Economic Survey

Statistics Norway

Statistisk sentralbyrå

- Economic developments in Norway
- Forecasts 2017-2020

4/2017

Economic developments in Norway

The preliminary seasonally adjusted quarterly national accounts figures (QNA) for the third quarter of 2017 confirm that the cyclical trough was reached about a year ago. Mainland GDP growth has now been higher than trend growth, estimated at just under 2 per cent annually, for three consecutive quarters. In contrast to many previous cyclical upturns, growth through this year has been only slightly higher than estimated trend. Although a number of factors are promoting increased growth, there are also counteracting impulses. As a result, the upturn will probably continue at a moderate pace for the next few years.

Growth impulses that have been important for the past two years are expected to become more neutral or contractionary in the years ahead. Figures from the National Budget for 2018 point to the structural, non-oil budget deficit (SNOBD) increasing by only NOK 6 billion in 2018-kroner from 2017 to 2018. This is modest compared with the increase from 2015 to

Table 1. Main macroeconomic aggregates. Accounts figures. Change from previous period. Per cent

	2015	2016*	Seasonally adjusted			
			16:4	17:1	17:2	17:3
Demand and output						
Consumption in households etc.	2.6	1.5	0.6	0.7	0.7	0.6
General government consumption	2.4	2.1	0.1	0.5	0.8	0.5
Gross fixed investment	-4.0	-0.2	0.2	0.6	1.5	0.3
Extraction and transport via pipelines	-12.2	-16.9	-1.3	0.0	1.4	-5.1
Mainland Norway	-0.2	6.1	0.8	1.2	1.1	1.8
Final domestic demand from Mainland Norway[1]	2.0	2.6	0.5	0.8	0.8	0.8
Exports	4.7	-1.8	2.6	-1.0	2.1	0.9
Traditional goods	6.9	-8.2	-6.4	6.4	1.5	1.0
Crude oil and natural gas	2.1	4.3	3.8	-0.7	3.9	1.7
Imports	1.6	2.3	1.5	1.0	-0.2	-1.8
Traditional goods	3.2	-0.4	1.3	2.1	-0.1	-0.1
Gross domestic product	2.0	1.1	1.4	0.1	1.1	0.7
Mainland Norway	1.4	1.0	0.2	0.7	0.6	0.6
Labour market						
Man-hours worked	0.6	0.7	0.4	0.1	0.2	0.4
Employed persons	0.4	0.3	0.2	0.3	0.3	0.3
Labour force[2]	1.4	0.3	-0.8	0.0	0.2	-0.2
Unemployment rate, level[2]	4.4	4.7	4.7	4.3	4.3	4.1
Prices and wages						
Annual earings	2.8	1.7	..	..	..	..
Consumer price index (CPI)[3]	2.1	3.6	4.0	3.6	1.8	1.3
CPI adjusted for tax changes and excluding energy products (CPI-ATE)[3]	2.7	3.0	3.3	2.7	1.5	1.0
Export prices, traditional goods	2.0	3.5	2.5	0.7	1.3	-1.1
Import prices, traditional goods	4.7	1.4	0.4	1.3	2.3	-0.6
Balance of payment						
Current balance, bill. NOK	248.8	120.6	50.7	41.6	35.8	
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	1.3	1.1	1.1	1.0	0.9	0.8
Lending rate, credit loans[4]	3.2	2.6	2.5	2.5	2.6	2.6
Crude oil price NOK[5]	431	378	428	461	433	414
Importweighted krone exchange rate, 44 countries, 1995=100	103.4	105.4	102.3	102.7	106.0	103.6
NOK per euro	8.94	9.29	9.04	8.99	9.38	9.35

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

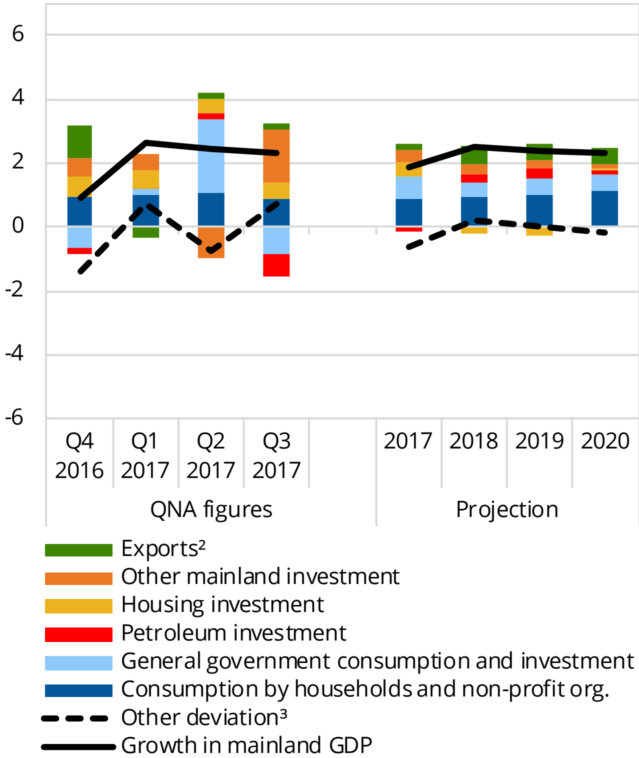
2017, which averaged about NOK 20 billion 2018-kroner per year. The fiscal scope for manoeuvre appears likely to be considerably reduced going forward, as a result both of the adjusted application of the fiscal rule and of higher expenditure in connection with the ageing population. We assume an approximately neutral fiscal stance in the projection period, in that SNOBD as a share of trend mainland GDP is expected to remain almost constant.

The positive impulses generated by monetary policy will also weaken and reverse in 2019. The key rate was cut further from an already low level in 2014, and reached 0.5 per cent in March 2016. Since then it has remained unchanged. We expect the key rate to remain at this low level until well into 2019, and then to be raised gradually towards the end of the projection period. If our assumptions hold true, the money market rate will have risen to 1.2 per cent as an annual average in 2020. In contrast to the period behind us, when the interest rate was being cut, monetary policy is thus expected to generate weakly contractionary impulses in the years ahead.

Nor will the exchange rate have as expansionary an effect in the years ahead. The depreciation of the krone from 2014, in pace with the falling oil price, has imparted positive impulses to the economy. The krone has also weakened in recent months. This most recent depreciation may seem somewhat surprising, given that the oil price has risen in the same period, but the weakening has been no greater than that the krone, measured as an annual average in 2017, appears to be somewhat stronger than in 2016 in terms of the import-weighted exchange rate. We assume that the krone will strengthen moderately in the years ahead. Given this course of events, a euro will cost an annual average of NOK 9.1 in 2020.

Housing investment is probably close to peaking. Housing starts are now more than 60 per cent higher than the level in 2010. Falling house prices will make residential construction less profitable going forward. House prices have been falling almost continuously since March, and in October were 2 per cent lower than the top recording in March. The fall has been greatest in the Oslo area. The fact that house prices are falling now is due first and foremost to the fact that the supply of dwellings has been high, prices had reached a high level and wage growth has been moderate. The Housing Loan Regulations may also have contributed to the change, but it is the aforementioned more fundamental factors that are giving rise to expectations that house prices will fall through the whole of next year

Figure 1. Growth in mainland GDP and contributions from demand components.[1] Percentage points, annual rate



[1] The demand contributions are calculated by finding the change in each variable, extracting the direct and indirect import shares, and then dividing by the mainland GDP level for the previous period. The import shares used are documented in Economic Survey 1/2017, Box 3. All figures are seasonally adjusted and in constant prices.
[2] The export variable is defined as total exports excluding exports of crude oil, gas and shipping.
[3] Other deviations' is defined residually so that it captures all other factors as well as changes in inventories and statistical deviations.
Source: Statistics Norway.

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

	QNA				Projection			
	16:4	17:1	17:2	17:3	2017	2018	2019	2020
Consumption by households and non-profit organisations	0.9	1.0	1.1	0.9	0.9	0.9	1.0	1.2
General government consumption and investment	-0.7	0.2	2.3	-0.9	0.7	0.5	0.5	0.5
Petroleum investment	-0.2	0.0	0.2	-0.7	-0.1	0.2	0.3	0.1
Housing investment	0.6	0.6	0.4	0.5	0.4	-0.2	-0.3	0.1
Other mainland investment	0.7	0.5	-1.0	1.8	0.3	0.3	0.2	0.1
Exports[1]	1.0	-0.3	0.2	0.2	0.2	0.6	0.6	0.5
Other deviations[1]	-1.4	0.6	-0.7	0.6	-0.6	0.2	0.0	-0.2
Growth in mainland GDP	0.9	2.6	2.5	2.3	1.9	2.5	2.4	2.3

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

Table 3. Main economic indicators 2016-2020. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Acco-unts	Forecasts										
	2016*	2017			2018			2019			2020	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	SN	NB
Demand and output												
Consumption in households etc.	1.5	2.5	2.7	2.3	2.5	2.7	3.2	2.8	2.2	3.2	3.2	2.0
General government consumption	2.1	1.9	2.0	1.7	1.5	1.6	1.2	1.7	1.2	..	1.6	1.1
Gross fixed investment	-0.2	4.2	..	3.9	3.2	..	2.5	2.3	..	3.0	2.2	..
Extraction and transport via pipelines	-16.9	-3.4	-1.0	-6.5	7.2	1.3	2.2	8.4	7.0	7.7	3.0	4.1
Mainland Norway	6.1	6.7	..	..	1.6	..	..	0.6	..	..	1.9	..
Industries	4.2	6.6	3.9	4.9	5.9	6.9	5.6	4.2	5.5	5.6	2.6	2.4
Housing	9.0	8.2	9.8	9.6	-3.7	-0.2	-0.2	-5.2	-1.4	-2.7	1.0	1.3
General government	5.9	5.0	..	5.4	1.5	..	1.5	1.4	..	..	1.7	..
Demand from Mainland Norway[1]	2.6	3.2	3.0	3.1	2.1	2.5	2.5	2.0	1.9	2.4	2.5	1.7
Stockbuilding[2]	1.4	-0.4	..	..	0.0	..	..	0.0	..	..	0.0	..
Exports	-1.8	2.5	..	1.1	2.1	..	0.9	2.6	..	1.9	3.0	..
Traditional goods[3]	-8.2	2.6	0.2	1.7	4.2	3.7	3.8	3.6	3.8	5.0	3.4	3.4
Crude oil and natural gas	4.3	4.5	..	0.9	-0.5	..	-4.8	0.8	..	-2.4	2.1	..
Imports	2.3	2.5	4.3	3.2	2.6	0.4	3.3	2.9	2.1	3.6	3.3	2.4
Traditional goods	-0.4	3.7	..	..	3.2	..	..	3.8	..	..	4.1	..
Gross domestic product	1.1	2.2	1.5	1.9	2.2	1.1	1.5	2.2	1.4	1.9	2.3	2.3
Mainland Norway	1.0	1.9	2.0	2.0	2.5	2.0	2.5	2.4	2.0	2.6	2.3	2.1
Labour market												
Employed persons	0.3	1.1	0.9	0.7	1.1	1.0	1.1	1.1	0.9	1.1	1.0	0.9
Unemployment rate (level)	4.7	4.2	4.3	4.3	3.9	3.9	4.0	3.8	3.7	3.8	3.7	3.5
Prices and wages												
Annual earnings	1.7	2.4	2.4	2.4	2.9	2.8	3.0	3.3	3.3	3.0	3.9	3.7
Consumer price index (CPI)	3.6	1.8	1.9	1.9	1.9	1.3	1.6	2.0	1.5	1.7	2.0	1.7
CPI-ATE[4]	3.0	1.5	1.4	1.6	1.8	1.5	1.8	1.8	1.5	1.9	1.8	1.7
Export prices, traditional goods	3.5	4.9	..	..	2.6	..	..	0.2	..	..	0.1	..
Import prices, traditional goods	1.4	3.2	..		2.5	..	..	1.2	..	..	0.8	..
Housing prices	7.0	4.6	6.0	..	-5.0	-0.4	..	-1.6	3.0	..	3.1	3.7
							..			..		
Balance of payment							..			..		
Current balance (bill. NOK)	121	215	..	193	222	..	137	237	..	..	251	..
Current balance (per cent of GDP)	3.9	6.5	..	5.6	6.4	..	3.9	6.5	..	4.5	6.6	..
							..			..		..
Memorandum items:							..			..		..
Household real income	-1.6	1.8			3.1			2.7			3.0	
Household savings ratio (level)	6.7	6.1	..	..	6.9	..	..	7.0	..	..	7.2	..
Money market rate (level)	1.1	0.9	0.9	0.9	0.8	0.9	0.9	0.9	1.1	1.2	1.2	..
Lending rate, credit loans (level)[5]	2.6	2.6	..	..	2.5	..	..	2.5	..	..	2.7	..
Crude oil price NOK (level)[6]	378	445	..	438	461	..	438	477	..	441	486	..
Export markets indicator	3.9	4.9	..	..	4.7	..	..	4.4	..	..	4.2	..
Importweighted krone exchange rate (44 countries)[7]	1.9	-0.9	-1.4	-1.1	0.1	-1.3	1.0	-2.0	-1.9	0.8	-2.0	-0.4

