.7	104.9	106.3	106.6	106.5
Final demand from Mainland Norway	103.0	105.5	102.0	102.6	103.6	104.0	104.5	105.1	105.9	106.5	107.5
Total exports	101.9	100.6	97.8	100.6	103.4	106.1	103.8	101.4	99.1	97.8	94.9
Traditional goods	103.1	107.3	99.6	102.2	103.9	106.2	107.0	105.7	106.6	109.5	112.3
Total use of goods and services	102.7	104.0	100.7	101.8	103.5	104.8	104.4	103.8	104.1	103.8	103.0
Total imports	102.5	106.8	99.3	101.3	103.8	106.0	105.7	105.7	107.6	109.3	109.4
Traditional goods	102.1	107.8	99.8	100.7	103.0	105.0	106.4	106.5	107.9	110.1	111.6
Gross domestic product (market prices)	102.7	103.2	101.0	102.0	103.4	104.4	104.1	103.3	103.1	102.3	101.2
Gross domestic product Mainland Norway (market prices)	103.2	105.3	102.4	102.8	103.5	104.1	104.1	104.8	105.8	106.6	107.1

Source: Statistics Norway

Table 6. **National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous period**

	Unadjusted		Seasonally adjusted								
	2013	2014	13:1	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1
Final consumption expenditure of households and NPISHs	2.8	2.3	0.5	1.0	1.0	0.4	0.3	0.7	0.7	0.4	0.9
Final consumption expenditure of general government	3.9	2.8	1.9	-0.1	1.1	0.4	0.9	0.8	0.4	1.0	0.9
Gross fixed capital formation	3.0	2.4	1.5	0.3	0.9	0.7	0.5	0.2	1.1	0.5	1.2
Mainland Norway	2.6	1.9	0.9	0.4	1.1	0.3	0.3	0.1	1.3	0.2	0.9
Final domestic use of goods and services	3.0	2.4	1.2	0.5	1.1	0.7	0.4	0.2	1.4	0.3	-0.1
Final demand from Mainland Norway	3.0	2.4	1.0	0.6	1.0	0.4	0.5	0.6	0.7	0.5	0.9
Total exports	1.9	-1.3	-1.3	2.9	2.8	2.6	-2.1	-2.4	-2.3	-1.3	-2.9
Traditional goods	3.1	4.1	0.6	2.6	1.6	2.2	0.8	-1.2	0.8	2.8	2.5
Total use of goods and services	2.7	1.3	0.5	1.2	1.6	1.2	-0.3	-0.6	0.3	-0.3	-0.8
Total imports	2.5	4.2	-1.3	2.0	2.5	2.1	-0.3	-0.1	1.9	1.5	0.1
Traditional goods	2.1	5.5	-0.6	1.0	2.3	1.9	1.4	0.1	1.3	2.0	1.4
Gross domestic product (market prices)	2.7	0.4	1.0	0.9	1.4	1.0	-0.4	-0.8	-0.2	-0.8	-1.1
Gross domestic product Mainland Norway (market prices)	3.2	2.0	1.5	0.4	0.7	0.5	0.1	0.6	1.0	0.7	0.5

