# **Economic Survey**

- Economic developments in Norway
- Forecasts 2015-2018

## Economic trends

Since the summer of 2014, the Norwegian economy has been in a clear cyclical downturn. Economic growth has been subdued and unemployment has reached heights not seen for a decade. Key factors underlying these developments are the plunge in oil prices and low investment in the petroleum industry. Activity in petroleum-related industries has slowed appreciably in recent months, and the decline has spread to industries that are not directly related to the petroleum sector. The negative impulses from the petroleum sector are being countered through many channels. Low interest rates, a weaker growth outlook and the fall in oil prices have caused a substantial weakening of the Norwegian krone. Measured by the trade-weighted exchange rate index, the krone depreciated by about 20 per cent from the average in 2013 to the end of August this year. So far, the weakening of the krone has not resulted in a corresponding increase in wages. This can be largely attributed to slow growth and higher unemployment. As a result, increased exports and reduced import shares have curbed the decline in growth. Labour has improved its competitive position in relation to other production factors. This has resulted in low productivity growth, but contributed to higher employment despite the low growth. Continued high labour force growth has also contributed to the increase in unemployment. However, the higher inflation ensuing from a weaker krone means that household purchasing power is lower than it would otherwise have been. Household demand has been checked, and with it domestic activity. The overall effect is that the weak krone, viewed in isolation, has led to increased mainland economic activity, higher employment and lower unemployment, but also to significantly higher inflation in Norway than in the euro area since 2013.

Demand in Norwegian export markets picked up in 2014. Growth in some leading economies, like the USA, is moderately high, and it is picking up in the euro zone, albeit from a low level. The global economy is not undergoing a sharp upturn, nonetheless. Despite this, exports of traditional non-oil goods and services have appreciably boosted growth in the Norwegian economy, and this will be sustained going forward, with solid backing from a weak krone. This will contribute to the restructuring of the Norwegian economy, and counteract the negative impulses of the fall in petroleum investment. Since 2012, business investment has moved on a weak trend, This situation will change in the time ahead, as many large manufacturing investment projects are in the start-up phase. Improved competitiveness and a supply of qualified labour, added to prospects of a prolonged period of low interest rates, are factors that will prompt increased investment and restructuring of the economy. Recently, however, we have also seen that uncertainty about developments in the Chinese economy could rapidly spread to the global economy, with the result that the tentative global upturn outlined above might not come about.

Norwegian fiscal policy is expansionary and has contributed to buoying up activity. General government investment has increased substantially since 2012, while consumption growth has been close to trend. Strong real growth in pension disbursements has added to growth in household income, as have lower taxes for the past two years. Despite the expansionary fiscal policy, the downturn is being exacerbated by a clear increase in unemployment, and the question is how best fiscal policy can stimulate the economy in the short term. We assume that tax relief will be increased in 2016 compared with this year. This will help to boost the activity level, but the effectiveness of the measure will depend on whether the tax relief targets groups with a high short-term propensity to consume or not. Macroeconomic research in the wake of the financial crisis indicates fairly unequivocally that tax relief is not normally an effective means of achieving short-term economic stability. However, it may be of importance to investment and restructuring in the longer term. A similar view applies to increased government expenditure. If increased appropriations do not result in higher demand in the short term, they are not very effective in economic policy, although the measures may be wise in a longer-term perspective. It may therefore be advisable to have clear plans for how policy should be formulated under different economic development scenarios. This will make it easier to adapt an expansionary policy within a framework that is fiscally sustainable in the long term.

# Economic developments in Norway

### **Economic developments in Norway**

The Norwegian economy has been in a clear, petroleum-driven cyclical downturn for a year, and is currently being subjected to strong impulses from various quarters. The fall in demand from the petroleum industry is generating strong negative impulses, while the weak krone exchange rate is having a stimulating effect on the economy.

The most recent seasonally adjusted quarterly accounts figures (QNA) show that mainland GDP growth has

been steady at just under 1 per cent for the last four quarters combined. This is substantially lower than trend economic growth, which is estimated to be 2½ per cent. Employment has increased somewhat in the period, but not enough to prevent unemployment, measured by the Labour Force Survey (LFS), increasing by 36 000 persons from the second quarter of 2014 to May–July 2015. From the first to the second quarter, mainland GDP increased by only an annualised 0.7 per cent, and in the summer of 2015 the unemployment rate rose to 4.5 per cent. We expect a weak tendency

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

	2012*	2014* —		Seasonally ad	justed	
	2013*	2014^ —	14:3	14:4	15:1	15:2
Demand and output			-			
Consumption in households etc.	2.1	2.0	0.1	0.9	1.0	0.5
General government consumption	1.7	2.7	0.5	0.8	0.1	0.5
Gross fixed investment	6.8	0.6	0.6	-3.5	-0.6	-1.3
Mainland Norway	2.9	1.7	1.5	-1.9	-1.3	-0.3
Extraction and transport via pipelines	17.1	-1.7	-3.1	-7.0	0.9	-3.0
Final domestic demand from Mainland Norway <sup>1</sup>	2.1	2.1	0.5	0.2	0.3	0.4
Exports	-3.0	2.7	3.3	3.4	-3.4	-0.1
Crude oil and natural gas	-7.6	1.5	4.8	4.1	-6.1	-0.8
Traditional goods	1.0	2.3	1.8	0.4	3.2	-0.2
Imports	4.3	1.9	5.4	-2.6	2.7	-1.3
Traditional goods	3.2	-0.3	1.0	-0.3	2.5	-0.1
Gross domestic product	0.7	2.2	0.4	0.9	0.1	-0.1
Mainland Norway	2.3	2.2	0.0	0.4	0.3	0.2
Labour market						
Man-hours worked	0.7	1.6	0.3	0.2	-0.1	0.2
Employed persons	1.2	1.0	0.3	0.2	0.1	0.2
Labour force <sup>2</sup>	1.0	1.1	0.5	0.6	0.1	0.5
Unemployment rate, level <sup>2</sup>	3.5	3.5	3.7	3.7	4.1	4.3
onemployment rate, rever	5.5	3.3	3.,	3.7	1.1	1.5
Prices and wages						
Annual earings	3.9	3.1				
Consumer price index (CPI) <sup>3</sup>	2.1	2.0	2.1	2.0	2.0	2.2
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>3</sup>	1.6	2.4	2.4	2.4	2.3	2.6
Export prices, traditional goods	3.1	4.1	0.3	2.4	1.1	0.3
Import prices, traditional goods	2.1	5.5	1.1	1.7	2.0	-0.7
import prices, traditional goods	۷.۱	5.5	1.1	1.7	2.0	-0.7
Balance of payment						
Current balance, bill. NOK	307.7	297.0	46.9	83.3	69.4	71.9
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	1.8	1.7	1.7	1.6	1.4	1.4
Lending rate, credit loans <sup>4</sup>	4.0	3.9	3.9	3.7	3.5	3.3
Crude oil price NOK <sup>5</sup>	639	621	646	526	428	491
Importweighted krone exchange rate, 44 countries. 1995=100	89.0	93.7	93.1	97.0	101.0	100.2
NOK per euro	7.8	8.4	8.3	8.6	8.7	8.6

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

<sup>&</sup>lt;sup>2</sup> According to Statistics Norways labour force survey (LFS).

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

<sup>&</sup>lt;sup>4</sup> Period averages.

<sup>&</sup>lt;sup>5</sup> Average spot price. Brent Blend.

Source: Statistics Norway and Norges Bank

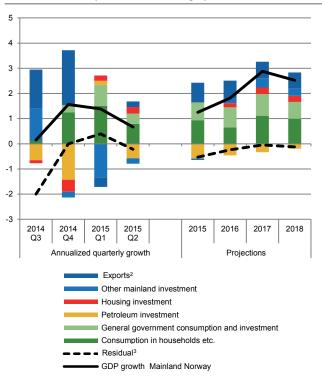
for the remainder of the year, and that mainland GDP growth will be 1.3 per cent this year.

The fall in investment in the petroleum industry is a key factor underlying developments in the Norwegian economy. The oil price has plummeted during the downturn, from USD 115 per barrel in the early summer of 2014 to around USD 50 per barrel towards the end of August this year. However, the decline in petroleum investment started towards the end of 2013 already, in advance of the fall in oil prices, in order to correct profitability in petroleum-related industries, which had been falling for several years because of a high rise in costs. We expect the oil price to remain low, but to gradually rise to just over USD 60 per barrel towards the end of 2018. The consequences of low oil prices for the real economy will be first and foremost a continued reduction in petroleum investment for a number of years ahead, assuming that the price expectations of the oil companies also remain low. The consequences of low oil prices for the public finances and the long-term sustainable path for spending of petroleum revenue will only emerge somewhat further ahead, however.

Last year demand from the Norwegian petroleum sector accounted for 11 per cent of mainland GDP, excluding the industry's own labour costs. Most of this is delivered directly or indirectly by Norwegian industries, since the import share has been in the range of 35-40 per cent in recent years. Activity in industries that directly supply the petroleum industry has fallen appreciably recently and, viewed in isolation, the activity of a number of vendors, including Norwegian industries that do not produce petroleum-specific products, is also depressed. Wages in the petroleum industry and in some supplier segments are far higher than the average in the rest of the economy. Thus a fall in employment in these industries will generate an extra strong negative impulse to household demand. This also implies negative ripple effects via investment demand from the supplier sector. The low oil price also results in reduced demand from the petroleum sector in other countries with high production costs. This implies a further negative impulse targeting the Norwegian supplier industry, which also exports for substantial sums.

The negative impulses from the petroleum industry are being countered through many channels: Cost-competitiveness is greatly improved as a consequence of the krone depreciating over a long period of time. The fall in oil prices has amplified this development. Measured by the trade-weighted exchange rate index, the krone has depreciated by over 25 per cent from the end of 2012 to the end of August this year. So far the weakening of the krone has not been compensated for by higher wage growth. On the contrary, wage growth have fallen as a result of a less tight labour market. This leads to increased exports and reduced import shares,

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



<sup>&</sup>lt;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.

Source: Statistics Norway.

Table 2. Growth in mainland GDP and contributions from demand components1. Percentage points. annual rate

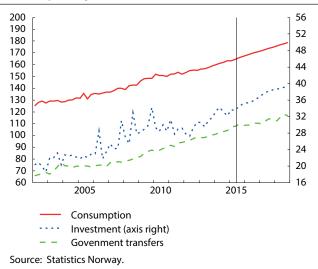
		QNA f	igures	Projection				
	2014:3	2014:4	2014:1	2015:2	2015	2016	2017	2018
Consumption by households and non-profit organisations	0.1	1.2	1.5	0.8	0.9	0.7	1.1	1.0
General government consumption and investment	0.0	0.3	0.8	0.4	0.7	8.0	0.9	0.7
Petroleum investment	-0.7	-1.4	0.2	-0.6	-0.6	-0.5	-0.3	-0.2
Housing investment	-0.1	-0.5	0.2	0.3	0.0	0.2	0.3	0.2
Other mainland investment	1.3	-0.2	-1.3	-0.2	-0.1	0.2	0.4	0.3
Exports	1.6	2.2	-0.4	0.2	8.0	0.7	0.7	0.7
	-2.0	0.0	0.4	-0.2	-0.5	-0.2	0.0	-0.1
Other deviations								
Growth in mainland GDP	0.2	1.6	1.4	0.7	1.3	1.8	2.9	2.5

<sup>&</sup>lt;sup>1</sup> See footnotes to Figure 2.1. Source: Statistics Norway.

 $<sup>^{\</sup>rm 2}$  Exports is defined as total exports minus exports of crude oil, natural gas, ships, oil platforms and planes.

