Economic Survey

Statistics Norway

Statistisk sentralbyrå

- Economic developments in Norway
- Forecasts 2016-2019

2/2016

Economic trends

The cyclical downturn in Norway driven by the oil price slump has now lasted for almost two years, with a considerable decline in the number of employees in industries associated with the petroleum sector. However, overall employment has increased by 15 000 persons this past year. Growth is largely in industries dominated by the public sector, but also in construction and in accommodation and food services. The greatest increase has been in health and care services.

Petroleum sector employment has fallen by 2 300 persons over the past year. The decline in demand from the petroleum industry affects employment far more widely, however, and our calculations show that the number of employees directly or indirectly associated with Norwegian petroleum production fell by 22 500 from 2014 to 2015. Besides the supplier industry, employment in recruitment companies has been particularly hard hit.

The oil downturn does not mean that the petroleum era is over. The petroleum industry will be an important part of the Norwegian economy for many years to come, but the economy is in a restructuring phase. The fall in the oil price has increased the pressure on both production companies and suppliers to the petroleum industry to reduce costs. Even if activity in the industry should remain at a high level going forward, demand for labour in both the production and supplier industries could nonetheless slow as a result of measures to increase efficiency.

Those who lose their jobs in petroleum-related activity are finding their way to other industries, but many have also been temporarily laid off or are unemployed. Unemployment results in a loss of income and can imply social costs for those affected. The effect for society of increased unemployment is that available resources remain unused.

However, there is no reason to increase public sector employment purely as a short-term solution to the unemployment situation. There is great demand for many services that are financed through taxes, particularly in health and care services, but also in the education and integration of refugees. Moreover, substantial resources are needed in connection with the transition to a low-emission society and the considerable lag in maintenance of public infrastructure. Persons with expertise from the petroleum industry can contribute to improvements in these and other areas.

Employment in health and care services has increased by over 40 per cent just since the turn of the millennium. Although there will continue to be jobs in this field, where skills other than a long formal education are required, the increase in employment has been clearly strongest for those with a higher education. Because of the ageing population, growth in this sector will continue. These activities proceed in both the public and the private sector, but will constitute a competitor irrespective of sector for highly trained labour in the time ahead. The level of welfare services with public sector funding will be a function not only of the resources channelled into the activity, but also of how well the resources are deployed.

A new report from Statistics Norway shows that the extent of innovations in Norwegian enterprises is closely related to the educational level of the workforce, the size of the markets and the degree of competitive pressure. Enterprises with a highly trained workforce account for a far higher share of product and process innovations than enterprises in which the level of education is lower. Similarly, the tendency is that the larger the market in which an enterprise operates, the more probable that it is innovative. The most innovative enterprises are those that compete in international markets.

There may be a conflict between short-term and long-term interests. Short-term employment measures that lock resources into less productive uses may impair welfare in the long term. A long-term strategy for increasing the extent of innovation may entail providing enterprises that compete internationally with good conditions, including ready access to highly qualified and appropriate labour. The long-term gains associated with finding measures that enhance productivity in the widest sense in the health and care sector, both private and public, may also be substantial and will increase as this sector accounts for an increasingly large share of the economy. Finding the right balance between short- and long-term measures is important to optimal restructuring of the Norwegian economy.

Economic developments in Norway

The downturn in Norway driven by the oil price is continuing, although the oil price has now picked up from the trough in January 2016. The cyclical downturn, defined as mainland GDP growth lower than trend growth, which is estimated at almost 2 per cent, has now lasted for seven quarters. The level of activity also fell slightly through the second half of 2015. Despite a 1.0 percentage point contribution to growth attributable to high electricity production, mainland GDP increased by only 1.3 per cent in the first quarter, calculated as an annual rate. Unemployment measured by the Labour Force Survey (LFS) rose slightly after the summer of 2015, and so far this year has been stable at 4.7 per cent. So far in the cyclical downturn, unemployment has risen by 1.5 percentage points. Employment increased by 0.1 per cent in the first quarter, but short-term inward labour migration has probably fallen off. In the event, this has acted as a shock-absorber, and slowed the rise in unemployment, despite that fact that the labour supply attributable to the resident portion

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

	2014*	2015*	Seasonally adjustedt			
			15:2	15:3	15:4	16:1
Demand and output						
Consumption in households etc.	1.7	2.0	0.7	0.2	0.5	0.3
General government consumption	2.9	1.9	0.3	0.5	0.4	0.9
Gross fixed investment	0.0	-4.2	0.6	0.1	-1.3	-0.9
Mainland Norway	1.3	0.0	2.5	3.2	-0.6	0.3
Extraction and transport via pipelines	-2.9	-15.0	-4.0	-7.8	-3.5	-6.0
Final domestic demand from Mainland Norway[1]	2.0	1.5	0.9	0.9	0.2	0.5
Exports	2.2	3.4	0.8	6.0	-3.5	-1.2
Crude oil and natural gas	1.9	3.4	0.0	9.3	-5.3	1.0
Traditional goods	2.5	4.8	1.6	0.4	0.1	-5.3
Imports	1.5	1.1	-0.3	-1.8	0.7	-0.4
Traditional goods	1.0	1.9	0.6	-3.5	2.7	0.2
Gross domestic product	2.2	1.6	0.1	1.7	-1.3	1.0
Mainland Norway	2.3	1.0	0.2	0.0	-0.1	0.3
Labour market						
Man-hours worked	1.5	0.6	0.1	-0.1	-0.2	0.1
Employed persons	1.1	0.5	0.2	0.1	-0.1	0.1
Labour force[2]	1.1	1.4	0.5	0.3	-0.2	0.5
Unemployment rate. level[2]	3.5	4.4	4.3	4.6	4.6	4.7
Prices and wages						
Annual earings	3.1	2.8	..	..	..	
Consumer price index (CPI)[3]	2.0	2.1	2.2	2.0	2.5	3.2
CPI adjusted for tax changes and excluding energy products (CPI-ATE)[3]	2.4	2.7	2.6	2.9	3.0	3.2
Export prices. traditional goods	4.0	3.4	-0.1	-0.6	-0.8	0.6
Import prices. traditional goods	5.5	5.4	-0.4	1.4	0.1	-0.2
Balance of payment						
Current balance. bill. NOK	376.7	272.7	72.1	62.1	52.9	54.0
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	1.7	1.3	1.4	1.2	1.1	1.1
Lending rate. credit loans[4]	3.9	3.2	3.3	3.1	2.8	2.7
Crude oil price NOK[5]	621	430	491	421	380	304
Importweighted krone exchange rate. 44 countries. 1995=100	93.7	103.4	100.2	105.1	107.4	108.1
NOK per euro	8.4	8.9	8.6	9.1	9.3	9.5

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

of the population rose by 0.5 per cent, according to the LFS. In the current downturn, unemployment has shown very different trends in different parts of the country.

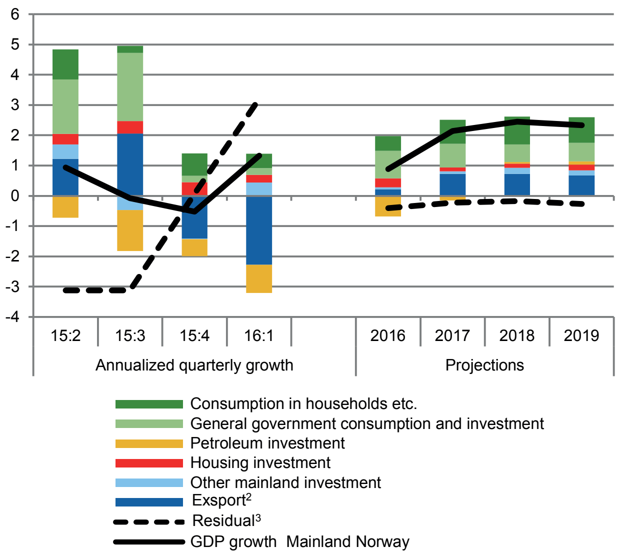
The oil downturn started when investment in the petroleum sector began to fall in the fourth quarter of 2013. Employment in the industry began to decline half a year later. In the third quarter of 2014, this tendency was reinforced by the dramatic fall in the oil price. The lowest oil price to date was noted in mid-January 2016, at less than USD 30 per barrel, whereas it was around USD 110 for several years before the slump. Petroleum sector investment fell by 6 per cent in the first quarter of 2016, to a level 32 per cent lower than the peak in 2013.

Demand from the petroleum industry, including the industry›s labour costs, accounted for over 13 per cent of mainland GDP in 2013. Almost all industries make direct or indirect deliveries to the petroleum industry, but some substantially more than others. Because of the low oil price, demand for goods and services related to the petroleum industry has also fallen globally, thereby also depressing traditional Norwegian exports. There are petroleum-related activities throughout Norway, but they represent a far greater share of the economy in some areas than in the country as a whole.

There are many reasons why the decline in oil prices has not resulted in an even more pronounced downturn. Thanks to the fiscal rule, the government›s scope for manoeuvre in the short-term is almost not affected by the oil price fall the way we see in other oil-exporting countries. The structural, non-oil budget deficit (SNOBD) has increased sharply for several years. According to the Revised National Budget (RNB 2016), the increase in SNOBD is equivalent to 1.1 per cent of trend mainland GDP in 2016. However, fiscal policy has probably not stimulated the economy as much as the expansionary monetary policy, including the sharp weakening of the krone.

The oil price affects the krone exchange rate directly, and reduced interest rates have also contributed to the depreciation. At the end of May 2016, the krone was 25 per cent weaker than in January 2013, measured in terms of the import-weighted krone exchange rate. The krone has admittedly strengthened by almost 4 per cent since year-end 2015, but movements in the exchange rate are still providing a powerful stimulus to internationally exposed Norwegian industry. Despite this, exports of traditional goods dipped by over 5 per cent in the first quarter of 2016, after a clear rise in 2015. Most of the decline can be attributed to a sharp fall in exports of refined products, following a corresponding increase in these exports through 2015. This is not a consequence of developments either in the global economy or in competitiveness, but of a corresponding change in imports of refined products. The fall in exports of traditional goods in the first quarter is greater than what can be ascribed to temporary factors, nonetheless.

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



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

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

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

Source: Statistics Norway.

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

	QNA figuresl				Projection			
	15:2	15:3	15:4	16:1	2016	2017	2018	2019
Consumption by households and non-profit organisations	1.0	0.2	0.7	0.5	0.5	0.8	0.9	0.9
General government consumption and investment	1.8	2.3	0.2	0.2	0.9	0.8	0.6	0.6
Petroleum investment	-0.7	-1.4	-0.6	-0.9	-0.7	-0.1	0.0	0.1
Housing investment	0.3	0.4	0.5	0.3	0.3	0.1	0.1	0.2
Other mainland investment	0.5	-0.5	0.0	0.4	0.1	0.1	0.2	0.2
Exports[1]	1.2	2.1	-1.4	-2.3	0.2	0.7	0.7	0.7
	-3.1	-3.1	0.1	3.2	-0.4	-0.2	-0.2	-0.3
Other deviations[1]								
Growth in mainland GDP	0.9	-0.1	-0.5	1.3	0.9	2.1	2.4	2.3

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

The global fall in demand for products associated with petroleum extraction in the wake of the collapse of the oil price is probably a large part of the explanation. It is reflected in a pronounced fall in exports of engineering products. The imports of our trading partners also appear to have moved on a weak trend in the first quarter of 2016.

The improvement in competitiveness has also served to curb imports, thereby stimulating Norwegian production. Improved cost-competitiveness may also have facilitated the financing of some investment projects and spurred interest in investing. It will take time before the effects of improved competitiveness on export volumes are exhausted. In the short term, they are reflected to a large degree in improved profitability. However, the fall in commodity prices, including prices for metals produced in substantial quantities in Norway, has dampened this effect in the internationally exposed sector of trade and industry.

Cuts through last year and in March this year in an already historically low key policy rate brought the money market rate down to 1.0 per cent in May 2016. The bank interest rates households now face have followed money market rates down – with a varying time lag. A typical mortgage had an average interest rate of 2.7 per cent in March 2016. Low interest rates and prospects of a further cut and that interest rates will remain low for quite a long time, have served to stimulate the housing market. In consequence, the cyclical downturn has been no impediment to date to a high rise in house prices for the country as whole. The marked price inflation has prompted a clear rise in housing investment through 2015 and into 2016.