[1] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in Mainland Norway.
[2] Change in stockbuilding. Per cent of GDP.
[3] Norges Bank publishes projections for traditional goods, travel, and other mainland transport services.
[4] CPI adjusted for tax changes and excluding energy products (CPI-ATE).
[5] Yearly average.
[6] Average spot price, Brent Blend.
[7] Increasing index implies depreciation. Ministry of Finance forecasts trade-weighted exchange rate.
Source: Statistics Norway (SN), Ministry of Finance, the National Budget St.meld nr.1 (2017-2018), (MoF), Norges Bank, Monetary Policy Report 3/2017 (NB).

as well. At the beginning of 2019, prices will be a bare 10 per cent lower than the level in the first quarter of 2017. As the supply of dwellings decreases and the economic situation improves further, the trend in the housing market will reverse into a moderate upturn from 2019, according to our projections. Developments in the housing market therefore diverge from the general economic situation: whereas residential construction provided an important positive impulse to the Norwegian economy during the downturn we have put behind us, it is now expected to contribute negatively in the near term in the current cyclical upturn. Residential construction is usually more congruent with the general business cycle.

Investment and household consumption are expected to account for the bulk of growth impulses for the next few years. The decline in petroleum investment now appears to be over. The oil price has been rising by degrees from the end of 2016, when it dipped below USD 30, to the current level of over USD 60. Coupled with an improved global outlook and lower investment prices, this augurs well for increased petroleum investment. The investment plans of the petroleum companies confirm this picture. There are plans for increased investment in the Johan Sverdrup field in particular. More plans for development and operation are expected to be submitted to the authorities in the near future, for example for Skarfjell and Pil og Bue. The weak trend in petroleum investment since 2013 therefore appears to be giving way to a new upturn.

Mainland business investment will pick up and growth shows prospects of being broad-based. Power supply businesses are planning further investment in production, transmission and distribution of electricity. Manufacturing firms report strong growth in oil refining, chemicals and pharmaceuticals manufacturing and the food industry. Service sector companies are also reporting increased investment, according to Norges Bank's regional network. In total, this will yield growth rates of around 5 per cent in the years ahead. This is moderate, nonetheless, compared with previous cyclical upturns.

Household consumption growth is picking up. Consumption has generated positive growth impulses to the economy for five consecutive quarters. Although third quarter goods consumption was somewhat weaker than earlier this year, we expect consumption growth to pick up further in the near term. Continued low interest rates and increasing growth in real income are contributing to this. The weak house price developments will have a dampening effect, but we expect consumption growth to increase to about 3 per cent in 2020.

Employees will have higher real pay going forward. In normal times, it is taken as a matter of course that real wages rise due to increased productivity, but the last few years have not been normal, and wage growth has been very low. Last year's nominal annual wage growth was 1.7 per cent, which means a 1.8 per cent decline in real wages, the lowest observed in Norway for 70 years. This year we expect nominal wage growth to be 2.4 per cent. In pace with the improved economic situation, wage growth will rise to about 4 per cent at the end of the projection scenario. Given relatively stable inflation, about 2 per cent annually, this is equivalent to average growth in real wages from 2018 to 2020 of a bare 1.5 per cent.

Unemployment continues to fall. After peaking at almost 5 per cent in mid-2016, it has now fallen back to 4.0 per cent, according to Statistics Norway's Labour Force Survey (LFS). In contrast to previously, when unemployment has fallen because the labour force has shrunk, the current situation is that unemployment is falling because employment growth is stronger than the growth of the labour force. We expect unemployment as an annual average to be 4.2 per cent in 2017, and then to fall gradually to 3.7 per cent at the end of the projection period.

The participation rate has been falling in recent years. This trend can be ascribed partly to the aging population and partly to the fact that we have been through an economic downturn which has led to some people withdrawing from the labour market. According to the LFS, the participation rate was 70.1 per cent in the third quarter of this year. The fall is expected to come to a halt in the near term, largely owing to the improving economic situation.

Thus the cyclical upturn appears likely to be moderate. Many of the forces that had an expansionary effect during the downturn will be more neutral or contractionary in the years ahead. This applies particularly to fiscal and monetary policy, companies' cost-competitiveness and residential construction. However, the absence of these positive driving forces will not stop the incipient recovery. Global growth is expected to pick up, and petroleum investment will again contribute positively to activity. Given the picture we are drawing, the Norwegian economy will be in an approximately cyclically neutral situation in the second half of 2019.

2.1. Towards a more cyclically neutral fiscal policy

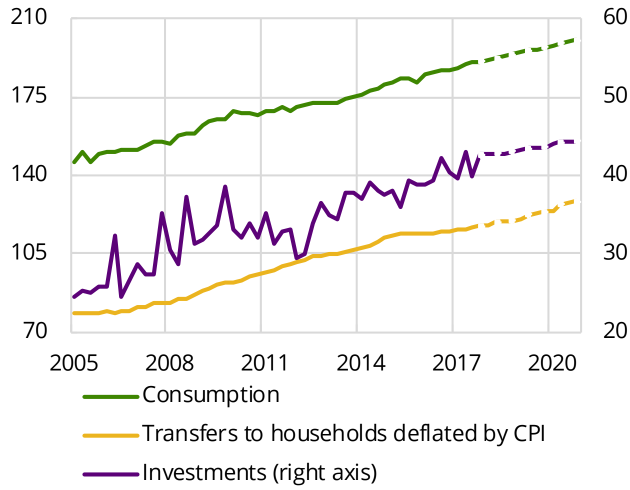
Fiscal policy has been providing a clear stimulus to the Norwegian economy since 2014. The National Budget 2018 (NB 2018) estimates that the structural non-oil budget deficit (SNOBD) as a share of trend mainland GDP has increased by 2.5 percentage points from 2013 to 2017. This is roughly the same stimulus as from 2006 to 2010, although most of the stimulus then was provided in 2009 alone. If SNOBD as a share of the mainland economy is used as indicator, fiscal policy will only generate marginally increased impulses to the economy in 2018. We can therefore say that the fiscal stance next year is approximately cyclically neutral.

General government consumption increased by 2.1 per cent from 2015 to 2016, while gross general government investment increased by nearly 6 per cent. Some of the high growth was due to increased imported defence investment, but gross non-military investment also increased appreciably. Public transfers to households increased by a nominal 3.9 per cent, so that real growth in transfers was only just positive as a result of the high inflation in 2016. Overall real growth in these three expenditure components was approximately 2 per cent in 2016, in line with estimated trend growth in the mainland economy. As a result of reduced tax rates in 2016, fiscal policy was expansionary on balance, and RNB 2018 estimates that SNOBD as a share of trend mainland GDP increased by 0.7 percentage point from 2015 to 2016. SNOBD was equivalent to 2.6 per cent of the value of the Government Pension Fund Global (GPFG) at the beginning of 2016.

Our fiscal policy projections in 2017 are in line with NB2018. Consumption growth this year is forecast to be a bare 2 per cent, and gross general government investment to be 5 per cent. The rise in investment in 2017 can largely be attributed to increased purchases of military fighter aircraft (from 2 aircraft in 2016 to 6 per year going forward). Growth in household transfers will be weak also in 2017 as a result of low wage growth. Considerably lower inflation this year will nonetheless push up real growth to about 1.5 per cent. Real growth in the three main expenditure components is now projected to be just over 2 per cent in 2017. The tax rate on ordinary income for companies (excluding the financial sector) and personal taxpayers has been reduced from 25 to 24 per cent in 2017. The system for petroleum tax and power supply taxation is being adjusted so that these two industries are not appreciably affected by the tax change. Bracket tax on high personal income has been increased, so that most of the revenue loss on personal taxpayers due to reduced tax on ordinary income will be recouped through other income taxes. Lower tax rates and real spending growth that is higher than trend growth in the mainland economy means that fiscal policy in 2017 is clearly expansionary. NB 2018 forecasts that SNOBD as a share of trend mainland GDP will increase by 0.4 percentage point from 2016 to 2017. At the beginning of 2017, SNOBD was a bare 3 per cent of the GPFG, in line with the fiscal rule. The municipalities have increased their scope for manoeuvre through increased property tax, particularly on residential property and cabins, so the reduction in overall taxes is somewhat less than might be expected by looking only at taxes levied by the central government.