<sup>&</sup>lt;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.

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



and to the competitive position of labour improving in relation to other production factors. However, the higher inflation ensuing from a weak krone means that household purchasing power, and accordingly also household demand, is lower than it would otherwise have been. On balance, a weaker krone nevertheless implies increased activity in the mainland economy, higher employment and lower unemployment; see Box 1.

The depreciation of the krone is directly related to the fall in oil prices, but is also a consequence of lower Norwegian interest rates and expectations of further cuts. The interest rates households have to contend with have declined through 2014 and so far this year. They will continue to fall in the period ahead as a result of the time-lagged effects of earlier cuts in the key policy rate and an expected cut in the upcoming half-year.

Lower interest rates have helped to maintain the rise in house prices at a high level despite the substantially weaker outlook for the Norwegian economy. This, coupled with relatively high household income growth, fuelled a rise in housing investment through the first half of the year. However, for the remainder of the year and in the early part of 2016 we expect a fall in real house prices, and that housing investment will increase only moderately.

Growth in household consumption remained buoyant in the first half of 2015, but we expect the cyclical downturn to place a damper on consumption in the near term.

Fiscal policy, measured in terms of developments in the structural non-oil budget deficit (SNOBD), has long been expansionary, and we expect the economic downturn to prompt a further increase in the spending of petroleum revenue. We assume that tax reductions will be somewhat larger in 2016 than this year, but they will make only a modest contribution to increasing the level of activity within our projection period. However, we

have also assumed that public consumption, investment and transfers to households will increase in real terms somewhat more in 2016 than this year.

Demand in Norwegian export markets picked up in 2014, and after somewhat lower growth in the first half of this year, demand growth is expected to revive slightly going forward. This will boost exports.

Mainland business investment fell appreciably through the first half of this year, particularly in manufacturing. This tendency is expected to reverse in the near term. The improvement in cost-competitiveness, freeing up of resources from the petroleum related sectors and the prospect that interest rates will remain low for a long period are all factors pointing to increased investment.

Inflation measured by the 12-month change in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) is now near the 2.5 per cent inflation target. The depreciation of the krone is expected to cause inflation to pick up somewhat during the remainder of the year. However, low electricity prices in recent months and for a while to come are curbing the rise in overall household consumption prices. We assume that the krone will appreciate somewhat through 2016. This, coupled with a fall in prices for many commodities, low inflation abroad and low wage growth will serve to dampen underlying inflation in the near term. However, the rise in the CPI will increase somewhat in 2016, as a result of higher electricity prices.

We assume that petroleum investment will fall by close to 12 per cent this year and at a gradually slower rate in subsequent years. However, increased mainland investment and higher growth in public consumption are expected to contribute to a cyclical upturn, albeit very moderate, in the second half of 2016. W assume nonetheless that unemployment will remain high throughout 2016 and that the average for the year will be 4.6 per cent. We expect the negative impulses from the petroleum industry to have lessened in 2017 and 2018, that growth in Norwegian export markets will pick up further and that growth in household consumption will gather pace. This will secure a clear, but very moderate economic upturn, and unemployment can then be expected to fall slightly. We believe nominal wage growth will be substantially lower in the years ahead than we have been used to. Inflation will nonetheless lead to a rise in real wages of around 0.5 per cent this year, while they will remain unchanged next year and increase by about 1 per cent in 2017 and 2018.

### More expansionary fiscal policy

General government consumption increased by 2.7 per cent from 2013 to 2014. Following almost zero growth from the fourth quarter of 2014 to the first quarter of 2015, growth picked up in the second quarter, and preliminary projections show annualised growth of 2 per cent. Gross general government investment dipped slightly from the first to the second quarter of this

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

	Accunts					Fo	recast				
	2014*		2015			2016		2017		2018	
		SSB	NB	FIN	SSB	NB	FIN	SSB	NB	SSB	NE
Demand and output											
Consumption in households etc.	2.0	2.6	2	1.8	1.8	1 3/4		3.0	2 3/4	2.7	3
General government consumption	2.7	2.3		2.4	2.6			2.2		2.3	
Gross fixed investment	0.6	-2.8		-3.3	0.0			3.0		2.3	
Extraction and transport via pipelines <sup>1</sup>	-1.7	-11.6	-15	-13.1	-10.3	-5		-8.5	-2 1/2	-5.5	0
Mainland Norway	1.7	0.5			3.6			6.5		4.2	
Industries	0.2	-1.0		1.1	3.6			6.9		4.9	
Housing	-1.6	0.2		-3.2	3.5			5.4		4.9	
General government	8.2	3.5		4.0	3.8			7.1		2.3	
Demand from Mainland Norway <sup>2</sup>	2.1	2.1	1 1/2	1.7	2.4	2 1/2		3.6	3 1/4	2.9	3
Stockbuilding <sup>3</sup>	0.2	0.5			0.0			0.0		0.0	
Exports	2.7	2.2		1.2	1.8			1.7		1.9	
Crude oil and natural gas	1.5	-0.1		-1.3	-0.5			-0.2		0.3	
Traditional goods <sup>4</sup>	2.3	5.8	3	3.8	4.4	3		3.6	4	3.3	4
Imports	1.9	3.0	2 1/4	0.3	2.5	2 1/4		2.9	3 3/4	2.9	4 1/4
Traditional goods	-0.3	2.2		1.4	2.7			3.6		4.0	
Gross domestic product	2.2	1.4	1 1/4	0.8	1.2	1 1/4	1.5	2.2	2	2.0	2
Mainland Norway	2.2	1.3	1 1/4	1.3	1.8	1 1/2	2.0	2.9	2 1/4	2.5	2 1/2
Labour market											
Employed persons	1.1	0.2	1/4	0.6	0.5	1/4		1.3	1	1.1	1
Unemployment rate (level)	3.5	4.4	4 1/4	4.0	4.6	4 1/4	4.1	4.2	4	4.1	3 3/4
Prices and wages											
Annual earnings	3.1	2.8	2 3/4	2.7	2.9	3		2.8	3 1/2	3.0	4
Consumer price index (CPI)	2.0	2.1	2	2.1	2.9	2 1/4		2.0	2	1.8	2 1/4
CPI-ATE <sup>5</sup>	2.4	2.6	2 1/4	2.6	2.5	2 1/4		1.9	2	1.8	2 1/4
Export prices, traditional goods	4.1	3.3	2 17 1	2.0	0.2			1.3		1.5	2 17 1
Import prices, traditional goods	5.5	4.4			1.8	**		1.0		1.0	
Housing prices	2.7	5.7			2.7			4.3		2.2	
Balance of payment											
Current balance (bill. NOK)	297.0	200.5			158.8	**		170.8		185.0	
Current balance (per cent of GDP)	9.4	6.4		7.7	4.9			5.1		5.3	
Memorandum items:											
Household savings ratio (level)	8.5	8.5		8.4	8.7			8.6		8.4	
Money market rate (level)	1.7	1.3	1.3	1.3	1.0	1.2		1.0	1.3	1.3	
Lending rate, credit loans (level) <sup>6</sup>	3.9	3.2			2.8			2.7		2.8	
Crude oil price NOK (level) <sup>7</sup>	621	439		480	431		529	455		473	
Export markets indicator	4.6	4.4			4.4			5.1		5.5	
Importweighted krone exchange rate (44 countries) <sup>8</sup>	5.3	10.1	7.5	5.6	1.7	-2.5		-1.5	-1.5	-1.5	-0.8

<sup>&</sup>lt;sup>1</sup> Forecasts from Ministry of Finance incl. service activities incidential to extraction.

<sup>&</sup>lt;sup>2</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.

<sup>&</sup>lt;sup>3</sup> Change in stockbuilding. Per cent of GDP.

<sup>&</sup>lt;sup>4</sup> Norges Bank estimates traditional exports, which also includes some services.

<sup>&</sup>lt;sup>5</sup> CPI adjusted for tax changes and excluding energy products (CPI-ATE).

<sup>&</sup>lt;sup>6</sup> Yearly average.

<sup>&</sup>lt;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 122015 (NB).

year, following high growth the previous quarter. The decline is partly attributable to the completion of a new hospital in Østfold County. Public transfers to households increased by over 8 per cent from the first half of 2014 to the same period this year. A substantial portion of the strong growth is due to an increase in disability benefits as compensation for the fact that from 2015 these benefits are taxable at the same rate as wage income. This factor in isolation means that both transfers for disability benefits and taxes will increase by an estimated NOK 12 billion more than if the rules from 2014 had been maintained. If we adjust the overall transfers to take account of the change in rules, nominal growth was just under 6 per cent in the first half of 2015. The increase in transfers in real terms was then just over 3.5 per cent, and will push up real household income and demand. Part of the growth in transfers is due to more persons aged 62-66 drawing an old-age pension from the National Insurance Scheme while continuing to work. It is reasonable to suppose that these disbursements have less effect on household demand than transfers generally.

Our projections for fiscal policy for the remainder of 2015 are approximately the same as the projections in the Revised National Budget 2015 (RNB) and are also very similar to those we have operated with earlier. We assume that general government consumption growth will be 2.3 per cent this year, while gross investment growth is forecast to be 3.5 per cent. We now envisage that transfers to households will increase slightly more than we assumed previously. A somewhat weaker labour market in 2015 than previously assumed will contribute to this increase. We estimate combined real growth in consumption, investment and transfers from 2014 to 2015 at 3 per cent. In addition come lower taxes, such that fiscal policy is generating clear growth impulses to the mainland economy, even though some of the tax relief of NOK 5 billion in 2015 probably has limited effect on demand in the short term. The fiscal impulse, measured as change in the structural, non-oil budget deficit as a share of trend mainland GDP, was forecast in the RNB to be 0.6 percentage point in 2015, i.e. the same as in 2014.

We have previously assumed that the general features of the fiscal stimuli will be maintained in 2016 and 2017. There are now two reasons to revise this assumption. Developments so far in 2015 have resulted in slightly higher unemployment than previously anticipated. In isolation, this points to a slight change in economic policy in an expansionary direction. However, the fall in oil prices this summer have caused us to revise oil prices downwards, also in the longer term, which will probably amplify the decline in petroleum investment going forward. Thus the slump in the Norwegian economy could be more prolonged than previously assumed. This may mean that both fiscal and monetary policy become more expansionary, to prevent unemployment increasing much from the current level. We are therefore now assuming a cut in tax rates for

2016 that will result in a reduction in tax revenue of NOK 10 billion compared with unchanged 2015 rates. Consumption growth and gross general government investment are also expected to be a little higher than in 2015. Two fighter 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 for these 52 fighter aircraft are projected to be about NOK 68 billion (in 2015 prices), but some of this amount is to be covered within the Armed Forces' investment framework. Growth in non-military investment in 2017 is projected to be approximately as in the two preceding years, as is consumption growth. Real growth in old-age pensions and disability benefits (measured as multiples of the basic amount (G) in constant prices) is projected to be 2 per cent annually in the projection period. We have assumed that taxes will also be reduced in 2017, with approximately the same effect on revenue as in 2015.

For 2018, we have largely extended the projections for growth in public consumption and investment in the same way as in the three previous years, but have not assumed a further reduction in the tax rates. After a couple of years with slightly higher growth, bringing the Norwegian economy into a more cyclically neutral situation, it is reasonable to assume that fiscal policy will be oriented so as to generate less expansionary impulses, to prevent interest rates from being raised more and the krone from strengthening more. In the period 2015-2018, when oil prices are assumed to be appreciably lower than previously and the krone is assumed to appreciate, the Government Pension Fund Global will grow less than we have been used to. We forecast that in 2018 SNOBD as a share of the Fund's value will rise to just over 3 per cent, compared with 2.6 per cent in 2015.