Household real disposable income increased by 2.7 per cent in 2015. Despite the decline in interest rates and high house price inflation, household consumption has increased fairly moderately through 2015 and so far this year. Increased uncertainty about own income developments due to the relatively high unemployment is a factor that has probably prompted the increase in saving, from 8.8 per cent of income in 2014 to 9.1 per cent in 2015. Seasonally adjusted figures show that household real disposable income fell a little in the first quarter of 2016. Consumption, which varies less than income, edged up a modest 0.3 per cent.

A slower fall in petroleum investment going forward may cause GDP growth to pick up slightly. Increased residential construction and public sector production, plus greater activity in some internationally exposed industries, will also contribute. We expect mainland GDP to increase by 0.9 per cent this year, compared with 1 per cent in 2015, while unemployment will be 4.7 per cent.

We expect the oil price to rise further in the near term, and assume that investment in the petroleum industry will stabilise in the course of 2017, then gradually increase slightly. We forecast that mainland GDP growth will rise above trend growth in early 2017. Higher global growth together with time-lagged effects of the improved competitiveness can be expected to push up exports. Household consumption will pick up when incomes are also boosted in 2017.

We assume that fiscal policy will be appreciably less expansionary in 2017 than in 2016. From next year, the increase in public consumption and investment, excluding increased purchases of fighter aircraft, will be more in line with trend growth in the economy, but with somewhat higher growth in real transfers to households and with corporate tax relief that may stimulate mainland business investment. As a result, mainland GDP growth will be high enough to give rise to a cyclical upturn from early 2017. High surplus capacity, for example in commercial construction, will place a damper on investment, however, with the result that the upturn will be very moderate.

Underlying inflation measured by the CPI adjusted for tax changes and excluding energy products (CPI-ATE) has risen markedly in the past four years as a result of the weakening of the krone. The 12-month rise in the CPI-ATE increased from 0.9 per cent in 2012 to 3.3 per cent in March and April this year. The recent appreciation of the krone is expected to continue, albeit at a slower pace than in recent months. This will exert downward pressure on inflation. However, electricity prices have been rising for a while, and higher electricity prices may push CPI inflation, as an annual average in 2016, to 2.9 per cent and somewhat higher than the CPI-ATE, at 2.6 per cent.

Large parts of the spring wage settlements are now completed. The total wage growth for manufacturing is estimated to be 2.4 per cent, and this appears to provide the norm for the other settlements. We expect structural changes to push up growth in average wages by 0.2 percentage point. As a result, real wage growth may be negative in 2016. Inflation is expected to slow appreciably from next year, and when the economic situation improves real wage growth will gradually rise to 1.5 per cent in 2019.

Expansionary fiscal policy in 2016

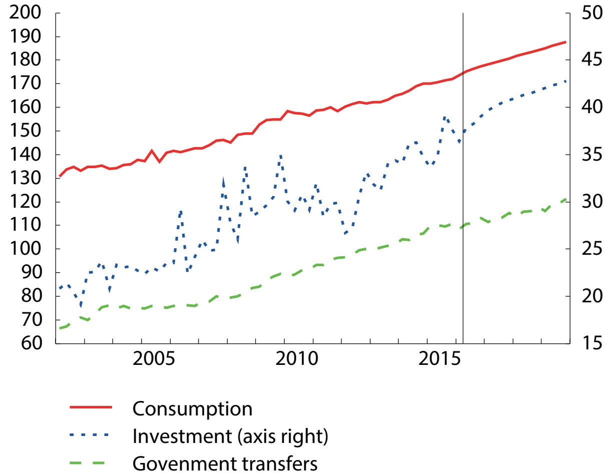
According to the National Accounts, general government consumption rose by 1.8 per cent in 2015. Growth was fairly stable during the year following weak developments around year-end 2014/2015, and picked up in the first quarter of 2016. Gross general government investment increased by just over 3 per cent in 2015, i.e. half as much as in 2014. Transfers to households increased by 7 per cent in 2015. Almost 3 percentage points of the increase can be attributed to changes in the rules for disability pensions, and are offset by increased taxes for persons receiving a disability pension. Given consumer price inflation of just over 2 per cent in 2015, this means that real growth in transfers adjusted for the change in disability pensions was about 2 per

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

	Accounts	Forecasts									
	2015	2016			2017			2018		2019	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	NB
Demand and output											
Consumption in households etc.	2.0	1.3	1.6	1.0	2.2	2.2	1.7	2.5	2.3	2.3	2.4
General government consumption	1.9	3.0	..	3.0	1.9	..	2.0	1.9	..	2.0	..
Gross fixed investment	-4.2	-1.5	..	-1.8	1.7	..	1.9	3.1	..	3.5	..
Extraction and transport via pipelines[1]	-15.0	-16.2	-12.0	-14.0	-4.2	-7.0	-8.0	1.5	-2.0	3.2	3.0
Mainland Norway	0.0	3.5	..	..	3.4	..	..	3.1	..	3.2	..
Industries	-3.0	1.2	..	0.3	1.6	..	4.9	3.8	..	3.3	..
Housing	1.6	6.1	5.9	4.2	2.5	2.4	3.4	2.9	1.5	3.7	0.8
General government	3.0	4.1	..	3.9	6.7	..	6.1	2.4	..	2.5	..
Demand from Mainland Norway[2]	1.5	2.2	2.0	1.9	2.4	2.2	2.4	2.5	2.4	2.4	2.6
Stockbuilding[3]	0.3	-0.2	..	..	0.0	..	..	0.0	..	0.0	..
Exports	3.4	1.4	..	-0.9	1.7	..	1.2	2.2	..	2.1	..
Crude oil and natural gas	3.4	1.4	..	-4.0	-1.0	..	-1.4	0.1	..	0.1	..
Traditional goods[4]	4.8	0.4	2.3	3.1	4.4	3.7	4.2	4.3	4.2	3.4	3.6
Imports	1.1	1.1	1.1	0.8	2.7	2.7	3.0	3.4	2.8	3.7	4.2
Traditional goods	1.9	0.3	..	1.5	2.5	..	3.3	3.8	..	3.6	..
Gross domestic product	1.6	0.9	-0.1	0.1	1.6	1.2	1.1	2.0	1.6	1.9	1.9
Mainland Norway	1.0	0.9	0.8	1.0	2.1	1.8	1.7	2.4	2.3	2.3	2.5
Labour market											
Employed persons	0.5	0.3	0.1	0.2	1.1	0.5	0.7	1.2	1.0	1.1	1.1
Unemployment rate (level)	4.4	4.7	4.6	4.7	4.5	4.4	4.6	4.4	4.1	4.3	3.9
Prices and wages											
Annual earnings	2.8	2.6	2.6	2.4	2.7	2.8	2.8	3.0	3.3	3.4	3.7
Consumer price index (CPI)	2.1	2.9	3.1	2.8	2.2	2.3	2.1	2.1	2.1	2.1	1.7
CPI-ATE[5]	2.7	2.4	3.0	2.8	2.0	2.5	2.2	1.9	2.1	1.9	1.7
Export prices, traditional goods	3.4	2.8	..	..	4.2	..	..	2.9	..	2.6	..
Import prices, traditional goods	5.4	0.9	..	..	1.7	..	..	1.5	..	1.3	..
Housing prices	6.1	4.4	..	..	5.9	..	..	5.8	..	4.7	..
Balance of payment											
Current balance (bill. NOK)	272.7	219.1	..	..	252.3	..	..	268.7	..	308.1	..
Current balance (per cent of GDP)	8.7	7.0	..	..	7.6	..	..	7.7	..	8.4	..
				..		..	..		..		..
Memorandum items:											
Household savings ratio (level)	9.1	8.9	..	..	9.2	..	..	8.9	..	8.7	..
Money market rate (level)	1.3	0.9	0.8	0.9	0.8	0.5	0.8	0.8	0.6	1.1	0.8
Lending rate, credit loans (level)[6]	3.2	2.6	..	..	2.5	..	..	2.5	..	2.7	..
Crude oil price NOK (level)[7]	430	366	..	346	411	..	396	439	..	466	..
Export markets indicator	4.7	3.4	..	..	4.6	..	..	5.1	..	5.2	..
Importweighted krone exchange rate (44 countries)[æ11]	10.4	2.4	4.7	2.4	-1.6	-0.4	-0.1	-1.1	-1.6	-1.1	-1.9

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

Figure 2. **General government. Seasonally adjusted, billion 2013-kr., quarterly**



Source: Statistics Norway.

cent. Overall real growth in public consumption, gross investment and transfers from 2014 to 2015 was thus also approximately 2 per cent. Reduced tax rates led to fiscal policy as a whole appearing somewhat more expansionary than the expenses mentioned indicate in isolation. Growth in local government consumption was lower than in the central government, so that fiscal policy was more expansionary in 2015 than is indicated by the figures for general government as a whole. The Revised National Budget (RNB) for 2016 estimates that the structural, non-oil budget deficit (SNOBD) as a share of trend mainland GDP increased by half a percentage point from 2014 to 2015.

Our projections for fiscal policy in 2016 are based on the RNB for 2016. As a result of the increased expenses associated with receiving the inflow of asylum-seekers to Norway, in November the Government proposed increasing gross allocations by NOK 9.5 billion in 2016, largely for consumption purposes. However, some of the increase in spending will be covered by cuts in both consumption and gross investment in general government of just over NOK 2 billion. In the RNB for 2016, the Government proposes further measures to combat the high and rising unemployment in Southern and Western Norway, and the debates in the Storting have resulted in an increase in the measures package, albeit within a balanced budget framework. The Ministry of Finance now expects growth in general government consumption to be 3 per cent in 2016. In the 2016 National Budget, the reduction in direct taxes was estimated at about NOK 8 billion, but during the review by the Storting, some of this was recouped through higher indirect taxes on electricity and air travel etc., which together were to total NOK 2 billion (accrued). The introduction of a new levy on air travel per seat booked (air passenger tax) was deferred for two months until 1 June 2016, slightly reducing the amount recouped. Total tax relief in 2016 will then be just over NOK 6 billion, of which some NOK 5 billion accrues to companies as a result of the reduction from 27 per cent to 25 per cent in the tax rate on ordinary income.

We assume growth in gross general government investment of 4 per cent in 2016, which is in line with the 2016 RNB. This year the Armed Forces will again import two fighter aircraft, meaning that the increase in overall investment will be for civilian purposes. We assume real growth in household transfers of about 2.5 per cent in 2016. Real growth in overall public consumption, investment and transfers is projected to be 2.7 per cent this year. Given lower taxes, fiscal policy will then be more expansionary in 2016 than in 2015, and SNOBD (as a share of trend GDP) will increase by 1.1 percentage points according to the 2016 National Budget.

No fiscal policy has been adopted for 2017–2019. There is reason to expect high costs to accrue in both 2017 and 2018 in connection with asylum-seekers. Even if the number of asylum-seekers should be markedly lower than the level in 2015, the expenses associated with settling them will also be high in 2017. See the discussion in Box 5 of Economic Survey 1/2016. Accommodation expenses may push up public transfers in 2017.

We have assumed that growth in general government purchases of goods for consumption purposes will be about 2 per cent annually in the period 2017 to 2019. The year 2017 is the first in which 6 new fighter aircraft are being purchased, and this will be reflected in increased gross general government investment. We have also assumed a further increase in investment in civil infrastructure, which means that general government real capital will continue to increase appreciably. This will lead to higher growth in general government consumption as a result of the increased capital services, which by definition are part of general government consumption.

Most of the parties in the Storting have agreed on a tax compromise based on the Scheel Committee›s study, resulting in a reduction in the tax rate on ordinary income from 25 per cent at present to 23 per cent. We assume, as previously, that this will happen in 2017. We further assume that the reduction will be combined with an upward adjustment of tax rates for taxpayers required to pay advance tax, so that only mainland enterprises will be affected. The loss of revenue is projected to be close to NOK 6 billion in 2017. The budget agreement for 2016 contained plans for increased environmental charges in the near term. We have therefore chosen to increase fuel taxes in 2017, so that the annual revenue effect is NOK 3 billion. There will be corresponding increases in 2018 and 2019, which will contribute about 0.2 percentage point to CPI inflation each year. This increase in taxes allows an easing of personal tax or reduction in indirect tax of about NOK 3 billion in 2017, which means that total tax relief will be about NOK 6 billion in 2017.

