



Economic Survey

2019 / 2

Economic developments in Norway

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Economic developments in Norway

The Norwegian economy is in a moderate, broad-based cyclical upturn. According to the preliminary figures in the quarterly national accounts (QNA), mainland GDP growth has been generally higher than trend growth, estimated at just under 2 per cent annually, for more than two years. The upturn appears likely to continue in the current year, driven by high petroleum and manufacturing investment. From 2020, higher interest rates and lower global growth will have a dampening effect on growth, and the Norwegian economy is then

expected to be more cyclically neutral in the years up to 2022.

For the past few years, fiscal policy has been almost cyclically neutral. Whereas a highly expansionary fiscal policy was conducted from 2014 to 2016 to compensate for reduced petroleum investment and the ensuing negative impulses, there was markedly lower growth in public consumption and transfers in 2018. We assume that fiscal policy will remain close to cyclically neutral

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

	2017*	2018*	Seasonally adjusted			
			18:2	18:3	18:4	19:1
Demand and output						
Consumption in households etc.	2.2	2.0	1.2	-0.1	0.5	0.5
General government consumption	2.5	1.2	0.0	-0.0	0.2	1.0
Gross fixed investment	3.6	1.0	4.7	1.9	2.3	-1.2
Extraction and transport via pipelines	-3.8	2.7	13.9	3.6	4.9	2.1
Mainland Norway	7.0	1.1	2.9	1.6	1.2	-2.2
Final domestic demand from Mainland Norway ¹	3.3	1.6	1.3	0.3	0.5	0.0
Exports	-0.2	-0.7	1.6	0.0	-0.7	2.2
Traditional goods	1.7	2.7	2.8	-1.6	6.4	0.8
Crude oil and natural gas	1.5	-4.7	-0.4	1.7	-2.2	-2.6
Imports	1.6	0.6	3.0	-0.5	1.8	2.4
Traditional goods	2.7	2.5	1.9	0.3	1.2	4.8
Gross domestic product	2.0	1.4	0.4	0.5	0.6	-0.1
Mainland Norway	2.0	2.2	0.7	0.2	1.1	0.3
Labour market						
Total hours worked, Mainland Norway ²	0.4	1.7	0.3	0.5	0.6	0.5
Employed persons	1.1	1.5	0.3	0.4	0.5	0.5
Labour force ³	-0.2	1.4	0.3	0.8	-0.1	0.1
Unemployment rate, level ³	4.2	3.8	3.8	4.0	3.8	3.8
Prices and wages						
Annual earnings	2.3	2.8	..	..	..	..
Consumer price index (CPI) ⁴	1.8	2.7	0.8	1.1	0.5	0.6
CPI adjusted for tax changes and excluding energy products (CPI-ATE) ⁴	1.4	1.6	0.5	0.6	0.6	0.8
Export prices, traditional goods	5.4	4.9	0.4	1.7	-1.0	-0.6
Import prices, traditional goods	3.7	5.4	0.6	1.4	0.9	0.5
Balance of payment						
Current balance, bill. NOK ⁵	186	285	67	94	47	68
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	0.9	1.1	1.1	1.1	1.2	1.3
Lending rate, credit loans ⁶	2.6	2.7	2.7	2.7	2.7	2.8
Crude oil price NOK ⁷	452	583	601	625	578	547
Importweighted krone exchange rate, 44 countries, 1995=100	104.5	104.6	104.5	103.7	104.7	106.7
NOK per euro	9.33	9.60	9.55	9.58	9.62	9.74

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

² Employees.

³ According to Statistics Norway's labour force survey (LFS).

⁴ Percentage change from the same period the previous year.

⁵ Current account not adjusted for saving in pension funds.

⁶ Period averages.

⁷ Average spot price, Brent Blend.

Source: Statistics Norway and Norges Bank.

in the near term. Growth in public sector investment and consumption is expected to be somewhat lower than trend growth in the mainland economy. Cyclical impulses generated by public spending are nonetheless expected to be close to neutral because the ageing population and increasing growth in real wages imply higher spending on old-age pensions and other transfers. In light of the combination of cyclically neutral spending growth and small changes in the taxation level, the fiscal impetus is expected to remain almost constant through the projection period. Given this outlook, and assuming that the expected real return on the Fund is 3.0 per cent, spending of petroleum money will amount to about 2.5 per cent of the value of the Government Pension Fund Global in 2022.

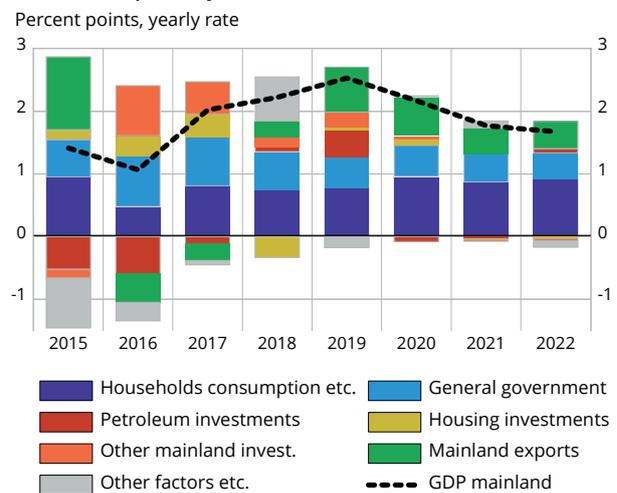
The housing market appears to be more in balance now than earlier. After falling through the fourth quarter of 2017 and the first half of 2018, housing investment remained virtually unchanged in the third quarter of last year, before picking up somewhat through the last two quarters. According to our projections, housing investment will continue to increase somewhat in the course of 2019. The upturn is partly attributable to the rise in housing prices through 2018, which has made residential construction more profitable. House prices continued to rise through the first quarter of 2019, but according to the house price index of Real Estate Norway, prices remained approximately unchanged in April. Higher income will push up house prices in the near term, but as interest rates are expected to rise and population growth is slowing, the rise in real house prices going forward appears likely to be modest. By comparison with the last five years, which were characterised by wide fluctuations in both house prices and housing investment, there now appears to be a better balance between supply and demand in the housing market.

Petroleum investment is contributing substantially to lifting the Norwegian economy in 2019. After four years of sharply reduced petroleum investment, the trend reversed in 2018. Investment is expected to grow markedly in 2019, largely owing to the Johan Sverdrup Phase 2 and Johan Castberg development projects.

Although several investment projects are expected to start up in the years ahead, this will be counteracted by lower investment in existing projects. We therefore expect relatively little change in petroleum investment in the period 2020 to 2022.

Higher trade tensions do not appear to be impeding manufacturing investment in the current year. The turnaround in the petroleum industry has spread to the mainland economy, and manufacturing enterprises report appreciable growth in 2019. Increased investment is expected in refined petroleum products, chemicals and pharmaceuticals manufacturing, basic metals and repair and installation of machinery. This comes on top of strong growth in manufacturing investment last year. Power supply companies also report further growth in

Figure 1. Contributions to growth in GDP Mainland Norway, import adjusted



Source: Statistics Norway

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 1/2019, Box 3. All figures are seasonally adjusted and in constant prices.

The export variable is defined as total exports excluding exports of crude oil, gas and shipping.

Other factors are defined as the difference between GDP Mainland-Norway and the listed contributions, including changes in stock and statistical deviations.

Source: Statistics Norway.

Table 2. Growth in GDP Mainland Norway and contributions from demand components.¹ Percentage points, annual rate

	QNA				Projection			
	2015	2016	2017	2018	2019	2020	2021	2022
GDP Mainland Norway	1.4	1.1	2.0	2.2	2.5	2.2	1.8	1.7
with contributions from:								
Consumption by households and non-profit organisations	1.0	0.5	0.8	0.8	0.8	1.0	0.9	0.9
General government consumption and investment	0.6	0.8	0.8	0.6	0.5	0.5	0.5	0.4
Petroleum investment	-0.5	-0.6	-0.1	0.1	0.4	-0.1	-0.0	0.1
Housing investment	0.2	0.3	0.4	-0.3	0.0	0.1	-0.0	-0.0
Other mainland investment	-0.1	0.8	0.5	0.2	0.2	0.1	-0.0	-0.0
Exports from Mainland Norway ¹	1.2	-0.5	-0.3	0.3	0.7	0.6	0.4	0.4
Other factors etc. ¹	-0.8	-0.3	-0.1	0.7	-0.2	0.0	0.1	-0.1

¹ See explanations to Figure 1.

Source: Statistics Norway.

Table 3. Main economic indicators 2018-2022. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Accounts 2018*	Forecasts										
		2019			2020			2021			2022	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	SN	NB
Demand and output												
Consumption in households etc.	2.0	2.1	1.9	2.3	2.6	2.4	2.9	2.4	2.3	..	2.5	2.5
General government consumption	1.2	1.7	1.4	1.7	1.7	1.2	..	1.6	1.1	..	1.4	1.1
Gross fixed investment	1.0	4.9	..	5.3	1.0	..	0.8	-0.2	..	..	0.4	..
Extraction and transport via pipelines	2.7	14.5	12.5	13.0	-2.5	1.0	-3.3	-1.2	-1.0	..	2.3	-6.0
Industries	2.6	4.0	4.1	6.7	1.0	2.5	3.7	-0.5	1.0	..	-0.6	1.8
Housing	-6.0	1.0	0.0	0.9	2.1	1.2	0.8	-0.2	1.3	..	-0.7	1.5
General government	6.8	1.4	..	1.2	1.4	..	..	1.3	..	..	1.3	..
Demand from Mainland Norway ¹	1.6	2.1	1.8	2.4	2.1	1.9	2.1	1.6	1.7	..	1.6	1.9
Exports	-0.7	2.3	..	1.8	5.9	..	6.9	2.9	..	..	1.8	..
Traditional goods ²	2.7	5.7	4.5	5.2	3.6	2.7	5.3	2.1	3.3	..	2.4	3.1
Crude oil and natural gas	-4.7	-0.7	..	-3.3	11.1	..	11.9	4.4	..	..	0.9	..
Imports	0.6	4.0	2.7	3.8	2.3	3.3	2.1	1.2	3.3	..	1.9	3.1
Gross domestic product	1.4	2.1	2.4	2.1	3.0	2.0	3.4	2.0	1.7	..	1.6	1.5
Mainland Norway	2.2	2.5	2.7	2.7	2.2	1.8	2.5	1.8	1.2	..	1.7	1.1
Labour market												
Employed persons	1.5	1.5	1.4	1.4	0.5	0.8	0.8	0.4	0.3	..	0.5	0.1
Unemployment rate (level)	3.8	3.6	3.6	3.7	3.6	3.5	3.6	3.6	3.6	..	3.5	3.6
Prices and wages												
Annual earnings	2.8	3.3	3.3	3.2	3.5	3.5	..	3.5	3.7	..	3.5	3.6
Consumer price index (CPI)	2.7	2.5	2.3	2.3	1.7	1.7	2.0	2.0	1.8	..	2.0	2.0
CPI-ATE ³	1.6	2.5	2.3	2.6	2.1	2.0	2.2	2.1	1.9	..	2.1	2.0
Housing prices ⁴	1.4	2.1	2.4	..	0.9	3.0	..	1.4	3.2	..	1.4	3.6
Balance of payment												
Current balance (bill. NOK) ⁵	285	277	..	224	331	..	88	361	..	..	351	..
Current account (per cent of GDP)	8.1	7.6	..	6.1	8.7	..	..	9.1	..	..	8.5	..
Memorandum items:												
Money market rate (level)	1.1	1.6	1.6	1.5	2.0	2.0	1.7	2.1	2.1	..	2.1	2.1
Crude oil price NOK (level) ⁶	583	542	..	559	498	..	556	488	..	..	486	..
Import weighted krone exchange rate (44 countries) ⁷	0.1	1.9	-0.2	2.0	0.1	-2.3	0.0	0.0	-0.4	..	0.0	0.0

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

² Norges Bank forecasts exports of traditional goods and services from Mainland Norway. Ministry of Finance forecasts exports of goods exclusive of oil and natural gas.