# Record low interest rates down even further

In June, Norges Bank lowered the key rate to a record low 1.0 per cent. At the end of August, the money market rate was down to 1.1 per cent, slightly lower than before the monetary policy meeting in March this year, as a reduction in the key rate was priced in. When the key rate was not lowered at the meeting, the money market rate rose immediately to 1.5 per cent before gradually declining from the beginning of June this year.

The krone has generally depreciated since early 2013. The krone exchange rate has fluctuated widely so far this year, and at the beginning of September the krone was clearly weaker than at the beginning of the year. The dollar exchange rate is now about 8.30 compared with 7.50 at the beginning of the year, and the euro exchange rate in the same period has risen from 9.00 to 9.30. The krone weakened markedly at the end of August following the Chinese stock market turbulence, which had a spillover effect onto the European and US stock exchanges, and led to a further decline in oil prices.

The average interest rate from banks and credit institutions on home equity lines of credit declined from 4.06 per cent at the end of 2013 via 3.64 per cent at the end of 2014 to 3.24 per cent at the end of the second quarter of this year. New monthly interest rate statistics which, unlike the quarterly statistics, are based on a sample survey show that most of the interest rate reduction this year for outstanding loans took place in March. For new loans, the monthly interest rate statistics show a new decline in July, so that the average interest rate for new home equity lines of credit was 2.82 per cent at the time. Statistics Norway is currently conducting a planned restructuring of the deposits statistics. The last official interest rate figures for deposits are from the end of the first quarter, when the average deposit rate was 1.59 per cent, down from 1.86 at the end of 2014.

Norges Bank signalled through its published interest rate forecast in connection with the interest rate reduction in June that a further reduction of the key rate is highly likely. Futures contracts in the interest rate market have also priced in such an interest rate reduction during the year. We assume a 0.25 percentage point cut in the key rate at the end of the year, so that the money market rate falls to 1.00 per cent. The reduction in interest rates is a result of low growth and rising unemployment so far this year and prospects of low growth also in the near term. At the same time, inflation is now close to the target, and expected to decline when the timelagged effects of the depreciation of the krone wane. The key rate may remain at this new record low level for two years before being raised slightly in 2018. The annualised money market rate will thus fall from its former lowest level of 1.7 per cent in 2014 via 1.3 per cent in 2015 to 1.0 per cent in both 2016 and 2017, before rising weakly again. The average interest rate on home equity lines of credit will continue to decline in the near term, and from next year and throughout the projection period will be below 3 per cent.

At the beginning of September, the krone was clearly weaker than indicated by the fundamentals. This means that some appreciation of the krone is expected in the near term. In our forecasts we have assumed that the euro exchange rate will gradually edge down to NOK 8.90 cent at the end of 2018. This means an annualised 3.0 per cent depreciation of the krone measured against the euro from this year to next year, and about half this amount measured against the import-weighted krone exchange rate. In 2017 and 2018, the krone will appreciate by 1.5 per cent annually, measured against both the euro and the import-weighted krone exchange rate. At the end of 2018, the import-weighted value of the krone will nonetheless be almost 9 per cent weaker than the average so far in the 2000s.

### **Moderate consumption growth**

According to QNA figures, consumption in households and non-profit organisations rose by a moderate 0.5 per cent in the second quarter of 2015, or just over an

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

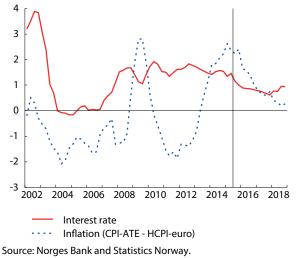
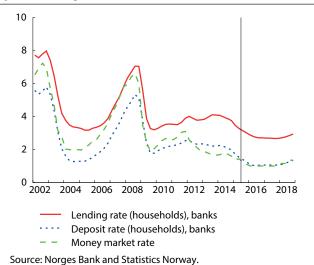
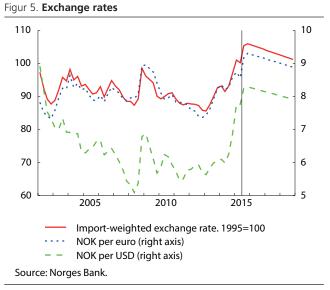


Figure 4. Norwegian interest rates. Per cent





### Box 1. The significance of exchange rate movements for the Norwegian economy

The krone has depreciated considerably over a period of two and a half years, particularly markedly in the wake of the fall in oil prices in the third quarter of 2014. To illustrate the significance of exchange rate movements for the Norwegian economy, we used the KVARTS model to calculate what the Norwegian economy would have looked like if the exchange rate had remained constant from the second quarter of 2014 to the end of 2018. In order to isolate the effects of exchange rate movements, it is assumed that all other policy variables and global economic developments are unaffected by them. The deviation between the projection scenario and this alternative scenario then represents the more isolated effect of the depreciation of the krone that has taken place and that to a large extent is expected to be maintained in the near term.

Table 1 shows the effects of the partially actual and partially assumed weakening of the krone in our projection after the second quarter of 2014, which is thus the deviation in relation to the hypothetical scenario. The weakening is moderate in 2014, but in 2015 the krone is almost 13 per cent weaker in the projection scenario, and slightly more still in 2016.

A weaker exchange rate impacts the Norwegian economy through increased import prices in Norwegian kroner, and through Norwegian manufacturers receiving more kroner for their products for given world market prices, or using their improved competitiveness to increase their market shares in Norway and abroad. Higher import prices are reflected in the consumer price index (CPI), so that the price level in Norway increases gradually. In 2018, the price level is 6 per cent higher than without the depreciation of the krone. If the exchange rate had remained constant at the level in the second quarter of 2014, inflation in Norway would thus have been lower than in our projection scenario. In 2015 and 2016 inflation would have been close to zero, which is consistent with what we are now observing in the euro area, before rising to just over 1 per cent in 2017 and 2018. Lower inflation would result in lower wage growth. As a result of the weak krone, wage growth was 1.5 percentage point higher in both 2015 and 2016 than in the hypothetical scenario with a constant krone exchange rate. As the depreciation of the krone causes a larger increase in prices than in wages, real wages in 2018 will be almost 1.5 per cent lower in our projections than would have been the case with a constant exchange rate.

The projection shows that the depreciation will lead to a good 5 per cent higher exports of traditional goods in 2016 and 2017. As import shares are reduced, imports will gradually be cut back by about 1.5 per cent. The effect is dampened by the increased activity in the Norwegian economy due to the weaker krone, which in isolation pushes up imports. Despite falling household consumption, mainland GDP will rise by just over 0.5 per cent as a result of higher net exports and investment. Production and investment will increase most in the internationally exposed sector.

Table 1. Effects of a weaker krone from the third quarter of 2014. Percentage deviation from the counterfactual scenario unless otherwise indicated

	2014	2015	2016	2017	2018
GDP Mainland Norway	0.1	0.3	0.5	0.7	0.5
Manufacturing	0.5	3.3	4.9	4.9	4.1
Gross fixed investments in Mainland Norway	0.1	1.1	2.9	3.0	1.1
Consumption in house- holds etc.	-0.1	-1.2	-1.7	-1.8	-2.0
Exports traditional godds	0.7	3.8	5.5	5.4	4.6
Imports Imort weighted krone	-0.1	-1.1	-1.4	-1.3	-1.5
exchange rate	2.0	12.7	14.7	13.0	11.2
Annual earnings	0.1	1.5	2.9	3.6	4.2
Real disposable income	-0.2	-1.8	-2.1	-1.8	-1.6
CPI	0.3	2.8	4.8	5.4	5.7
Employment	0.1	1.0	1.6	1.8	1.6
Labour supply	0.0	0.3	8.0	1.0	1.0
Unemployment (level)	-0.1	-0.6	-0.9	-0.8	-0.7

The weak krone has a pronounced effect on the labour market. In isolation, increased activity contributes to higher private sector employment. Of equal importance is the effect of the fall in the ratio between hourly labour costs and the intermediate input price index, due to higher prices for imported intermediate inputs. Production thus becomes more labour-intensive. This substitution leads to lower labour productivity. Appreciably higher employment is accompanied by a marked reduction in unemployment. Whereas unemployment in 2016 would have been close to 5.5 per cent given a constant krone exchange rate, it is 4.6 per cent in our projection scenario. Without the depreciation of the krone, unemployment would have been 5.0 per cent in 2015. The weak krone has also helped to augment the labour supply.

Thus our calculations show that the significant weakening of the krone we have experienced in recent quarters substantially affects the Norwegian economy. The fact that our projections now indicate only a moderate increase in unemployment in the near term compared to what we observe to date in 2015 is attributable to our belief that the effect of the weak krone going forward is significant. Thus a much faster strengthening of the krone than we have assumed in our projection scenario would lead to a greater increase in unemployment than we envisage.

KVARTS specifies over twenty industries other than general government. The industries employ a number of production factors such as labour, energy inputs, other intermediate inputs and various capital instruments. It is assumed that these factors offer considerable substitution possibilities. This means that when the price of a factor rises, the industries will shift to using factors that have become relatively less expensive. A slightly lower substitution possibility would first and foremost lessen the impact on the labour market, but without changing the qualitative effects.

Figure 1. Import-weighted krone exchange rate in the baseline scenario and in the scenario without depreciation of the krone

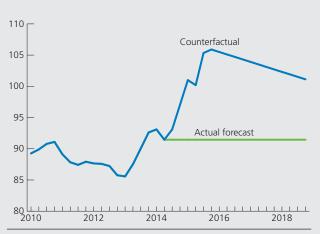
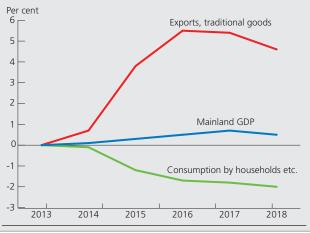


Figure 2. Percentage deviation from the counterfactual path



annualised 2 per cent. Except for the third quarter of 2014, which moved on a weak trend following a decline in goods consumption, growth in consumption was relatively strong through 2014 and in the first quarter of 2015. Goods consumption rose by a full 1.1 per cent in the second quarter, primarily pushed up by purchases of vehicles and electricity. Service consumption also increased, but only by 0.6 per cent, following 1 per cent growth the previous quarter. The seasonally adjusted goods consumption index for July was approximately unchanged compared with June, and points to weak developments in household goods consumption in the third quarter.

Developments in consumption are largely determined by movements in household income, wealth and interest rates. Real disposable income (including share dividends) rose by 2.6 per cent in 2014, a little less than the previous year. Wage income, which is the most important source of household income, was a clear stimulus last year, even after deduction of income taxes. Annual wage growth was lower in 2014 than it has been for a long time, nevertheless, and employment rose by 1.1 per cent, which was also less 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 significance to growth. Inflation of 2.3 per cent, measured by the consumer price index in the National Accounts, curbed growth in real income last year. Real disposable income continued to increase by a full 2.6 per cent in the first quarter of this year. The contributions to growth of both wage income and public transfers were relatively large, like last year, but some of the increase in public transfers was intended to offset the effects of new rules for taxation of National Insurance disability benefit. Real disposable income was virtually unchanged from the first to the second quarter.