We use the projections in NB2018 as our starting point for 2018, but adjust them as a result of the budget agreement in the Storting. The agreement entails a slight increase in the tax level and a corresponding increase in spending, thereby maintaining the budget balance in principle. Growth in general government consumption was projected to be 1.2 per cent in NB2018,

Figure 2. General government
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway.

and we now assume growth of 1.5 per cent next year. Growth will then be approximately the same as gross investment. The tax compromise based on the Scheel Committee's report means that the tax rate on ordinary income will be reduced to 23 per cent in 2018 and then kept constant in the near term. The resulting loss of revenue is projected to be just under NOK 3 billion in 2018. The Government proposed a number of minor revisions of tax rules and rates that roughly balance one another out, with the result that the overall (accrued) tax reduction was estimated at NOK 3 billion. The Storting budget agreement entails somewhat higher taxes, including higher taxes on CO2 emissions and on chocolate and sugar-containing products and a tax on non-alcoholic beverages. The effect of the proposed tax changes is contractionary, and the net effect implies a revenue increase of some NOK 2 billion. We estimate that the overall effect of the budgeted tax changes will affect the difference between CPI and CPI-ATE inflation by 0.2 percentage point in 2018. Real growth in transfers to households is estimated at just over 2 per cent next year. Overall real growth in expenditure for consumption, investment and transfers can then be estimated at approximately equal to trend growth in the economy. As tax reductions next year are very moderate following the Storting budget agreement, we can describe fiscal policy in 2018 as roughly cyclically neutral.

Fiscal policy projections for 2019 and 2020 are based on a weak increase in the level of indirect taxes, as in 2018. We assume these will take the form of increased environmental taxes. Growth in general government consumption and investment is moreover projected to be close to trend growth in the mainland economy, while transfers will increase slightly more in real terms. On balance, these projections lead to an approximately cyclically neutral fiscal policy in both 2019 and 2020, in line with the fiscal rule.

The Government Petroleum Fund Global is currently valued at over NOK 8 300 billion, which is appreciably higher than the projection in NB2018, at just under NOK 7 900 billion. The krone is very weak at present, and is expected to appreciate on balance going forward. Small changes in the krone exchange rate may cause substantial changes in fiscal scope for manoeuvre, but the fiscal rule is designed in such a way that random changes can be circumvented.

2.2. Low interest rate and weak krone

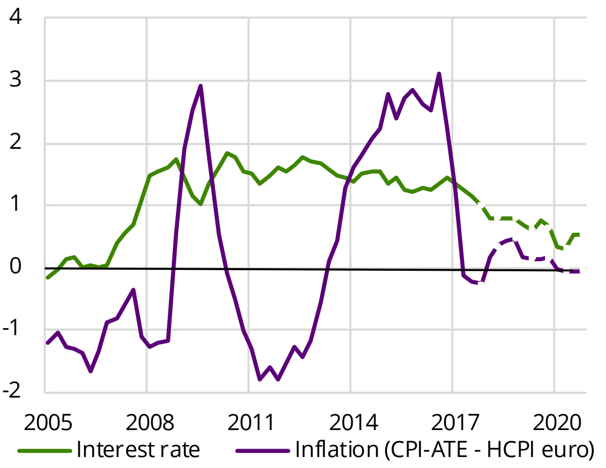
The key policy rate has been at a record-low 0.5 per cent since March 2016. At the beginning of 2017, the money market rate was 1.2 per cent. It has fallen on balance through the year, down to 0.8 per cent in August this year. At the end of November, the money market rate was still 0.8 per cent. Deposit and lending rates have not shown the same tendency this year. Interest rates on loans secured on dwellings from banks and credit institutions rose in the first quarter of 2017 from 2.5 to 2.6 per cent, an increase that can probably be explained by the increase in money market rates through the last three quarters of 2016. Interest on loans secured on dwellings remained roughly unchanged in the second and third quarters of 2017.

The average deposit rate has been 0.8 per cent since the beginning of 2017.

Measured in terms of the import-weighted krone exchange rate, the krone was about 4½ per cent weaker at the end of November than at the beginning of the year. During this period, the krone has weakened substantially against the euro. Whereas a euro cost about NOK 9.00 at the beginning of 2017, the exchange rate was up to about NOK 9.80 at end-November. However, the krone has strengthened against USD through 2017, from an exchange rate of just over NOK 8.60 to about NOK 8.30 per dollar at the end of November.

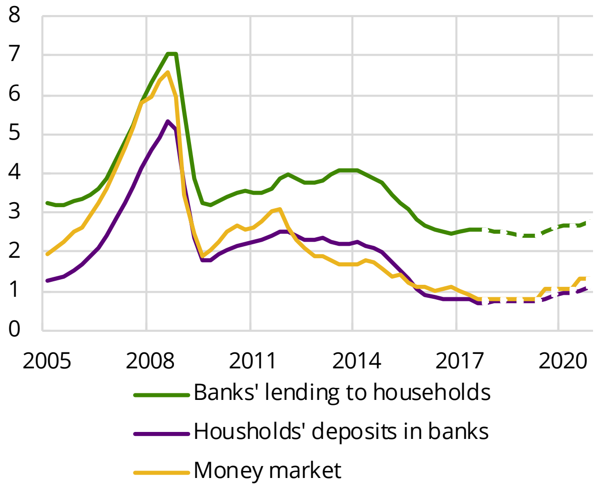
Growth in the Norwegian economy has picked up, and unemployment has fallen. In isolation, this points to higher interest rates going forward. However, since mainland GDP will remain below trend until the second half of 2019, and unemployment can still be considered high, it will be a while before the interest rate hikes come. Developments in house prices in 2017 combined with our forecast of a continued price fall in the near term also reduce the need to raise the interest rate in the near future. The forecast for mainland GDP growth in 2018 has been revised upward compared with the previous economic report. As a result, we now believe the interest rate hike may come somewhat earlier than previously forecast. We have therefore assumed in our projections that Norges Bank will raise the key policy rate by 0.25 percentage point in the second half of 2019, and that there will be one further increase in 2020. As a result of the fall in money market rates so far this year and our forecast that they will remain low going forward, we expect interest rates on loans secured on dwellings to edge down, to 2.5 per cent in early 2018.

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



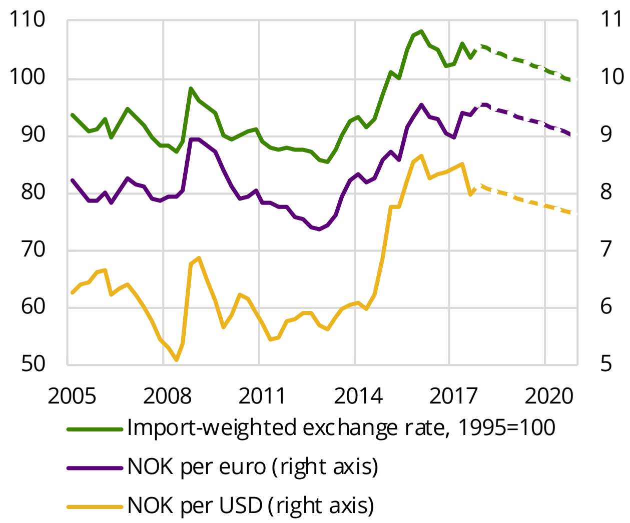
Norges Bank and Statistics Norway

Figure 4. Norwegian interest rates
Percent



Norges Bank and Statistics Norway

Figure 5. Exchange rates



Source: Norges Bank

At present the krone is weaker than we believe to be indicated by economic fundamentals. This points to the krone appreciating in the near term, while a reduced interest rate differential between Norway and the EU points the opposite way. Measured by the import-weighted krone exchange rate, the krone will appreciate by an annual average of approximately one per cent from 2016 to 2017, and will have roughly the same value next year as this year before again appreciating by about 2 per cent in both 2019 and 2020.

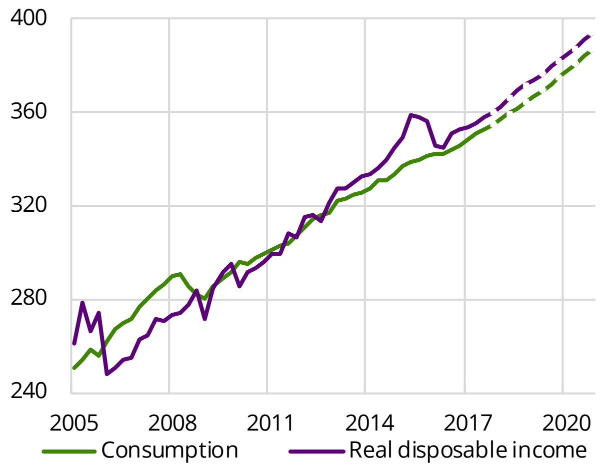
2.3. Consumption is picking up

Following weak growth through the first half of 2016, consumption by households and non-profit organisations has picked up appreciably. According to the QNA, seasonally adjusted consumption increased by 0.6 per cent in the third quarter of this year, approximately the same as in the previous four quarters. Goods consumption increased 0.4 per cent in the third quarter, mainly as a result of substantial purchases of cars, clothing and footwear, following broad-based growth of as much as 1.3 per cent the previous quarter. Consumption of services increased by 0.8 per cent in the third quarter, approximately on a par with average quarterly growth since 2012. An increase was seen for most service groups, with passenger transport, postal and telecommunications services and the hotel and restaurant industry making particularly large contributions to growth. If total consumption remains at the level of the third quarter through the fourth quarter, growth in 2017 as an annual average will be 2.3 per cent, compared with 1.5 per cent last year. Consumption growth therefore appears likely to be markedly higher this year than in 2016.

Developments in household income, wealth and interest are important forces driving consumption. Real disposable income fell by 1.6 per cent in 2016 after an increase of a full 5.5 per cent the previous year. The increase can be attributed to the high tax-motivated disbursements of share dividends in 2015. If we exclude dividend disbursements, real disposable income only increased by 0.5 per cent in 2016, about 2 percentage points less than the previous year. One important explanation is that wage income, the most important source of household income, pushed down growth in real disposable income last year owing to a fall in real wages and weak employment developments.

We assume growth in real wages in the near term, and that the increase in employment through the first three quarters of 2017 will continue as a result of higher

Figure 6. Income and consumption in households
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway

output growth, so that wage income as an annual average will again push up growth in real disposable income. Government transfers may also push up growth in real disposable income through the projection period. The contribution of net interest income to growth will be relatively moderate for the next few years, however, as the interest rates facing households will undergo little change. We now expect growth in real disposable income excluding share dividends of around 2 per cent this year, rising to around 3 per cent in the years 2018 to 2020. The stronger growth in real income will have a stimulating effect on consumption in the near term. A pronounced fall in real house prices and hence housing wealth in 2018 and 2019 will dampen this effect, however. Overall, we envisage consumption growth of around 2.5 per cent this year and next and around 3 per cent in 2019 and 2020.

Household saving, in the form of financial and real capital, has increased considerably since the financial crisis. Saving as a share of disposable income increased from a level of just over 3.5 per cent in 2008 to over 8 per cent in 2014. Because of the high share dividend disbursements, the saving ratio increased further to a level of around 10.5 per cent in 2015. The saving ratio excluding share dividends increased by about 3.5 percentage points from 2008 to 2015. However, the saving ratio both including and excluding share dividends fell through 2016 to annual averages for the year of 7 and 3 per cent, respectively. Given our projections for income, consumption, and wealth, the saving ratio might fall further to an annualised average of 6 per cent in 2017,

Table 4. Real disposable income by households and non-profit organisations. Percentage growth compared with previous year

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total	-6.4	6.2	3.5	3.2	2.3	4.2	4.5	3.9	2.9	5.5	-1.6	1.8	3.1	2.7	3.0
Excl. share dividends	4.5	5.0	2.8	3.4	1.9	4.2	4.4	3.8	2.4	2.4	0.5	2.2	3.1	2.8	3.0

Source: Statistics Norway.

before gradually edging up later in the projection period, again reaching an annualised average of around 7 per cent in 2020.