³ CPI adjusted for tax changes and excluding energy products (CPI-ATE).

⁴ Norges Bank forecasts the housing price index published by Eiendom Norge.

⁵ Current account not adjusted for saving in pension funds.

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. Meld.St.2. (2018-2019) (MoF). Norges Bank. Pengepolitisk rapport 1/2019 (NB).

production as a result of the development of more wind farms. The picture for 2020 is somewhat different, and the completion in 2019 of some large individual projects will lead to investment levelling off. According to Norges Bank's regional network, a moderate rise in investment is expected in the service industries, which account for around 60 per cent of business investment. Weaker global demand in the years ahead will also inhibit domestic investment. We forecast that growth in business investment will fall from around 4.0 per cent in 2019 to close to zero in 2022.

Consumption growth looks set to remain somewhat higher than mainland trend growth. Consumption is driven by developments in household income, wealth

and interest rates. Wage income, one of the most important sources of household income, is expected to increase in the years ahead as a consequence of both higher annual wage growth and a further rise in employment. Public transfers will increase as a result of the ageing population and higher real wages. Higher interest rates and virtually unchanged real house prices will curb consumption growth, however. The result will be consumption growth that is slightly higher than mainland trend growth in the years ahead, which is substantially lower than in previous upturns.

Wage growth picked up in 2017 and 2018, following record low growth in average annual wages of 1.7 per cent. Although nominal annual wage growth was 2.8

per cent in 2018, increased energy prices meant that there was virtually no growth in real wages. High electricity prices made intermediate inputs more costly, and thus also detracted from manufacturing profitability. A cyclically neutral economic situation going forward will enable wage growth to pick up from an abnormally low level, both nominal and real. We project annual wage growth of 3.3 per cent in 2019, rising to around 3.5 per cent in 2022. Even given these developments, wages as a share of labour costs will fall somewhat, but only to the extent that in 2022 they will be close to the average for the last 30 years.

Unemployment appears to be stabilising. According to Statistics Norway's labour force survey (LFS), unemployment has fallen almost continuously, from just over 5 per cent in early 2016 to 3.5 per cent as an average from February to April 2019. We expect unemployment as an annual average to be 3.6 per cent in 2019, and to remain at about this level up to 2022. Because of the expected increase in the labour supply, unemployment will not fall more for the next few years. According to our projections, the participation rate will pick up by about half a percentage point, to around 71 per cent in 2020.

The krone is weak in a historical perspective, and only some of its weakness can be explained by higher inflation in Norway than in the euro area. Its current weakness does not necessarily mean that it is very likely to strengthen in the years ahead. Interest rates are now higher in Norway than in the euro area, which may indicate that the krone must depreciate if the expected return is to be the same for the krone and the euro. Increased trade tensions may additionally lead to investors moving assets from small currencies with low liquidity to large, liquid currencies. This could lead to a further depreciation of the krone. There is great uncertainty concerning developments in the krone exchange rate going forward and, as in our last economic report, we have assumed unchanged exchange rates through the projection period. This means that on an annual basis, the import-weighted exchange rate index (I44) will weaken by 1.9 per cent in 2019, and a euro will cost around NOK 9.8 up until 2022.

Even given greater global unrest and reduced market growth, interest rates in Norway are likely to rise going forward. Norges Bank's operational target is an annual rise in consumer prices of close to 2 per cent over time. Monetary policy shall also contribute to output and employment stabilising around the highest possible level that is consistent with price stability over time. Inflation has increased in recent months, and was 2.9 per cent in April, measured by the 12-month rise in the consumer price index. Higher wage growth, the ripple effects of a weaker krone and the effects of high energy prices have fuelled the increasing inflation. The effects of the weaker krone are expected to taper off in the near term, and forward rates in the power market indicate expectations of a fall in electricity prices. The oil price has

also fallen by almost USD 10 per barrel this past week, and the futures market indicates that it will fall further in the next few months. Thus inflation is expected to slow a little in the short term. At the same time, it looks as though wage growth, and hence also domestic inflation, will continue to rise slightly, with the result that underlying inflation is expected to remain at around 2.0 per cent in the period from 2020 to 2022. In light of this economic scenario, Norges Bank is expected to continue raising the key policy rate from the current low level. We have assumed three interest rate hikes of 0.25 percentage point each by the end of 2022, with the first expected in June this year. The interest rate on home equity lines of credit will then rise to 3.6 per cent in 2022.

Whereas the global picture is one of increased turmoil and weaker growth prospects, the picture for the Norwegian economy is more mixed. In the short term, increased petroleum sector activity will stimulate both production and investment in sectors that supply the petroleum industry. High income, partly attributable to a rise in wage growth after some years of wage moderation, will fuel consumption. A few years ahead, demand will be dampened by increased interest rates. Lower global growth will then also exert a stronger effect, and investment growth in the Norwegian economy will slow. Given a neutral fiscal policy, developments in the Norwegian economy promise to be close to cyclically neutral in the years up to 2022.

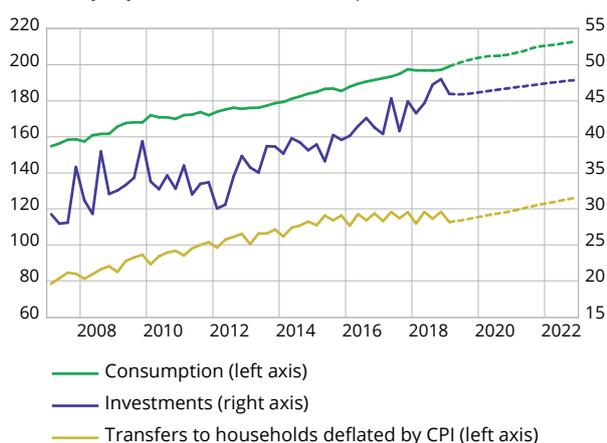
Box 1 presents a closer examination of the effects of trade tensions on the Norwegian economy.

Roughly cyclically neutral fiscal policy

Revised national accounts figures show growth of 1.2 per cent in general government consumption in 2018, which is lower than the previous year and slightly lower than earlier projections. It is central government spending, measured in fixed prices, that has been revised down. Gross general government investment increased by 6.8 per cent, which is markedly higher than in 2017, and in this case the volume has been revised slightly up. On balance, the volume of general government purchases of goods and services has been revised slightly down compared with previous projections, but it was still higher than estimated trend growth in the mainland economy in both 2017 and 2018. Growth in 2018 was nonetheless somewhat lower than in 2017. Household transfers increased nominally by just over 2.6 per cent in 2018, following growth of just over 3 per cent the previous year. The real value of transfers in 2018 was thus approximately unchanged from the previous year. Growth was also moderate in 2017. Real growth in public sector consumption, gross investment and transfers combined was about 2 per cent in both 2016 and 2017, close to estimated trend growth in the mainland economy. In 2018, the sum of these fiscal components increased by only 1.4 per cent, such that the most central expenditures in government budgets

Figure 2. General government

Seasonally adjusted, billion 2016 NOK, quarter



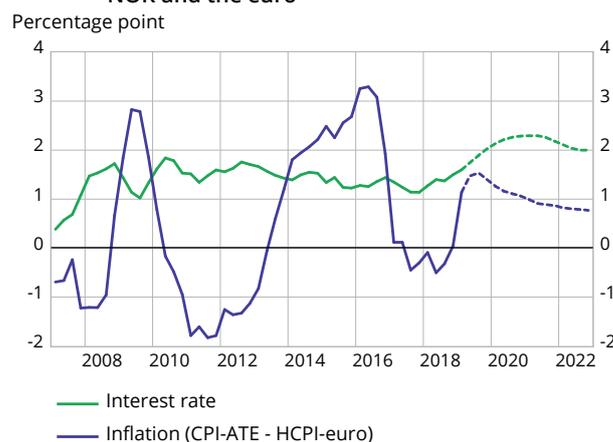
Source: Statistics Norway

generated markedly less impetus to the Norwegian economy than in the previous two years.

The tax rate on ordinary income for personal taxpayers and companies (excluding the financial sector) was reduced from 24 to 23 per cent in 2018. The system for taxation of petroleum and power companies was adjusted so that they were not significantly affected by the tax change. Bracket tax on personal income was increased, so that most of the revenue loss due to reduced tax on ordinary income was recouped through an increase in other income taxes. The increased taxes pushed up CPI inflation by 0.2 percentage point in 2018. On balance, fiscal policy was weakly contractionary in 2018. The revised National Budget 2019 (RNB 2019) shows that the structural non-oil budget deficit (SNOBD) as a share of trend mainland GDP fell in 2018 for the first time since 2011. SNOBD as a share of the Government Pension Fund Global fell to 2.5 per cent, from 2.9 per cent in 2017.

Fiscal policy in 2019 is based on projections published in RNB 2019. Growth in general government consumption and investment combined is expected to be 1.6 per cent, slightly lower than in 2018. Transfers are expected to increase slightly in real terms in 2019 because real wage growth and the number of pensioners is increasing slightly. Overall real growth in spending on purchases of goods and services and household transfers will increase by 1.6 per cent in 2019, i.e. slightly more than the previous year, but the increase will be a little lower than estimated trend economic growth. Some stimuli are provided through lower indirect taxes (electricity and sugar taxes). Tax on ordinary income has also been reduced from 23 to 22 per cent, while bracket tax on personal income is being increased so that there is little change in the effect on the household taxation level. On balance, we forecast that fiscal policy will be roughly cyclically neutral in 2019. The government forecasts in RNB 2019 that SNOBD as a share of trend GDP will increase from 2018 to 2019, ending up at about the same level as in 2017.