We expect public transfers to continue to make relatively clear contributions to growth in real disposable income through the whole projection period. Conversely, wage income will move on a weak trend through 2015 as a result of weak growth in both annual wages and employment, but will pick up later in the projection period, as the economic situation improves. At the same time, tax relief will provide a positive stimulus to real disposable income through the projection period. Net interest income may make an appreciable contribution to annualised income growth this year as a result of a sharp decline in lending rates. Higher inflation this year and next year will curb real income growth, while lower inflation during the remainder of the

projection period will be reflected in higher real income growth. We now expect annual growth in real disposable income of about 2.5 per cent in 2015, just under 2 per cent in 2016, rising to about 3 per cent in 2017 and 2.5 per cent in 2018.

In isolation, relatively weak developments in annualised real house prices during the projection period may generate somewhat lower growth impulses to consumption than they are doing this year. At the same time, a decline next year in real interest rates after tax will in isolation have the effect of stimulating consumption with a time lag, while a corresponding increase the following year will dampen consumption. Higher real interest rates after tax may also gradually curb the rise in house prices, which will further reduce consumption towards the end of the projection period.

Our projections show consumption growth of about 2.5 per cent this year and 2 per cent next year. Assuming consumption growth of about 3 per cent in 2017, and somewhat lower in 2018, consumption developments are far weaker than during the cyclical upturn that preceded the financial crisis in 2008. Household saving in the form of financial and housing investment, calculated as a share of disposable income, has risen from a level of close to 4 per cent in 2008 to 9.2 per cent in the second quarter of 2015. This is historically high, and the saving ratio has not been at a similar level since 2005. The saving ratio at the time was 9.6 per cent, partly as a result of high, tax-motivated share dividend disbursements. We now envisage that the saving ratio may remain at a fairly stable level of about 8.5 per cent through the projection period.

### Lower rise in house prices

Seasonally adjusted house prices rose by 1.4 per cent from the first quarter to the second quarter, and were then 6.6 per cent higher than in the second quarter of last year, according to Statistics Norway's house price index. Prices have risen for six consecutive quarters, but the rate is now slowing. This is supported by monthly figures from the Association of Real Estate Agency Firms (Eiendom Norge), which show a seasonally adjusted rise of 0.4 per cent for the months of May, June and July as a whole, compared with a monthly rise of 0.5 to 0.7 per cent in each of the first four months of the year. The figures provided are national averages, and developments in house prices show wide geographical variation.

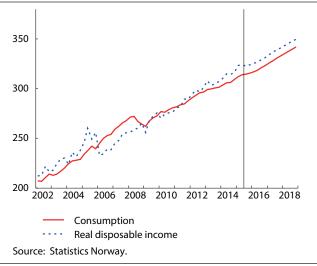
The 0.25 percentage point interest rate cut in December last year lowered banks' lending rates to households correspondingly through the first half of this year. Lower real interest rates fuel borrowing, and house

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

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Total	2.3	4.1	4.5	2.8	2.6	2.6	1.8	3.1	2.5
Excluding share dividends	1.9	4.2	4.4	2.7	2.8	2.9	1.4	3.0	2.4

Source: Statistics Norway

Figure 6. Income and consumption in households. Seasonally adjusted, billion 2012–kr., qarterlyl

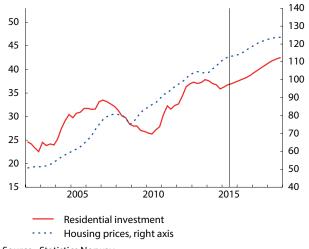


prices and household debt mutually influence each other. Twelve-month growth in household gross domestic debt (C2) rose slightly through the first six months, and was 6.5 per cent at the end of June. Seasonally adjusted growth in household real disposable income was just over 2.5 per cent in the first quarter, while the level was virtually unchanged from the first to the second quarter. However, the consumer confidence indicator from TNS Gallup and Finance Norway, which measures households' expectations regarding their own financial situation and the national economy, declined in both the first and the second quarter. On the whole, this is consistent with a positive, but decelerating rise in house prices. The rise in house prices so far this year is still higher than can be explained by our model.

Households' expectations were lowered further in the third quarter. We assume that this tendency will continue in the last quarter of the year, and that the economic outlook will be perceived as relatively weak into 2016. We then expect the mood to gradually change through 2016, in pace with increased activity growth, and to provide weakly positive impulses to developments in house prices for the remainder of the projection period. We expect real income growth of 2.6 per cent in 2015, which is the same as the two preceding years. House prices are expected to rise by just over an annualised 5.5 per cent in 2015. This corresponds to a real increase of about 3.5 per cent. As we have seen a strong rise in house prices so far this year, this means a levelling off or a moderate nominal fall in prices in the second half of this year. This can be regarded as a correction of the high house price level. Increasing uncertainty about the general trend in the Norwegian economy in the coming year may also contribute to the correction. Household credit growth is expected to be about 6.5 per cent in 2015, and to remain relatively stable at this level in the years ahead.

We forecast that, stimulated by even lower real interest rates after tax, the rise in house prices will pick up

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



Source: Statistics Norway.

slightly through 2016, but still be slightly lower than inflation, which is projected to be a bare 3 per cent. In 2017, household real disposable income will increase appreciably and cause house prices to rise by just under 4.5 per cent, or just over 3 per cent in real terms. In 2018, we expect that house prices will continue to rise, by just over 2 per cent, half a percentage point more than inflation, as a result of slightly higher real interest rates and two years of high housing investment.

Housing investment rose by about 1 per cent in both the first and the second quarter of this year after falling through 2014. The Norwegian Home Builders' Association reported an increase in both housing starts and sales of new dwellings in the first half of 2015. According to Statistics Norway's building statistics, developments in building start permits showed a rising tendency from a low level in the autumn of 2014. We estimate that housing investment, which follows housing starts with a time lag, will remain at about the same annual average level in 2015 as the previous year. This will result in positive investment growth through the remainder of 2015 and into 2016. We expect housing investment to increase by over 3.5 per cent in 2016 and by about 5 per cent in both 2017 and 2018. The last increase in particular 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.

# Prolonged decline in petroleum investment

According to the QNA, petroleum investment continued to decline in the second quarter of this year. Excluding the first quarter of this year, which showed a slight increase, investment has consistently declined through the past two years. The decline in investment compared with the same quarter last year was 11.6 per cent. Petroleum investment has also previously fluctuated widely and the decline so far has been less than during the investment crash of 1999 and 2000.

### Box 2. Effects of lower petroleum investment

The petroleum industry has been a major driving force in the Norwegian economy since the 1970s. For a number of years, increased investment activity in the petroleum sector generated solid positive growth impulses, but towards the end of 2013, investment began to fall. Since peaking in the third quarter of 2013, the investment level has fallen around 15 per cent, and we forecast that the fall will continue in the years ahead. This box illustrates the effects of this fall on the Norwegian economy. Our projection scenario is compared with a scenario in which, from 2014 onwards, investment remains at the same level as the annual average for 2013. In so doing, we show how 2014 and 2015 would have developed if petroleum investment had not fallen, and how developments in the next few years would have deviated from our current projection scenario. The analysis is counterfactual, since we change both the prehistory and the assumptions concerning future petroleum investment.

The projections are intentionally stylised in order to show the effects of lower investment, using the direct demand impulses generated by investment in the petroleum industry as starting point. Thus variables that can be directly or indirectly influenced by petroleum investment are kept unchanged. The analysis therefore does not capture the full effects on the Norwegian economy. For example, we have assumed that the production level in the petroleum industry is the same in both scenarios, and that employment in the industry and purchases of goods and services for current operations are not affected. Nor do the expectations of the participants regarding the country's economy change in this experiment. The effect of these assumptions, in isolation, is to make the differences between the two scenarios artificially small. On the other hand, we have also excluded some mechanisms that would have reduced these effects. This applies in

Table 1. Effects of constant petroleum investment from 2104. Percentage deviation from the counterfactual scenario unless otherwise indicated

	2014	2015	2016	2017	2018
Mainland GDP	-0.2	-0.8	-1.3	-1.5	-1.9
Manufacturing	0.2	-1.5	-2.0	-2.6	-3.4
Mechanical engineering	0.4	-2.6	-3.3	-4.4	-5.7
Mainland business investment	-0.3	-0.7	-1.3	-1.3	-1.5
Consumption by households etc.	0.0	-0.2	-0.6	-1.0	-1.4
House prices	0.0	-0.3	-1.1	-2.2	-3.6
Annual wages	0.0	-0.2	-0.5	-0.8	-1.2
Real disposable income	-0.1	-0.5	-0.9	-1.2	-1.5
CPI	0.0	0.0	0.1	0.1	0.0
Employment	0.0	-0.2	-0.4	-0.6	-0.8
Unemployment (level)	0.0	0.1	0.2	0.3	0.4
Memo:					
Investment in petroleum extraction and pipeline					
transport	-1.7	-13.0	-22.0	-28.6	-32.6

particular to the response from monetary and fiscal policy and in the foreign exchange market, all of which are assumed to remain constant. The oil price is also identical in both scenarios.

Given these reservations, our projections show that without the fall in investment, mainland GDP would have grown at less than trend (estimated at 2½ per cent) in 2015, and at somewhat over trend in subsequent years. This means that the decline in investment will push down mainland GDP by a projected 0.8 per cent in the current year and by 1.3 per cent next year – all compared with the counterfactual scenario. In 2017 and 2018 the differences between the two scenarios are 1.5 and 1.9 per cent, respectively. The effects are stronger for manufacturing, and particularly for the engineering industry where, according to our projections, the level of value added will be depressed by 2.6 per cent in the current year, rising to almost 6 per cent in 2018.

The projections also show that demand from the petroleum industry has a wide-ranging effect on the Norwegian economy. Lower investment, results in lower employment than would otherwise have been the case. This means that unemployment will be higher than in the counterfactual scenario, even though the impact is eased somewhat by the fact that the labour force is also reduced. The unemployment rate increases by 0.1 percentage point in 2015 as a result of the decline in investment, and by 0.2 to 0.4 percentage point in the years up to 2018. Household income also falls compared with the counterfactual scenario, as a result of lower growth in both wages and employment. This in turn results in lower consumption and lower housing demand, which means reduced housing investment and lower house prices.

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



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

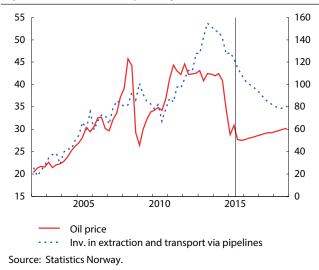
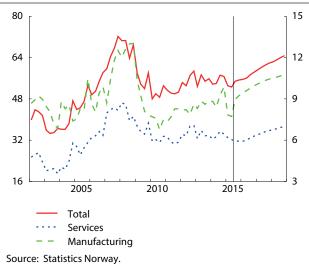


Figure 9. Investments. Mainland Norway. Seasonally adjusted, billion 2012-kr., quarterlyl



In the second quarter, investment declined as a result of less petroleum drilling and exploration, while investment in platforms was unchanged compared with the previous quarter. This fluctuates from quarter to quarter, and in the first quarter was pushed down by investment in platforms. Measured as a share of mainland GDP, petroleum investment declined from 9.1 per cent in the third quarter of 2013 to 7.7 per cent in the second quarter of 2015, i.e. a decline of close to 1.5 percentage points.

Oil prices continued to fall this summer, and there is little indication of an imminent increase in prices to what were considered normal levels before the fall. Low oil prices detract from the profitability of potential development projects. The appreciation of the dollar compensates for some of the decline in oil prices, while the latest developments in oil prices represent another negative factor for petroleum investment going forward.

With a decline in demand for capital goods and services, the prices of these products have also begun to soften. This will boost the profitability of development projects and curb the decline in investment. Several field developments are nearing completion, while development of the large Johan Sverdrup field did not begin until 2014. Investment in this field has been moderate so far, but will gather pace appreciably in 2016. We also expect a few minor field development projects to begin in the period ahead. The overall effect will be a further decline in investment in 2016 and the next two years.