2.4. Fall in house prices will continue through 2018

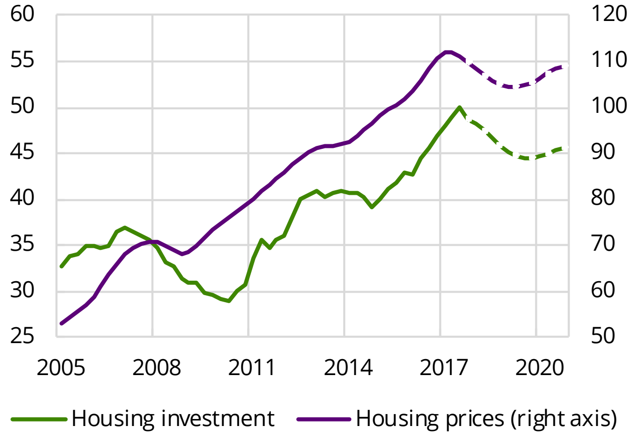
After several years of strongly rising house prices, driven by low interest rates and high demand, house prices have undergone a clear correction through 2017. Statistics Norway's house price index rose by a seasonally adjusted 1.3 per cent in the first quarter, a clear moderation compared with the average quarterly rise of 2.5 per cent last year. House prices fell for the first time since the fourth quarter of 2013, by 0.5 per cent in the second quarter and a further 1.0 per cent in the third quarter. The price fall is most pronounced in Oslo. If seasonally adjusted house prices remain at the level of the third quarter through the fourth quarter, the rise in 2017 as an annual average will be 4.7 per cent, compared with 7.0 per cent last year. Real Estate Norway's monthly house price index shows a seasonally adjusted fall in house prices of close to 2.5 per cent for the period March to September, while the most recent observation in October shows a rise of 0.4 per cent.

In our calculations, house prices are stimulated in the long term by an increase in household real disposable income and lower real interest rates, and curbed by an increase in the supply of new dwellings. At the same time, we take into account that household borrowing and house prices mutually influence one another, so that measures that curb borrowing also restrain the rise in house prices. We also assume that in the short term, house prices are influenced by changes in households' expectations of developments in both their own financial situation and the Norwegian economy.

Growth in real disposable income is expected to pick up going forward. Lending rates, which fell slightly through 2016, have remained stable at a low level so far this year, and are likely to remain so for a good while to come. According to Norges Bank's survey of bank lending, banks reported a certain tightening of credit standards to households through the first three quarters of the year. However, this has not as yet been reflected in aggregate domestic credit to households, measured by the year-on-year rise in the credit indicator, C2, which hovered around 6.5 per cent in the period January to September this year. Growth in household gross debt is projected to be just under 6 per cent in 2017, roughly the same as last year, around 4 per cent in 2018 and 2019 and somewhat higher in 2020.

The consumer confidence indicator of Kantar TNS and Finance Norway for the fourth quarter of this year reveals continued optimism among households concerning their financial situation and the Norwegian economy. We assume that the consumer confidence indicator will remain approximately unchanged from the current level for the next few years.

Figure 7. Housing market
Seasonally adjusted. Left axis: billion 2015 NOK, quarter. Right axis: index, 2015=100



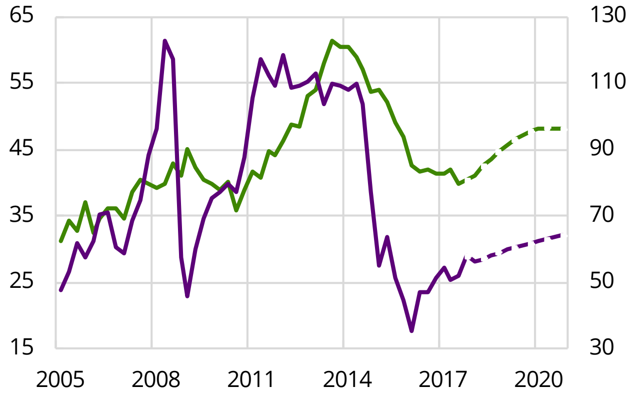
Source: Statistics Norway

Although growth in real disposable income will pick up, and real interest rates will remain low, we foresee house prices continuing to fall through 2018. Seasonally adjusted house prices will thus fall by just under 10 per cent from the peak in the first quarter of this year to a trough in the first quarter of 2019. By way of comparison, house prices fell just as much through two quarters during the financial crisis in 2008. Prices will then rise somewhat through 2019 and 2020. According to our projections, house prices will rise by an annual average of 4.6 per cent this year, fall by about 5 per cent in 2018 and 1.5 per cent in 2019, and increase by about 3 per cent in 2020. The reasons for this fall in prices are primarily the record-high level of housing investment and the supply of dwellings, and the fact that house prices had risen to a high level.

According to the QNA, housing investment rose by 9 per cent in 2016 and over 10 per cent in the first three quarters of this year compared with the same period last year. In terms of area, seasonally adjusted housing starts are now at a historically high level, but the underlying trend has been slowing in the period March to October.

In light of falling real prices for resale homes, housing investment now appears likely to stop rising this year and to slow at the start of next year. We estimate growth in housing investment of over 8 per cent as an annual average this year, a fall of close to 4 per cent in 2018 and 5 per cent in 2019, and growth of around 1 per cent in 2020. If our projections prove correct, and this fall occurs, housing investment in 2020 will be around 8 per cent lower than in the peak year of 2017, but still at a historically high level.

Figure 8. Petroleum investments and oil price
Seasonally adjusted. Left axis: billion 2015 NOK, quarter. Right axis: USD per barrel



Source: Statistics Norway

2.5. The fall in petroleum investment is giving way to a new upswing

The volume of petroleum investment has fallen markedly since the third quarter of 2013. After levelling off in the first two quarters of this year, investment fell by 5.1 per cent in the third quarter, according to the QNA. This is equivalent to a quarterly fall of 8.4 per cent in current prices. That the decline is smaller in real terms is attributable to the continuing fall in development costs in the petroleum sector. The decline in costs can be attributed largely to various productivity-promoting measures, coupled with lower prices for investment products.

After several years of declining petroleum sector investment, there are prospects of an upswing in the years ahead. The reason we expect an upturn is a combination of lower costs and the expectation that the oil price will remain at over USD 60 per barrel. Several development projects that have previously been put on hold may therefore become profitable. According to investment plans collected by Statistics Norway from petroleum companies, plans for development and operation (PDOs) have been submitted for several large projects. Some are expected to start up in the fourth quarter of this year already. In consequence, the decline in investment as an annual average for 2017 is not expected to be more than 3.4 per cent, measured in constant prices. All investment areas in the oil and gas extraction sector are contributing to the decline that is forecast for 2017, while the projection for pipeline transport is in the opposite direction, and serves to slow the decline somewhat.

Large development projects with planned start-up in the fourth quarter of 2017 or first quarter of 2018 include Johan Castberg, Yme and the Snorre Expansion. Many PDOs are also being planned for next year. The largest of these are Skarfjell, Pil og Bue and Johan Sverdrup (phase 2). There are also prospects of PDOs for several other development projects being submitted in the period ahead. The level of investment in the projects will be highest in 2019 and 2020. We therefore forecast an annual increase in petroleum sector investment of about 7 per cent in 2018 and over 8 per cent in 2019.

Oil production increased quite appreciably in 2016, while gas production fell back slightly. The Norwegian Petroleum Directorate estimates that oil production in 2017 will be on a par with 2016. For our near-term forecasts we use the Petroleum Directorate's projections, which show a moderate fall in oil production up to 2019, but stable gas production. The completion of major projects like Johan Sverdrup is expected to result in higher oil production in 2020, and a relatively clear increase in overall petroleum production that same year.

2.6. Upswing in business investment this year

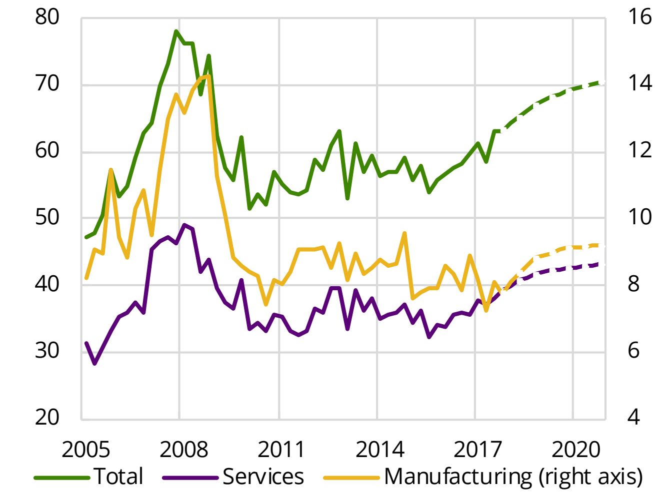
Mainland business investment increased quite appreciably through 2016 after falling moderately through the previous three years. This tendency continued into the first quarter of 2017, according to seasonally adjusted QNA figures. Mainland business investment fell in the second quarter of this year, but more than recovered again in the third quarter, with growth of 8.2 per cent. Manufacturing investment slumped by about 10 per cent in both the first and the second quarter, and although it increased by 12.0 per cent in the third quarter, an appreciably annualised fall appears likely.

In Statistics Norway's November investment intentions survey, companies submitted projections for their own investments in 2017 and 2018. The projection for manufacturing investment in 2017 is 3.5 per cent lower than the one made for 2016 in the fourth quarter of last year. Since the projection is expressed in nominal prices, the survey indicates a larger decline in investment this year. The projections for manufacturing investment made in November for 2018 are approximately 15 per cent higher than the corresponding projections for 2017 made in November 2016, and even after adjustment for expected inflation, the figures indicate a sharp rise in manufacturing investment next year.

The investment intentions survey also indicates a sharp increase in power supply, with an investment forecast almost 21 per cent higher than last year's. The upgrading of the main grid, installation of 'smart' electricity meters (advanced metering system - AMS) and development of several new wind farms are contributing to growth. Investment growth appears likely to continue next year. The projection for next year is about 19 per cent higher than the projections for 2017 made at the same time last year.