Statistics Norway

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

Source: Norges Bank and Statistics Norway

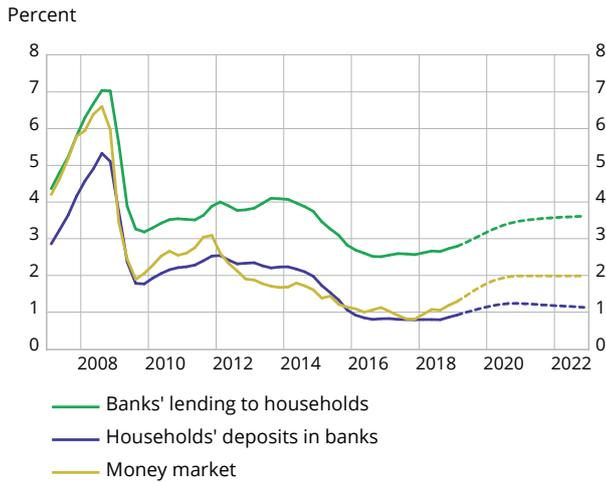
No fiscal policy has been adopted for the period 2020 to 2022. Our projections for growth in general government consumption and investment are therefore mainly an extension of the projections for 2019, i.e. a little lower than trend mainland economic growth. Transfers, on the other hand, are expected to increase more in real terms than trend mainland economic growth, which is a distinct change from the last few years. This is attributable partly to the ageing population and partly to increased real wages. Combined demand impulses from general government spending on goods and services coupled with real transfers will thus increase by just over 2 per cent annually from 2020 to 2022, resulting in weakly expansionary impulses from 2020 to 2022. We assume unchanged tax rates in real terms.

The value of the Government Pension Fund Global (GPSG) was around NOK 9000 billion at the beginning of June 2019. We are assuming that exchange rates will remain unchanged in the near term, so that the value of the Fund will not change as a result of exchange rate changes in our projection scenario. The price of crude oil has fallen recently, and at the beginning of June was just over USD 60 per barrel. There is great uncertainty as to how the oil price will move in the near term. If the oil price adheres roughly to the path indicated by forward rates, increased oil production in the next few years will yield increased cash flow from petroleum activities, which will contribute to further growth in the GPSG. As our projections for fiscal policy are approximately cyclically neutral in our projection scenario, this means that SNOBD as a share of the value of the Fund will fall from just under 3 per cent in 2019 towards 2.5 per cent in 2022.

Interest rate hikes continue

In March 2019, Norges Bank raised the key policy rate by 0.25 per cent. The key rate was raised by the same amount in September 2018, so in the course of this six-month period the key rate has increased from 0.5 per cent to 1.0 per cent. Money market rates have also

Figure 4. Norwegian interest rates



Source: Norges Bank and Statistics Norway

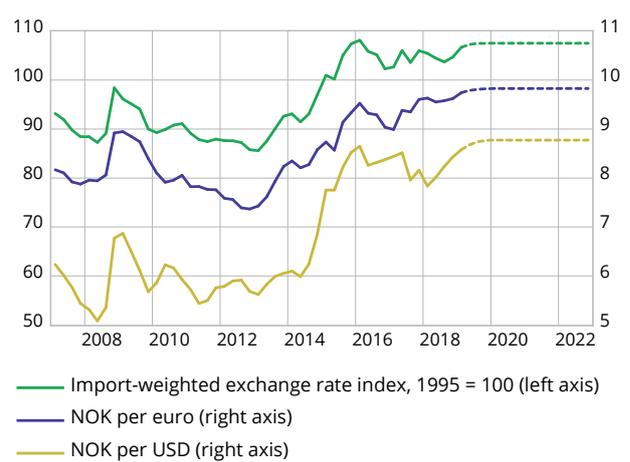
increased, to 1.5 per cent at the end of May this year. This is 0.5 percentage point higher than one year ago.

Deposit and lending rates have increased over the past couple of years. In 2016, the interest rate on loans secured on dwellings offered by banks and mortgage companies was 2.5 per cent, while by the end of 2018 it had risen to 2.8 per cent – a level at which it remained at the end of the first quarter of 2019. Deposit rates have increased less, from a level of 0.8 per cent in the period 2016 Q2 – 2018 Q3, to 0.9 per cent at the end of 2018. Deposit rates remained at this level through the first quarter of this year. The interest rate hike in late March is not yet reflected in the statistics on interest rates on current deposits and loans.

The krone has remained at a historically weak level for the last four years. The exchange rate for one euro has not fallen below NOK 9.4 since the end of 2017. The average euro exchange rate in the first five months this year was NOK 9.7, while at the beginning of June it was 9.8. The price for a US dollar at the beginning of June this year had risen to NOK 8.7, a strengthening of USD from the average price of NOK 8.6 in the first quarter. The dollar exchange rate also rose in 2018, from a level of just under NOK 8 for almost the whole first quarter of 2018. The Swedish krone has weakened somewhat against the Norwegian krone so far this year, resulting in a strengthening in the same period of NOK measured by the import-weighted krone exchange rate, despite the appreciation of the dollar.

At its monetary policy meeting in May, Norges Bank announced that the next interest rate increase will probably be in June. This is also consistent with the March Monetary Policy Report. This interest rate rise appears to be priced into the current money market rate of 1.5 per cent, as the forward rate in mid-June is not significantly higher than the current money market rate. Forward rate contracts also point to one more interest rate hike this year, which is also consistent with the Monetary Policy Report. Norges Bank has indicated

Figure 5. Exchange rates



Source: Norges Bank

one further interest rate hike within our projection period.

Our interest rate projection is largely in line with Norges Bank's March projection. We foresee two interest rate increases this year and one further increase during the projection period. The interest rate hikes are taking place from a low level. Given the interest rate developments we foresee, inflation, measured as the rise in the CPI, will be close to the inflation target in 2021 and 2022. The money market rate will then increase from the present 1.5 per cent to 2.1 per cent in these same years. The lending rate will shadow the money market rate, and is expected to increase from 3.0 per cent this year to 3.6 per cent in 2022.

The krone is weak at present. The euro-krone exchange rate averaged 8.1 from the turn of the century and up to the end of 2015, whereas it is now 9.8. Some of the depreciation of the krone can be explained by higher inflation in Norway than in the euro area. A comparison with the period 2000–2015 indicates that according to the theory of purchasing power parity the EUR-NOK exchange rate should be 8.7 now and for the remainder of the projection period. But the krone has now been weak for several years, which may indicate a permanent shift in the real exchange rate.

According to the theory of uncovered interest rate parity, higher interest rates in Norway than in the euro area must be offset by a change in exchange rates, so that the return is the same irrespective of where an investor places his or her funds. This implies a further weakening of the krone, so that an EUR/NOK exchange rate of 10 is exceeded in the course of 2020.

Our projections are based on an unchanged krone exchange rate in the near term. At an annual rate, this implies an EUR–NOK exchange rate of 9.8 from now until the end of the projection period. Measured in terms of the import-weighted exchange rate, the krone will depreciate by an annualised average of 1.8 per

cent from 2018 to 2019. Much of the weakening can be attributed to movements in the dollar exchange rate through 2018 and early 2019.

Consumption growth is rising slightly

Consumption in households and non-profit organisations increased by 2.0 per cent in 2018, compared with 2.2 per cent the previous year. By way of comparison, consumption increased by around 5 per cent annually during the cyclical upturn preceding the financial crisis in 2008.

Seasonally adjusted QNA figures show a 0.5 per cent increase in consumption in Q1 this year, following weak growth through the second half of 2018, strong growth in Q2 and almost zero growth in 2018 Q1. The unstable developments are largely attributable to the 0.8 per cent increase in goods consumption in Q1 of this year. This was mainly a result of a strong increase in car purchases, due in particular to record-high deliveries of Tesla Model 3. Solid growth was also reported in 2019 Q1 for purchases of other consumer durables such as furniture and white goods. However, electricity consumption fell by 1.7 per cent in the same period, while consumption of clothing and footwear edged down 0.3 per cent.

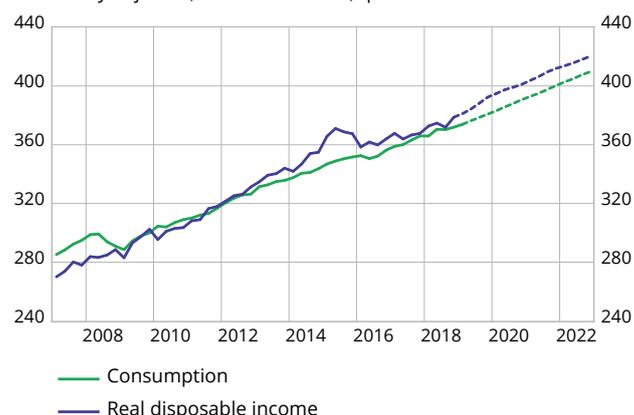
The goods consumption index for April shows a seasonally adjusted fall of as much as 1.2 per cent. Following strong growth in February and March, car purchases fell by 8.0 per cent in April, pushing down goods consumption by 1.5 percentage points. Electricity consumption also fell from March to April, while spending on food, drink and other goods, including clothing, increased somewhat in the same period.

Growth in consumption of services has been stable, remaining for the most part between 0.5 and 1.0 per cent each quarter for the past two years. There was a broad-based 0.7 per cent rise in consumption of services in Q1.

Developments in consumption are largely determined by changes in household income, wealth and interest rates. Real disposable income, including and excluding disbursements of share dividend, picked up appreciably in 2018, with growth rates of 2.4 per cent and 2.3 per cent, respectively. Wage income, which is the primary source of household income, contributed by far the most to growth in real disposable income last year. Although growth in real wages was modest, high

Figure 6. Income and consumption in households

Seasonally adjusted, billion 2016 NOK, quarter



Source: Statistics Norway

employment growth contributed to boosting wage income.

In the projection period, growth in real wages of between 1 and 2 per cent, coupled with employment growth of between 0.4 and 1.5 per cent, will push up growth in real disposable income. Public transfers will also contribute positively to growth in real disposable income through the projection period, following weak growth in 2018. Near term growth in transfers will be due to a combination of a higher number of old-age pensioners and increased real wages. Conversely, net capital income will curb real income growth, as interest on household debt will rise over the next few years. We expect average annual growth in real disposal income including dividend disbursements of just over 2.5 per cent in the projection period, and slightly lower growth excluding share dividend disbursements. This will stimulate consumption. However, weak developments in real house prices and overall wealth in real terms will dampen consumption growth in the near term. All in all, growth in annual consumption is likely to average just under 2.5 per cent in the period 2019–2022. This is about half a percentage point higher than last year.

Given our projections for income, consumption and wealth, the saving ratio, measured as saving as a share of disposable income including dividend disbursements, will remain unchanged at a level of around 6.5 per cent this year. It will then rise by just over one percentage point in 2020 and end up at close to 7.5 per cent towards the end of the projection period. The saving ratio excluding disbursements of share dividend

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

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Forecasts			
												2019	2020	2021	2022
Total	3,4	3,0	2,1	4,2	4,4	4,0	2,9	5,5	-1,7	1,4	2,4	2,4	3,5	2,2	2,1
Excl. share dividends	2,7	3,2	1,6	4,2	4,1	3,9	2,4	2,4	0,0	1,4	2,3	2,4	3,1	2,1	2,1

Source: Statistics Norway.

will increase by 1.9 per cent in 2018, to 2.5 per cent in 2022.