We have assumed that real growth in pension transfers to households will be about 2 per cent annually in the period 2017 to 2019. Other transfers will grow slightly less in real terms, except for in 2017, when transfers related to asylum-seekers will push up the increase. Total real growth in transfers is expected to be about 1.5 per cent annually, but slightly higher in 2017. We have not assumed changes in the rates for direct taxes in 2018 and 2019 beyond an adjustment for inflation. The projected increase in environmental taxes means that our projections will lead to a slight increase in overall tax in 2018 and 2019. Our projections, coupled with extended projections for expenses, imply that fiscal policy in 2018 and 2019 will be approximately cyclically neutral.

The value of the Government Pension Fund Global (GPFG) was almost NOK 7 500 billion at the beginning of 2016. According to the 2016 National Budget, the Fund may be reduced in 2016, both as a result of fluctuations in exchange rates and because the state›s net cash flow from petroleum activities appears likely to be lower than SNOBD in the 2016 National Budget. The GPFG is unlikely to reach its 2016 level again before 2018. According to our projections, SNOBD will be just over 3 per cent of the Fund›s value in 2017. Our projection scenario shows that the Norwegian economy will enter a moderate upswing from 2017 to 2019. Given the fiscal policy assumptions upon which we have based our projections, we estimate SNOBD to be just over 3 per cent of the GPFG in both years.

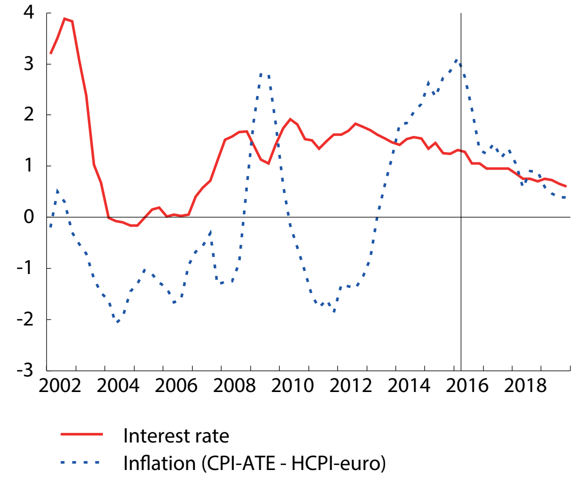
New interest rate cut in the autumn

The key policy rate was cut by 0.25 percentage point in March 2016. Following the last cut, the key rate is 0.5 per cent. The three-month money market rate has not declined as much as the key rate. In the months before the latest interest rate cut, this money market rate was about 1.1–1.2 per cent, while it has declined to 1.0 per cent since the key rate cut.

Following the depreciation of the krone during the past three years, it has strengthened since January this year. While a euro and a dollar cost about NOK 9.60 and NOK 8.80, respectively, as a monthly average in January this year, in May these exchange rates were NOK 9.30 and NOK 8.20, respectively. Measured by the import-weighted krone exchange rate, the krone appreciated by almost 4 per cent during this period. The krone is still weak, and at the end of May about 2 per cent weaker than the annual average for 2015 measured by the import-weighted krone exchange rate.

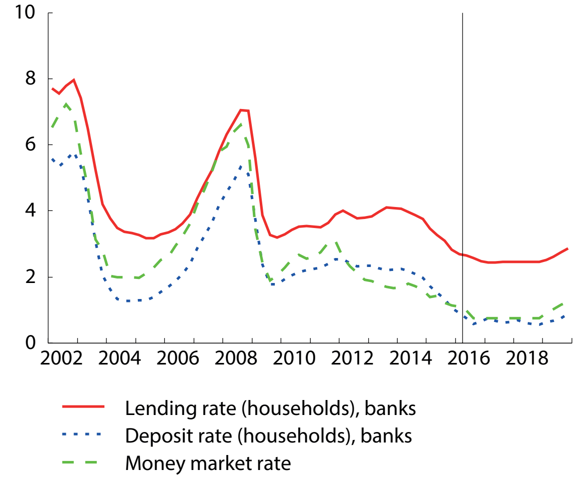
The latest interest rate cut has naturally not yet been reflected in lower observed deposit and lending rates. The average interest rate on credit loans secured on dwellings at the end of the first quarter of this year was 2.7 per cent, the same as at the end of the fourth quarter of last year. The deposit rate was 0.9 per cent at the end of the first quarter, which was also unchanged compared with the previous quarter. The monthly interest rate statistics, which are a sample survey, unlike

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



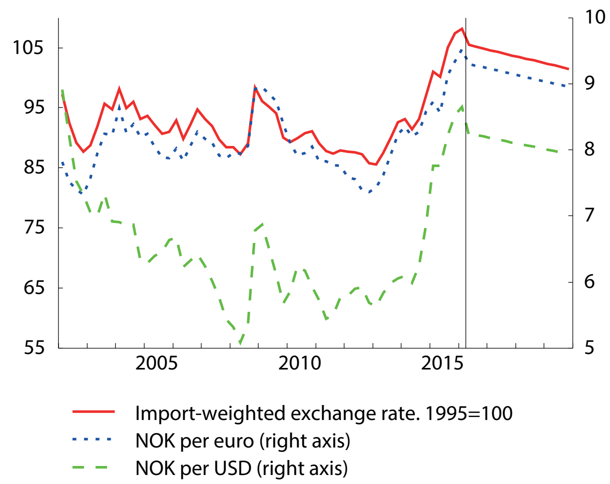
Source: Norges Bank and Statistics Norway.

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



Source: Norges Bank and Statistics Norway.

Figure 5. **Exchange rates**



Source: Norges Bank.

Box 1 **Effects on the Norwegian economy of the fall in interest rates 2012–2016**

Since the beginning of December 2011, Norges Bank has reduced the key policy rate by a total of 1.75 percentage points, to the current 0.50 per cent. We expect a further cut this autumn. In this box, we analyse the effects on the Norwegian economy of this gradual reduction in interest rates with the aid of the KVARTS model.1 We do this by comparing actual developments, extended by our projections for the remainder of 2016, with a counterfactual scenario in which the money market rate is maintained at the level of the fourth quarter of 2011. In order to isolate the effects of Norwegian monetary policy, it is assumed that all other policy variables and global economic developments, including interest rates, are unaffected.

A lower interest rate level affects the Norwegian economy through the foreign exchange rate. The calculations indicate that the krone would have been substantially stronger if interest rates had not gone down. According to the calculations, the decline in interest rates after 2011 reduced the value of the krone by 3.5 per cent as an annual average in 2012, by over 6 per cent in 2013 and 2014, just under 8 per cent in 2015 and almost 10 per cent in 2016. The actual depreciation of the krone in the period 2012–2015 of around 18 per cent, measured by the import-weighted krone exchange rate, would thus have been almost halved without Norges Bank›s interest rate cuts. Note, however, that the krone also depreciates in our counterfactual scenario, largely due to the fall in the oil price. The table below shows the effect of the decline in interest rates on other key variables in the Norwegian economy. These can in large part be explained through the weakening of the krone exchange rate, particularly the effects on exports, manufacturing output and price and wage inflation (see Box 1 in Economic Survey 2/2015).

However, the reduced interest rate level also affects the economy more directly through increased consumption and investment demand. The calculations show that household consumption would have been more than 3 per cent lower in 2016 without the reduction in interest rates, while mainland business investment would have been almost 8 per cent lower the same year. The weakening of the krone means a substantial improvement in competitiveness. It contributes to higher manufacturing value added and increased exports of traditional goods. The effects come relatively rapidly, and increase throughout the calculation period. Mainland GDP was 0.3 per cent higher in 2012 as a result of interest rate changes, and the effects build up gradually to 2.7 per cent in 2016. This increase in demand is reflected in both higher Norwegian output and increased imports. The effect on imports of the increase in demand is thus stronger than the effect of an improvement in cost-competitiveness, which has the opposite effect on imports.

The labour market is also affected to a considerable degree. In isolation, increased activity contributes to higher employment and lower unemployment. The calculations show that in 2016 unemployment was reduced by 0.8 percentage point by the decline in interest rates. The level of prices in Norway has also risen appreciably as a result of higher import prices. In 2016, consumer prices are approximately 2.4 per cent higher as a result of the interest rate cuts, attributable to rising inflation through the whole calculation period, in contrast to the counterfactual scenario. Lower unemployment increases nominal wages, but the effect of the interest rate changes on prices is stronger. The real wage level is thus pushed slightly down through the entire calculation period by the interest rate reductions. Household real disposable income nonetheless increases markedly as a consequence of lower interest rate expenses and increased employment. This, coupled with the direct effect of lower interest rates, is inflating house prices. In the counterfactual scenario, where interest rates are kept unchanged and we therefore do not get this effect, house prices more or less level off from 2013. The fall in interest rates has fuelled a rise in the level of house prices of as much as 16 per cent towards the end of the calculation period.

All in all, the calculations show that monetary policy has had substantial effects on the Norwegian economy in the last few years. Without Norges Bank›s interest rate cuts, the economy would have been in a deeper downturn, with appreciably higher unemployment and lower inflation.

[1] See Box 1 in Eika, T. and R. Hammersland: «Hvordan stimulere arbeidsmarkedet på kort sikt? Kortsiktige virkninger av tre finanspolitiske motkonjunkturtiltak» [How to stimulate the labour market in the short term: Short-term effects of three countercyclical fiscal policy measures] in Økonomiske analyser 2/2016 for a brief description of the model in Norwegian.n.

Effects on the Norwegian economy of the lower fall in interest rates after the fourth quarter of 2011. Percentage deviation from the counterfactual scenario unless otherwise indicated

	2012	2013	2014	2015	2016
Household consumption	0.1	1.0	2.0	2.5	3.2
Mainland business investment	0.5	2.3	3.5	5.3	7.6
Exports of traditional goods	1.1	2.0	2.4	2.8	3.1
Imports	0.1	0.8	1.5	2.1	2.8
Mainland GDP	0.3	1.0	1.5	2.0	2.7
Manufacturing	1.0	2.2	2.5	3.2	3.7
Employment	0.2	0.6	0.8	1.2	1.6
Unemployment rate, % points	-0.1	-0.3	-0.4	-0.6	-0.8
Wages	0.3	0.8	1.2	1.7	2.3
CPI	0.4	1.1	1.4	1.8	2.4
CPI, 12-month rise, % points	0.4	0.7	0.3	0.4	0.5
House prices	0.3	2.4	6.5	11.2	16.1
Household real disposable incom	0.2	0.8	1.3	1.5	4.8
Import-weighted krone exchange rate	3.5	6.5	6.5	7.9	9.7
Memo:					
Interest rate, % points	-0.9	-1.3	-1.4	-1.8	-2.2

the quarterly statistics, which are based on complete figures, show a weak decline in interest rates for credit loans secured on dwellings through the first quarter of just under 0.1 percentage point. As the cut in the key rate happened in late March, it will not impact on the deposit and lending rates until the second quarter.

To stimulate growth in the Norwegian economy, we expect Norges Bank to cut the key rate once more this year. The cut is expected in the autumn of this year. We assume that the premium between the key rate and the money-market rate will remain at half a percentage point in the near term. The money-market rate may then decline to 0.75 per cent at the end of the year and remain at this level for a couple of years. Despite the weakened krone in the past few years, which is still generating a rise in imported prices, there is little risk of high inflation in the near term, even with this lower money-market rate level.

When the moderate cyclical upturn has lasted for a while, and the economy moves into a more pronounced upturn, the key rate will be raised slightly from the beginning of 2019. We therefore expect the money-market rate to rise to 1.25 per cent at the end of 2019. Given these movements in the money-market rate, the average interest rate on credit loans may decline to just under 2.5 per cent in 2017 and 2018 before rising to close to 3.0 per cent at the end of 2019.

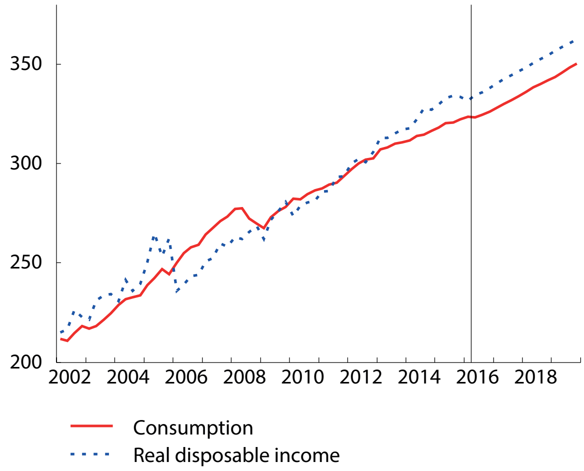
We envisage a certain appreciation of the krone in the near term. The krone will nevertheless depreciate by 2.4 per cent as an annual average in 2016, measured by the import-weighted krone exchange rate. In 2017 the krone will strengthen by about 1.5 per cent and in both 2018 and 2019 by about 1 per cent. The euro exchange rate will then end at about NOK 9.00 in 2019. The strengthening can be partly considered a reversal of the depreciation of the krone over the past few years. Higher oil prices, together with higher interest rates in Norway than in the euro area, are also expected to contribute to the strengthening. Higher inflation in Norway will counter this effect, however, but this difference will be appreciably less after 2016.