The sharp depreciation of the krone is improving the competitiveness of the Norwegian supplier industry. This means that the import share may decrease, and thus help raise the share of Norwegian deliveries in the years ahead.

We assume that planned investment in gas pipelines will be cut back somewhat, and that exploration will continue to decline through 2016 and 2017, but that the level of drilling will be less affected. Fairly high investment in operating fields is expected, as many of them are profitable even with very low oil prices. We expect annualised investment in the petroleum industry to decline as a whole by just over 10 per cent this year and next, and somewhat less in the following years. Measured as a share of mainland GDP, the decline will be about 0.8 percentage point in 2016 and 2017, and 0.5 percentage point in 2018.

Petroleum extraction, measured in oil equivalent, increased appreciably in the second quarter of this year compared with the second quarter of last year. Oil extraction increased by a full 7 per cent, while gas extraction increased by 3 per cent. So far this year, overall extraction has been about 4 per cent higher than in the corresponding period last year. The export price for oil measured in NOK rose by 14 per cent in the second quarter, but was still 30 per cent lower than in the second quarter of 2014. The export price shadows developments in the Brent Blend spot price and is expected to move on a weak trend until the end of the year, before rising gradually.

The contracts that set the prices of Norwegian gas were previously linked to developments in oil prices. This correlation is less clear now. Gas prices rose through the winter and the spring, following a clear fall at the beginning of 2014. We expect gas prices to be affected by the same factors that have led to lower commodity prices, and thus to fall for the next few quarters before they too rise through 2017 and 2018.

# Business investment changes to moderate growth

After remaining relatively stable for about two years, mainland business investment has declined through the past three quarters. According to the QNA, investment was 8.1 per cent lower in the second quarter of 2015

than in the third quarter of 2014. However, there are several signs that the weak trend will give way to moderate growth towards the end of the year.

Business investment dipped by 1.1 per cent from the first to the second quarter of 2015. There was a corresponding fall in manufacturing investment, following a sharp decline in the previous quarter. This is mainly due to lower investment in manufacture of metal goods, electronic equipment and machinery and in petroleum refinement, chemicals and pharmaceuticals. Investment in services has been subdued recently. Investment in retail trade and transport in particular has been low for the past two quarters. However, these figures are uncertain, as there are few short-term statistics for investment in services. One exception is data on investment in commercial buildings, etc., which are based on building statistics. Sale and management of real property, mainly in the form of investment in commercial buildings, remained at the level of the last two years, also in the second quarter. Investment in other mainland goods production rose by 2.4 per cent.

Our forecasts are largely based on Statistics Norway's investment intentions survey. The latest survey indicates that manufacturing companies assume that investment will remain roughly unchanged in 2015. Given a low registered investment level in the first half of the year, this implies a gradual increase in investment in the second half of the year. Investment is expected to pick up further next year, and companies' forecasts indicate investment growth of 10 to 20 per cent in 2016 after adjustment for normal underreporting (see Box 1 in Økonomiske analyser 4/2014). In power supply, the projections for future investment point to about 10 per cent growth in both 2015 and 2016 from already high levels. In the past, growth has been mainly in electricity transmission and distribution, but strong growth is now expected in electricity production, mainly through upgrading of old power stations. The proposed change to five-year linear depreciation for wind power may lead to continued growth in investment in power supply also after 2016.

Norges Bank's Regional Network also charts economic developments in Norway by gathering information from enterprises and activities throughout the country. The report from before the summer indicated positive growth in investment during the next 12 months in both retail trade and other services.

Despite low business investment so far this year, we expect a change to a moderate rise in the near term. Even with the expected increase at the end of the year, the average investment level in 2015 will be somewhat lower than the level in 2014. An improved global economic situation from 2016 and a weak krone exchange rate mean that in the near term we expect increased investment in industries with few ties to the petroleum industry. We estimate growth in business investment at between 2 and 6 per cent annually, starting in 2016

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

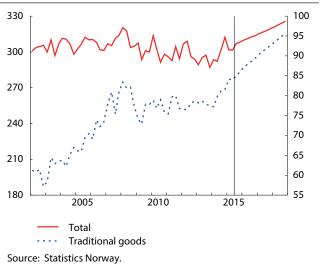
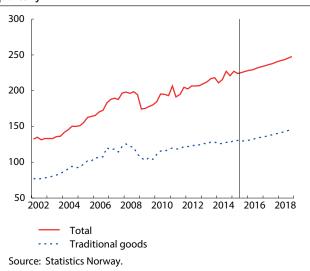


Figure 11. Imports. Seasonally adjusted, billion 2012-kr., quarterly



and until the end of the projection period. Despite this growth, the investment level in 2018 will remain well below the investment peak of 2008.

# The decline in oil prices has a negative impact on the external account

Seasonally adjusted QNA figures show a slight decline in the volume of traditional goods exports in the second quarter of this year, following growth in the previous four quarters. Exports of refined petroleum products fluctuate widely from quarter to quarter. Traditional goods exports excluding these products increased appreciably in the second quarter, and well above the underlying trend growth of about 1 per cent per quarter. Exports of fish and fish products rose substantially last year. Following a pronounced fall in the first quarter of this year, growth was high again in the second quarter. Growth in exports of farmed fish was much higher through the first half of this year than through last year. Exports of engineering products continued to grow for the fifth consecutive quarter. Petroleum exports increased in the second quarter of this year following a

pronounced fall in the first quarter, while gas exports declined sharply following a minor reduction in the first quarter. A strong increase in exports of services associated with petroleum and gas extraction and in non-residents' consumption in Norway led to a rise in total exports of services in the second quarter, following a large decline in the first quarter of this year.

The rise in prices for traditional goods exports was weak last year, and the weak rise continued in the first half of the year. The decline in global market prices for many commodities is a factor underlying these developments. Prices for service exports have also moved on a weak trend this year, largely due to the decline in prices for gross freight exports in international shipping

Growth through last year and into 2015 has brought the level of traditional goods exports to 5 per cent higher than last year's average. The recent depreciation of the krone will add further impetus to mainland exports. Assumed increasing growth in Norwegian export markets will also stimulate export developments. Oil and gas exports are limited by production capacity, and unlikely to change much in the projection period.

The volume of traditional goods imports remained at roughly the same level through 2013 and 2014. An increase in the first quarter of this year and close to zero growth in the second quarter raised the level by almost 3 per cent, according to seasonally adjusted QNA figures. Imports of passenger cars, car parts and other vehicles, metal goods and chemical products have increased in the past few quarters, while imports of metals, clothing and footwear have decreased. A decline in Norwegians' consumption abroad, services linked to transport, and legal and business services led to a slight reduction in the volume of overall service imports in the second quarter. The depreciation of the krone has provided substantial impetus to the rise in import prices during the past year, even though prices for imports of traditional goods and services alike declined in the second quarter of this year.

The depreciation of the krone and weak domestic demand will curb import growth this year and next year before increased domestic demand, a slightly stronger krone and the import of a number of fighter aircraft stimulate import growth in 2017 and 2018.

A stronger rise in volume and prices for total imports than for total exports lowered the trade surplus in 2013 and 2014. The large reduction in oil prices and terms of trade losses are expected to reduce the trade surplus substantially both this year and next, before an assumed rise in oil prices and terms of trade gains transforms the slump into an upturn in 2017 and 2018. A rising net factor income and transfers surplus will also lead to the current account surplus as a share of GDP remaining at 5–6 per cent during the projection period.

### Weak activity growth in the near term

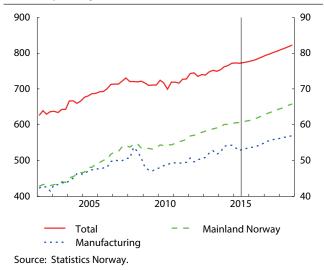
Mainland GDP rose by an annualised 0.7 per cent in the second quarter of 2015. This was the fourth consecutive quarter with growth below trend, which is estimated at 2½ per cent. Mainland GDP has only risen by a total of 0.9 per cent since the second quarter of 2014.

Lower activity in manufacturing in particular pushed down GDP growth. Manufacturing growth braked through the second half of last year, and value added has now declined appreciably for two consecutive quarters. The decline is primarily due to weak developments among suppliers to the petroleum industry, and was most evident in the shipbuilding and transport equipment industry, where value added has declined by a good 14 per cent in the course of the past three quarters. The decline in manufacturing as a whole was curbed by high growth in certain industries that depend less on deliveries to the petroleum industry. This particularly applies to production of commodity-based manufacturing products, like chemicals and metals. These manufacturing segments also deliver to the petroleum sector, but they produce far more for export. The level of activity has thus been boosted by improved cost-competitiveness as a result of a weaker krone and low wage growth.

The ripple effects of reduced activity in the petroleum sector are by no means limited to manufacturing. Even excluding manufacturing and mining, mainland GDP did not grow by more than an annualised 1.5 per cent in the second quarter. This is also well below trend growth. Service industries other than general government – which accounts for almost half of mainland GDP – only rose by an annualised 0.6 per cent in the second quarter. If we disregard household services, production rose even less. Value added in general government rose by an annualised rate of 1.5 per cent in the second quarter.

On the other hand, the rise in the level of activity in other goods-producing industries was relatively pronounced, and value added for this sector as a whole rose by an annualised 5.2 per cent. The sector mainly consists of the primary industries, power supply and construction. The strong growth in the second quarter can be largely attributed to higher value added in fishing and aquaculture and in energy production. The former industry climbed by an annualised rate of almost 49 per cent, making one of the strongest positive contributions to growth in mainland GDP. Fishing is naturally enough an industry where production fluctuates widely, and in pace with naturally-occurring conditions. The same is true of power production. There is thus little reason to expect a similar contribution to growth from these two industries in the period ahead. Value added in the construction industry remained virtually unchanged in the second quarter, following negative growth in the two previous quarters, seen as a whole.

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



We assume that demand from the petroleum sector will continue to decline in the near term, and that it will continue to place a damper on the general level of activity in the economy. Manufacturing, particularly the segments that depend on deliveries to the petroleum sector, will be particularly impacted. We accordingly expect value added in manufacturing as a whole to develop weakly for the remainder of the year, and then pick up from early next year. Several years of improved cost-competitiveness will contribute to this upswing, and we therefore expect that the import share may decline somewhat for certain goods. International demand will also pick up gradually, while the negative impulses from the petroleum sector will wane. On balance, our projections indicate that this will yield moderate but increasing activity growth in manufacturing from 2016 and until the end of the projection period.

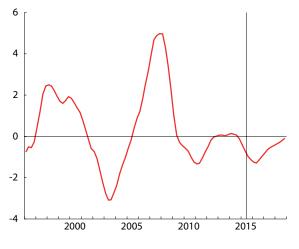
We also expect higher growth in other mainland industries from next year. Growth in housing investment is expected to pick up somewhat, as is mainland business investment. All of this will help to push up mainland GDP. We further expect relatively high growth in general government demand, and that it will be higher than growth in the economy generally for the next two years. General government output will thus also contribute to moderating the current slump.

On balance, we assume fairly positive growth for many mainland industries through 2016 and until the end of 2018. Mainland GDP growth may thus rise above trend during the second half of 2016, following weak growth during the whole of this year. Our projections show that the weak cyclical upswing may persist through the projection period.