Cautious rise in house prices

According to Statistics Norway's quarterly house price index, house prices rose by a full 5 per cent in 2017, despite a marked fall in prices through 2017 Q2 and Q3 as a result of a record-high supply of dwellings, lower population growth than previously and a tightening of the Mortgage Regulations with effect from 1 January 2017. House prices in 2018 were only 1.4 per cent higher than the previous year.

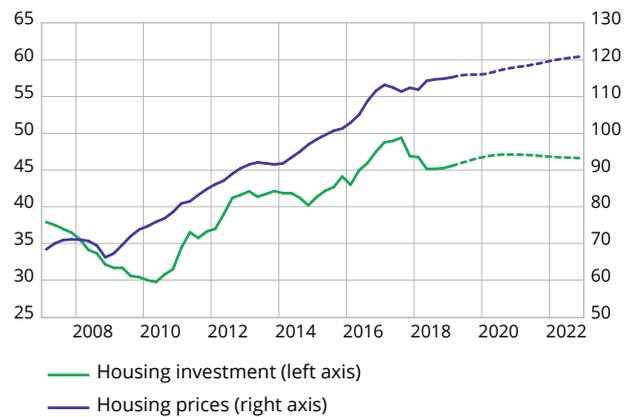
Seasonally adjusted figures show that the price fall through 2017 Q2 and Q3 stopped at year-end 2017/2018 and reversed into a new strong rise in 2018 Q2. Movements in prices for flats in the Oslo area contributed substantially to the fall in prices for Norway as a whole, and the new upturn was similarly dominated by a strong rise in prices for the same type of dwelling in the same region. The rise in prices for Norway as a whole has been fairly cautious subsequently. House prices in 2019 Q1 were just under 2 per cent higher than the level in 2017 Q1, when the turnaround in the housing market occurred. According to Real Estate Norway's monthly house price statistics, seasonally adjusted house prices showed virtually no rise in April, which may point to cautious price movements also in Q2 this year.

House prices are stimulated by an increase in real disposable income and lower real interest rates, and dampened by an increased supply of dwellings and lower population growth. In the short term, house prices are also influenced by changes in households' expectations regarding both their own financial situation and the Norwegian economy. Restrictions that lead to less borrowing will also curb house prices. The new Mortgage Regulations, in force since 1 July 2018, are largely a continuation of the borrowing requirements in the Mortgage Regulations of 1 January 2017.

Whereas growth in real disposable income will increase going forward, the lending rates facing households will rise in pace with money market rates. Higher lending rates will constrain borrowing for housing-related purposes, with the result that growth in household debt will decrease gradually from around 6 per cent in 2018 to around 4 per cent in 2022. The household interest burden, measured as interest expenses after tax as a percentage of disposable income before interest expenses after tax, will nonetheless rise from a level of just over 5 per cent in 2018 to just over 6 per cent in 2022 as a consequence of higher lending rates going forward. After four consecutive quarters in which households expressed weakened confidence in the future, Finance Norway's consumer confidence indicator has turned up again, reflecting greater optimism regarding the economic situation in Norway and households' own financial situation. This will provide some impetus to house prices going forward.

Figure 7. Housing market

Seasonally adjusted. Left axis: billion 2016 NOK, quarter. Right axis: index, 2015 = 100



Source: Statistics Norway

We assume a continued cautious rise in house prices in nominal terms through the projection period as a result of a fairly good balance between supply and demand in the housing market. Population growth, a factor that drives growth in housing demand, will increase less in the near term than in the years prior to the housing market downturn in 2017. As housing investment fell by as much as 6 per cent as an annual average in 2018, the supply of dwellings, i.e. the value of housing stock, will also increase less in the near term than in recent years. All in all, we forecast an average annual rise in house prices of around 1.5 per cent in the period 2019–2022. This is approximately in line with the rise in prices last year.

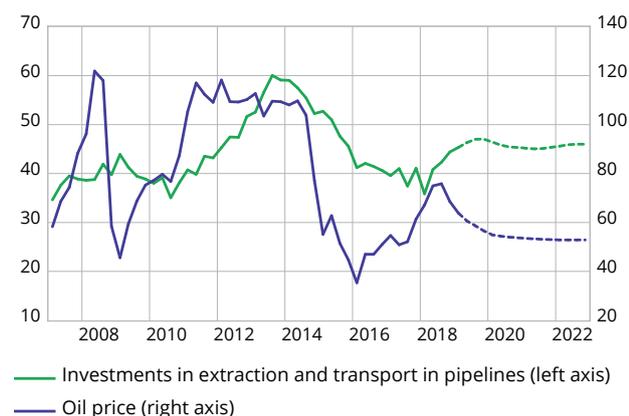
Seasonally adjusted figures show that housing investment has reversed from a sharp fall through 2017 Q4 and the first half of 2018 to zero growth in the 2018 Q3 and a renewed, cautious rise through the last two quarters. Although there has been a trend rise in housing starts in recent months, weak real house price developments will curb housing investment going forward. We envisage a rise in housing investment through the projection period, albeit at a very moderate pace compared with the cyclical upturn prior to the financial crisis in 2008. Our projections indicate that the level of housing investment in 2022 will be about 4 per cent lower than the peak in 2017.

Marked positive impetus from petroleum investment this year

After falling for several years, the level of petroleum investment increased by 13.9 per cent from 2018 Q1 to Q2, according to seasonally adjusted QNA figures. Growth continued at a more moderate pace through the second half of last year. Growth of 2.1 per cent was registered in Q1 this year, according to preliminary QNA figures. In the most recent QNA figures, investment growth in 2018 was revised down from 3.3 per cent to 2.7 per cent.

Figure 8. Petroleum investments and oil price

Seasonally adjusted. Left axis: billion 2016 NOK, quarter. Right axis: USD per barrel



Source: Statistics Norway

According to Statistics Norway's last investment survey (KIS), licensees on the Norwegian continental shelf estimate nominal investment in 2019 to be about NOK 184 billion measured in current prices. This is 6.4 per cent higher than projected in the previous quarter. The increase has mainly occurred in field development and fields in operation. The projection indicates investment growth in current prices of 17.4 per cent compared with the corresponding projection for 2018 published a year ago. Two new development projects have been included in the survey since the last measurement. We expect Plans for Development and Operation (PDOs) to be submitted for a couple more projects in the second half of 2019. These developments are relatively small. As investment in development projects is also usually lowest in the first year of a development, we forecast that only around NOK 1 billion in all will be invested in these projects in 2019. The strong investment growth implicit in the plans for 2019 may result in relatively large amounts being moved from 2019 to 2020. We therefore assume somewhat higher investment in 2019 than projected in our previous report, but expect it to be somewhat lower than indicated by the current KIS figures in KIS. A 14.5 per cent increase in the volume of petroleum investment is accordingly expected this year.

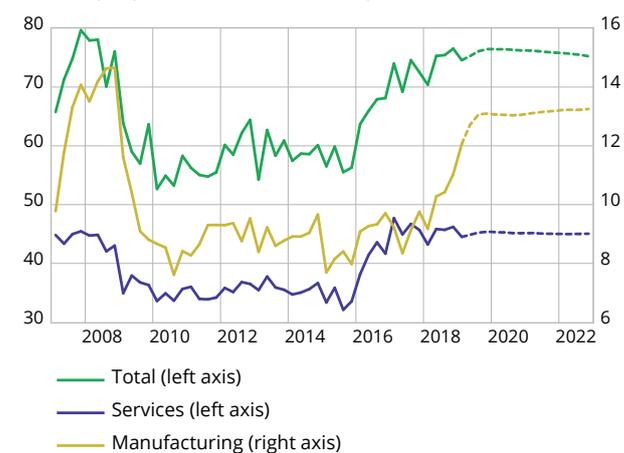
Investment growth in 2020 and 2021 is projected to be somewhat weaker than assumed in our previous report, partly because we have raised our projection for 2019. According to the KIS survey, investment in 2020 is projected to be about NOK 172 billion, which is 8.8 per cent higher than in the last survey. We are therefore raising the investment level for 2020 as well, but not as much as for 2019. New information about future development projects and downward revision of oil price assumptions point to somewhat more postponements in upcoming development projects than assumed in our previous report. This will result in a moderate fall in investment in 2020 and 2021.

Some of the postponed investments that we have now placed in 2020 and 2021 are expected to be realised in

Statistics Norway

Figure 9. Investments, Mainland Norway

Seasonally adjusted, billion 2016 NOK, quarter



Source: Statistics Norway

2022. At the same time, we foresee that some of the investments in projects that we had placed in 2022 in the previous report will be postponed. The net effect of the postponements to and from 2022 appears to be negative, and we have accordingly revised down the investment level in 2022 compared with our previous report. As we are also assuming a lower level of investment in 2021 than in our previous report, investment growth in 2022 is being revised up somewhat, to 2.3 per cent.

The costs of petroleum investment have fallen markedly in recent years. Investment prices fell by as much as 5.2 per cent in 2017. In the most recent QNA figures, the decline in prices for 2018 has been revised down from 1.2 per cent to 0.2 per cent. In 2019 we expect increased demand for capital goods and services to lead to increased pressure on prices. We are therefore assuming a 1.5 per cent rise in prices this year as an annual average. We also expect inflation to pick up somewhat in the course of the projection period.

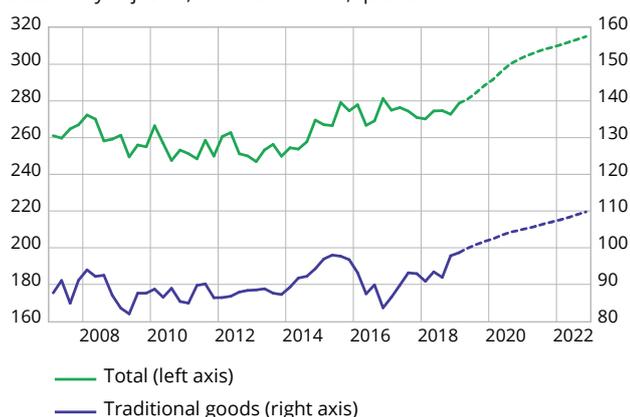
In the first quarter of this year, oil and gas extraction, measured in energy equivalent, was 4.4 per cent lower than in the same period last year. Liquid production fell by 9.4 per cent, while the level of gas production in 2019 Q1 was approximately the same as in the corresponding period in 2018. According to the Norwegian Petroleum Directorate, oil and gas extraction is expected to decline moderately this year. Extraction is expected to increase substantially in 2020, while growth is expected to be positive, but more moderate, further on in the projection period. The expected increase in 2020 is a consequence of Johan Sverdrup coming on stream in November this year.

Moderate growth in business investment

Total business investment rose by 16.5 and 9.3 per cent in 2016 and 2017, respectively, but by only 2.6 per cent in 2018. There were large differences in investment growth across industries in 2018. Investment in power supply was record high, with annual growth of 27 per cent. Manufacturing investment grew by 10.4 per cent,

Figure 10. Exports

Seasonally adjusted, billion 2016 NOK, quarter



Source: Statistics Norway

Figure 11. Imports

Seasonally adjusted, billion 2016 NOK, quarter



Source: Statistics Norway

with the food industry, refined petroleum products, chemicals and pharmaceuticals manufacturing at the forefront. Investment in services was weaker, however, and in consequence aggregate investment growth was moderate in 2018.