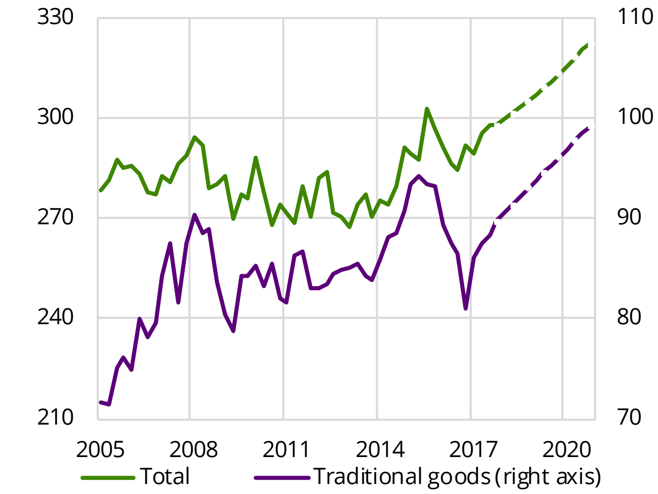
According to our projections, mainland business investment will grow by 6.6 per cent this year. This implies

Figure 9. Investments. Mainland Norway.
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway

Figure 10. Exports
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway

seasonally adjusted investment in the fourth quarter of this year that is slightly higher than in the third quarter. Whereas manufacturing investment is projected to fall by 8.0 per cent this year, investment in private services is forecast to grow by 6.8 per cent.

We forecast increased manufacturing investment next year, in line with the investment intentions survey. However, our projections are not as optimistic as companies' own estimates in the investment intentions survey. We forecast that manufacturing investment will grow by just under 10 per cent next year, and continue growing substantially in 2019. Investment in private services is also expected to grow next year, an expectation supported by the projections provided by Norges Bank's regional network. For mainland industry as a whole, we forecast investment growth of about 6 per cent next year High GDP-growth combined with low interest rates next year will contribute to this development. In 2019 and 2020, investment growth will fall back, due to somewhat slower global growth and higher interest rates than in 2018.

2.7. Improved current account balance

The volume of traditional goods exports increased in the third quarter of 2017, according to the QNA. Following a reduction through the second half of 2015 and the whole of 2016, exports of traditional goods have increased through 2017 and made up about half of the preceding decline. Increased exports of refined petroleum products, chemicals, chemical and mineral products and metals have contributed substantially to growth in 2017. However, in the third quarter a large increase in exports of another major product group – engineering products – assured growth in traditional goods exports. A prolonged decline in exports of engineering products in 2015 and 2016 came to a halt in the first half of 2017, and reversed into an upswing in the third quarter of this year.

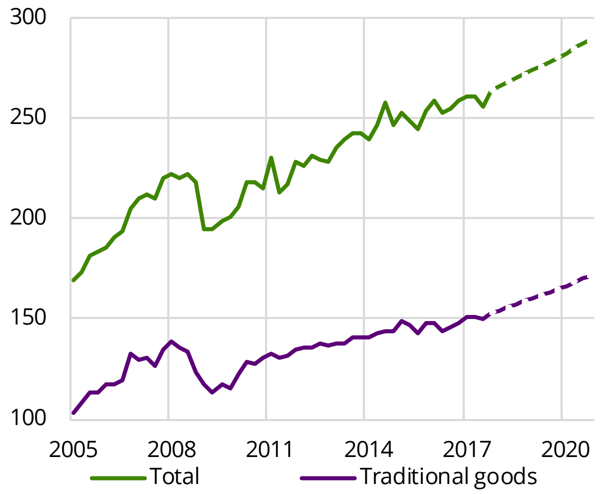
In 2017, exports of natural gas showed stronger developments in terms of both volume and price than exports of crude oil, and the third quarter value of gas exports was 17 per cent higher than the value of oil exports. Following a minor reduction in overall oil and gas exports in the first quarter, the volume of exports increased by almost 6 per cent in the second and third quarters. Exports of services have also grown in the same period, following a decline in the first quarter of this year. Both decline and growth have been broad-based, and the export volumes of many service groups have rebounded to the level of the fourth quarter of 2016. The level of exports of petroleum-related services is considerably higher this year than last.

After eight quarters of growth, the export price index for traditional goods fell in the third quarter of this year. The decline was broad-based. Prices for both oil and gas fell in the second and third quarters, after rising for the four preceding quarters. A decline in prices for service exports as a whole in both the second and third quarters was also broad-based.

Traditional goods exports appear set to increase in 2017 compared with the level in 2016. Mainland exports are expected to pick up in the years ahead, boosted by a weak krone and improved competitiveness. Exports of goods and services associated with international petroleum activities will benefit from a rising oil price and the cost efficiency measures implemented by the petroleum sector. Exports of oil and gas will only show growth of significance in 2019/2020 with the start of production on the big Johan Sverdrup field.

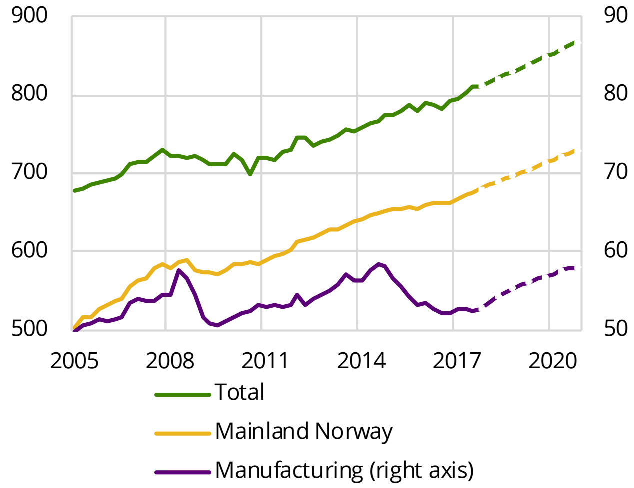
Traditional goods imports increased in volume in 2017 compared with 2015 and 2016. In the first three quarters of the year, the volume of traditional goods imports remained virtually constant at a level about 3 per cent higher than the average for the previous years.

Figure 11. Imports
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway

Figure 12. Gross domestic product
Seasonally adjusted, billion 2015 NOK, quarter



Source: Statistics Norway

The third quarter saw a large increase in metal imports and a slightly larger reduction in imports of engineering products, but apart from this there were only minor changes. Imports of non-military ships and boats have fallen each quarter in 2017, by a total of over 60 per cent. Service imports have grown by over 3 per cent in the past two quarters, boosted by growth in information and business services (including recruitment of foreign labour). Norwegians' consumption abroad remains stable. In the current year, relatively high domestic demand will be reflected in pronounced growth of traditional goods imports. Next year lower demand growth and imports are expected.

The sharp fall in the oil price contributed substantially to the large reduction in the trade surplus in 2015 and 2016. However, weaker developments in net mainland exports in 2016 and in the terms of trade in 2015 also contributed to a smaller surplus. Although the trade surplus appears likely to increase this year, it will still be relatively small. We assume that the aforementioned causes will be reversed to some extent, and contribute to a growing trade surplus through the projection period. Weak developments in the Norwegian (oil) economy and the krone exchange rate, coupled with an increasing return from a growing petroleum fund, have contributed to the income and current transfers balance showing a markedly increasing surplus in recent years. We expect no major changes in this surplus in the next few years. The balance of income and current transfers may therefore make a larger positive contribution than the balance of goods and services to a growing surplus on the current account balance in the projection period. The surplus expressed as a share of GDP is expected to be between 6 and 7 per cent in the projection period.

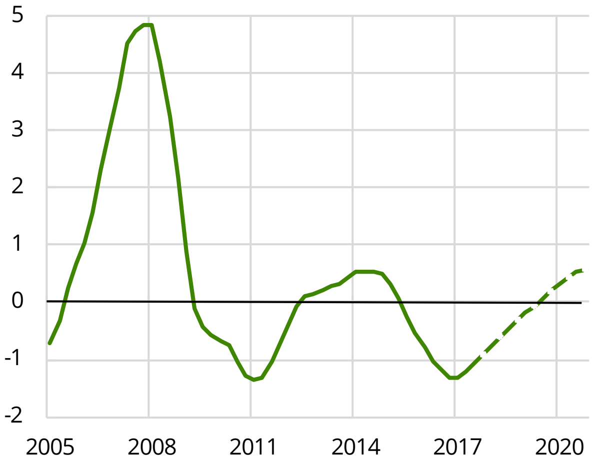
2.8. Continued cyclical upturn

Mainland GDP increased by 0.6 per cent in the third quarter of 2017 following roughly similar growth in the first and second quarters. Growth so far this year implies underlying annual growth of about 2.5 per cent, compared with estimated trend growth of just under 2 per cent. The Norwegian economy is thus in a moderate cyclical upturn.

The upturn follows a slump due largely to reduced petroleum sector demand. The ripple effects of this fall in demand affected large sectors of the Norwegian economy. Hardest hit was manufacturing, where value added fell by more than 10 per cent from the third quarter of 2014 to the beginning of 2017. However, even manufacturing has shown signs of improvement since the fourth quarter last year, and this applies even to those manufacturing segments that have normally been most strongly linked to petroleum activities. The activity level did fall back somewhat in the third quarter of 2017, driven by precisely the petroleum-related industries, but the underlying tendency still seems to be positive.

Value added for the other goods-producing mainland industries rose by a full 1.1 per cent from the second to the third quarter, following strong growth also in the first two quarters of this year. Growth remains high in building and construction, where value added rose 0.9 per cent, approximately in line with average growth in the first half of the year. The industry has long been an important driver for the Norwegian economy, and helped to prevent the downturn becoming deeper than it actually became. The upturn can probably be attributed to the low interest rate level and large public investment projects. Developments in other goods-producing industries, which are all to some extent subject to naturally occurring factors, were mixed in the third quarter. Electricity production increased by just over 1 per cent following strong second-quarter growth, while the activity level in agriculture and forestry dipped. Value added in fishing and aquaculture rose by a whole 4.8 per cent, after an almost equally large fall the preceding quarter.

Figure 13. Output gap. Mainland Norway
Deviation from estimated trend GDP in percent



Source: Statistics Norway

Value added in service industries excluding general government increased by 0.8 per cent in the third quarter, following second-quarter growth of 0.6 per cent. So far this year, growth in the service industries has been fairly broad-based. Growth in business services has been particularly strong, with the hotel and restaurant industry close behind. The latter should be viewed in light of the weak krone, which not only encourages foreign tourists to visit Norway, but also leads to Norwegians spending more holidays at home. Value added in general government edged up only 0.2 per cent in the third quarter. This is appreciably lower than growth last year and in the first half of the current year, and also less than estimated trend growth in the Norwegian economy as a whole.

We expect growth in economic activity to pick up further in the near term. The negative demand impulses from the petroleum sector are now waning, and the sector is likely to generate moderately positive growth impulses next year already. Manufacturing, which has experienced some growth so far this year, will benefit appreciably from this turnaround. In addition, manufacturing will probably benefit from the substantially improved competitiveness of recent years due to a weak krone and low wage growth. On balance, we therefore also foresee growth in manufacturing activity through the projection period.

The construction industry has experienced strong growth in recent years, and our projections indicate that growth will remain at a high level for the remainder of this year and some way into next year. The growth rate will then abate, mainly as a result of falling residential construction, but also because growth in public investment in fixed assets is expected to be lower. Increased mainland business investment will have a countering effect, and may offset some of the reduction in demand.