Continued moderate consumption growth

The moderate growth in household consumption and non-profit organisations last year continued into 2016. According to the quarterly national accounts (QNA), consumption rose by only 0.3 per cent in the first quarter. Goods consumption remained roughly unchanged, as in the fourth quarter of last year, with weak movements in clothing and footwear, furniture and white goods, and purchase of means of transport. Food and non-alcoholic beverages also moved on a fairly weak trend. Seasonally adjusted figures show that goods consumption was at the same level in April as in March, with continued weak developments in purchases of food, beverages and tobacco, and means of transport. Service consumption increased, however, by 0.7 per cent in the first quarter, or just under an annualised 3 per cent. This growth is approximately the same as in the previous four quarters, and there was a strong contribution to growth from hotel and restaurant services.

Developments in consumption are largely determined by movements in household income and wealth and the interest rates they face. Real disposable income rose by

Figure 6. **Income and consumption in households. Seasonally adjusted, billion 2013–kr., qarterlyl**



Source: Statistics Norway.

2.7 per cent in 2015, about the same as the previous year. Wage income is the most important source of household income. Even though annual wage growth was lower than in a long time and there was low employment growth, wage income together with public transfers still provided the greatest stimulus to income growth last year. As a result of low interest rates, net interest income also made a clear contribution to income growth. According to the quarterly institutional sector accounts, seasonally adjusted real disposable income declined by 0.5 per cent in the first quarter of this year, following the strong growth of the previous quarter and a clear decline in the preceding summer half-year. A factor underlying these developments in the first quarter of this year is continued weak growth in wage income, close to zero growth in public transfers and a strong increase in the private consumption deflator.

We expect wage income to continue to move on a weak trend in the near term due to low annual wage growth. Fairly moderate employment growth, especially in 2016, will also curb income developments. Tax relief will result in some increase in real disposable income this year. Public transfers will continue to make clear contributions to growth in real disposable income through the whole projection period. Net interest income will also contribute to income growth this year and next year as a result of a continued decline in lending rates. Higher inflation this year will curb real income growth, however, while lower inflation in the next three years will be reflected in higher real income growth. We now expect moderate growth in real disposable income of just over 1 per cent this year and 2.5 per cent or slightly less in 2017, 2018 and 2019. Positive movements in real house prices may provide some impetus to consumption growth in the near term as a result of an increase in household wealth. On the whole, we expect consumption growth through the projection period that is far weaker than during the cyclical upturn preceding the 2008 financial crisis, when consumption growth peaked at close to 5.5 per cent annually.

Household saving – in the form of financial and housing investment – calculated as a share of disposable income, rose from a level of just over 3.5 per cent in 2008 to just over 9 per cent in 2015. The seasonally adjusted saving ratio has declined to a level of close to 8 per cent in the past two quarters. We assume that the annualised saving ratio will be around 8–9 per cent during the projection period.

Short pause in the rise in house prices

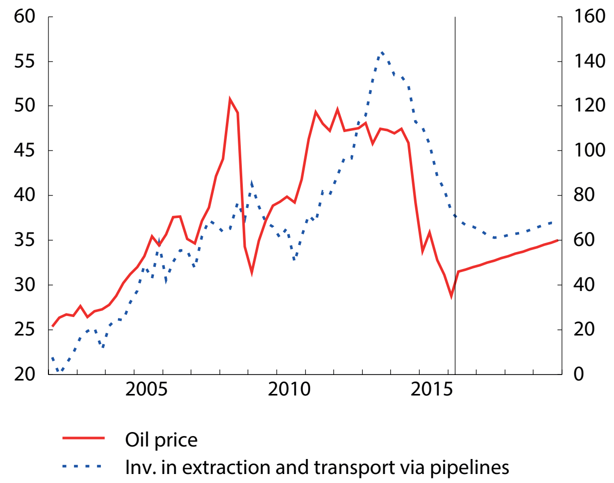
While seasonally adjusted quarterly figures for 2015 showed clear indications of house prices declining through the year, house prices rose markedly in the first quarter of 2016, to 1.7 per cent compared with the previous quarter, according to Statistics Norway›s house price index. Support for this can be found in the monthly house price statistics from Norsk Eiendom (the Norwegian Property Federation), which show an even stronger rise in house prices so far in 2016. Unchanged house prices from April until the end of the year will result in a rise in house prices of an annualised 5.8 per cent in 2016, according to Norsk Eiendom. This is almost 3 percentage points higher than estimated from Statistics Norway›s house price statistics, which are based on first-quarter figures. For a long time, the figures for the country as a whole have concealed major regional differences in house price developments, with a sharp rise in prices in Oslo and a fall in Stavanger.

In the long term, an increase in household real disposable income and lower interest rates has a positive effect on house prices, while an increased supply of new dwellings curbs prices. Our projections also take account of the fact that household borrowing and house prices mutually influence each other.

Following a fall in lending rates through 2015 and another interest rate cut in March, households are facing clearly lower interest rates, which stimulates borrowing. Gross household debt is growing, but debt growth calculated in relation to the same quarter in 2014 declined from about 6.5 per cent in the first three quarters of 2015 to about 6 per cent in the fourth quarter of 2015 and the first quarter of 2016.

In the short term, house prices are affected by changes in household expectations regarding developments in both their own financial situation and the national economy. The consumer confidence indicator from TNS Gallup and Finance Norway has fallen for six consecutive quarters, from the third quarter of 2014 to the first quarter of this year. However, the unadjusted index for the second quarter shows a weak improvement on the first quarter, and household expectations regarding the Norwegian economy one year ahead are a little less pessimistic.

Figure 7. **Residential market. Left axis adj. indices. 2013=100. Right axis per cent**



Source: Statistics Norway.

We assume that households will continue to regard the economic outlook as weak through all of 2016, and that the confidence indicator will remain virtually unchanged through the year. It will not begin to rise until 2017, as the economic situation improves. Debt growth will decline in real terms despite lower real interest rates, and we estimate nominal growth at just over 5.5 per cent in 2016. Nominal debt growth will then increase, and is projected to be close to 6.5 per cent annually in the period 2017 to 2019. We assume that household real disposable income will show little growth in 2016, and that this will lead to a weak nominal decline in house prices in the second half of this year after adjustments for normal seasonal variation. As house prices have risen through 2015, and given the higher growth rate so far in 2016, this will nonetheless result in an annual rise in house prices of just under 4.5 per cent in 2016.

With clearly higher growth in household real disposable income and persistently low real interest rates, we expect the rise in house prices to be close to 6 per cent in 2017 and 2018, but to decline to slightly over 4.5 per cent when interest rates rise in 2019. When we adjust for inflation, this corresponds to a rise in real house prices of 1.5 per cent in 2016 and an average annual rise in real prices of just over 3 per cent for the remainder of the projection period.

According to the QNA, housing investment increased by 1.6 per cent in 2015 after declining through 2014. Housing investment increased by 1.3 per cent in the first quarter of 2016. However, Statistics Norway›s building statistics show a tendency to slightly lower growth in the first quarter of 2016 following a clear increase in building start permits through 2015. Preliminary figures for April again point to higher growth in building starts, nonetheless. We estimate volume growth in 2016 to be about 6 per cent, which will entail a record-high level of housing investment. The slowing of house prices in the second half of 2016 will give way to a new rise in subsequent years. We expect growth in housing investment of 2.5 per cent in 2017, just under 3 per cent in 2018, and over 3.5 per cent in 2019.

Continued weak developments in petroleum investment

In the first quarter of 2016, investment declined by a full 6 per cent, following a continuous sharp fall for two and a half years. The fall from the peak in the third quarter of 2013 is 32 per cent. The decrease in the first quarter was particularly pronounced for drilling, exploration and pipelines, which fell by a full 9 per cent compared with the previous quarter. Investment in platforms and drilling rigs increased by 1 per cent, which means that this investment has remained at the same level for the past half-year.

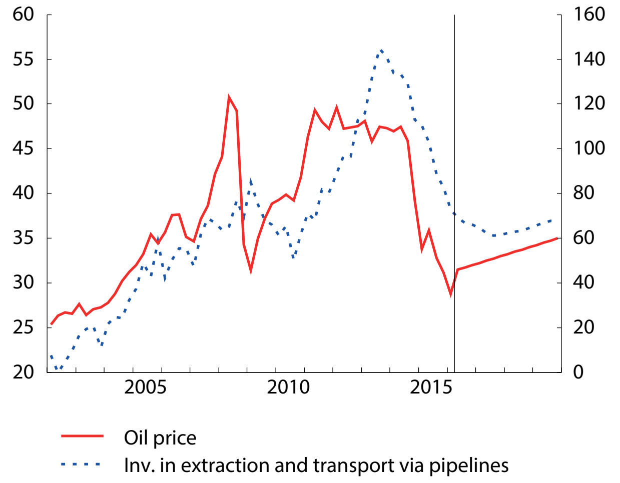
The weak economic situation is illustrated by the fact that several fields have been postponed while developers wait for an increase in oil prices and for work to cut development costs to yield results. Lower profitability expectations have suppressed exploration investment, and drilling has slowed in pace with lower platform investment. However, investment is taking place in the Johan Sverdrup field, and start-up of several small fields is expected in 2016. This will help curb the decline this year. We expect weaker developments in exploration investment than those indicated by the petroleum investment survey. We are therefore assuming lower investment in 2016 than indicated by the survey. We expect the decline to level off in the second half of this year, so that the total decline in investment is about 40 per cent lower than in the third quarter of 2013.

Oil and gas prices fell appreciably in the two years up to January this year. The slump in oil prices has been considerable, albeit less expressed in NOK due to the depreciation of the krone against the dollar through the autumn of 2014 and all of 2015. There has been a clear rise in the oil price since January. We assume a moderate increase in the near term, with the oil price rising gradually to USD 60 per barrel in 2019. We further assume that gas prices will continue to decline slightly in the next few quarters before they also gradually rise in pace with oil prices.

It is likely that several minor fields will start up in 2017. At the same time, it is expected that the negative trend in exploration investment will come to a halt, and that investment will pick up gradually during the year, partly as a result of the awarding of new exploration licences in the Barents Sea. This will nonetheless not be enough to prevent petroleum investment from declining slightly from 2016 to 2017.

Several of the major development projects on the continental shelf that were expected to take place in the period 2014–2015 were postponed. This was largely attributable to sharp cost inflation in addition to the

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



Source: Statistics Norway.

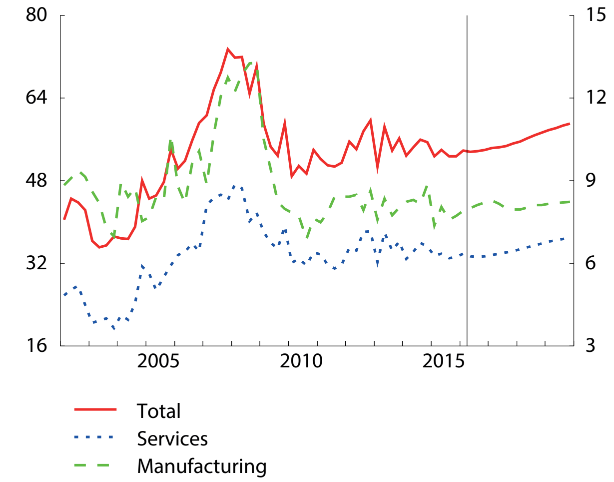
decline in oil prices, with the result that they were not considered profitable in the long term. Following substantial cost reductions for these projects, the price developments we are now sketching may lead to adequate profitability on projects like Snorre 2040 and Johan Castberg. It is assumed that development of these fields will start around year-end 2017/2018, which will lead to a slight increase in investment in 2018 and 2019. Despite weak developments over a period of several years, petroleum investment will be equivalent to four to five times the expected level of manufacturing investment in the period 2017 to 2019.