Overall, business investment grew by about 6 per cent in 2019 Q1 compared with the level in 2018 Q1. By far the highest growth rate was reported for manufacturing investment, which was about 34 per cent higher than the same quarter the previous year.

In Statistics Norway's investment intentions survey, conducted in May 2019, the manufacturing investment projections for 2019 are about 30 per cent higher than the corresponding projections for 2018 published in May the same year. The projections are in current prices, so the survey implies somewhat lower growth, measured in constant prices, owing to rising investment prices. The upswing in 2019 is broad-based, with growth of over 5 per cent in the food industry, refined petroleum products, chemicals and pharmaceutical products, basic metals and repair and installation of machinery. The strong investment picture is attributable to several large individual projects in various manufacturing segments.

The investment intentions survey points to a levelling off of investment in power supply. This must be viewed against the backdrop of the high growth in 2018 in connection with the installation of AMS Smart meters. This has now been phased out and completed. The survey in May shows growth of 4.1 per cent compared with the corresponding figure for 2018. Growth is being driven by increased investment in the production stage. The survey shows a decline for 2020, but the projections are uncertain, and may change if new wind park projects are initiated.

Norges Bank's regional network maps economic developments in Norway, including expected investment, by compiling information from businesses throughout Norway. The first report for 2019, published in March, showed a slight rise in expected investment growth. Retailers report reduced investment, while somewhat higher investment in the coming year is planned in 'Other services'.

We expect business investment growth to be about 4 per cent this year and somewhat more subdued in the years ahead. Despite very high projections for manufacturing in the current year, higher interest rates and markedly weaker global growth will constrain investment growth for the next few years. The level of business investment in 2022 will then be about 3 per cent higher than in the peak year of 2008.

Weaker market outlook moderates the current account

Exports of traditional goods rose by almost 1 per cent in the first quarter of this year. After a decline through 2016 and an upswing through 2017 and 2018, exports, measured in constant prices, were more or less back at the peak level of 2015, according to seasonally adjusted QNA figures. The largest contribution to growth in 2019 Q1 came from exports of electrical equipment, which increased by 40 per cent compared with the previous quarter. Other large groups with increased first-quarter exports – albeit with more normal growth rates – were refined petroleum products, engineering products, fish and fish products. On the other hand, there was a decline in exports of basic chemicals, chemical and mineral products, basic metals, electricity and farmed fish. The export volume of most of the product groups varies considerably from quarter to quarter. In contrast to the other product groups mentioned above, reduced exports of farmed fish in Q1 this year represent a break with persistent export growth in the previous eight quarters.

Whereas the volume of traditional goods exports has increased in the last two quarters, by an overall amount of just over 7 per cent, the price index for traditional goods exports fell in the same period, by 1.6 per cent overall. While the growth in terms of volume in 2017 and 2018 continued into 2019, the rise in prices through 2017 and 2018 – of about 5 per cent each

year – appears to have been interrupted. The decline in prices can be largely attributed to lower prices for refined petroleum products and electricity.

Oil exports have fallen in recent years, while gas exports have increased, and are now larger than oil exports both in current prices (value) and in constant 2016 prices (volume). In 2018 Q4 and 2019 Q1 both the volume and the price index for oil and gas exports combined fell, ending a tendency for negative correlation between these value factors that persisted for many years. The oil price rose in Q1 this year, but a sharp drop in gas prices brought about a fall in the overall price index.

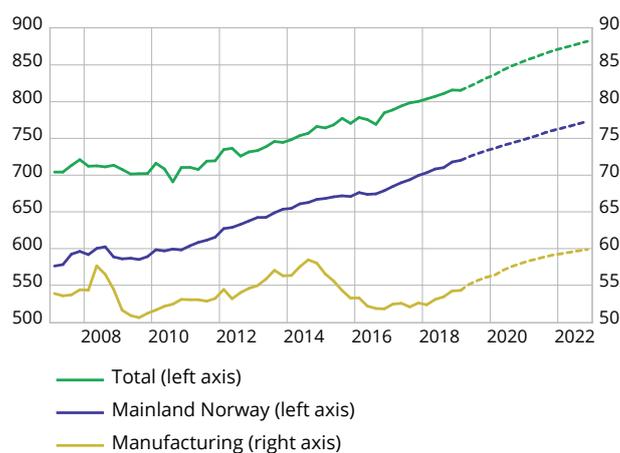
Over the past three years, exports of services have fluctuated roughly around a constant level, with a sharp upswing in Q1 this year following a marked reduction the 2018 Q4. The upswing was broad-based, with particularly strong growth in financial and petroleum-related business services and in construction. Export price indices moved largely counter to export volumes in 2018 Q4 and Q1 this year, with a fall in prices for the aforementioned service groups.

The global market outlook appears weaker than previously envisaged. In consequence, we have revised down our projections for market growth in the near term. This implies lower growth in demand for Norwegian export products and services than previously foreseen. This in itself will curb growth in mainland exports for the entire projection period. However, high growth into 2019 is contributing to higher export volumes this year than the average in 2018, and annualised growth in 2019 and to some extent in 2020 will still be higher than projected in our previous report. Towards the end of this year, production is expected to start on the big Johan Sverdrup field. This will to some extent check a decline in oil and gas exports this year, before increasing production yields growth each subsequent year in the projection period, particularly from 2019 to 2020.

Following moderate growth in traditional goods imports in 2017 and 2018, imports increased sharply in 2019 Q1, by almost 5 per cent compared with the previous quarter. Imports of refined petroleum products, engineering products and cars made substantial contributions to growth. Developments in prices for the first two product groups were negative, while car prices increased considerably. Imports and sales of a large number of relatively costly Tesla electric cars in March may explain the rise in both volume and price for car imports. Aggregate service imports also increased strongly in the first quarter of this year. Imports of financial and business services and petroleum-related services increased, while imports of transport and communication services fell back. Price movements reflected developments in volume to some extent: Norwegians' travel abroad, operating expenses in shipping and transport and communication services

Figure 12. Gross domestic product

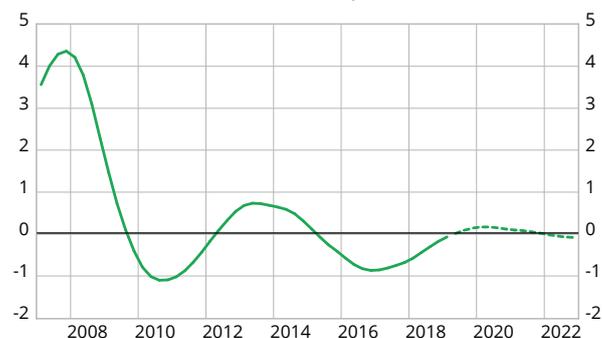
Seasonally adjusted, billion 2016 NOK, quarter



Source: Statistics Norway

Figure 13. Output gap, Mainland Norway

Deviation from estimated trend GDP in percent



Source: Statistics Norway

contributed to higher prices, while prices for banking services and petroleum-related services fell. As a result of high growth in imports of traditional goods and services in early 2019, annual growth is expected to be relatively high. More normal growth rates are forecast for the last three years of the projection period.

The trade surplus increased in 2017 and 2018, largely because of the strong rise in prices for oil and gas exports. An expected decline in the oil price will generate a negative impulse to the trade surplus each year in the projection period. A higher rise in prices for imports than for mainland exports may also generate a negative impulse, while positive growth in the volume of net exports will boost the trade surplus. On balance, we project a lower path for the trade surplus during the projection period than in the last report. Increasing transfers from a growing petroleum fund will boost the net factor income and transfers surplus for the next few years. The sum of the trade surplus and the net factor income and transfers surplus makes up the current account balance. The surplus expressed as a share of GDP is expected to be between 7 and 9 per cent in the projection period.

Box 1: Effects on the Norwegian economy of an escalation of global trade tensions

For the past few quarters there have been concerns regarding increased global trade tensions. These concerns have proved well founded, as we have seen an exacerbation of the conflict between the USA and China recently. This is taken into account in our baseline scenario, but an escalation of the conflict is nonetheless a downside risk for our projections.

We have used the KVARTS macroeconomic model to study the effects on the Norwegian economy of a further increase in tariff rates between the USA and China and other countries. One possibility, for example, is that the USA may raise tariff rates on imports of cars from Europe. There is great uncertainty as to the form this would take and what the outcome would be for global markets. In our alternative scenario, we assume that the escalation in trade tensions is of a temporary nature, and apply the following general assumptions from and including 2019 Q3:

- Increased trade tensions lead to a temporary reduction in annual growth of imports by Norway's trading partners. The export market indicator in 2020 will then be about 10 per cent lower than in the baseline scenario. Growth will subsequently pick up, and the export indicator will be 2.5 per cent lower in 2022 than in the baseline scenario.
- A further increase in trade tensions is expected to dampen inflation in the euro area. However, this effect is countered by higher tariff rates, which in isolation will increase prices. We therefore assume that inflation will remain at 1.3 per cent through 2022. This is lower than the baseline scenario.
- In the baseline scenario we have assumed that the ECB will keep the interest rate unchanged at the current low level through 2021, and then raise it. We assume in our alternative scenario that the interest rate hike in 2022 is cancelled.
- Lower global demand will lead to the oil price falling further, by more than USD 10 per barrel in 2020, and then rebounding somewhat subsequently.
- Petroleum investment, which is not directly modelled in KVARTS, is reduced gradually, to some 15 per cent lower in 2022 than in the baseline scenario. Given the size of the fall in the oil price, this is comparable with the investment response estimated by the Holden III Committee (Official Norwegian Report NOU 2013: 13).

The table shows the effects of some key macroeconomic variables. Lower global demand and lower producer prices reduce Norwegian exports. In 2020, the level of traditional goods exports is around 5.0 per cent lower than in the baseline scenario. Reduced international demand hits manufacturing particularly hard. The manufacturing segment that supplies the petroleum industry is also impacted by lower petroleum investment. In 2020, manufacturing value added is just over 3.0 per cent lower than in the baseline scenario.

The lower demand spreads to the labour market. It takes some time before the negative impulses are reflected in lower employment. Whereas employment is 0.4 per cent lower than the baseline scenario in 2020, it is 0.9 per cent lower in 2022. Unemployment increases by around 0.3 percentage point. Some of the fall in employment must be viewed in light of the reduced oil price, but the impact of a demand-driven decline in the oil price is not as great now as it was a few years ago. In 2013, petroleum investment accounted for 8.8 per cent of mainland GDP, but this share was reduced to 5.8 per cent in 2018. From 2013 to 2017, some 50 000 fewer employees had petroleum-related jobs (Brasch, Hungnes and Strøm, 2018). The Norwegian economy is therefore somewhat less vulnerable to changes in the oil price than it was six years ago, as both direct and indirect petroleum-sector demand represent a smaller share of overall economic activity.