Source: Statistics Norway

# Main economic indicators 2003-2018

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

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*	2014*	Forecasts			
													2015	2016	2017	2018
<b>Demand and output</b>																
Consumption in households etc.	3.2	5.4	4.4	5.0	5.3	1.7	0.0	3.8	2.3	3.5	2.1	2.0	1.9	2.1	2.7	2.7
General government consumption	1.3	1.3	1.9	1.9	2.0	2.4	4.1	2.2	1.0	1.6	1.7	2.7	2.5	2.3	2.0	2.3
Gross fixed investment	0.4	10.0	12.0	9.1	11.7	0.9	-6.8	-6.6	7.4	7.6	6.8	0.6	-3.2	1.5	3.8	3.3
Extraction and transport via pipelines	13.8	10.5	19.7	3.2	6.9	4.7	3.3	-8.9	11.3	15.1	17.1	-1.7	-14.5	-8.3	-1.8	2.4
Mainland Norway	-4.9	10.7	11.1	9.3	14.2	0.9	-10.4	-6.4	5.0	7.4	2.9	1.7	1.2	4.9	5.5	3.3
Industries	-14.2	12.5	18.1	12.7	22.7	3.1	-18.4	-9.5	1.1	10.5	-1.1	0.2	0.1	4.7	5.0	4.5
Housing	1.8	16.3	9.7	4.0	2.7	-9.0	-8.1	-1.6	17.0	10.9	6.4	-1.6	0.2	5.3	4.1	1.8
General government	9.9	2.6	-0.6	8.4	8.7	7.2	7.7	-4.8	1.1	-1.8	6.5	8.2	4.0	4.8	7.8	3.0
Demand from Mainland Norway <sup>1</sup>	1.6	5.1	5.1	5.0	6.2	1.6	-1.4	1.6	2.6	3.2	2.1	2.1	1.9	2.8	3.1	2.7
Stockbuilding <sup>2</sup>	-1.2	2.4	-0.1	1.4	0.2	-0.1	-2.5	2.9	-0.3	-0.3	0.5	0.2	0.6	0.2	-0.5	0.0
Exports	-0.1	1.0	0.5	-0.8	1.4	0.1	-4.1	0.7	-0.8	1.4	-3.0	2.7	1.9	2.1	2.7	3.1
Crude oil and natural gas	-0.8	-0.7	-5.0	-6.6	-2.4	-1.3	-1.6	-6.9	-5.6	0.5	-7.6	1.5	-0.5	-0.7	-0.1	0.3
Traditional goods	3.7	3.6	5.3	6.1	9.2	3.5	-8.0	3.3	-0.1	-0.2	1.0	2.3	3.4	4.3	5.0	5.3
Imports	1.2	9.0	7.9	9.1	10.0	3.2	-10.0	8.3	4.0	3.1	4.3	1.9	2.7	3.5	1.7	3.2
Traditional goods	5.7	11.7	8.4	11.6	7.2	1.2	-12.1	9.2	4.6	2.6	3.2	-0.3	1.8	3.0	4.1	4.4
Gross domestic product	0.9	4.0	2.6	2.4	2.9	0.4	-1.6	0.6	1.0	2.7	0.7	2.2	1.2	1.7	2.5	2.6
Mainland Norway	1.2	5.0	4.7	5.0	5.7	1.7	-1.6	1.8	1.9	3.8	2.3	2.2	1.2	2.4	3.2	3.2
Manufacturing	2.8	4.6	3.6	2.6	3.8	2.7	-7.8	2.1	1.7	2.0	3.2	3.5	-0.2	3.4	4.5	4.6
<b>Labour market</b>																
Total hours worked, Mainland Norway	-2.0	2.2	1.6	3.5	4.8	3.6	-2.0	0.2	1.7	1.8	0.7	1.7	0.5	0.5	0.7	1.1
Employed persons	-1.2	0.6	1.3	3.4	4.1	3.2	-0.5	-0.5	1.5	2.1	1.2	1.1	0.2	0.2	1.3	1.3
Labor force <sup>3</sup>	-0.1	0.3	0.8	1.6	2.5	3.4	0.0	0.5	1.0	1.8	1.0	1.1	0.9	0.6	1.0	1.2
Participation rate (level) <sup>3</sup>	72.9	72.6	72.4	72.0	72.8	73.9	72.8	71.9	71.4	71.5	71.2	71.0	70.4	70.1	70.2	70.5
Unemployment rate (level) <sup>3</sup>	4.5	4.5	4.6	3.4	2.5	2.6	3.2	3.6	3.3	3.2	3.5	3.5	4.2	4.3	4.0	3.8
<b>Prices and wages</b>																
Wages per standard man-year	4.5	3.5	3.3	4.1	5.4	6.3	4.2	3.7	4.2	4.0	3.9	3.1	2.8	3.0	3.0	3.3