Oil and gas production, measured in energy content, increased by 4.5 per cent in the first quarter of this year compared with the same quarter last year. The increase was approximately equally strong for gas and oil. The sharp fall in prices in this period means a fall in production value nevertheless. We expect virtually unchanged extraction volumes through the projection period.

Weak growth in business investment

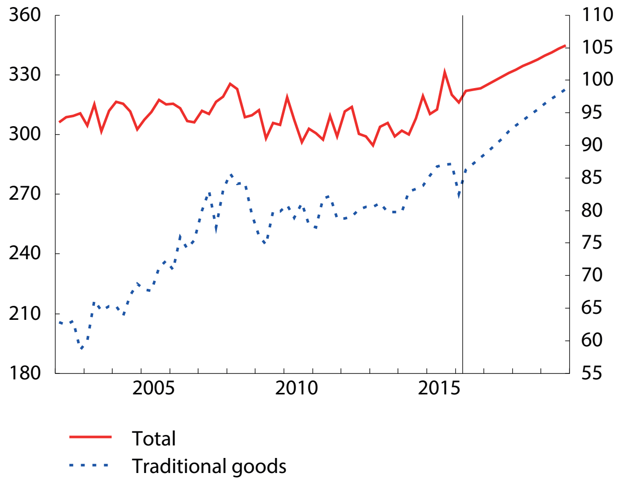
The decline in mainland business investment slowed through 2015, and investment increased by 2.2 per cent in the first quarter. This growth was broad-based in manufacturing, services and other goods production. However, there were great differences within manufacturing. While investment in the food industry and shipbuilding and other transport equipment increased markedly, there was a decline in petroleum refinement, chemicals and pharmaceuticals, and in production of metal goods, electrical equipment and machinery. In the service industries, investment in the sale and management of property in particular made a positive contribution. These figures are mainly based on building statistics, and are considered more reliable than the figures for investment in other services. Investment in other mainland goods production, which includes power supply, rose by 2.9 per cent in the first quarter.

Figure 9. **Investments. Mainland Norway. Seasonally adjusted, billion 2013-kr., quarterly**



Source: Statistics Norway.

Figure 10. **Exports. Seasonally adjusted, billion 2013-kr., quarte**



Source: Statistics Norway.

Statistics Norway›s latest survey of manufacturing companies› future investment intentions indicates growth of about 10 per cent in 2016. This would result in a very sharp increase in the pace of investment through the year. For 2017, however, a decline is expected from the expected high level in 2016. We believe that the increase in investment will be pushed back slightly, into 2017. This means an annualised growth rate in 2016 of over 6 per cent and that the investment level will be virtually unchanged through the projection period. Pronounced growth is expected in the metals industry in particular. In power supply, the projections for future investment indicate about 5 per cent growth in both 2016 and 2017 from already high levels.

Norges Bank›s Regional Network surveys economic developments in Norway by gathering information from enterprises and activities throughout the country. Reports from March indicated weakly rising investment over the next 12 months in the segments retail trade and other services.

An improved global economic situation, a weak krone exchange rate, very low interest rates and corporate tax relief lead us to expect a rising investment level in the near term. The increase is particularly expected in sectors with few ties to the petroleum industry. However, surplus capacity in a number of industries will curb this tendency. We estimate annual growth in business investment of about 2 per cent through the projection period. Given this growth, the investment level will nevertheless be about 15 per cent lower in 2019 than the investment peak in 2008.

Weak growth outlook for traditional goods exports this year

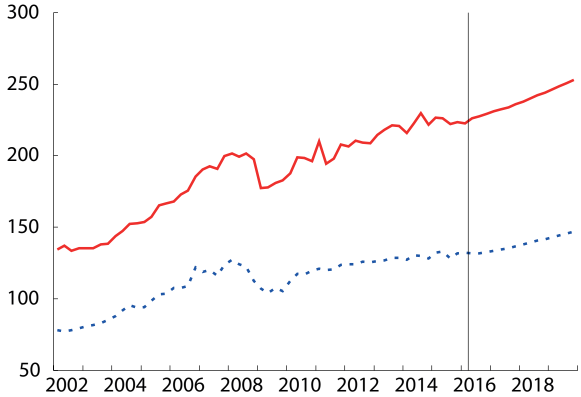
Exports of traditional goods rose by close to 5 per cent from 2014 to 2015. Growth slowed last year, and in the first quarter of this year it had reversed to a decline of over 5 per cent, according to seasonally adjusted QNA figures. Exports of engineering products and farmed fish decreased, as they also did in the last two quarters of 2015. Exports of chemical products increased – for the fifth consecutive quarter. Exports of refined petroleum products can fluctuate so much that they considerably affect growth in overall exports of traditional goods. The export volume of traditional goods excluding refined petroleum products increased minimally in the first quarter of this year, following a large decline in the last two quarters 2015.

Oil and gas exports also fluctuate widely from quarter to quarter. Both increased slightly in the first quarter of this year, following a pronounced reduction in gas exports in the fourth quarter of last year. Also exports of services increased somewhat in the first quarter of this year following a large decline in the previous quarter. The growth appears to have been broad-based.

The rise in prices for both traditional goods exports and service exports levelled off in 2015. In the first quarter of this year, prices fell for most groups of traditional export goods, while prices for overall service exports rose slightly. Oil and gas, refined petroleum products and certain other petroleum products again saw a decline in prices in the first quarter, even though a weak krone dampened the effect of the international decline in oil prices.

The depreciation of the krone has substantially strengthened the cost-competitiveness of export companies in recent years. This year, lower growth in Norwegian export markets is expected to curb growth in traditional exports. Certain export sectors related to petroleum production may also experience considerably lower demand from abroad. Growth in traditional exports is projected to be markedly lower in 2016 than in 2015. In the period 2017–2019 we expect stronger global market growth to boost exports. A projected gradual strengthening of the krone will weaken competitiveness and exert downward pressure on export growth. Time-lagged effects of the previous improvement are likely to dominate for a good while to come. Growth in

Figure 11. **Imports. Seasonally adjusted, billion 2013-kr., quarterly**



Source: Statistics Norway.

traditional exports is thus assumed to be weaker than global market growth for the next few years. However, due to a reduced international market for petroleum-related products, not all differences in growth will lead to loss of market shares for Norwegian export companies. Production-based oil and gas exports are not expected to change much during the projection period.

The weakening of the import-weighted krone exchange rate has contributed considerably to the rise in import prices in recent years. The rise in prices for traditional imports levelled off through 2015 and the price level dropped slightly in the first quarter of this year. Refined petroleum products and metals contributed substantially to the decline.

Imports did not increase appreciably in 2014 and 2015. Nor do we expect stronger growth this year. The very low growth in traditional imports is largely attributable to sharply reduced demand for capital goods from the petroleum sector, which contain a high share of imports. In addition, the depreciation of the krone will shift some domestic demand from imports to domestic production. If the schedule is adhered to, imports of fighter aircraft and a large oil platform will boost overall imports. Due to time-lagged effects, an expected strengthening of the krone will gradually stimulate import growth from 2017.

A considerably lower average oil price this year than last year, which means a continued terms of trade loss, may reduce the trade surplus to less than NOK 100 billion this year. Conversely, a rising oil price and other terms of trade gains may increase the trade surplus from next year. There was a large net factor income and transfers surplus in 2014 and 2015. Low growth in the Norwegian economy will reduce disbursements abroad. This factor, coupled with a weak krone, which increases payments from abroad converted into Norwegian kroner, has a positive effect on the surplus measured in kroner. We therefore expect a large net factor income and transfers surplus also this year, and that the surplus will then decline somewhat through the projection period. The current account surplus, which is equal to the total of the trade surplus and the net factor income and transfers surplus, as a share of GDP, is expected to rise from 7 per cent in 2016 to 8 per cent in 2019.

Modest cyclical upturn next year

Mainland GDP growth has been weak and less than our estimate for trend growth (about 2 per cent) for almost two years. From the fourth quarter of last year to the first quarter of this year, value added rose by 0.3 per cent, following a slight decline through the second half of last year. The slight upswing in GDP growth may be largely explained by a sharp increase in power production – an increase that is not likely to continue in the near term.

Reduced demand from the petroleum industry continues to act as a brake on activity in large segments of the Norwegian economy, and production in most petroleum-related industries declined further in the first quarter. For example, value added for metal goods, electrical equipment and machinery declined by almost 4 per cent. Value added for manufacturing as a whole dipped by 0.5 per cent, following a decline of over 3 per cent last year. Nonetheless, there are certain signs of improvement. Several manufacturing sectors are now experiencing growth, aided by the sharp improvement in cost-competitiveness due to a poorer krone exchange rate and moderate wage growth. The shipbuilding and transport equipment industry is one example, and value added in this industry rose by 2 per cent in the first quarter following an overall decline of 23 per cent from the third quarter of 2014 to the fourth quarter of last year. In addition to the cost-competitiveness mentioned, the improvement can be attributed to a shift to markets other than the offshore market. Production in commodity-based manufacturing also increased in the first quarter of this year.

Goods-producing industries excluding manufacturing and mining helped boost mainland GDP growth in the first quarter. Value added in the construction industry rose by 1.1 per cent following solid growth through much of last year. Overall manufacturing value added has now improved by almost 4 per cent since the trough in the first quarter of last year. The low interest rate spurs demand for dwellings and other fixed assets. These factors, coupled with high public investment in buildings and infrastructure, are probably important drivers of the upturn. Mainland goods production excluding manufacturing is otherwise dominated by industries that are largely affected by naturally occurring factors. Developments in these industries therefore do not tell us as much about the underlying economic situation. Value added in agriculture and forestry increased by 1 per cent in the first quarter, while value added in fishing and aquaculture remained unchanged from the fourth quarter of last year. Value added in

Box 2 **Employment associated with petroleum investment**

In 2013, the resource consumption of the petroleum industry in the form of investment, intermediate inputs and labour costs amounted to 13.3 per cent of mainland GDP. Hungnes et al. (2016) use a static input-output model based on final national accounts figures for 2013 to analyse and quantify deliveries to the petroleum industry from various Norwegian industries and from abroad.

In 2013, about 40 per cent of investment in the petroleum industry was imported, either directly from abroad or as imports by subcontractors. As a result, 60 per cent of value added associated with the delivery of these capital goods took place in Norway. Norwegian value added accounted for about 65 per cent of deliveries of intermediate inputs to the petroleum industry. Employment in the industry itself, and in the Norwegian supplier industries, is estimated at 232 100 persons in 2013.

Petroleum sector investment fell in 2014, and particularly in 2015, and as a result the number of employees associated with petroleum-related activities dropped to 206 200. Thus 25 900 jobs were lost, approximately equivalent to the increase in the number of unemployed in the period. The «oil brake» caused employment associated with the petroleum industry to be reduced from 8.6 per cent of total employment in 2013 to 7.5 per cent in 2015. The calculations for 2014 and 2015 are based on preliminary figures, and must be regarded as uncertain.

From 2013 to 2015, the numbers employed in the petroleum industry were reduced by about 2 400. This accounts for just under 10 per cent of the decline in employment in all industries associated with the petroleum sector.

Most industries supply the petroleum industry directly or indirectly. Measured by number of employees, the industry ‹Other private services› is the most important. This industry, which includes recruitment agencies, there were 89 600 jobs associated with the petroleum industry in 2013. Two years later, the number was reduced to 77 800.

On the basis of our prognoses, the overall employment associated with petroleum activities as an annual average is estimated at around 182 500 persons in 2016. It therefore seems likely that this number will be reduced by almost 50 000 in the period 2013–2016.

Reference:

Hungnes, H., D. Kolsrud, J. Nitter-Hauge, J. B. Prestmo og B. Strøm (2016): *Ringvirkninger av petroleumsnæringen i norsk økonomi.* [*Ripple effects of the petroleum industry for the Norwegian economy*]. Reports 2016/17, Statistics Norway.