Lower real disposable income also means falling consumption. In addition, consumption falls because household wealth diminishes. Wealth is reduced because of lower house prices, but also as a result of lower share prices on the Oslo Stock Exchange in line with lower oil prices.

The krone is an important buffer for the Norwegian economy, and depreciates by almost 3 per cent compared with the baseline scenario in 2022. This improves cost-competitiveness. Inflation in Norway is curbed by the lower oil price, but because of the weaker krone, inflation is approximately unchanged compared with the baseline scenario. Nonetheless, the effect of the fall in output and unemployment is that the interest rate is 0.5 percentage point lower in 2022.

The above calculations indicate that the Norwegian economy will be substantially impacted by a further escalation of international trade tensions. In our alternative scenario, the Norwegian economy could enter a new economic downturn towards the end of 2019 already. There may be effects that would exacerbate the decline and that are not captured by the KVARTS macroeconomic model. For example, the weak level of the krone makes it more uncertain whether the krone would depreciate further if trade tensions should increase. If an important buffer for the Norwegian economy no longer works, Norges Bank must lower the interest rate further to counter the effects of the increased trade tensions. This will probably not be enough to prevent the impact on output and employment being greater than described here. There are also mechanisms that can contribute to reducing the effects of increased trade tensions. The projections above are based on the assumption of unchanged fiscal policy. It is possible that increased trade tensions would be countered by an expansionary fiscal policy, to parry the negative impulses from lower global demand. At the same time, a scenario with increased trade tensions would challenge fiscal scope for manoeuvre. A lower level of activity would reduce government revenue. If a scenario such as the one described above should cause a global fall in equity prices, the value of the Petroleum Fund would probably be reduced. For an analysis of how a fall in the value of the Government Pension Fund Global affects fiscal scope for manoeuvre, see Kjelsrud (2017).

References

Brasch, T. von, Hungnes, H., Strøm, B. (2018). *Ringvirkninger av petroleumsnæringen i norsk økonomi*. [Ripple effects of the petroleum industry for the Norwegian economy]. Statistics Norway. Reports 2018/18.

Kjelsrud, Anders (2017): *Handlingsregelen og endringer i Statens pensjonsfond utland* [The fiscal rule and changes in the Government Pension Fund Global], Statistics Norway *Økonomiske analyser* 2017/2.

Effects of increased trade tensions. Deviation from baseline scenario in per cent unless otherwise indicated

	2019	2020	2021	2022
Mainland GDP	-0,3	-1,4	-1,6	-1,2
- Manufacturing	-0,8	-3,3	-2,9	-1,9
Mainland business investment	-0,3	-1,6	-2,1	-1,5
Employment	-0,0	-0,4	-0,8	-0,9
Wages	-0,0	-0,1	-0,4	-0,6
Unemployment rate, percentage points	0,0	0,3	0,4	0,3
Consumption, household	-0,1	-0,8	-1,1	-1,0
Household real disposable income	-0,2	-1,1	-1,6	-1,3
Import-weighted krone exchange rate (I44)	0,8	2,0	2,2	2,6
Exports, traditional goods	-1,9	-5,3	-3,6	-1,5
Consumer price index	-0,0	0,0	0,1	0,1
House prices	-0,7	-3,3	-3,6	-2,6
Money market rate, percentage points	0,0	0,0	-0,0	-0,5
Assumptions				
Export market indicator	-2,9	-10,0	-6,3	-2,5
CPI, euro area	0,0	-0,0	-0,3	-0,7
Interest rate, euro area, percentage points	0,0	0,0	0,0	-0,3
Oil price, USD/barrel.	-7,5	-12,5	-7,5	-5,0
Petroleum investment	0,0	-7,5	-15,0	-15,0

The moderate cyclical upturn continues

Mainland GDP growth increased by 2.2 per cent in 2018 after growth of 2.0 per cent in 2017. Developments through 2018, with strong quarterly growth towards the end of the year, were marked by the dry summer last year. Weather-related factors also affected growth in the first quarter of this year, when mainland GDP increased by 0.3 per cent. A sharp fall in power production due to a relatively mild winter pushed growth down by 0.2 percentage point. Annualised mainland growth excluding power production was a bare 2.5 per cent. Given estimated trend growth of just under 2 per cent, this indicates that the Norwegian economy was still in a cyclical upturn at the beginning of 2019.

The Norwegian economy has now been in an economic upturn since the beginning of 2017. After positive growth through the last three quarters of 2018, manufacturing output remained roughly unchanged from 2018 Q4 to 2019 Q1. Value added fell in several manufacturing segments, and the decline was particularly large in refined petroleum products and in chemical and pharmaceutical products. The contribution of the food industry was also negative, driven by a fall in the production of processed and preserved fish. Production in oil- and gas-related industries increased, however. Value added increased by 6.8 per cent in the shipbuilding industry compared with 4.8 per cent on average per quarter in 2018. In addition to repair and installation of machinery and equipment, manufacture of metal goods contributed to maintaining manufacturing output at a high level in 2019 Q1.

Among other goods-producing mainland industries, construction has made a prolonged contribution to the current economic upturn. High house prices, partly driven by low interest rates, have stimulated housing demand. Public investment projects have also contributed to increasing activity in the construction industry. In 2018 Q4, growth in construction value added fell back to 0.4 per cent, following quarterly growth of around 1.2 per cent through the first three quarters last year. In 2019 Q1 growth picked up again, to 1.8 per cent.

Activity in other goods-producing mainland industries, such as power production and primary industries, is subject to naturally occurring factors. Developments in these industries therefore provide little insight into the underlying economic situation. Power production fell in 2018, and developments through the year were strongly influenced by the dry spring and summer weather last year. In 2019 Q1, production fell by a further 9.0 per cent as a result of a relatively mild winter and hence lower demand in the power market. This pushed mainland GDP growth down by 0.2 percentage point. Value added in fishing and aquaculture rose by over 5.9 per cent in 2018 Q4 following weak developments through the previous three quarters. In 2019 Q1, value added

in this industry fell sharply, by 6.7 per cent, reducing mainland GDP growth by 0.1 percentage point.

Value added in service industries excluding general government increased by an average of barely 0.7 per cent per quarter in 2018, and growth was just under 0.8 per cent in 2019 Q1. Like last year, growth in service industries was broad-based in the first quarter of this year. On average, value added rose by over 1 per cent per quarter in 2018, both in professional, scientific and technical services and in administrative and support service activities. Growth in these industries fell back towards the end of last year. Value added increased most strongly in information and communication services, at 1.6 per cent. General government value added edged up by 0.4 per cent in the first quarter of this year.

Aggregate GDP in 2019 Q1 was roughly unchanged from 2018 Q4, despite positive mainland growth. This is due to negative growth in oil and gas extraction. Markedly higher petroleum investment and a generally higher level of petroleum-related activity is expected to generate a positive demand impetus to the mainland economy going forward. The manufacturing industry will benefit from these impulses, and according to our calculations, manufacturing growth will boost activity for the next few years.

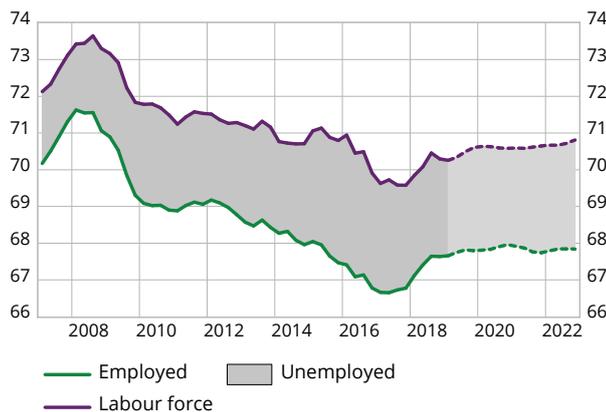
Construction is not expected to contribute as positively to output growth in the years ahead as it has done in previous years. The level of activity in the industry is fairly high this year, but government investment is expected to grow less than previously in the near term. Moderate developments in residential construction are also expected. All in all this points to modest construction activity in the years ahead. We also forecast that the upturn in private service industries will continue, in pace with the increasingly broad-based cyclical upturn. Growth in general government activity is expected to remain below trend growth for the Norwegian economy through the projection period.

Overall, our projections indicate mainland GDP growth of 2.5 per cent for the current year and growth gradually falling to 1.7 per cent towards the end of the projection period. Weaker impulses from the petroleum sector and the global economy, coupled with slightly higher interest rates, are contributing to slower growth in 2021 and 2022. Given our estimated trend growth, which also falls somewhat through the projection period as a result of lower population growth (see Box 5 in Economic Trends 2018/1), our projections imply that developments in the Norwegian economy will be close to cyclically neutral in the period up to 2022.

Box 1 presents a closer examination of the effects of trade tensions on the Norwegian economy.

Figure 14. Labour market status

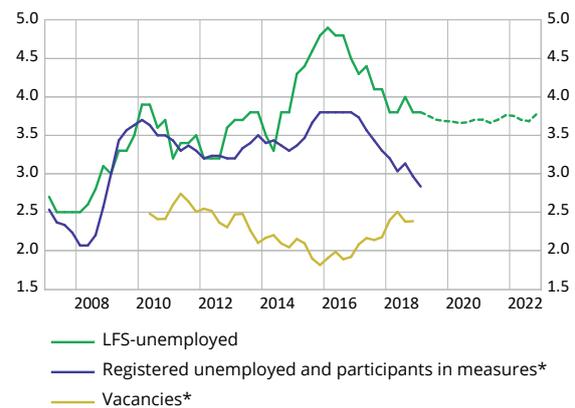
Percent of population in working age, LFS



Source: Statistics Norway

Figure 15. Unemployed and number of vacancies

Percent of labour force and of the sum of occupied and vacant positions, seasonally adjusted and smoothed

*Breaks in the statistics make the numbers incomparable before and after January 2013
Source: The Norwegian Labour and Welfare Administration and Statistics Norway

Somewhat tighter labour market in the near term

In pace with the moderate cyclical upturn, employment increased by 1.1 per cent in 2017 and a further 1.5 per cent in 2018. In 2019 Q1, employment rose further by 2.0 per cent measured as an annual rate. According to the Labour Force Survey, unemployment fell from 4.0 per cent to 3.8 per cent through the second half of 2018 and into early 2019. A further increase in employment and somewhat weaker developments in the labour force led to unemployment of 3.5 per cent as an average for the period February to April this year.

Employment in the construction industry has grown strongly through the cyclical upturn that started in early 2017. On average, employment increased by 0.9 per cent per quarter in 2018, and growth gathered pace through the year. This trend continued in 2019 Q1, with growth of 1.3 per cent. Employment in commercial services, which includes employment activities, increased by 0.6 per cent. The growth rate was somewhat weaker than we have seen in recent years, but nonetheless higher than the average for mainland Norway. In 2019 Q1, employment in the hotel and restaurant industry increased by 1.0 per cent, following average quarterly growth of 0.4 per cent in 2018.