### Rising unemployment

We have yet to see signs of a broad-based decline in overall employment as a result of reduced activity in the petroleum sector, and employment rose moderately

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



Source: Statistics Norway.

by 0.1 and 0.2 per cent in the first and second quarters of this year respectively. Increased employment in several manufacturing segments and in construction made a positive contribution. However, employment growth is now substantially lower than the average annual growth of just over one per cent for the past two years. The working age population also increased in the first and second quarters, but at a slightly slower rate than previously. Employment as a share of the working age population was thus virtually unchanged from the first to the second quarter.

The employment pattern during the past year differs from developments in recent years. For a long time, employment growth in services associated with extraction of crude oil and natural gas was particularly strong, but employment in this sector has fallen during the past year, and the decline from the first to the second quarter was 2.4 per cent. Employment in manufacturing segments that primarily supply the petroleum sector, like shipbuilding and transport equipment and repair and installation of machinery and equipment, has also declined during the past year. Overall, employment in manufacturing has declined by 0.8 per cent since the first quarter of this year.

In the second quarter, construction employment rose by 0.7 per cent, while retail trade employment edged up by 0.1 per cent. During the past three–four years, the tendency has been for stable growth in construction and reduced or unchanged employment in retail trade. There was some decline in employment in business services and in finance and insurance. Employment in education and health care services has risen slightly. It also increased in central and local government, and most in the former, with growth of 0.4 per cent from the first to the second quarter. In the first quarter, the situation was the reverse, while in recent years central government employment has grown more than local government.

Figure 14. Labour force. employment and number of man-hours. Seasonally adjusted and smoothed indices. 2012=100

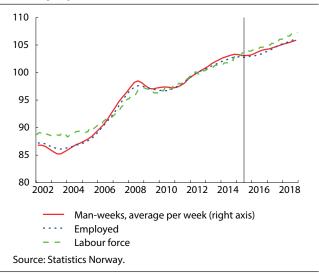
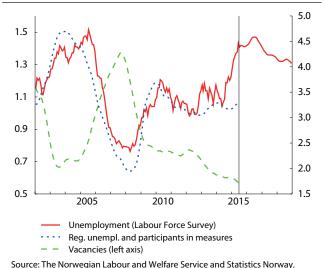


Figure 15. Unemployment and number of vacancies. Per cent of labour force. Seasonally adjusted and smoothed



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The labour force has increased substantially in recent years, and grew in the second quarter by just under 0.7 per cent. Since 2013 there has been a steady, strong increase in the labour force participation rate among people aged 55 to 66, and the rate also rose substantially in the second quarter. 69 per cent of the persons in this group are now part of the labour force, against 65.7 per cent in 2013. The participation rate for the group aged between 15 and 24 also rose substantially from the first to the second quarter, but the participation rate of this group fluctuates considerably from quarter to quarter.

The relatively moderate employment growth, combined with a relatively high increase in the labour force, led to a rise in unemployment in the second quarter of this year. The latest figures from Statistics Norway's Labour Force Survey (LFS) show that the average unemployment rate in the period May to July was 4.5 per cent. Unemployment has risen steadily from 3.2 per cent in the spring of 2014. The less tight labour market also

means that it will become more difficult for vulnerable groups to find work, which will widen the differences in employment rates between age groups. Unemployment among persons aged 15 to 24 in particular has surged in this period from 8.0 to 11.3 per cent.

The statistics of the Norwegian Labour and Welfare Organisation (NAV) for persons registered as unemployed or on labour market programmes show approximately unchanged unemployment through 2014, but an increase from January to August this year of 7 700 persons. In August, some 95 000 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 decidedly largest percentage increase in unemployment is in engineering and ICT. Unlike the LFS unemployment figures, the NAV figures for August show a decline in unemployment for persons under the age of 24. However, the LFS captures job seekers who are not entitled to unemployment benefit, and thus have no incentive to register as unemployed. NAV's figures for August show that unemployment increased most for persons over the age of 50, compared with the same time last year.

Until August, the number of registered unemployed increased most in counties with close ties to the petroleum sector, while the number declined in other counties. In August, unemployment decreased most in Hedmark county, by 13 per cent compared with the same time last year. During the same period, unemployment was reduced by 7 and 4 per cent, respectively, in the counties of Vestfold and Østfold. In the second quarter, there was higher net migration to these counties than the national average, when the population of the counties is taken into account. In certain other counties, like Oslo and Oppland, the number of unemployed declined up to August this year, but the decline in the number of unemployed there must be viewed bearing in mind that there was net migration out of these counties. It is also worth noting that the oil counties of Rogaland, Hordaland and Møre og Romsdal have a higher share of persons who emigrate abroad of those who move out than the other counties.

Despite the large migration flows to counties with lower unemployment, NAV's figures show an increase in the number of long-term unemployed. The long-term unemployed, defined as persons who have been unemployed for over 26 weeks, including persons who had previously participated in labour market programmes for a period, now make up 47 per cent of all unemployed.

We forecast that employment this year will be virtually unchanged compared with last year. Next year we expect a moderate increase, before a slightly steeper rise in 2017 and 2018. This must be seen in the context of the general economic situation. Higher domestic demand will increase employment in construction and in retail trade in the period to 2017. Manufacturing is

### Box 3 What is the probability of unemployment rising above 5 per cent?

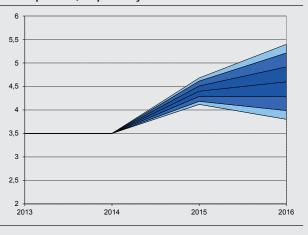
Statistics Norway normally presents forecasts for the Norwegian economy each quarter. In the following we evaluate the uncertainty of our projection for unemployment as a percentage of the labour force (LFS) on the basis of historical deviations between projections made in September and final figures.

There are a number of reasons why the unemployment projections may differ from the final figures. Developments in the global economy, oil prices, fiscal policy, exchange rates and monetary policy may for example follow a different path from the one we have used as a basis. Some of these impulses may have opposing effects on unemployment, however. For example, weaker developments in the global economy, which in isolation result in higher unemployment, may be counteracted by lower interest rates, which in isolation result in lower unemployment. The difference between our unemployment projection and the final figure is therefore affected by how the various uncertainty factors materialise. The difference is also affected by the fact that there is uncertainty associated with the functioning of the economy as it is described in the KVARTS model which we use in our forecasting. In order to be able to say anything about the uncertainty surrounding our projections, we assume that all deviations pertain to a given statistical distribution (Student)s t-distribution with the same expectation and spread) and are independent. The spread is based on the deviations between actual outcomes and projections made in September for unemployment the same year and the following year. The data cover the years 1991–2014, encompassing a total of 23 deviations for both current and following year.

Figure 1 shows the uncertainty in our projections for 2015 and 2016. In this Economic Survey, unemployment as an annual average is projected to rise from 3.5 per cent in 2014 to 4.4 per cent in 2015 and then further to 4.6 per cent in

2016. The intervals in the figure indicate the uncertainty surrounding these projections. Given the assumptions described above, the probabilities that the difference between projections and accounts figures lies within these intervals are 50, 80 and 90 per cent, respectively. Whereas historical forecast errors indicate that the projection for 2015 can be regarded as relatively certain, there is more uncertainty attached to the projection for 2016. For example, there is a 50 per cent probability that unemployment will not differ more than 0.1 percentage point from our projection for 2015. In 2016, on the other hand, there is a 50 per cent probability that unemployment will lie outside an interval of 0.3 percentage point above or below the projection. There is accordingly a probability of about 25 per cent that unemployment in 2016 as an annual average will be 5.0 per cent or higher.

Figure 1. Unemployment projection (LFS). The certainties that the final figure will lie within the three intervals are 50, 80 and 90 per cent, respectively



characterised by negative impulses from the petroleum sector, and despite high growth in export markets and improvement of cost-competitiveness, overall employment will decline. Moderate, stable employment growth is expected in the public sector through the projection period, with strongest growth in municipal service production.

The international economic situation and a somewhat less tight labour market in Norway will reduce inward labour migration. We still expect positive net inward migration. The labour supply among workers aged 67 to 74 is assumed to increase going ahead. On balance we expect the labour force to grow faster than employment in 2015 and 2016. Unemployment is thus expected to increase through 2015 and peak in 2016. We project that the annual average for 2016 will be about 4.6 per cent. The unemployment rate is then expected to decline through the projection period, in pace with an increase in activity in the Norwegian economy.

### Low wage growth in the near term

Following annual wage growth of about 4 per cent in the period 2009 to 2013, annual wage growth in 2014

declined to 3.1 per cent. This was the lowest nominal wage growth for 20 years, and real wage growth was just over one per cent. National accounts figures for 2014 show that annual wage growth in manufacturing was 3.1 per cent. This was very close to the projected ceiling of 3.3 per cent in the wage settlement. Developments in other industries show that the wage leader was generally followed, and there were very small differences in wage growth between the industries in 2014. Higher unemployment through the second half of last year, particularly in occupations related to the petroleum sector, has likely contributed to depressing growth in average wages for the economy as a whole.

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 a ceiling of 2.7 per cent. Growth in the manufacturing wage index from the first to the second half-year is also moderate. The year's settlement indicates that annual wage growth for manufacturing workers will be even lower in 2015 than in 2014. Technical administrative personnel generally have local wage negotiations, and greater

uncertainty is thus associated with developments for this group. We expect higher unemployment to exert downward pressure on wage drift this year too. Outside manufacturing, the wage carry-overs into 2015 are low and the results of several of the wage settlements are also moderate. The central government has the same ceiling 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. Wage statistics show no pay increase from the first to the second quarter.

Growth in average annual wages is 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 in isolation might indicate. The composition of employment across industries has an offsetting effect, with a weak tendency in some industries with high wage levels. We project wage growth in 2015 at 2.8 per cent. Consumer price inflation in 2015 is likely to be at about the same level as last year, and real wage growth in 2015 is thus expected to be slightly lower than in 2014.

The krone has depreciated substantially since early 2013 and up to the second half of August this year, resulting in improved cost-competitiveness and, in isolation, slightly higher wage growth. However, we expect the krone to undergo a slight general strengthening in the period ahead and thus dampen this effect. The share of manufacturing costs represented by labour will remain fairly stable through the projection period.

We forecast that annual wage growth will not rise above 3 per cent in the projection period. The moderate wage growth must be viewed in conjunction with the fact that parts of the economy have been significantly impacted by the fall in oil prices. The reduced demand from the petroleum sector and fall in oil prices reduces profitability in parts of the wage leader segment, and unemployment rises. This will reduce wage growth. both because the demands in the centralised wage negotiations will be under pressure and because wage drift will be reduced. In addition, there are composition effects through lower employment in the petroleum sector in Norway. The pay level in the petroleum industry is higher across the board than in the rest of the economy, and in isolation the effect of reduced employment will exert downward pressure on growth in average wages through the entire projection period. Inflation will nonetheless lead to a rise in real wages of around 0.5 per cent this year, while they will remain unchanged next year and increase by about 1 per cent in 2017 and 2018.

### Rise in underlying inflation

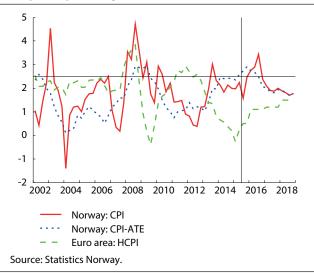
The prolonged, sharp weakening of the krone has caused underlying inflation to rise in recent months. The year-on-year rise in the consumer price index, adjusted

for tax changes and excluding energy products (CPI-ATE) was 2.4 per cent in May, the same as the annual average for 2014. Inflation then rose to 3.2 per cent in June before falling back to 2.6 per cent in July. The strong rise in June can be largely explained by a rise in prices for air travel, with the measurement date in 2015 coinciding with the start of the school holidays. This price rise was partly reversed in July. Food prices rose less in July this year than in the same period last year and are also part of the explanation for the decline in the year-on-year rise for this month. The year-on-year rise in the consumer price index (CPI) fell to 1.8 per cent in July. As a consequence of weak developments in prices for energy products, CPI inflation has been lower than CPI-ATE inflation so far this year. In July, the rise in the CPI was 0.8 percentage point lower than the rise in the CPI-ATE. The weak rise in prices for energy products in July compared with the same month the previous year can be largely attributed to the fact that electricity prices, including grid rental, fell by 14.5 per cent, while the fall in fuel prices was more moderate. Average inflation for the period January–July 2015 was 2.1 per cent for CPI inflation and 2.5 per cent for CPI-ATE inflation compared with the same period the previous year.