Consumer price index (CPI)	2.5	0.4	1.6	2.3	0.8	3.8	2.1	2.5	1.2	0.8	2.1	2.0	2.0	2.1	1.6	1.4
CPI-ATE <sup>4</sup>	..	0.4	1.0	0.8	1.4	2.6	2.6	1.4	0.9	1.2	1.6	2.4	2.5	1.9	1.5	1.4
Export prices, traditional goods	-1.0	8.4	4.0	11.3	2.4	2.8	-6.0	4.5	5.8	-1.9	3.1	4.1	5.5	1.3	1.8	1.6
Import prices, traditional goods	0.0	3.7	0.3	4.0	3.7	3.9	-1.5	0.0	4.0	0.3	2.1	5.5	5.4	1.9	1.4	1.3
Housing prices <sup>5</sup>	1.7	10.1	8.2	13.7	12.6	-1.1	1.9	8.3	8.0	6.7	4.0	2.7	4.6	2.5	2.2	0.1
<b>Income, interest rates and exchange rate</b>																
Household real income	4.6	3.4	8.3	-6.5	6.1	3.5	3.2	2.1	4.2	4.5	2.8	2.6	2.1	2.4	3.0	3.0
Household saving ratio (level)	8.8	6.9	9.6	-0.3	1.1	3.9	5.5	4.3	6.2	7.6	7.5	8.5	8.7	9.0	9.2	9.5
Money market rate (level)	4.1	2.0	2.2	3.1	5.0	6.2	2.5	2.5	2.9	2.2	1.8	1.7	1.3	1.3	1.3	1.5
Lending rate, credit loans(level) <sup>6</sup>	6.5	4.2	3.9	4.3	5.0	6.8	4.0	3.4	3.6	3.9	4.0	3.9	3.2	3.0	3.0	3.1
Real after-tax lending rate, banks (level)	2.2	2.5	1.3	0.7	2.9	1.1	0.7	0.1	1.3	2.1	0.7	0.8	0.3	0.1	0.6	0.8
Importweighted krone exchange rate (44 countries) <sup>7</sup>	1.3	3.0	-3.9	0.7	-1.8	0.0	3.3	-3.7	-2.4	-1.2	2.2	5.3	5.9	-0.6	0.0	0.0
NOK per euro (level)	8.0	8.4	8.0	8.1	8.0	8.2	8.7	8.0	7.8	7.5	7.8	8.4	8.48	8.4	8.4	8.4
<b>Current account</b>																
Current balance (bill. NOK)	195.2	220.6	322.8	357.7	287.4	408.3	258.2	282.7	344.9	368.9	307.7	297.0	209.2	233.7	288.1	319.9
Current balance (per cent of GDP)	12.1	12.4	16.2	16.1	12.2	15.6	10.7	10.9	12.7	13.9	10.0	9.4	6.6	7.0	8.2	8.7
<b>International indicators</b>																
Exports markets indicator	4.0	7.9	7.0	9.7	6.6	1.7	-10.1	11.2	6.3	1.3	1.8	4.4	4.1	4.7	5.6	6.1
Consumer price index, euro-area	2.1	2.1	2.2	2.2	2.2	3.3	0.3	1.7	2.7	2.5	1.3	0.4	0.2	1.1	1.5	1.9
Money market rate, euro(level)	2.3	2.1	2.2	3.1	4.3	4.6	1.2	0.8	1.4	0.5	0.2	0.2	0.1	0.1	0.3	0.4
Crude oil price NOK (level) <sup>8</sup>	201	255	356	423	423	536	388	484	621	649	639	621	478	523	548	563

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

<sup>2</sup> Change in stockbuilding. Per cent of GDP.

<sup>3</sup> According to Statistics Norway's labour force survey(LFS). Break in data series in 2006.

<sup>4</sup> CPI adjusted for tax changes and excluding energy products.

<sup>5</sup> Break in data series in 2004.

<sup>6</sup> Yearly average. Lending rate, banks until 2006

<sup>7</sup> Increasing index implies depreciation.

<sup>8</sup> Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was 2 June 2015.

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