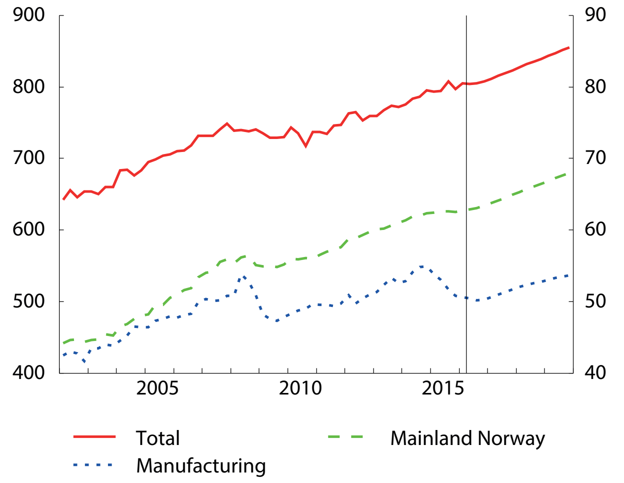
Employment associated with the petroleum industry on the Norwegian continental shelf. Number of persons[1]

	2013	2014	2015	2016
Primary industries, incl. fishing and aquaculture	**1 600**	**1 600**	**1 500**	**..**
Agriculture and forestry	1 500	1 400	1 300	..
Fishing and aquaculture	200	200	100	..
Manufacturing	**33 700**	**33 100**	**29 400**	**..**
Manufacture of consumer goods	1 200	1 200	1 100	..
Power-consuming manufacturing	600	600	600	..
Manufacture of engineering products, ships and oil platforms	28 700	28 100	24 900	..
Other manufacturing	3 100	3 100	2 800	..
Building and construction	**3 400**	**3 300**	**3 000**	**..**
Extraction of crude oil and natural gas and pipeline transport	**31 800**	**31 700**	**29 400**	**..**
Services associated with oil and gas extraction	**20 000**	**19 700**	**17 500**	**..**
Shipping	**700**	**700**	**700**	**..**
Production of electricity	**900**	**900**	**800**	**..**
Services from mainland industries excl. services associated with extraction	**128 500**	**126 300**	**113 100**	**..**
Banking and insurance	3 800	3 800	3 700	..
Domestic transport and communications incl. air transport and supply activities	11 000	10 900	10 100	..
Wholesale and retail trade	22 500	22 200	20 000	..
Housing services	0	0	0	..
Renting out of commercial buildings, sale and operation of real property	1 700	1 700	1 500	..
Other private services	89 600	87 800	77 800	..
General government	**10 800**	**10 800**	**10 300**	**..**
Municipal government	4 400	4 400	4 200	..
Central government	6 300	6 200	5 900	..
Defence	200	200	200	..
Total	**232 100**	**228 700**	**206 200**	**182 500**

[1] The 2013 figures are from Hungnes et al. (2016). Figures for 2014 and 2015 are new calculations in which revised national accounts figures have been used. Estimates for 2016 are based on the projections in this present report. We have not calculated how employment is distributed among industries.

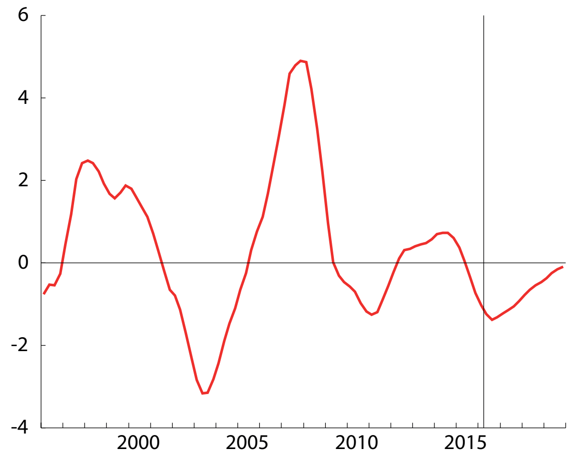
power supply increased sharply, however. From the fourth quarter of last year to the first quarter of this year, growth was a full 11.1 per cent, which per se boosted mainland GDP growth by 0.2 percentage point. The cold weather during part of January and February is an important reason why electricity consumption rose considerably. The increased consumption, in conjunction with the record-high levels of Norwegian hydropower plant reservoirs at the beginning of the year, made a high production level possible. Reservoir levels have

Figure 12. **Gross domestic product. Seasonally adjusted , billion 2013-kr., quarterly**



Source: Statistics Norway.

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



Source: Statistics Norway.

now fallen to more normal levels, and there is therefore little reason to expect equally strong growth in power production in the near term.

Value added in service industries excluding general government declined by almost 0.4 per cent in the first quarter, after approximately zero growth through all through last year. Certain service industries are experiencing solid growth nonetheless. Value added in hotels and restaurants increased by about 4 per cent in the first quarter. The level for this sector has thus improved by over 10 per cent since the fourth quarter of 2014. This must be seen in light of the weak krone exchange rate, which has encouraged more foreign tourists to come to Norway, and to more Norwegians holidaying in Norway. Value added in general government rose by 0.8 per cent in the first quarter, or an annualised 3 per cent. This is appreciably higher than last year's average growth, and also well above what we consider to be trend mainland GDP growth.

We expect output in the Norwegian economy to gradually improve in the near term. The petroleum sector is likely to restrain the activity level this year, but the negative stimuli will gradually decrease and eventually become positive. Exchange rates affect competitiveness and business sector activity with a time lag, and even though we expect a slightly stronger krone in the years ahead, the effects of the depreciation of the krone in recent years have not been exhausted. A further improvement of the price and cost situation for internationally exposed industries may thus also play a positive part going forward.

We further expect that the production level in manufacturing as a whole will not change significantly through much of the present year, but will pick up somewhat towards the end of the year. A gradual increase in foreign demand may contribute to this. Activity in the other mainland sectors is also expected to gather pace during the year, to some extent driven by the increase in housing and business investment. The construction industry will probably contribute substantially to growth, at least this year. Value added in general government is assumed to reach a stable high level, albeit clearly below trend mainland GDP growth.

On balance, this will lead to a gradual improvement and relatively positive developments in activity through next year and until the end of the projection period. We forecast that mainland GDP growth will be an annualised 0.9 per cent this year and over 2 per cent for the next three years. From 2017, growth will thus be slightly higher than estimated trend growth, thereby implying that we will be moving into a modest cyclical upturn.

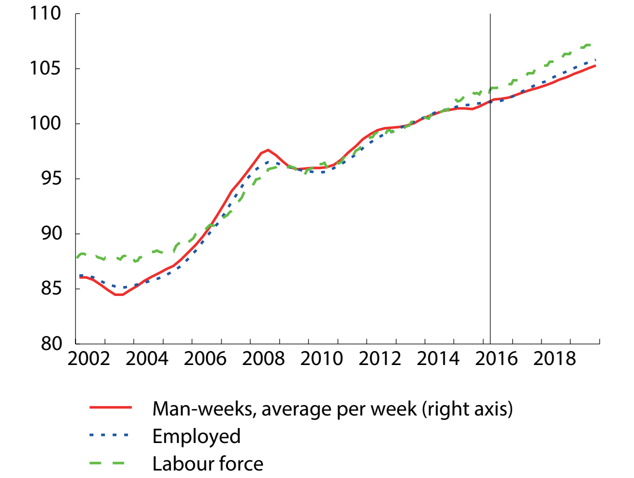
Unemployment slowly down

First-quarter employment increased by 0.1 per cent according to the QNA. Although the increase is moderate, it is an improvement compared with the fourth quarter of 2015, which showed a decline of 0.1 per cent.

Developments in employment still reflect developments in the industries associated with petroleum activities. Employment in crude oil and natural gas extraction has fallen each quarter since the second quarter of 2014. Industries that primarily supply the petroleum industry, such as shipbuilding and other transport equipment industry, and repair and installation of machinery and equipment, also reported a decline in employment through 2015 and the first quarter of this year.

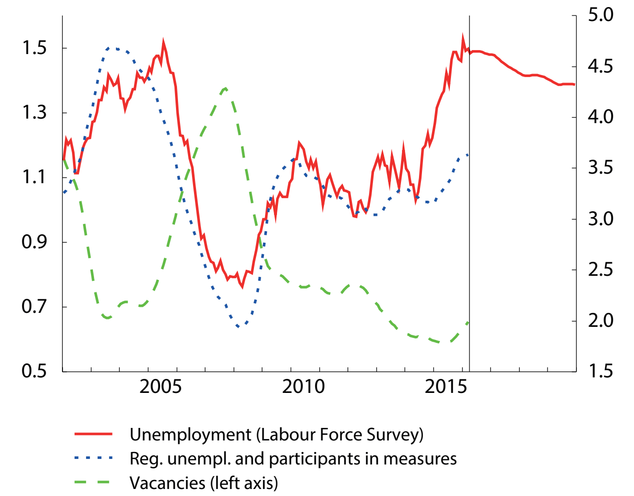
There is great variation across industries with respect to first-quarter developments in employment. While the petroleum industry in particular and closely related industries report weak developments, employment growth in other industries has helped to compensate. Examples of industries that have experienced employment growth in the first quarter are the construction industry and retail trade. They, however, reported very different employment developments through 2015. In contrast to construction, employment in retail trade

Figure 14. **Labour force. employment and number of man-hours. Seasonally adjusted and smoothed indices. 2013=100**



Source: Statistics Norway.

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



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

fell in every quarter in 2015. In the first quarter of the current year, employment in both industries rose, and it rose more than the average. General government, both central and municipal, also reported higher than average employment growth. .

There has been a tendency over time for slow labour force growth. Lower net labour migration served to reduce labour force growth last year and probably in the first quarter of this year. In 2015, net immigration of European citizens fell sharply. The result of the weak krone and relatively high unemployment is that the Norwegian labour market has become relatively less attractive. Short-term immigration in particular is sensitive to developments in the Norwegian labour market in relation to developments in other European countries, and this group may have served to slow labour force growth.

According to the LFS, average unemployment in 2015 was 4.4 per cent, the highest level since the global financial crisis. In the first quarter of this year unemployment increased to 4.7 per cent, after adjustment for normal seasonal variations. This is higher than the average for last year, and also a slight increase on the last two quarters of 2015, when unemployment was 4.6 per cent.

The statistics of the Norwegian Labour and Welfare Organisation (NAV) for those registered as fully unemployed and the total of these persons and persons on labour market programmes show a clear increase through the last four months of 2015, however. The share of the labour force accounted for by these groups reached 3.7 per cent at the end of 2015. It remained unchanged from January to March this year, and edged down slightly to 3.6 per cent in April. There is wide variation in unemployment across counties, and those associated with the petroleum industry have higher unemployment than the average.

In addition to the number of unemployed, the number of temporarily laid off was also high in the first four months of the year. Almost 9 200 were laid off in April, about twice as many as in the same month last year. The number of people laid off was lower at the end than at the beginning of the year in both 2013 and 2014. This pattern changed in 2015, when the number laid off increased through the second half of the year. The level remained high from January to April this year.

There are still fewer vacancy announcements than previously, but the decline is not as pronounced as before. There were 57 500 vacancies advertised in the first quarter of 2016, almost 2 per cent fewer than in the same quarter the previous year. This reflects weak developments in demand in the labour market.

There is a decline in advertised vacancies in a number of industries, but it is particularly large in mining and petroleum extraction. A decline is also reported for commercial services. This industry hires out labour, to petroleum-related industries, among others, and is strongly impacted by labour market developments. Other industries, such as construction and professional, scientific and technical services, had an increase in vacancies in the first quarter of this year.

We forecast that employment growth will remain moderate this year, but that it will increase in the years ahead. It is reasonable to assume that not all those who were laid off last year and so far this year will get back their old jobs. On the other hand, real wages are dipping somewhat, and that pushes employment up. Unemployment is expected to remain high, and will be an annualised 4.7 per cent in 2016. After that we expect unemployment to decline gradually to 4.3 per cent towards the end of the projection period. Labour force developments are sensitive to changes in the inflow of migrants. In the years immediately ahead, immigration from the EU will be of primary importance.

Asylum-seekers who came to Norway last year will increase the labour force, especially towards the end of the projection period. A continued weak krone, low wage growth and relatively high unemployment will make the Norwegian market less attractive to labour migrants, and hence restrain labour force growth.

Moderate wage settlement

Annual wage growth has been very low for the past two years. Nominal annual wage growth fell from 3.1 per cent in 2014 to 2.8 per cent last year, the lowest since World War II. Growth in real wages fell by over one per cent to just over 0.5 per cent. National accounts figures show that annual wage growth, also in manufacturing, was 2.8 per cent in 2015. This is very close to the limit arrived at in the 2015 collective bargaining round, where the Confederation of Norwegian Enterprise (NHO), in agreement with the Norwegian Confederation of Trade Unions (LO) proposed a frame of 2.7 per cent. Developments in other industries show that the frame for the wage leader segment is very largely adhered to, and that there are small differences in wage growth across industries in 2015.