We furthermore expect the upswing in the service industries to continue in the near term, as the overall economic upturn becomes more firmly established. Growth in general government is expected to remain fairly stable at slightly below trend growth for the mainland economy. In sum, we forecast mainland GDP growth of 1.9 per cent in 2017 and somewhat higher for the next three years. We estimate trend growth in the Norwegian economy to just under 2 per cent, and our projections therefore imply that the cautious cyclical upturn we have now embarked upon will persist through the projection period.

2.9. Somewhat tighter labour market

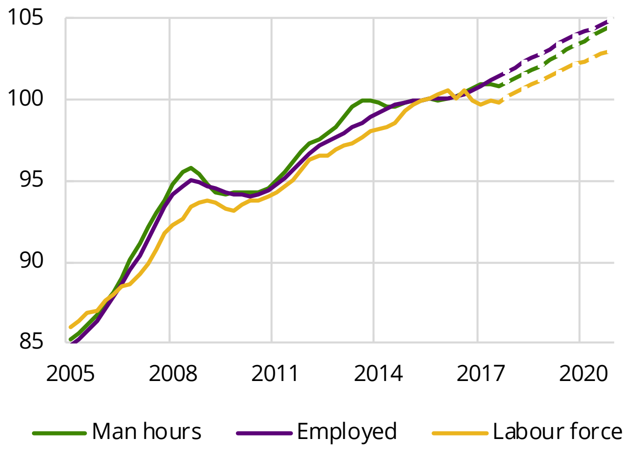
Following moderate employment growth of less than 0.5 per cent in 2015 and 2016, employment increased by an annualised 1.2 per cent in each of the first three quarters this year. As an average for the period August to October, unemployment has fallen to 4.0 per cent from a peak of 4.9 per cent in summer 2016. Both broader-based employment growth across industries and a decline in unemployment across counties in the third-quarter point to a tighter labour market in the near term.

After falling for several quarters, employment in extraction of crude oil and natural gas, including services, rose in both the second and third quarters of 2017. The increases of 0.3 per cent and 0.5 per cent, respectively, were moderate, however. Employment in extraction of crude oil and natural gas continued to make a negative contribution, and dipped 0.2 per cent in the third quarter. This is a more subdued decline in employment than observed for several consecutive quarters, however. Services associated with extraction of crude oil and natural gas – previously exhibiting a sharp decline in employment – reported positive employment growth of over one per cent in both the second and third quarters of 2017.

Manufacturing employment rose by 0.5 per cent in the third quarter, and growth was broad-based. This is the first quarter with employment growth in manufacturing since the beginning of the downturn in the second quarter of 2014. The decline in manufacturing employment showed signs of slowing earlier this year already because of higher demand for labour in manufacturing segments that are less strongly associated with the petroleum sector.

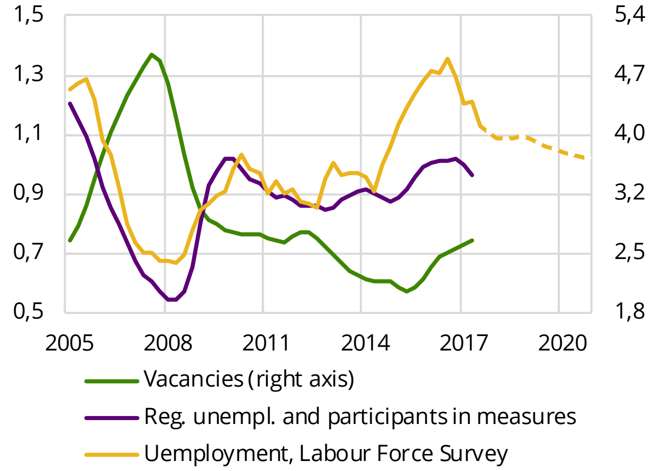
Positive contributions to overall employment from the hotel and restaurant, construction and commercial services industries continued in the third quarter of 2017. Employment in commercial services has shown positive growth for six consecutive quarters, and was particularly high in the third quarter of this year at 2.7 per cent. However, this also reflects higher temporary employment in recruitment companies, which may indicate an uncertain, but also steadily increasing demand for labour in the rest of the economy.

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



Source: Statistics Norway

Figure 15. Unemployed and number of vacancies
Percent of labour force, seasonally adjusted and smoothed



Source: The Norwegian Labour and Welfare Service and Statistics Norway

Vacancy developments also indicate increased growth in demand for labour. According to Statistics Norway, the number of vacancies increased by 8.4 per cent from the third quarter of 2016 to the third quarter of 2017, following positive growth through the second half of 2016. Such a steady rise in vacancy numbers has not been seen since the economic upturn ten years ago.

Unemployment measured by the LFS remained fairly stable through the first half of 2017 and then fell. Unemployment in February (the average for the months January–March) was 4.3 per cent. After rising temporarily to 4.5 per cent in March and April, unemployment fell back to 4.3 per cent in May and June. Unemployment in September (the average for the months August–October) was 4.0 per cent. The decline seen earlier this year is closely related to the reduction in the labour force. In September, however, unemployment decreased concurrently with an increase in the labour force.

According to the Norwegian Labour and Welfare Organisation (NAV), the seasonally adjusted number of individuals registered as fully unemployed and those registered as fully unemployed and those on labour market programmes declined through the period January–October this year. About 1 900 fewer persons were registered as fully unemployed or on labour market programmes in October 2017 than in September 2017, and 12 000 fewer than in December 2016. Unemployment figures by county show that the decline through 2017 in the number of fully unemployed applies to almost all counties. Since April this year there has also been a reduction in the number of long-term unemployed, i.e. persons who have been fully unemployed for over six months. Both indicate that the cyclical upturn is broad-based.

Employment is forecast to pick up in 2017 and continue rising in the near term. According to our projections, employment in private services production will increase as a share of total employment during the projection period. Conversely, the shares of those employed in the public sector and in retail trade will fall. Employment growth in construction will be relatively more moderate, bringing the share of workers in this industry slightly down towards 2020. The improving economic situation will also prompt an increase in the labour force, however. According to our calculations, annualised unemployment will be 4.2 per cent this year and fall to around 3.7 per cent towards the end of the projection period.

2.10. Wage growth is picking up

Nominal annual wage growth has been low since 2014. Last year's annual wage growth of 1.7 per cent was particularly low, and the decline in petroleum-related employment contributed to pushing down average wage growth. We assume that the composition effects will wane going forward, and that wage growth will be higher, but still moderate, both this year and next. As the economic upturn takes hold, wage growth is expected to rise to 4 per cent in 2020.

Growth in average annual wages can be decomposed into three parts: The carry-over reflects the difference between the annual wage level at the end of the previous year and the average annual wage level for the previous year, the negotiated wage increase includes the increase arising from central negotiations, and wage drift is the sum of all other factors that contribute to recorded wage growth.

The Technical Reporting Committee on Income Settlements (TBU) has calculated the carry-over into 2017 for several negotiating areas. The average carry-over is 1.1 percentage points, with some variation across areas. The carry-over for retailers in the Enterprise Federation of Norway (Virke) is 0.9 per cent, and the carry-overs in central and local government are

1.5 and 0.9 per cent, respectively. The carry-over into 2017 is somewhat lower than in previous years with interim settlements, mainly as a result of last year's low wage growth.

The Confederation of Norwegian Enterprise (NHO), with the agreement of the Norwegian Confederation of Trade Unions (LO), estimates wage growth in manufacturing of 2.4 per cent in this year's wage settlement. The norm is based on 1.1 percentage point carry-over, 0.3 percentage point pay increase and 1.0 percentage point wage drift. The moderate wage growth must be viewed against the backdrop of the relatively high unemployment and the fact that profitability in some petroleum-related activities has been weak.

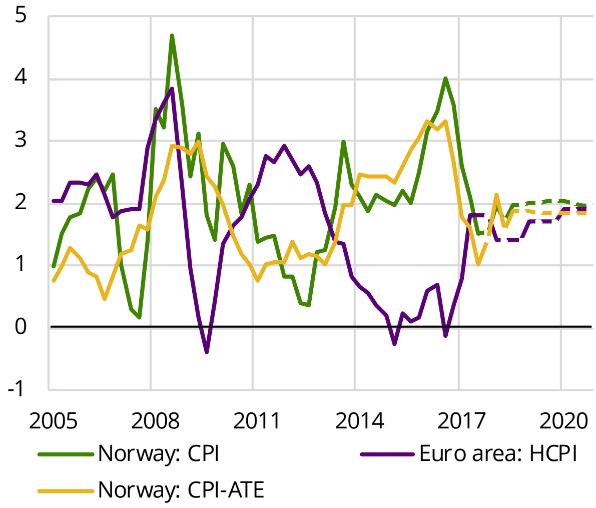
The wage index for basic salary also shows a moderate tendency for the first three quarters of the year for most industries. We assume that wage settlements in areas other than manufacturing will largely follow the moderate wage developments in manufacturing, with the result that annual wage growth this year will be 2.4 per cent.

As the economic situation improves and unemployment falls, wage growth is expected to pick up. The global economic situation is also improving, with the consequence that inward labour migration from Eastern European EU countries will fall in the projection period. On the other hand, higher employment will also mean that more low-paid job-seekers will be employed in the near term. A countering trend is that highly qualified workers who previously worked in the petroleum sector secure jobs in other industries after a period of unemployment. The labour market is expected to become tighter in pace with the cyclical upturn, and real wage growth is forecast to rise towards 2 per cent at the end of the projection period.

2.11. Prospects of continued low inflation

The depreciation of the krone from early 2013 up to January 2016 resulted in very high inflation later in 2016. This was a consequence of prices for imported goods and services gradually being adjusted to the weaker krone exchange rate. The krone strengthened through 2016 and into 2017, resulting in lower imported inflation from summer 2016. This factor, and the moderate wage growth of recent years, have been important reasons for the steadily slowing rise in prices. In July 2016, the 12-month rise in the consumer price index (CPI) was 4.4 per cent, while it had fallen to 1.2 per cent in October. This was the lowest 12-month rise in the CPI since February 2013. The year-on-year rise in the consumer price index, adjusted for tax changes and excluding energy products (CPI-ATE) was 1.1 per cent in October, up from 0.9 per cent in August. By comparison, the year-on-year rise in the CPI-ATE was 3.7 per cent in July 2016. CPI inflation in October reflected a sharp rise in airfares as a result of high demand for air

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



Source: Statistics Norway

travel in the autumn holidays. Airfares will probably correct downwards again in November, and in isolation push down underlying inflation. On the other hand, the recent weakening of the krone may contribute to a rise in the underlying inflation rate in the months ahead. For 2017 as a whole, the CPI-ATE appears likely to rise by 1.5 per cent, while the rise in the CPI is estimated to be 1.8 per cent.