Employment in petroleum-related services fell in the first half of 2018, but picked up strongly through the remainder of the year. This development continued into 2019 and first quarter growth was 2.7 per cent. Manufacturing employment increased by 0.9 per cent in the first quarter of this year, and growth has thus been continuous since the second half of 2017.

Retail trade accounts for some 13 per cent of total employment in the Norwegian economy. In 2019 Q1, employment in retail trade fell by 0.6 per cent, which in isolation pushed down mainland employment growth by 0.1 percentage point.

Vacancies decreased in 2018 Q4, after increasing generally since early 2016. The number of vacancies rose again in 2019 Q1, to about the same level as in 2018 Q3. In 2019 Q1, vacancies accounted for 2.4 per cent of the total number of jobs, compared with 2.3 per cent for the whole of 2018. The total number of jobs is defined as the sum of the number of employment relationships and the number of vacancies. The number of retail trade vacancies was higher in 2019 Q1 than in the previous quarter and higher than the average for 2018. The outcome may be a slowing of the decline in employment in retail trade.

Unemployment measured by the LFS was 4.2 per cent in 2017, and fell to 3.8 per cent in 2018 in pace with the upturn in the Norwegian economy. In January and February this year, unemployment remained unchanged at 3.8 per cent (measured as a centred 3-month moving average). The economic upturn has contributed to higher employment and lower unemployment. In March this year (average for the period February to April) unemployment fell further to 3.5 per cent as a consequence of increased employment, but also of a slight reduction in the labour force.

The sum of unrealised man-weeks wanted by the unemployed and the underemployed in 2019 Q1 was equivalent to 115 000 full-time jobs, according to the LFS. This is about 3000 full-time jobs less than in 2018 Q1 and about 2000 full-time jobs less than the average for 2018. The fall is due to a reduction in desired man-weeks for the unemployed. Conversely, the number of unrealised man-weeks for the underemployed in 2019 Q1 was 3000 higher than in the same period last year and 1000 higher than the average for 2018.

The seasonally adjusted statistics of the Norwegian Labour and Welfare Organisation (NAV) show that the number of fully unemployed and the sum of the fully unemployed and persons on labour market programmes fell through the first four months of this

year, as they did in the second half of last year. The May figures show an increase in both statistics, however. The sum of fully unemployed persons and persons on labour market programmes accounted for 2.9 per cent of the labour force in January this year, and this share fell to 2.7 per cent in April. In May the share increased to 2.8 per cent. The figures for fully unemployed persons show a similar tendency. They accounted for 2.2 per cent of the labour force in April, and 2.3 per cent in May.

Increased demand, particularly in the current year and next year, contributes to increased pressure in the labour market, and employment is expected to pick up further in the next few years. The decline in manufacturing employment has reversed into an upswing which we believe will continue for the next few years. According to our calculations, employment in private service production will continue to grow. Growth in the number of general government employees will be about 1 per cent annually on average. At the same time, a tighter labour market and higher real wages will attract more people into the labour market, thereby countering the decline in unemployment. According to this scenario, unemployment will remain at around 3.6 per cent for the next few years, falling to around 3.5 per cent at the end of the projection period.

Real wage growth each year

After a long period of relatively slow wage growth, there was a significant increase in the last quarter. Profitability is high in many sectors, but some structural factors also point to higher wage growth in the first quarter of the year. There were large bonus payments in petroleum-related services. In 2019 there are also changes in the collective wages agreement for the financial services industry. There were previously 12.5 payments a year in this industry, with an extra half payment in December. With effect from this year, the number of payments is reduced to twelve, and the previous extra payment is distributed among all the months of the year. This means a contribution to higher wage growth in the first three quarters of the year compared with the same quarters the previous year, which will be offset by lower wage growth in Q4 of this year.

Growth in average annual wages can be decomposed into carry-over, pay increases and wage drift. Carry-over is the difference between the annual wage level at the end of the previous year and the average annual wage level that year, and the negotiated wage increase includes the increase arising from central negotiations. The last component, wage drift, is the sum of all other factors that affect annual wages, such as local wage negotiations and changes in employee composition.

The Technical Reporting Committee on Income Settlements (TBU) has estimated the carry-over into 2019 for several areas of negotiations. The average carry-over for manufacturing is about 1.2 percentage points, the same as the previous year. The carry-over in

the other areas varies from 0.7 percentage point among municipal employees to 1.9 percentage points for employees in the health enterprises under employer association Spekter. The carry-over in the central government negotiations area is 1.5 percentage points.

This year's wage settlement is an interim settlement, which means that negotiations are limited to pay for the wage leader segment. In the main settlements, every second year, negotiations also take place on topics under the collective wages agreement other than wages. The question of public sector occupational pensions was taken up during this year's interim settlement, and disagreement on the subject almost led to a strike. The social partners have now largely reached agreement on this year's settlement. The Confederation of Norwegian Enterprise (NHO) and the Norwegian Confederation of Trade Unions (LO) estimate a norm of 3.2 per cent for the current year. This norm is based on a carry-over of 1.2 percentage points. The negotiated settlement contains a pay increase of 0.75 percentage point for manufacturing workers and a low-pay supplement of 0.05 percentage point. The remainder of the norm consists of the contribution from projected wage drift.

Going forward, we assume that pressures in the labour market will be maintained, with unemployment of just over 3.5 per cent. The labour market is tight in many industries, particularly construction and the service industries. We therefore expect wage growth to increase further from 3.3 per cent this year to around 3.5 per cent each year for the remainder of the projection period. If global developments takes a more pronounced negative turn, it will reduce manufacturing profitability and hence reduce wage growth compared with our projections.

Because of high electricity prices, there was virtually no real wage growth last year. In the near term, inflation is expected to edge down towards 2 per cent, and we therefore expect real wage growth to pick up to around 1.5 per cent in 2022. The wage share, i.e. the share of value added that accrues to the employees, has been high since 2018. Despite the increase in wage growth, we expect the wage share to gradually be reduced to more normal levels going forward.

Inflation approaching target

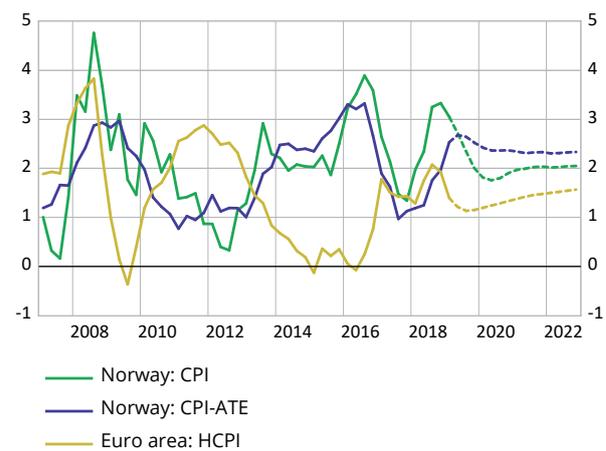
Underlying inflation measured by the 12-month rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) has risen appreciably since summer last year, following low and stable inflation in the first half of 2018. The 12-month rise in the CPI-ATE in June 2018 was 1.1 per cent, while it had reached 1.9 per cent in August and September already. Underlying inflation remained relatively stable during the autumn and until the end of the year, while CPI-ATE inflation edged up, reaching 2.1 per cent in January this year. In the past three months, the

inflation rate has increased further, and the 12-month rise in the CPI-ATE was 2.6 per cent in both February and April, with a peak of 2.7 per cent in March. Given increased wage growth, the ripple effects of a weaker krone and the indirect effects of high energy prices, an accelerating rise in the CPI-ATE has been expected. The most recent figures nonetheless exceed our previous projections. In the course of the autumn, the time-lagged inflationary effects of a weak exchange rate will wane, while the carry-over from low inflation in the first half of 2018 will gradually be phased out. This will lead to the rise in the CPI-ATE being somewhat lower in the second half of the year than the observed rise in recent months. We now forecast annualised CPI-ATE inflation of 2.5 per cent in 2019.

The consumer price index (CPI) is the most relevant price index for calculating developments in household purchasing power. The difference between the annual rise in the CPI and in the CPI-ATE was as much as 1.1 percentage points in 2018. This past year, the considerable difference between movements in the CPI and the CPI-ATE has been dominated by developments in energy prices, and electricity prices in particular, while tax changes have been of lesser importance. The 12-month rise in the CPI in April 2019 was 2.9 per cent, compared with a rise of 3.1 per cent in January. The CPI excluding energy products (CPI-AE) was 2.5 per cent in April, as against 2.1 per cent in January. The contribution of energy prices to CPI inflation has thus fallen from 1.0 to 0.4 percentage point in the period from January to April. As a consequence of the sharp fall in electricity spot prices from January to April, the 12-month rise in electricity prices including grid charges fell from 30.4 to 8.4 per cent during this period according to the CPI. In May last year, the spot price for electricity was low for a while when a rapid thaw resulted in spring floods several places, but the price rose sharply during the summer, which was generally dry. At the beginning of June, the expected average Nordic price for power in the forward market for the second quarter was around 34 øre/kWh. If these prices are realised, electricity prices including grid charges are likely to be far lower than last year for a good while to come. Prices for fuel rose substantially last year as a result of rising oil prices and a strong US dollar, before falling back somewhat at the turn of the year. In May, petrol prices had reverted to the peak level of last autumn, while the price at the pumps for diesel had risen less. According to fuel retailers, less refinement capacity has led to a growing shortage of petrol on the European market. An expected increase in demand for petrol in the summer months points to the petrol price in particular remaining high for a while to come, but a lower oil price in NOK will push down the rise in prices in the longer term. On an annual basis, we project that energy prices as a whole will increase a little more than general price inflation. While we forecast that energy prices will increase CIP inflation by 0.1 percentage point in 2019, special taxes will have a countering effect, such that CPI inflation,

Figure 16. Consumer price indices

Percent growth from same quarter previous year



Source: Statistics Norway

like CPI-ATE inflation, is projected to be 2.5 per cent from 2018 to 2019. Given these projections, CPI inflation will be substantially lower than CPI-ATE inflation in the second half of 2019 compared with the same period in 2018.

Easter was in April this year, and in March last year. The rise in prices over the past few months must be viewed against this backdrop, as there are often special Easter bargain prices in the consumption group food and non-alcoholic beverages. According to the sub-indices of the CPI-ATE, there has been an average rise in prices in the product group food and non-alcoholic beverages over the last three months of 3.1 per cent compared with last year, which pushed underlying inflation up slightly. The CPI sub-index for the same product group showed an average rise of 2.1 per cent in the same period. The CPI index, which includes tax changes, reflects a virtual reversal this year of the increased sugar tax from 2017 to 2018. In May the agricultural trade unions entered into an agreement with the central government whereby part of the income target is to be met by increasing target prices. According to the Ministry of Agriculture and Food, an increase in target prices, if realised, would in isolation provide a basis for a rise in the consumer price index for food of a moderate 0.15 percentage point. There is strong competition for customers in the groceries market. We assume that the underlying rise in prices for food and non-alcoholic beverages will be roughly in line with general inflation.