Higher unemployment, particularly in petroleum-related industries, pushed down growth in average wages in the economy as a whole. Wage growth is also affected by the profitability of manufacturing and the scale of immigration. The weakening of the krone exchange rate through 2015 increased the profitability of some internationally exposed industries. In addition, a less tight labour market and a weaker krone have contributed to reducing immigration. However it will take some time before lower immigration pushes up wage growth.

Growth in average annual wages can be decomposed into carry-over and contributions from pay increases and wage drift. In manufacturing, the carry-over into 2016 was 1.1 per cent, which is slightly lower than the preceding year. Although pay increases in manufacturing are slightly higher in the main settlement and the depreciation of the krone has improved competitiveness, NHO, in agreement with LO, arrived at a frame of only 2.4 per cent for this year›s wage settlement. In view of the calculated carry-over in manufacturing, wage drift needs to be very moderate this year. On the one hand, the fact that there are fewer employees in petroleum-related activities pushes down wage drift, because these employees have higher than average wages. On the other, the employees remaining after cutbacks will have high seniority and this, coupled with relatively few new appointments at a low wage level, pushes up wage drift.

The non-manufacturing wage carry-over into 2016 is also low. The Technical Reporting Committee on Income Settlements (TBU) has calculated the carry-over for several negotiations areas. The carry-over in retail businesses in the Enterprise Federation of Norway (Virke) is 0.7 per cent, and in state and municipal government 0.5 and 0.75 per cent, respectively. A recommendation regarding centralised pay increases and wage growth of 2.4 per cent for all managers, function heads and foremen, with effect from 1 May, has been submitted for the municipal sector. This comes in addition to an added 16th year on the seniority ladder and an increase for skilled workers with supplementary training. General increases were also agreed for 2017. Taking average municipal salaries (calculated by the TBU) as the starting point, the centralised pay increases represent at least 1.5 per cent of the wage level in 2015.

We assume that the wage settlement in manufacturing will continue to provide guidelines for wage formation in other industries, so that non-manufacturing wage settlements will also be moderate. The results of the recently concluded central government settlement point the same way, if the settlement is adopted. We assume in our projections that average wage growth will be somewhat higher than the limit proposed by NHO and LO. On balance, we project that average annual wage growth in 2016 will be 2.6 per cent.

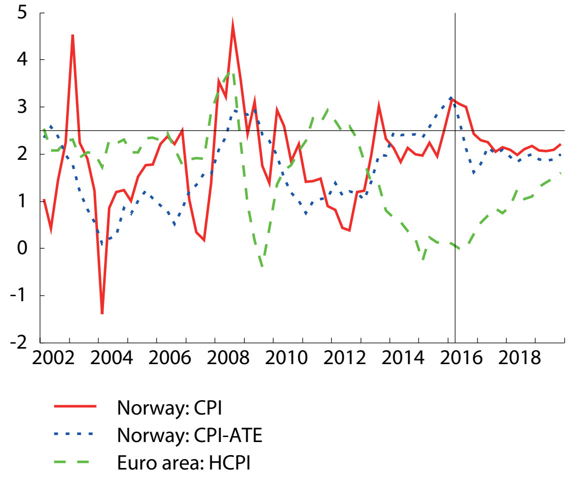
Given our projection for consumer price inflation, real wage growth in 2016 will be weakly negative. The decline in wage growth must be seen bearing in mind that parts of the economy have suffered a considerable negative shock through the fall in oil prices and reduced demand from the petroleum sector, which results in an increased need for restructuring. This will reduce wage growth, both because the demands in the centralised wage negotiations will be under pressure and because local pay increases will be reduced. Countering this effect are improved profitability ensuing from the weaker krone exchange rate and a certain improvement in the global economic situation. Reduced inward labour migration may also offset a dampening factor. After a period, improvements in the economic situation and lower unemployment from 2017 will cause wage growth to gather pace. Inflation is expected to slow appreciably from next year, and real wage growth will then gradually rise to 1.5 per cent in 2019.

Inflation has peaked for now

The consumer price index (CPI) rose by 2.1 per cent in 2015 after the year-on-year rise had fluctuated around this level through the year. The year-on-year rise increased from the beginning of the year to 3.2 per cent in April. The consumer price index adjusted for taxes and excluding energy products (CPI-ATE) increased by 3.3 per cent in the same period,

Imported goods account for about 1/3 of goods and services in the CPI-ATE. The 12-month rise in prices for imported goods was around 4 per cent for the first four months of the year, and contributed substantially to the marked rise in the CPI-ATE. The rise in prices for Norwegian goods excluding agricultural goods was equally high for this period, but this group accounts for only 10 per cent of the CPI-ATE. The rent increase was lower, however, at about 2 per cent. Rents account for 20 per cent of the CPI-ATE.

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



Source: Statistics Norway.

The krone exchange rate is an important inflation driver. The import-weighted krone exchange rate weakened by 30 per cent from the beginning of 2013 to the end of 2015, thereby contributing to higher inflation. However, the import-weighted krone exchange rate strengthened by 4 per cent through the first five months of the year. In isolation, this will have the effect of dampening inflation. But there is a lag in the feed-through from the krone exchange rate to prices. In the short term, the depreciation of the krone in 2015 will continue to generate positive impulses to inflation. A weakening of the exchange rate has the greatest impact on inflation in the fourth quarter after the weakening occurs (see Box 6 in *Economic Survey* 1/2016). As the impulses of the depreciation of the krone through 2015 wane, the effect of the strengthening of the krone through 2016 will become dominant and result in lower inflation later in the projection period. We assume the krone will appreciate further. The inflation level in 2019 is expected to be about 8 per cent lower than that at the end of 2015.

Wage growth developments will also contribute to lower inflation. The current downturn in the Norwegian economy means that there are still prospects of low wage growth in the years immediately ahead. Average annual wage growth for the next four years is expected to be around half a percentage point lower than in the previous four years. These wage developments will contribute to lower unit costs, and hence lower price inflation.

Prices for energy products are expected to push up inflation in the near term, however. This is largely because the oil price is expected to rise from just under USD 50 per barrel at the end of May to USD 60 per barrel at the end of 2019. The pronounced increase in investment in the transfer and distribution of electricity may lead to grid rental increasing, and so to higher electricity prices. Future electricity prices point the opposite way, and are expected to fall from around 22 øre/KWh at the end of May to an annual average of 19 øre/KWh for 2019.

The expected increase in indirect taxes will increase the differential between the CPI and the CPI-ATE in the near term. The introduction on 1 June 2016 of air passenger tax is forecast to push up CPI inflation by 0.1 percentage point in 2016. We also assume that fuel taxes will increase in the period from 2017 to 2019, and push up CPI inflation by 0.2 percentage point in the course of these years.

We forecast that consumer price inflation will be 2.9 per cent in 2016 and then slow to about 2 per cent in the period 2017 to 2019. CPI inflation is expected to be a little higher than CPI-ATE inflation throughout the projection period.

Table 4. **National accounts: Final expenditure and gross domestic product. At constant 2013 prices. Million kroner**

	Unadjusted		Seasonally adjusted								
	2014	2015	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1
Final consumption expenditure of households and NPISHs	1 254 154	1 278 931	311 492	313 929	314 682	316 516	318 055	320 243	320 757	322 413	323 454
Household final consumption expenditure	1 194 398	1 217 835	296 731	299 015	299 613	301 512	302 897	305 095	305 378	307 012	308 346
Goods	564 394	570 655	141 050	141 729	141 599	142 773	142 740	144 301	143 270	143 162	143 184
Services	573 833	593 478	141 847	142 897	143 917	144 925	146 435	147 675	148 958	150 130	151 222
Direct purchases abroad by resident households	91 011	92 129	22 400	22 923	22 809	22 812	22 787	22 818	23 163	23 345	23 703
Direct purchases by non-residents	-34 840	-38 427	-8 566	-8 534	-8 712	-8 999	-9 066	-9 699	-10 013	-9 625	-9 763
Final consumption expenditure of NPISHs	59 755	61 096	14 761	14 914	15 068	15 004	15 159	15 148	15 379	15 401	15 107
Final consumption expenditure of general government	671 433	684 181	165 646	167 121	168 886	170 065	170 083	170 621	171 421	172 074	173 550
Final consumption expenditure of central government	336 519	343 908	82 697	83 851	84 750	85 470	85 454	85 836	86 166	86 475	87 325
Central government, civilian	296 074	303 873	72 629	73 722	74 600	75 377	75 424	75 866	76 201	76 408	77 280
Central government, defence	40 445	40 035	10 068	10 129	10 151	10 093	10 030	9 970	9 965	10 067	10 045
Final consumption expenditure of local government	334 914	340 274	82 949	83 270	84 136	84 595	84 628	84 785	85 255	85 599	86 225
Gross fixed capital formation	717 466	687 019	178 548	182 115	182 518	174 938	171 501	172 548	172 775	170 556	168 951
Extraction and transport via pipelines	207 257	176 076	53 451	53 292	52 257	48 246	47 619	45 718	42 137	40 657	38 215
Ocean transport	795	1 366	-34	241	431	246	554	471	201	223	608
Mainland Norway	509 415	509 578	125 132	128 583	129 829	126 446	123 328	126 360	130 437	129 675	130 127
Industries	218 221	211 777	52 815	54 446	55 856	55 407	52 674	53 918	52 688	52 649	53 800
Service activities incidential to extraction	2 402	2 012	505	703	616	579	656	681	369	306	210
Other services	135 803	131 403	32 352	33 550	35 326	34 644	32 817	33 191	32 572	32 893	33 623
Manufacturing and mining	33 438	30 643	8 221	8 302	8 153	8 849	7 361	8 041	7 584	7 723	7 904
Production of other goods	46 578	47 719	11 738	11 891	11 761	11 335	11 841	12 005	12 163	11 727	12 063
Dwellings (households)	149 953	152 326	38 306	37 897	37 680	36 330	36 992	37 678	38 489	39 380	39 890
General government	141 241	145 475	34 010	36 240	36 294	34 709	33 662	34 764	39 260	37 645	36 437
Changes in stocks and statistical discrepancies	154 242	164 775	33 649	42 498	41 282	36 315	50 309	44 296	33 486	35 575	45 376
Gross capital formation	871 709	851 794	212 198	224 613	223 800	211 252	221 810	216 843	206 261	206 131	214 326
Final domestic use of goods and services	2 797 296	2 814 906	689 336	705 663	707 368	697 834	709 947	707 707	698 439	700 618	711 330
Final demand from Mainland Norway	2 435 002	2 472 690	602 270	609 633	613 397	613 027	611 466	617 223	622 615	624 162	627 131
Final demand from general government	812 674	829 656	199 656	203 361	205 180	204 774	203 744	205 385	210 681	209 719	209 987
Total exports	1 230 629	1 272 559	301 888	300 162	308 228	319 279	310 181	312 686	331 348	319 880	316 034
Traditional goods	329 773	345 716	79 731	82 947	83 335	83 769	85 358	86 739	87 068	87 157	82 530
Crude oil and natural gas	592 123	612 401	147 317	141 021	147 798	155 018	148 590	148 529	162 293	153 729	155 227
Ships, oil platforms and planes	7 783	5 531	3 588	1 390	831	1 924	1 462	1 020	1 490	1 532	342
Services	300 950	308 910	71 251	74 803	76 264	78 567	74 771	76 398	80 497	77 461	77 934
Total use of goods and services	4 027 925	4 087 465	991 224	1 005 825	1 015 596	1 017 112	1 020 128	1 020 393	1 029 787	1 020 497	1 027 364
Total imports	888 773	898 278	215 692	222 466	229 755	221 611	226 624	225 982	221 965	223 579	222 617
Traditional goods	515 768	525 484	127 475	130 336	130 141	128 236	132 096	132 921	128 332	131 860	132 088
Crude oil and natural gas	13 944	13 767	3 269	3 140	3 631	4 020	3 846	3 507	2 977	3 421	3 165
Ships, oil platforms and planes	29 776	27 551	5 278	6 304	13 630	4 511	7 795	6 754	7 269	5 723	4 564
Services	329 286	331 476	79 669	82 685	82 353	84 844	82 886	82 800	83 387	82 575	82 800
Gross domestic product (market prices)	3 139 152	3 189 318	775 532	783 360	785 841	795 502	793 505	794 412	807 822	796 919	804 747
Gross domestic product Mainland Norway (market prices)	2 473 523	2 498 183	613 171	618 778	619 904	623 216	624 339	625 804	625 681	624 856	626 929
Petroleum activities and ocean transport	665 628	691 135	162 361	164 581	165 937	172 286	169 166	168 608	182 141	172 062	177 818
Mainland Norway (basic prices)	2 146 475	2 166 546	531 792	536 944	538 313	540 973	541 515	543 126	542 541	541 216	543 162
Mainland Norway excluding general government	1 628 383	1 640 137	402 982	407 551	408 738	410 705	410 794	411 871	410 640	408 645	409 578
Manufacturing and mining	215 819	208 689	52 834	54 089	54 847	54 899	53 875	53 078	51 662	50 788	50 638
Production of other goods	267 797	275 201	65 858	67 968	67 179	67 092	67 801	69 224	69 777	68 658	70 817
Services incl. dwellings (households)	1 144 768	1 156 248	284 290	285 494	286 712	288 714	289 117	289 568	289 202	289 200	288 123
General government	518 092	526 409	128 809	129 393	129 574	130 268	130 721	131 255	131 901	132 571	133 584
Taxes and subsidies products	327 048	331 636	81 379	81 834	81 591	82 243	82 824	82 677	83 140	83 640	83 766

Source: Statistics Norway.