A decomposition of the sub-indices in the CPI-ATE by delivery sector shows that it is consumption of goods, both Norwegian and imported, that is pushing down the inflation rate. The 12-month rise in prices for these consumer groups fell by 0.9 per cent and 0.3 per cent, respectively, in October. Prices for services increased by 2.3 per cent and were the reason that the year-on-year rise in the CPI-ATE had a positive sign. According to the CPI, prices for food and alcoholic beverages have fallen since this summer. Year-on-year price changes for large product groups such as clothing and footwear, furniture and household items have mainly been negative since July. The competition for market shares using prices as an instrument emerges as one cause of a slow rise in prices for consumer goods. Another contributing factor is probably competition from online trading, and the limited possibility for companies to increase prices without it leading to a fall in sales. According to Statistics Norway's retail trade statistics, online shopping websites in Norway had turnover of NOK 9.5 billion in the first half of 2017, a 14 per cent increase on the same period in 2016. This indicates that physical stores face increasing competition from online retailers. Given our projections for developments in wage growth and import prices, the competitive situation implies that the rise in prices for goods will be moderate in the years ahead.

An important explanatory factor for the rise in the services sub-index in the CPI-ATE is movements in rents, where the 12-month rise has not varied much from 2.0 per cent since November 2016. For the past three months, rents have risen 1.9 per cent compared with last year. Actual and imputed rent have a combined weight of over 20 per cent in the CPI-ATE, and thus play a considerable part in inflation. Actual rent is calculated as market rents, the figures for which are obtained each month from a selection of rental dwellings in the rent survey. The price of rents for owner-occupied dwellings is derived from rents for similar dwellings in the rental market. Existing rental contracts are mainly regulated in accordance with developments in the CPI, while entering into new rental contracts allows greater scope for regulating the rent for rental dwellings. With this year's slowing in CPI inflation and prospects of lower interest rates and a moderate general rise in prices going forward, we assume that the rise in rents will remain at approximately the current level for the next few years.

Prices for the two service groups holiday travel and package tours and accommodation services increased by 5.4 and 5.9 per cent in the first ten months of the year compared with the same period last year. The rise in prices for holiday travel must be largely ascribed to the weakening of the exchange rate. The same probably applies to the accommodation services group, in which price developments have been weak for many years. A weaker krone makes it more attractive for both tourists and Norwegians to holiday in Norway, which may explain the increase in occupation rates and higher prices.

Up until October, electricity prices including grid rental were clearly higher through 2017 than for the same month in 2016. According to figures from the Norwegian Water Resources and Energy Directorate (NVE), reservoir levels this autumn are considerably higher than last year. The favourable resource situation contributed to the spot price for electricity decreasing from September to October. The 12-month rise in the CPI for electricity prices, including grid rental, had fallen to 1.1 per cent in October. Spot prices so far in November have been far lower on average than in the same month last year and, viewed in isolation, will further depress the 12-month rise in the CPI from October to November. However, electricity prices fell substantially from November to December in 2016, so this effect on the 12-month rise may be temporary. Prices for forward contracts in the Nord Pool area indicate that power prices for the next few years will fall somewhat compared with this year's realised spot prices. Grid rental has increased appreciably this year, and investment projects associated with the grid point to a pronounced rise in grid rentals also in the years ahead. We assume that the overall electricity price to households will rise by over 8 per cent this year, and fall slightly in 2018. We then assume that electricity prices will increase approximately in pace with the rise in prices generally.

The settlement among the conservative parties on next year's national budget includes increases in the registration fee for cars and the taxes on mineral oil, chocolate and alcohol-free beverages. In total, higher special taxes will increase CPI inflation for 2018 by 0.2 percentage point. Our projections assume a continuation of the increase in special taxes equivalent to 0.2 percentage point of the CPI for the years 2019 and 2020 as well. We have assumed for these two years that the special taxes on fuel will be raised, while other tax rates will be adjusted according to general inflation. Even given our assumption of a fall in electricity prices next year, a higher oil price and an increase in special taxes mean that CPI inflation will be slightly higher than CPI-ATE inflation also in 2018.

Time-lagged effects of the current weak krone exchange rate will probably exert upward pressure on prices for imported goods for a while going forward. We assume that the weakening of the krone is temporary, and that it will appreciate somewhat in the years ahead. Given moderate global inflation, imported price inflation will be low and its effect on underlying inflation will gradually wane. Wage growth will pick up somewhat through the cyclical upturn and contribute, in isolation, to higher inflation. Countering this effect is an increase in productivity growth in the years immediately ahead, which is normal at an early stage of a cyclical upturn. Given our assumptions concerning developments in special taxes, CPI inflation will be generally somewhat higher than CPI-ATE inflation. According to our calculations, CPI-ATE inflation will average 1.8 per cent for the next three years. CPI inflation will be 1.9 per cent in 2018 and 2.0 per cent in 2019 and 2020. If the exchange rate assumptions hold true, the increase in prices for Norwegians' consumption abroad will ease further on in the projection scenario, and have the effect that consumer price inflation, measured by the national accounts deflator, is lower than CPI inflation.

Table 5. National accounts: Final expenditure and gross domestic product. At constant 2015 prices. Million kroner

	Unadjusted		Seasonally adjusted							
	2015	2016	15.4	16.1	16.2	16.3	16.4	17.1	17.2	17.3
Final consumption expenditure of households and NPISHs	1 353 723	1 374 069	341 510	342 514	342 293	343 885	346 096	348 533	351 095	353 202
Household final consumption expenditure	1 281 171	1 300 126	323 148	324 642	323 524	325 255	327 428	329 692	332 761	334 598
Goods	592 469	591 644	148 947	149 023	147 778	147 440	148 477	149 014	150 979	151 584
Services	621 993	641 144	157 338	158 360	159 208	161 195	162 051	163 403	164 397	165 684
Direct purchases abroad by resident households	106 006	109 815	26 888	27 441	27 167	27 668	27 469	27 352	28 112	28 338
Direct purchases by non-residents	-39 297	-42 477	-10 025	-10 182	-10 629	-11 049	-10 570	-10 078	-10 727	-11 008
Final consumption expenditure of NPISHs	72 552	73 943	18 362	17 872	18 770	18 631	18 668	18 841	18 334	18 604
Final consumption expenditure of general government	729 267	744 881	181 822	184 901	186 204	186 767	187 040	188 012	189 438	190 353
Final consumption expenditure of central government	368 749	377 100	92 089	94 026	94 190	94 484	94 434	94 692	95 372	95 750
Central government, civilian	325 138	333 554	81 151	83 066	83 278	83 648	83 596	83 922	84 628	84 967
Central government, defence	43 611	43 546	10 938	10 960	10 912	10 836	10 838	10 770	10 744	10 783
Final consumption expenditure of local government	360 518	367 781	89 733	90 874	92 015	92 283	92 606	93 319	94 067	94 603
Gross fixed capital formation	741 413	739 701	183 694	181 263	182 569	187 279	187 636	188 780	191 676	192 277
Extraction and transport via pipelines	201 658	167 624	46 815	42 648	41 777	41 907	41 374	41 392	41 953	39 831
Ocean transport	-867	-1 698	-451	275	-682	-490	-767	-1 374	-605	-545
Mainland Norway	540 622	573 776	137 330	138 341	141 473	145 862	147 029	148 762	150 329	152 991
Industries	223 056	232 305	55 683	56 651	57 685	58 047	59 818	61 212	58 440	63 226
Service activities incidential to extraction	4 785	2 010	748	891	387	234	498	1 059	896	1 733
Other services	131 832	138 859	33 184	32 746	35 322	35 639	35 226	36 759	36 224	36 248
Manufacturing and mining	31 262	33 794	7 930	8 597	8 361	7 864	8 916	8 134	7 255	8 123
Production of other goods	55 177	57 642	13 822	14 417	13 615	14 311	15 178	15 260	14 065	17 121
Dwellings (households)	165 708	180 689	42 882	42 756	44 393	45 629	46 900	48 063	48 945	49 958
General government	151 858	160 783	38 765	38 934	39 395	42 185	40 310	39 488	42 944	39 807
Acquisitions less disposals of valuables	348	358	90	87	92	85	94	94	90	86
Changes in stocks and statistical discrepancies	117 955	162 296	28 924	47 392	42 617	34 322	39 098	41 163	36 710	31 604
Gross capital formation	859 716	902 355	212 619	228 655	225 186	221 601	226 734	229 944	228 386	223 881
Final domestic use of goods and services	2 942 706	3 021 305	735 950	756 070	753 683	752 253	759 870	766 488	768 920	767 436
Final demand from Mainland Norway	2 623 612	2 692 726	660 662	665 755	669 971	676 514	680 165	685 307	690 863	696 546
Final demand from general government	881 125	905 663	220 586	223 834	225 599	228 953	227 351	227 499	232 382	230 160
Total exports	1 176 078	1 154 865	296 823	291 444	286 170	284 749	292 172	289 332	295 357	298 133
Traditional goods	374 196	343 695	93 172	89 387	87 533	86 506	80 973	86 190	87 509	88 395
Crude oil and natural gas	445 209	464 491	112 487	116 845	114 805	113 861	118 170	117 396	122 007	124 122
Ships, oil platforms and planes	11 508	16 755	2 919	2 055	2 736	2 923	9 026	7 425	2 819	1 582
Services	345 165	329 923	88 245	83 158	81 096	81 459	84 003	78 321	83 022	84 034
Total use of goods and services	4 118 784	4 176 169	1 032 774	1 047 514	1 039 853	1 037 003	1 052 043	1 055 821	1 064 277	1 065 568
Total imports	1 000 668	1 024 020	253 805	258 629	252 482	254 939	258 750	261 392	260 788	256 212
Traditional goods	587 771	585 418	148 038	147 651	144 139	145 814	147 672	150 706	150 518	150 381
Crude oil and natural gas	10 908	9 793	2 867	3 002	2 250	2 564	1 971	2 635	3 403	2 760
Ships, oil platforms and planes	34 895	44 122	7 491	9 287	10 712	11 964	12 183	14 173	11 228	6 177
Services	367 094	384 688	95 409	98 689	95 380	94 597	96 924	93 877	95 639	96 894
Gross domestic product (market prices)	3 118 116	3 152 149	778 969	788 885	787 371	782 064	793 293	794 429	803 490	809 357
Gross domestic product Mainland Norway (market prices)	2 621 032	2 646 221	655 661	659 157	661 332	661 964	663 437	667 769	671 840	675 729
Petroleum activities and ocean transport	497 084	505 928	123 308	129 729	126 039	120 100	129 856	126 660	131 649	133 627
Mainland Norway (basic prices)	2 278 422	2 295 067	569 012	572 331	573 364	574 150	575 244	578 773	582 080	585 243
Mainland Norway excluding general government	1 711 838	1 715 599	426 605	428 231	428 846	428 907	429 630	432 167	434 739	437 644
Manufacturing and mining	219 267	210 217	53 319	53 480	52 675	52 091	52 098	52 618	52 737	52 479
Production of other goods	276 957	284 358	68 988	71 335	70 591	70 944	71 452	72 070	72 695	73 498
Services incl. dwellings (households)	1 215 614	1 221 024	304 298	303 417	305 581	305 871	306 081	307 479	309 307	311 667
General government	566 584	579 468	142 407	144 100	144 518	145 243	145 613	146 606	147 341	147 599
Taxes and subsidies products	342 610	351 154	86 649	86 826	87 968	87 814	88 193	88 996	89 760	90 486

Source: Statistics Norway.