The increase in underlying inflation since the first quarter of 2013 has been closely connected to the weakening of the krone and to imported inflation. The 12-month rise in the sub-index for imported consumer goods in the CPI-ATE was 1.3 per cent at the beginning of this year, and close to the annualised average for 2014. It increased to 2.4 per cent in May and increased further to 3.2 per cent and 2.9 per cent in June and July, respectively. In July the rise in prices for this product group as a whole was higher than the overall rise in the CPI-ATE, and accordingly pushed up underlying inflation. The krone weakened further in August. As it takes time for the krone exchange rate to feed fully through to Norwegian prices, we expect that the rate at which prices for imported consumer goods rise will continue to increase for a good while to come, pushing up CPI-ATE inflation towards 3 per cent at the end of the year. Given an expected moderate strengthening of the import-weighted krone exchange rate in the near term, inflationary impulses generated by imported goods and services are expected to ease a little way into 2016.

The exchange rate also affects prices for intermediate inputs, and therefore affects the prices of all goods and services produced in Norway. Whereas higher import prices push the industries' costs up, lower wage growth has the opposite effect. Annual wage growth has slowed appreciably since 2013 and is expected to be moderate in the years ahead as well. Labour productivity normally picks up when the level of activity in the economy increases. Developments in Norwegian labour costs and productivity are expected to generate relatively moderate inflationary impulses later in the projection scenario.

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



According to the CPI, the 12-month rise in imputed rent has remained stable through the year, and in July 2015 was 2.4 per cent, as it was at the beginning of the year. The 12-month rise in actual rent paid has remained steady at a higher level through the year, and has fluctuated around 3 per cent, but fell by 0.2 per cent, to 2.8 per cent, from June to July. Developments in rents actually paid are derived from market rents that are obtained each month from a sample of households in rented dwellings. When new rental contracts are made, the rent can be fixed in accordance with market developments, whereas rents in existing rentals are largely adjusted in accordance with developments in the CPI. Given a weak economic situation in petroleum-based regions, and the aforementioned index regulation of existing rentals, there is reason to assume that developments in rents as a whole will serve to slow the rise in inflation during the coming year.

High inflows of water into reservoirs contributed to pushing the spot price excluding taxes and grid charges on the Nordic power exchange down to less than 10 øre/kWh in July. The system prices were thus back to the same low levels as during the summer of 2012. As a result, the consumer price index for electricity including grid rental fell markedly from July 2014 to July 2015. Owing to the fall in electricity prices combined with a moderate fall in fuel prices, CPI inflation is now appreciably lower than CPI-ATE inflation. The tax on electricity increased by 0.5 øre per kWh from 1 July 2015, so that the rate is now 14.15 øre per kWh and, viewed in isolation, was higher than the spot price in July. In general, the special taxes on energy products dampen the effects on consumer prices of fluctuations in underlying producer prices. This is one reason why the consumer price index for petrol only fell by 2.4 per cent from July 2014 to July 2015, while the price of crude oil fell by 30 per cent, measured in Norwegian kroner, in the same period.

There is considerable uncertainty surrounding naturally occurring factors that affect the level of electricity prices. On the basis of the forward prices, we expect electricity prices including grid charges to fall by about 4 per cent as an annual average in 2015 and rise by over 9 per cent next year. In subsequent years we assume that electricity prices will evolve in line with general inflation. Recent developments in crude oil prices indicate that fuel prices will remain low for a good while to come. Given an expected increase in crude oil prices, they will start rising in the early part of next year and increase slightly more than general price inflation in 2017 and 2018.

Price impulses from imported goods are likely to push up inflation in the near term. How much and for how long will be largely determined by exchange rate movements. Low wage growth and a moderate rise in rents dampen the effects of the weaker krone on inflation.

According to our projections, CPI-ATE inflation will average 2.6 per cent for the year of 2015, while CPI inflation will be 2.1 per cent, given our assumptions concerning developments in energy prices and taxes. An expected appreciation of the krone coupled with moderate wage growth and increased productivity growth will bring inflation down in subsequent years. In our projections, CPI-ATE inflation will slow to 2.5 per cent in 2016 and fall further to 1.9 per cent and 1.8 per cent in 2017 and 2018 respectively. Given our assumptions about developments in energy prices and indirect taxes, CPI inflation will increase 0.4 percentage point more than CPI-ATE inflation in 2016 and end at 2.9 per cent. The rise in the CPI will then closely parallel the rise in the CPI-ATE for 2017 and 2018.

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

	Unadj	usted				Seas	onally adj	usted			
	2013	2014	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1	15:2
Final consumption expenditure of households and NPISHs	1 201 060	1 225 090	299 688	300 591	301 360	303 710	306 015	306 296	308 919	312 122	313 817
Household final consumption expenditure	1 144 644	1 166 561	285 536	286 424	287 146	289 299	291 473	291 507	294 078	297 377	299 098
Goods	554 754	558 843	138 860	137 756	137 685	139 125	139 877	139 412	140 416	141 388	142 882
Services	540 065	556 836	134 513	135 955	136 489	137 677	138 727	139 359	140 874	142 314	143 124
Direct purchases abroad by resident households	82 559	85 065	20 261	20 938	21 350	20 786	21 314	21 409	21 543	22 403	22 463
Direct purchases by non-residents	-32 734	-34 183	-8 098	-8 225	-8 379	-8 288	-8 446	-8 673	-8 755	-8 727	-9 37
Final consumption expenditure of NPISHs	56 416	58 529	14 152	14 168	14 215	14 411	14 542	14 790	14 841	14 744	14 720
Final consumption expenditure of general government	629 119	646 281	156 609	157 527	159 074	160 169	161 135	161 980	163 196	163 422	164 298
Final consumption expenditure of central government	314 723	324 680	78 229	78 607	79 602	80 053	80 953	81 632	82 244	82 520	83 02!
•	275 637	285 579	68 450	68 785	69 927	70 306	71 195	71 851	72 433	72 744	73 109
Central government, civilian	39 087	39 100	9 779	9 821	9 675	9 747	9 759	9 781	9 811	9 777	9 916
Central government, defence Final consumption expenditure of	314 395	321 601	78 380	78 921	79 472	80 115	80 182	80 348	80 952	80 902	81 273
local government											
Gross fixed capital formation	704 846	709 082	176 586	178 683	180 252	178 022	178 761	179 751	173 446	172 422	170 100
Extraction and transport via pipelines	204 477	201 025	50 617	53 704	53 061	51 959	51 920	50 303	46 760	47 162	45 727
Ocean transport	8 125	7 607	2 225	1 978	1 803	1 456	1 732	2 407	2 052	2 266	1 707
Mainland Norway	492 244	500 451	123 744	123 002	125 387	124 606	125 109	127 040	124 635	122 995	122 666
Industries Service activities incidential to	220 588	221 107	57 220	54 810	55 742	53 703	53 960	57 184	56 592	53 108	52 542
extraction	3 244	2 610	1 381	920	1 261	551	749	673	636	714	669
Other services	132 497	132 693	34 347	32 789	32 527	31 782	32 558	34 715	33 726	32 229	31 519
Manufacturing and mining	34 591	36 200	8 837	8 591	8 861	8 807	8 385	9 262	9 844	7 823	7 722
Production of other goods	50 255	49 604	12 656	12 510	13 094	12 563	12 268	12 534	12 385	12 342	12 633
Dwellings (households)	149 206	146 886	36 991	37 200	37 852	37 518	36 984	36 757	35 847	36 247	36 742
General government	122 450	132 458	29 533	30 992	31 794	33 385	34 165	33 099	32 196	33 640	33 382
Changes in stocks and statistical discrepancies	140 216	145 351	31 551	34 474	39 758	29 257	39 423	42 141	34 813	49 612	45 778
Gross capital formation	845 062	854 434	208 137	213 157	220 010	207 279	218 185	221 892	208 259	222 034	215 878
Final domestic use of goods and services	2 675 241	2 725 805	664 434	671 276	680 444	671 157	685 335	690 169	680 374	697 578	693 994
Final demand from Mainland Norway	2 322 423	2 371 822	580 041	581 121	585 822	588 485	592 259	595 317	596 750	598 539	600 782
Final demand from general government	751 568	778 739	186 142	188 520	190 867	193 554	195 301	195 079	195 392	197 062	197 68°
5											
Total exports	1 168 538	1 200 168	295 186	297 236	287 079	293 315	292 129	301 867	312 235	301 757	301 601
Traditional goods	312 541	319 642	78 616	77 744	77 504	77 217	79 775	81 205	81 532	84 106	83 962
Crude oil and natural gas	564 225	572 871	144 421	144 742	134 933	142 408	136 874	143 489	149 308	140 156	139 045
Ships, oil platforms and planes	8 512	8 291	1 623	2 389	2 589	3 517	1 573	1 074	2 099	1 587	1 229
Services	283 260	299 364	70 526	72 361	72 052	70 173	73 907	76 099	79 296	75 907	77 364
Total use of goods and services	3 843 779	3 925 973	959 620	968 512	967 522	964 472	977 464	992 035	992 609	999 335	995 595
Total imports	856 565	872 783	212 151	216 512	218 110	210 784	215 198	226 832	220 897	226 951	223 935
Traditional goods	508 128	506 464	125 670	127 943	128 313	125 476	126 429	127 701	127 315	130 476	130 317
Crude oil and natural gas	16 437	14 676	3 948	4 854	3 316	3 552	3 309	3 685	4 291	4 301	3 585
	25 211	27 575	6 372	6 949	5 596	4 726	5 346	12 707	4 802	6 123	4 616
Ships, oil platforms and planes Services	306 790	324 068	76 161	76 766	80 885	77 029	80 113	82 739	84 489	86 051	85 417
Gross domestic product (market prices)	2 987 214	3 053 190	747 468	752 000	749 413	753 689	762 266	765 203	771 713	772 384	771 659
Gross domestic product Mainland Norway (market prices)	2 347 170	2 399 701	585 171	588 172	591 588	594 223	600 995	601 221	603 557	605 634	606 643
Petroleum activities and ocean	640.044	652 400	162.207	162.020	157.024	150.466	161 274	162.002	160 150	166.751	165.017
transport	640 044	653 489	162 297	163 828	157 824	159 466	161 271	163 983	168 156	166 751	165 016
Mainland Norway (basic prices)  Mainland Norway excluding general	2 030 965	2 078 469	506 338	508 891	512 168	514 633	520 357	521 205	522 666	524 209	525 105
government	1 541 130	1 580 518	384 226	386 201	388 554	390 473	396 054		397 648	398 942	399 360
Manufacturing and mining	207 747	215 079	52 088	52 732	51 821	52 418	54 059	54 184	54 274	53 614	52 794
Production of other goods	246 140	257 369	60 952	60 757	62 684	63 032	65 289	64 762	64 483	64 816	65 642
Services incl. dwellings (households)	1 087 243	1 108 070	271 187	272 712	274 049	275 023		277 805	278 891	280 513	280 925
General government	489 835	497 951	122 111	122 690	123 614	124 161	124 303	124 453	125 017	125 267	125 745
Taxes and subsidies products	316 205	321 232	78 834	79 281	79 421	79 590	80 638	80 015	80 891	81 424	81 538

Source: Statistics Norway.å.