Tabele 5. **National accounts: Final expenditure and gross domestic product. At constant 2013 prices. Percentage change from the previous periodg fra foregående kvartal**

	Ujustert		Seasonally adjusted								
	2014	2015	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1
Final consumption expenditure of households and NPISHs	1.7	2.0	0.2	0.8	0.2	0.6	0.5	0.7	0.2	0.5	0.3
Household final consumption expenditure	1.7	2.0	0.2	0.8	0.2	0.6	0.5	0.7	0.1	0.5	0.4
Goods	0.6	1.1	0.5	0.5	-0.1	0.8	0.0	1.1	-0.7	-0.1	0.0
Services	2.9	3.4	0.4	0.7	0.7	0.7	1.0	0.8	0.9	0.8	0.7
Direct purchases abroad by resident households	3.0	1.2	-2.5	2.3	-0.5	0.0	-0.1	0.1	1.5	0.8	1.5
Direct purchases by non-residents	5.1	10.3	0.3	-0.4	2.1	3.3	0.7	7.0	3.2	-3.9	1.4
Final consumption expenditure of NPISHs	1.4	2.2	-0.2	1.0	1.0	-0.4	1.0	-0.1	1.5	0.1	-1.9
Final consumption expenditure of general government	2.9	1.9	0.5	0.9	1.1	0.7	0.0	0.3	0.5	0.4	0.9
Final consumption expenditure of central government	3.6	2.2	0.7	1.4	1.1	0.8	0.0	0.4	0.4	0.4	1.0
Central government, civilian	4.2	2.6	0.7	1.5	1.2	1.0	0.1	0.6	0.4	0.3	1.1
Central government, defence	-0.3	-1.0	0.6	0.6	0.2	-0.6	-0.6	-0.6	0.0	1.0	-0.2
Final consumption expenditure of local government	2.2	1.6	0.3	0.4	1.0	0.5	0.0	0.2	0.6	0.4	0.7
Gross fixed capital formation	0.0	-4.2	-2.9	2.0	0.2	-4.2	-2.0	0.6	0.1	-1.3	-0.9
Extraction and transport via pipelines	-2.9	-15.0	-3.3	-0.3	-1.9	-7.7	-1.3	-4.0	-7.8	-3.5	-6.0
Ocean transport	-24.3	71.9	-89.4	-807.4	79.1	-43.0	125.2	-15.0	-57.2	10.9	172.2
Mainland Norway	1.3	0.0	-2.9	2.8	1.0	-2.6	-2.5	2.5	3.2	-0.6	0.3
Industries	-0.4	-3.0	-5.9	3.1	2.6	-0.8	-4.9	2.4	-2.3	-0.1	2.2
Service activities incidential to extraction	-56.4	-16.2	-84.4	39.3	-12.4	-6.0	13.3	3.9	-45.8	-17.0	-31.5
Other services	0.5	-3.2	-1.7	3.7	5.3	-1.9	-5.3	1.1	-1.9	1.0	2.2
Manufacturing and mining	5.5	-8.4	2.5	1.0	-1.8	8.5	-16.8	9.2	-5.7	1.8	2.3
Production of other goods	-0.4	2.4	-2.0	1.3	-1.1	-3.6	4.5	1.4	1.3	-3.6	2.9
Dwellings (households)	-1.5	1.6	-0.2	-1.1	-0.6	-3.6	1.8	1.9	2.2	2.3	1.3
General government	7.3	3.0	-1.1	6.6	0.1	-4.4	-3.0	3.3	12.9	-4.1	-3.2
Changes in stocks and statistical discrepancies	10.0	6.8	-1.3	26.3	-2.9	-12.0	38.5	-12.0	-24.4	6.2	27.6
Gross capital formation	1.6	-2.3	-2.6	5.9	-0.4	-5.6	5.0	-2.2	-4.9	-0.1	4.0
Final domestic use of goods and services	2.0	0.6	-0.6	2.4	0.2	-1.3	1.7	-0.3	-1.3	0.3	1.5
Final demand from Mainland Norway	2.0	1.5	-0.4	1.2	0.6	-0.1	-0.3	0.9	0.9	0.2	0.5
Final demand from general government	3.7	2.1	0.2	1.9	0.9	-0.2	-0.5	0.8	2.6	-0.5	0.1
Total exports	2.2	3.4	1.0	-0.6	2.7	3.6	-2.8	0.8	6.0	-3.5	-1.2
Traditional goods	2.5	4.8	0.0	4.0	0.5	0.5	1.9	1.6	0.4	0.1	-5.3
Crude oil and natural gas	1.9	3.4	4.4	-4.3	4.8	4.9	-4.1	0.0	9.3	-5.3	1.0
Ships, oil platforms and planes	-14.0	-28.9	26.2	-61.3	-40.2	131.4	-24.0	-30.2	46.1	2.8	-77.7
Services	3.2	2.6	-5.3	5.0	2.0	3.0	-4.8	2.2	5.4	-3.8	0.6
Total use of goods and services	2.1	1.5	-0.1	1.5	1.0	0.1	0.3	0.0	0.9	-0.9	0.7
Total imports	1.5	1.1	-2.3	3.1	3.3	-3.5	2.3	-0.3	-1.8	0.7	-0.4
Traditional goods	1.0	1.9	-0.7	2.2	-0.1	-1.5	3.0	0.6	-3.5	2.7	0.2
Crude oil and natural gas	-11.9	-1.3	4.8	-4.0	15.6	10.7	-4.3	-8.8	-15.1	14.9	-7.5
Ships, oil platforms and planes	7.4	-7.5	-7.1	19.4	116.2	-66.9	72.8	-13.4	7.6	-21.3	-20.3
Services	2.5	0.7	-4.7	3.8	-0.4	3.0	-2.3	-0.1	0.7	-1.0	0.3
Gross domestic product (market prices)	2.2	1.6	0.5	1.0	0.3	1.2	-0.3	0.1	1.7	-1.3	1.0
Gross domestic product Mainland Norway (market prices)	2.3	1.0	0.5	0.9	0.2	0.5	0.2	0.2	0.0	-0.1	0.3
Petroleum activities and ocean transport	2.0	3.8	0.5	1.4	0.8	3.8	-1.8	-0.3	8.0	-5.5	3.3
Mainland Norway (basic prices)	2.4	0.9	0.5	1.0	0.3	0.5	0.1	0.3	-0.1	-0.2	0.4
Mainland Norway excluding general government	2.5	0.7	0.5	1.1	0.3	0.5	0.0	0.3	-0.3	-0.5	0.2
Manufacturing and mining	3.4	-3.3	0.5	2.4	1.4	0.1	-1.9	-1.5	-2.7	-1.7	-0.3
Production of other goods	4.8	2.8	1.2	3.2	-1.2	-0.1	1.1	2.1	0.8	-1.6	3.1
Services incl. dwellings (households)	1.8	1.0	0.3	0.4	0.4	0.7	0.1	0.2	-0.1	0.0	-0.4
General government	2.0	1.6	0.7	0.5	0.1	0.5	0.3	0.4	0.5	0.5	0.8
Taxes and subsidies products	1.5	1.4	0.3	0.6	-0.3	0.8	0.7	-0.2	0.6	0.6	0.2

Source: Statistics Norway.

Table 6. **National accounts: Final expenditure and gross domestic product. Price indices. 2013=100**

	Unadjusted		Seasonally adjusted								
	2014	2015	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1
Final consumption expenditure of households and NPISHs	102.1	104.4	101.5	101.9	101.1	102.7	103.6	103.8	103.4	105.5	106.9
Final consumption expenditure of general government	103.0	106.2	102.2	102.8	102.9	104.0	105.7	106.1	106.2	107.1	107.1
Gross fixed capital formation	102.3	106.0	101.5	101.8	102.5	103.3	105.0	105.7	106.5	106.8	107.1
Mainland Norway	101.8	105.3	101.0	101.3	102.1	102.8	104.2	104.8	105.7	106.4	106.6
Final domestic use of goods and services	102.4	105.0	101.5	102.2	102.7	103.3	104.5	104.6	104.5	106.3	106.5
Final demand from Mainland Norway	102.3	105.1	101.6	102.0	101.8	103.1	104.3	104.6	104.7	106.1	106.9
Total exports	99.1	91.2	103.0	100.2	96.7	95.5	92.9	94.1	91.0	87.2	81.2
Traditional goods	104.0	107.5	104.3	102.4	102.7	106.1	108.1	108.0	107.3	106.4	107.1
Total use of goods and services	101.4	100.7	102.0	101.6	100.9	100.8	101.0	101.4	100.1	100.3	98.7
Total imports	104.6	109.7	103.5	103.0	105.0	107.1	108.6	109.5	110.5	111.1	110.5
Traditional goods	105.5	111.1	104.3	104.2	105.7	107.6	110.6	110.2	111.8	111.9	111.7
Gross domestic product (market prices)	100.5	98.2	101.5	101.1	99.7	99.1	98.8	99.1	97.3	97.3	95.5
Gross domestic product Mainland Norway (market prices)	102.1	104.6	100.8	101.7	102.2	103.1	103.8	104.3	104.5	105.4	106.1

Source: Statistics Norway.

Table 7. **National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous period**

	Unadjusted		Seasonally adjusted								
	2014	2015	14.1	14.2	14.3	14.4	15.1	15.2	15.3	15.4	16.1
Final consumption expenditure of households and NPISHs	2.1	2.2	1.0	0.4	-0.7	1.5	0.9	0.1	-0.3	2.0	1.3
Final consumption expenditure of general government	3.0	3.1	1.3	0.6	0.1	1.1	1.6	0.4	0.1	0.8	0.0
Gross fixed capital formation	2.3	3.6	0.7	0.3	0.6	0.8	1.7	0.6	0.7	0.3	0.3
Mainland Norway	1.8	3.4	0.2	0.3	0.8	0.6	1.4	0.6	0.8	0.7	0.1
Final domestic use of goods and services	2.4	2.6	0.4	0.7	0.6	0.5	1.2	0.1	-0.2	1.8	0.2
Final demand from Mainland Norway	2.3	2.7	0.9	0.4	-0.2	1.2	1.2	0.3	0.0	1.4	0.7
Total exports	-0.9	-8.0	-0.4	-2.7	-3.4	-1.3	-2.7	1.3	-3.3	-4.2	-6.9
Traditional goods	4.0	3.4	1.7	-1.8	0.3	3.2	1.9	-0.1	-0.6	-0.8	0.6
Total use of goods and services	1.4	-0.7	0.2	-0.4	-0.6	-0.1	0.1	0.4	-1.2	0.2	-1.6
Total imports	4.6	4.9	0.9	-0.4	1.9	2.1	1.4	0.8	0.9	0.6	-0.6
Traditional goods	5.5	5.4	1.7	-0.1	1.5	1.8	2.9	-0.4	1.4	0.1	-0.2
Gross domestic product (market prices)	0.5	-2.3	0.0	-0.4	-1.4	-0.6	-0.3	0.3	-1.8	0.0	-1.9
Gross domestic product Mainland Norway (market prices)	2.1	2.5	0.0	0.9	0.5	0.9	0.7	0.4	0.2	1.0	0.6

Source: Statistics Norway..

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