Table 6. National accounts: Final expenditure and gross domestic product. At constant 2015 prices. Percentage change from the previous period

	Unadjusted		Seasonally adjusted							
	2015	2016	15.4	16.1	16.2	16.3	16.4	17.1	17.2	17.3
Final consumption expenditure of households and NPISHs	2.6	1.5	0.4	0.3	-0.1	0.5	0.6	0.7	0.7	0.6
Household final consumption expenditure	2.3	1.5	0.4	0.5	-0.3	0.5	0.7	0.7	0.9	0.6
Goods	1.2	-0.1	-0.2	0.1	-0.8	-0.2	0.7	0.4	1.3	0.4
Services	3.9	3.1	0.8	0.6	0.5	1.2	0.5	0.8	0.6	0.8
Direct purchases abroad by resident households	1.5	3.6	1.5	2.1	-1.0	1.8	-0.7	-0.4	2.8	0.8
Direct purchases by non-residents	9.8	8.1	-0.1	1.6	4.4	3.9	-4.3	-4.7	6.4	2.6
Final consumption expenditure of NPISHs	9.0	1.9	0.6	-2.7	5.0	-0.7	0.2	0.9	-2.7	1.5
Final consumption expenditure of general government	2.4	2.1	-0.7	1.7	0.7	0.3	0.1	0.5	0.8	0.5
Final consumption expenditure of central government	3.1	2.3	-0.4	2.1	0.2	0.3	-0.1	0.3	0.7	0.4
Central government, civilian	3.1	2.6	-0.5	2.4	0.3	0.4	-0.1	0.4	0.8	0.4
Central government, defence	3.5	-0.1	0.3	0.2	-0.4	-0.7	0.0	-0.6	-0.2	0.4
Final consumption expenditure of local government	1.6	2.0	-1.0	1.3	1.3	0.3	0.3	0.8	0.8	0.6
Gross fixed capital formation	-4.0	-0.2	0.2	-1.3	0.7	2.6	0.2	0.6	1.5	0.3
Extraction and transport via pipelines	-12.2	-16.9	-4.3	-8.9	-2.0	0.3	-1.3	0.0	1.4	-5.1
Ocean transport	-232.6	95.9	-16.5	-161.0	-348.0	-28.1	56.5	79.1	-55.9	-10.0
Mainland Norway	-0.2	6.1	1.7	0.7	2.3	3.1	0.8	1.2	1.1	1.8
Industries	-2.8	4.1	3.5	1.7	1.8	0.6	3.1	2.3	-4.5	8.2
Service activities incidential to extraction	3.8	-58.0	-17.7	19.1	-56.6	-39.6	113.0	112.6	-15.4	93.4
Other services	-5.1	5.3	5.9	-1.3	7.9	0.9	-1.2	4.4	-1.5	0.1
Manufacturing and mining	-11.9	8.1	0.0	8.4	-2.7	-5.9	13.4	-8.8	-10.8	12.0
Production of other goods	9.5	4.5	1.3	4.3	-5.6	5.1	6.1	0.5	-7.8	21.7
Dwellings (households)	3.2	9.0	2.6	-0.3	3.8	2.8	2.8	2.5	1.8	2.1
General government	0.2	5.9	-1.6	0.4	1.2	7.1	-4.4	-2.0	8.8	-7.3
Acquisitions less disposals of valuables	-14.1	2.8	7.1	-2.9	5.0	-7.7	10.6	0.4	-4.2	-4.9
Changes in stocks and statistical discrepancies	-0.3	37.6	22.6	63.8	-10.1	-19.5	13.9	5.3	-10.8	-13.9
Gross capital formation	-3.4	5.0	2.7	7.5	-1.5	-1.6	2.3	1.4	-0.7	-2.0
Final domestic use of goods and services	0.7	2.7	0.8	2.7	-0.3	-0.2	1.0	0.9	0.3	-0.2
Final demand from Mainland Norway	2.0	2.6	0.4	0.8	0.6	1.0	0.5	0.8	0.8	0.8
Final demand from general government	2.0	2.8	-0.8	1.5	0.8	1.5	-0.7	0.1	2.1	-1.0
Total exports	4.7	-1.8	-1.9	-1.8	-1.8	-0.5	2.6	-1.0	2.1	0.9
Traditional goods	6.9	-8.2	-0.4	-4.1	-2.1	-1.2	-6.4	6.4	1.5	1.0
Crude oil and natural gas	2.1	4.3	-5.4	3.9	-1.7	-0.8	3.8	-0.7	3.9	1.7
Ships, oil platforms and planes	0.0	45.6	-5.4	-29.6	33.1	6.8	208.8	-17.7	-62.0	-43.9
Services	7.1	-4.4	1.3	-5.8	-2.5	0.4	3.1	-6.8	6.0	1.2
Total use of goods and services	1.9	1.4	0.0	1.4	-0.7	-0.3	1.5	0.4	0.8	0.1
Total imports	1.6	2.3	3.9	1.9	-2.4	1.0	1.5	1.0	-0.2	-1.8
Traditional goods	3.2	-0.4	3.3	-0.3	-2.4	1.2	1.3	2.1	-0.1	-0.1
Crude oil and natural gas	-0.1	-10.2	21.2	4.7	-25.1	14.0	-23.1	33.7	29.1	-18.9
Ships, oil platforms and planes	-6.7	26.4	-11.9	24.0	15.4	11.7	1.8	16.3	-20.8	-45.0
Services	0.1	4.8	5.7	3.4	-3.4	-0.8	2.5	-3.1	1.9	1.3
Gross domestic product (market prices)	2.0	1.1	-1.2	1.3	-0.2	-0.7	1.4	0.1	1.1	0.7
Gross domestic product Mainland Norway (market prices)	1.4	1.0	-0.2	0.5	0.3	0.1	0.2	0.7	0.6	0.6
Petroleum activities and ocean transport	4.3	1.8	-6.2	5.2	-2.8	-4.7	8.1	-2.5	3.9	1.5
Mainland Norway (basic prices)	1.3	0.7	-0.3	0.6	0.2	0.1	0.2	0.6	0.6	0.5
Mainland Norway excluding general government	0.9	0.2	-0.6	0.4	0.1	0.0	0.2	0.6	0.6	0.7
Manufacturing and mining	-4.6	-4.1	-1.8	0.3	-1.5	-1.1	0.0	1.0	0.2	-0.5
Production of other goods	0.9	2.7	-2.1	3.4	-1.0	0.5	0.7	0.9	0.9	1.1
Services incl. dwellings (households)	2.0	0.4	0.0	-0.3	0.7	0.1	0.1	0.5	0.6	0.8
General government	2.3	2.3	0.4	1.2	0.3	0.5	0.3	0.7	0.5	0.2
Taxes and subsidies products	2.3	2.5	0.8	0.2	1.3	-0.2	0.4	0.9	0.9	0.8

Source: Statistics Norway.

Table 7. National accounts: Final expenditure and gross domestic product. Price indices. 2015=100

	Unadjusted		Seasonally adjusted							
	2015	2016	15.4	16.1	16.2	16.3	16.4	17.1	17.2	17.3
Final consumption expenditure of households and NPISHs	100.0	103.2	101.1	102.2	103.3	103.3	103.5	104.0	104.8	104.8
Final consumption expenditure of general government	100.0	101.7	100.2	100.7	100.8	101.4	103.9	103.8	103.3	104.5
Gross fixed capital formation	100.0	101.5	101.6	100.9	101.8	101.4	101.6	101.4	102.7	102.2
Mainland Norway	100.0	102.4	101.5	101.1	102.2	102.7	103.3	103.5	105.0	105.1
Final domestic use of goods and services	100.0	102.3	100.8	101.4	102.5	101.7	103.3	103.6	104.2	103.1
Final demand from Mainland Norway	100.0	102.6	100.9	101.6	102.4	102.6	103.6	103.8	104.4	104.8
Total exports	100.0	92.1	95.8	88.8	91.5	91.6	95.8	100.7	97.2	95.5
Traditional goods	100.0	103.5	100.5	99.2	103.4	104.2	106.8	107.6	109.0	107.8
Total use of goods and services	100.0	99.5	99.4	97.9	99.5	98.9	101.2	102.8	102.3	101.0
Total imports	100.0	101.3	101.6	101.8	102.2	100.3	101.6	102.1	104.5	102.1
Traditional goods	100.0	101.4	101.3	101.2	101.8	101.2	101.6	102.9	105.3	104.7
Gross domestic product (market prices)	100.0	98.9	98.6	96.6	98.6	98.5	101.1	103.1	101.6	100.7
Gross domestic product Mainland Norway (market prices)	100.0	102.7	100.3	101.2	102.3	102.5	104.0	103.9	104.0	104.0

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted							
	2015	2016	15.4	16.1	16.2	16.3	16.4	17.1	17.2	17.3
Final consumption expenditure of households and NPISHs	2.4	3.2	1.4	1.1	1.0	0.0	0.2	0.4	0.8	0.0
Final consumption expenditure of general government	3.0	1.7	0.0	0.6	0.1	0.6	2.5	0.0	-0.5	1.2
Gross fixed capital formation	3.0	1.5	2.7	-0.7	0.9	-0.4	0.2	-0.2	1.2	-0.5
Mainland Norway	3.5	2.4	1.2	-0.4	1.1	0.4	0.6	0.2	1.4	0.1
Final domestic use of goods and services	2.1	2.3	2.0	0.6	1.1	-0.8	1.6	0.3	0.6	-1.0
Final demand from Mainland Norway	2.8	2.6	1.0	0.6	0.8	0.3	0.9	0.2	0.6	0.4
Total exports	-8.0	-7.9	-5.9	-7.3	3.1	0.1	4.6	5.0	-3.4	-1.8
Traditional goods	2.0	3.5	0.4	-1.3	4.2	0.8	2.5	0.8	1.3	-1.1
Total use of goods and services	-1.0	-0.5	-0.4	-1.5	1.6	-0.6	2.3	1.6	-0.5	-1.2
Total imports	5.1	1.3	1.5	0.2	0.4	-1.8	1.3	0.4	2.3	-2.3
Traditional goods	4.7	1.4	1.1	-0.1	0.5	-0.5	0.4	1.2	2.4	-0.6
Gross domestic product (market prices)	-2.8	-1.1	-1.0	-2.1	2.1	-0.2	2.7	2.0	-1.5	-0.9
Gross domestic product Mainland Norway (market prices)	1.8	2.7	0.3	0.9	1.1	0.3	1.4	-0.1	0.1	0.1

Source: Statistics Norway.

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