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

	Unadju	ısted				Seaso	nally adju	ısted			
	2013	2014	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1	15:2
Final consumption expenditure of											
households and NPISHs	2.1	2	0.2	0.3	0.3	0.8	0.8	0.1	0.9	1	0.!
Household final consumption expenditure	2.1	1.9	0.1	0.3	0.3	0.7	0.8	0	0.9	1.1	0.6
Goods	1.1	0.7	-0.9	-0.8	-0.1	1	0.5	-0.3	0.7	0.7	1.1
Services	2.4	3.1	1.2	1.1	0.4	0.9	8.0	0.5	1.1	1	0.6
Direct purchases abroad by resident households	7.8	3	1	3.3	2	-2.6	2.5	0.4	0.6	4	0.3
Direct purchases by non-residents	3.4	4.4	1.2	1.6	1.9	-1.1	1.9	2.7	0.9	-0.3	7.4
Final consumption expenditure of NPISHs	2	3.7	1.6	0.1	0.3	1.4	0.9	1.7	0.3	-0.6	-0.2
Final consumption expenditure of general	_										
government	1.7	2.7	0.3	0.6	1	0.7	0.6	0.5	8.0	0.1	0.5
Final consumption expenditure of central	1.4	2.2	0.4	٥٦	1.2	0.6	1 1	0.0	0.7	0.2	0.0
government	1.4	3.2	-0.4	0.5	1.3	0.6	1.1	0.8	0.7	0.3	0.6
Central government, civilian	1.8	3.6	-0.4	0.5	1.7	0.5	1.3	0.9	0.8	0.4	0.5
Central government, defence	-0.9	0	-0.3	0.4	-1.5	0.7	0.1	0.2	0.3	-0.4	1.4
Final consumption expenditure of local government	1.9	2.3	1	0.7	0.7	0.8	0.1	0.2	0.8	-0.1	0.5
government											
Gross fixed capital formation	6.8	0.6	4	1.2	0.9	-1.2	0.4	0.6	-3.5	-0.6	-1.3
Extraction and transport via pipelines	17.1	-1.7	7.7	6.1	-1.2	-2.1	-0.1	-3.1	-7	0.9	-3
Ocean transport	18.2	-6.4	2.4	-11.1	-8.8	-19.2	18.9	39	-14.8	10.4	-24.7
Mainland Norway	2.9	1.7	2.5	-0.6	1.9	-0.6	0.4	1.5	-1.9	-1.3	-0.3
Industries	-1.1	0.2	8.3	-4.2	1.7	-3.7	0.5	6	-1	-6.2	-1.1
Service activities incidential to extraction	-69.3	-19.6	-534.1	-33.4	37.1	-56.3	35.9	-10.1	-5.5	12.2	-6.4
Other services	0.1	0.1	4.4	-4.5	-0.8	-2.3	2.4	6.6	-2.8	-4.4	-2.2
Manufacturing and mining	5.6	4.7	6.4	-2.8	3.1	-0.6	-4.8	10.5	6.3	-20.5	-1.3
Production of other goods	6.2	-1.3	6.2	-1.1	4.7	-4.1	-2.3	2.2	-1.2	-0.3	2.4
Dwellings (households)	6.4	-1.6	-0.8	0.6	1.8	-0.9	-1.4	-0.6	-2.5	1.1	1.4
General government	6.5	8.2	-3.4	4.9	2.6	5	2.3	-3.1	-2.7	4.5	-0.8
Changes in stocks and statistical	10.6	3.7	-7.8	9.3	15.3	-26.4	34.7	6.9	-17.4	42.5	-7.7
discrepancies Gross capital formation	7.4	1.1	2	2.4	3.2	-5.8	5.3	1.7	-6.1	6.6	-2.8
Gross Capital formation	7	1.1		۷.٦	J.2	5.0	5.5	1.7	0.1	0.0	2.0
Final domestic use of goods and services	3.6	1.9	0.8	1	1.4	-1.4	2.1	0.7	-1.4	2.5	-0.5
Final demand from Mainland Norway	2.1	2.1	0.7	0.2	8.0	0.5	0.6	0.5	0.2	0.3	0.4
Final demand from general government	2.4	3.6	-0.3	1.3	1.2	1.4	0.9	-0.1	0.2	0.9	0.3
	2	2.7	2.1	0.7	2.4	2.2	0.4	2.2	2.4	2.4	0.1
Total exports	-3 1	2.7	2.1	0.7 -1.1	-3.4	2.2 -0.4	-0.4 3.3	3.3 1.8	3.4 0.4	-3.4 3.2	-0.1
Traditional goods	-7.6	2.3 1.5	0.6 2.5	0.2	-0.3 -6.8	5.5	-3.9	4.8	4.1	-6.1	-0.2 -0.8
Crude oil and natural gas	-7.6 -1.5	-2.6	-13.7	47.2	8.4	35.9	-55.3	-31.7	95.5	-24.4	-22.6
Ships, oil platforms and planes	2.9	-2.6 5.7	3.2	2.6	-0.4	-2.6	-55.3 5.3	-31.7	4.2	-24.4 -4.3	1.9
Services	2.9	5.7	3.2	2.0	-0.4	-2.0	5.5	3	4.2	-4.5	1.5
Total use of goods and services	1.5	2.1	1.2	0.9	-0.1	-0.3	1.3	1.5	0.1	0.7	-0.4
3											
Total imports	4.3	1.9	1.2	2.1	0.7	-3.4	2.1	5.4	-2.6	2.7	-1.3
Traditional goods	3.2	-0.3	-0.5	1.8	0.3	-2.2	0.8	1	-0.3	2.5	-0.1
Crude oil and natural gas	11.2	-10.7	4.6	22.9	-31.7	7.1	-6.8	11.3	16.4	0.2	-16.6
Ships, oil platforms and planes	23	9.4	-0.2	9	-19.5	-15.5	13.1	137.7	-62.2	27.5	-24.6
Services	4.5	5.6	4	0.8	5.4	-4.8	4	3.3	2.1	1.8	-0.7
Gross domestic product (market prices)	0.7	2.2	1.2	0.6	-0.3	0.6	1.1	0.4	0.9	0.1	-0.1
Gross domestic product (market prices)  Gross domestic product Mainland Norway											
(market prices)	2.3	2.2	0.5	0.5	0.6	0.4	1.1	0	0.4	0.3	0.2
B. I. was	-4.4	2.1	2.7	0.0	2.7	1	1.1	1.7	2 -	0.0	- 1
Petroleum activities and ocean transport		2.1	3.7	0.9	-3.7	0.5	1.1		2.5	-0.8	-1
Mainland Norway (basic prices) Mainland Norway excluding general	2.2	2.3	0.5	0.5	0.6	0.5	1.1	0.2	0.3	0.3	0.2
government	2.5	2.6	0.5	0.5	0.6	0.5	1.4	0.2	0.2	0.3	0.1
Manufacturing and mining	3.2	3.5	2.3	1.2	-1.7	1.2	3.1	0.2	0.2	-1.2	-1.5
Production of other goods	2.5	4.6	-1	-0.3	3.2	0.6	3.6	-0.8	-0.4	0.5	1.3
Services incl. dwellings (households)	2.3	1.9	0.5	0.6	0.5	0.4	0.6	0.4	0.4	0.6	0.1
General government	1.4	1.7	0.6	0.5	0.8	0.4	0.1	0.1	0.5	0.2	0.4
Taxes and subsidies products	2.5	1.6	0.5	0.6	0.2	0.2	1.3	-0.8	1.1	0.7	0.1

Source: Statistics Norway.å.

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

	Unadjusted					Seaso	nally adju	ısted			
	2013	2014	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1	15:2
Final consumption expenditure of households and NPISHs	102.8	105.2	102.5	103.4	103.9	104.2	104.9	105.6	106.1	107.0	107.4
Final consumption expenditure of general government	103.9	106.8	103.2	104.2	104.8	105.7	106.6	107	108.1	109.8	110.2
Gross fixed capital formation	103	105.4	102.4	103.3	103.9	104.4	104.9	106	106.4	107.2	107.7
Mainland Norway	102.6	104.6	102.1	103.1	103.4	103.7	104	105.1	105.3	106.0	106.3
Final domestic use of goods and services	103	105.5	101.7	103.5	104.1	105	104.7	106.2	106.6	107.6	106.3
Final demand from Mainland Norway	103	105.5	102.6	103.6	104	104.5	105.2	105.8	106.5	107.6	107.9
Total exports	101.9	100.6	100.8	103.2	105.9	103.9	101.8	98.7	97.6	94.6	97.8
Traditional goods	103.1	107.3	102.3	103.7	106.1	107.1	106	106.3	109.4	110.6	110.9
Total use of goods and services	102.7	104	101.4	103.4	104.6	104.7	103.8	103.9	103.7	103.7	103.7
Total imports	102.5	106.8	101.2	103.8	105.5	106.5	104.8	107.8	108.7	111.6	108.8
Traditional goods	102.1	107.8	101.1	103	104.6	106.5	106.8	107.9	109.7	111.9	111.1
Gross domestic product (market prices)	102.7	103.2	101.5	103.3	104.4	104.1	103.5	102.8	102.3	101.3	102.3
Gross domestic product Mainland Norway (market prices)	103.2	105.3	102.9	103.6	103.9	104.2	104.8	105.8	106.6	106.9	107.5

Source: Statistics Norway.å.

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

	Unadju	sted				Seasonally adjusted					
	2013	2014	13:2	13:3	13:4	14:1	14:2	14:3	14:4	15:1	15:2
Final consumption expenditure of households and NPISHs	2.8	2.3	0.9	0.9	0.5	0.3	0.6	0.6	0.5	0.9	0.4
Final consumption expenditure of general government	3.9	2.8	-0.1	1.1	0.5	0.9	0.8	0.4	1.0	1.6	0.4
Gross fixed capital formation	3.0	2.4	0.5	0.9	0.5	0.5	0.5	1.0	0.4	0.7	0.5
Mainland Norway	2.6	1.9	0.5	1.1	0.2	0.3	0.3	1.1	0.2	0.7	0.2
Final domestic use of goods and services	3.0	2.4	-0.9	1.7	0.6	0.9	-0.3	1.5	0.4	1.0	-1.2
Final demand from Mainland Norway	3.0	2.4	0.6	1.0	0.4	0.5	0.6	0.7	0.6	1.0	0.4
Total exports	1.9	-1.3	3.0	2.4	2.5	-1.8	-2.1	-3.0	-1.2	-3.0	3.4
Traditional goods	3.1	4.1	2.6	1.3	2.3	1.0	-1.0	0.3	2.9	1.1	0.3
Total use of goods and services	2.7	1.3	0.3	1.9	1.2	0.0	-0.8	0.1	-0.2	-0.1	0.1
Total imports	2.5	4.2	1.6	2.6	1.6	1.0	-1.7	2.9	0.8	2.7	-2.5
Traditional goods	2.1	5.5	1.4	1.9	1.6	1.8	0.3	1.1	1.7	2.0	-0.7
Gross domestic product (market prices)	2.7	0.4	-0.1	1.7	1.1	-0.2	-0.6	-0.7	-0.4	-1.0	0.9
Gross domestic product Mainland Norway (market prices)	3.2	2.0	0.6	0.6	0.3	0.3	0.5	0.9	0.8	0.3	0.6

Source: Statistics Norway.å.

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