A breakdown of the CPI-ATE by supplier sector shows an increasing rise in prices for services with important price components other than labour in recent months. An important contribution to the higher 12-month rise in prices for services was air travel prices, which increased by 10.1 and 25.7 per cent in March and April, respectively. The high rise in April reflects the fact that Easter was in April this year. The rise in prices for air travel usually reverses after the Easter month. The air strike in late April–early May and the placing of public

holidays in May may affect inflation in the short term. In the longer term, we assume that prices for air travel will normalise. An important contribution to the higher rise in prices for services was prices for charter trips, which increased by 6.9 and 11.0 per cent in March and April, respectively. Prices for charter tours are collected every three months, so the rise in prices in April will remain unchanged for this service group up to and including June. The rise in prices for charter trips is affected by exchange rate changes and will probably be reduced in the second half of the year.

Rental prices have shown a surprisingly low increase so far this year, and have pushed CPI-ATE markedly down. The 12-month rise in rentals was 1.6 per cent in April 2019, almost unchanged from January. This service group has a weighting of more than 20 per cent in the CPI-ATE, and makes an important contribution to underlying inflation as a whole. Existing rents are largely adjusted according to CPI inflation, and we still assume that higher CPI inflation will result in somewhat higher inflation for this group of services in the course of the year.

Underlying inflation is largely driven by developments in labour costs, exchange rates and global inflation, and by productivity growth. The fundamental forces that govern inflation developments have undergone little change in recent months, and the inflation presented in this projection is close to that presented in the last economic analysis for the years ahead. The effects of a weak krone will wane, and imported inflation will then gradually become governed by the global rise in prices for imported goods. Wage growth will pick up further, while increased productivity growth will ease the effect of increased wages on prices. Increased manufacturing investment in the current year will help to push up productivity growth in the years ahead. The indirect effects of lower energy prices point the same way as increased productivity growth.

In light of forward prices in the power market, we estimate that the price of electricity including grid charges will decrease by about 3 per cent as an annual average from 2019 to 2020, as a consequence of carry-over from high power prices in 2019 Q1. This, coupled with a low oil price, will contribute to reducing CPI inflation by 0.4 percentage point next year. On the basis of forward power prices and a further fall in the oil price measured in NOK, we assume that energy prices as a whole will push down CPI inflation by 0.2 and 0.1 percentage point in 2021 and 2022, respectively.

We forecast that real tax changes will reduce CPI inflation by 0.1 percentage point in 2019. The special tax rates have been adjusted for inflation for the years 2020–2022 so that they have a neutral effect on CPI inflation. Special taxes are decided on by the Storting when the government budget is presented, and there will be changes. In particular, it was announced in

connection with last year's government budget that vehicle taxes are to be reviewed in light of new emission norms.

We now forecast that CPI-ATE inflation will end up at 2.5 per cent in 2019. CPI-ATE inflation will then fall to 2.1 per cent as an annual average in 2020 and, according to our projections, will remain at that level through the remainder of the projection period. The underlying rate of inflation, measured by the rise in the CPI-ATE, will thus be around Norges Bank's inflation target in 2020 and 2021. CPI inflation is projected to be 2.5 per cent this year. In 2020, an expected fall in energy prices will lead to CPI inflation of 1.7 per cent. Given the assumed weak developments in energy prices, CPI inflation will be slightly lower than CPI-ATE inflation in 2021 and 2022.

Table 5. National accounts: Final expenditure and gross domestic product. At constant 2016 prices. NOK million

	Unadjusted		Seasonally adjusted							
	2017	2018*	17.2	17.3	17.4	18.1	18.2	18.3	18.4	19.1
Final consumption expenditure of households and NPISHs	1 443 445	1 472 827	360 039	363 221	365 934	365 965	370 480	370 284	371 976	373 833
Household final consumption expenditure	1 364 740	1 390 845	340 512	343 505	346 017	345 668	349 950	349 668	351 069	353 132
Goods	625 914	631 126	156 575	157 932	159 802	158 023	160 450	158 580	158 518	159 850
Services	669 032	685 834	166 738	167 864	168 861	169 655	171 315	172 669	173 657	174 877
Direct purchases abroad by resident households	113 236	117 563	27 948	28 780	28 350	29 147	29 108	29 244	29 887	29 857
Direct purchases by non-residents	-43 441	-43 678	-10 749	-11 071	-10 997	-11 156	-10 923	-10 825	-10 993	-11 452
Final consumption expenditure of NPISHs	78 704	81 982	19 527	19 716	19 917	20 297	20 530	20 615	20 907	20 701
Final consumption expenditure of general government	778 468	787 731	193 529	194 922	197 553	196 858	196 891	196 844	197 152	199 131
Final consumption expenditure of central government	391 089	393 617	97 370	97 834	99 182	98 474	98 459	98 460	98 231	99 601
Central government, civilian	346 231	348 423	86 201	86 610	87 832	87 175	87 112	87 154	86 987	88 150
Central government, defence	44 858	45 194	11 169	11 225	11 351	11 300	11 347	11 306	11 244	11 450
Final consumption expenditure of local government	387 379	394 114	96 160	97 088	98 371	98 383	98 433	98 384	98 921	99 530
Gross fixed capital formation	818 871	827 399	205 514	204 036	205 451	196 776	205 946	209 917	214 657	211 997
Extraction and transport via pipelines	159 147	163 406	41 013	37 422	41 059	35 835	40 816	42 298	44 383	45 317
Ocean transport	3 902	750	1 000	1 852	49	513	3	-217	450	572
Mainland Norway	655 822	663 244	163 501	164 762	164 343	160 427	165 127	167 836	169 824	166 109
Industries	290 345	297 759	69 191	74 575	72 520	70 389	75 296	75 436	76 561	74 568
Service activities incidental to extraction	2 436	3 304	409	823	853	693	766	915	926	1 095
Other services	185 026	180 991	44 924	46 686	45 678	43 194	45 847	45 694	46 206	44 514
Manufacturing and mining	36 450	40 915	8 348	9 123	9 753	9 173	10 279	10 421	11 030	12 058
Production of other goods	66 434	72 549	15 509	17 942	16 237	17 329	18 403	18 406	18 400	16 901
Dwellings (households)	194 017	182 282	48 968	49 396	46 906	46 756	45 159	45 157	45 267	45 579
General government	171 460	183 202	45 342	40 791	44 916	43 283	44 672	47 244	47 996	45 962
Acquisitions less disposals of valuables	414	444	97	104	107	106	113	110	116	117
Changes in stocks and statistical discrepancies	107 799	120 701	23 753	26 910	33 114	35 840	28 963	27 649	32 631	31 468
Gross capital formation	927 084	948 545	229 364	231 050	238 672	232 721	235 022	237 676	247 403	243 583
Final domestic use of goods and services	3 148 996	3 209 103	782 932	789 193	802 160	795 544	802 394	804 804	816 531	816 546
Final demand from Mainland Norway	2 877 734	2 923 801	717 069	722 905	727 830	723 251	732 498	734 963	738 952	739 072
Final demand from general government	949 927	970 933	238 872	235 713	242 470	240 141	241 564	244 087	245 148	245 092
Total exports	1 096 104	1 088 560	276 347	274 388	270 933	270 139	274 558	274 677	272 745	278 747
Traditional goods	361 646	371 481	89 827	93 178	92 919	90 827	93 401	91 920	97 822	98 636
Crude oil and natural gas	379 333	361 406	96 872	95 524	90 698	90 542	90 209	91 713	89 738	87 418
Ships, oil platforms and planes	14 459	11 494	2 934	1 883	2 174	3 722	3 713	3 065	994	2 642
Services	340 666	344 179	86 715	83 803	85 141	85 049	87 235	87 979	84 191	90 051
Total use of goods and services	4 245 100	4 297 662	1 059 279	1 063 581	1 073 092	1 065 683	1 076 951	1 079 481	1 089 277	1 095 293
Total imports	1 064 025	1 070 592	265 059	265 298	272 860	261 927	269 764	268 538	273 356	279 971
Traditional goods	613 190	628 702	152 753	154 494	158 189	155 078	157 988	158 496	160 416	168 080
Crude oil and natural gas	10 974	15 441	2 538	2 531	3 427	3 845	3 837	3 598	3 936	2 978
Ships, oil platforms and planes	49 624	35 343	12 723	10 374	12 005	6 681	9 761	8 456	10 645	6 337
Services	390 237	391 106	97 045	97 900	99 239	96 323	98 178	97 989	98 360	102 575
Gross domestic product (market prices)	3 181 071	3 227 070	794 220	798 283	800 232	803 756	807 187	810 942	815 921	815 323
Gross domestic product Mainland Norway (market prices)	2 767 631	2 829 146	689 734	693 716	699 352	703 218	708 246	710 008	717 948	720 176
Petroleum activities and ocean transport Mainland Norway (basic prices)	413 440	397 924	104 486	104 567	100 880	100 538	98 941	100 934	97 973	95 147
Mainland Norway excluding general government	2 398 334	2 454 976	597 732	600 907	606 536	610 098	614 802	616 199	623 399	625 790
Manufacturing and mining	1 797 869	1 840 870	447 914	450 727	454 935	457 733	461 759	462 261	468 655	470 356
Production of other goods	208 289	210 201	52 539	52 058	52 573	52 350	53 062	53 416	54 234	54 299
Services incl. dwellings (households)	316 783	323 775	78 831	79 500	80 616	81 653	80 936	79 670	82 759	81 478
General government	1 272 797	1 306 895	316 544	319 169	321 746	323 729	327 762	329 175	331 663	334 579
Taxes and subsidies products	600 464	614 106	149 818	150 180	151 601	152 365	153 042	153 938	154 744	155 434
Taxes and subsidies products	369 297	374 170	92 002	92 809	92 816	93 120	93 444	93 809	94 549	94 386

Source: Statistics Norway.

Table 6. National accounts: Final expenditure and gross domestic product. At constant 2016 prices. Percentage change from previous period

	Unadjusted		Seasonally adjusted							
	2017	2018*	17.2	17.3	17.4	18.1	18.2	18.3	18.4	19.1
Final consumption expenditure of households and NPISHs	2,2	2,0	0,3	0,9	0,7	0,0	1,2	-0,1	0,5	0,5
Household final consumption expenditure	2,2	1,9	0,3	0,9	0,7	-0,1	1,2	-0,1	0,4	0,6
Goods	1,6	0,8	0,5	0,9	1,2	-1,1	1,5	-1,2	0,0	0,8
Services	2,5	2,5	0,7	0,7	0,6	0,5	1,0	0,8	0,6	0,7
Direct purchases abroad by resident households	2,7	3,8	-1,6	3,0	-1,5	2,8	-0,1	0,5	2,2	-0,1
Direct purchases by non-residents	-0,6	0,5	3,9	3,0	-0,7	1,5	-2,1	-0,9	1,5	4,2
Final consumption expenditure of NPISHs	2,7	4,2	0,5	1,0	1,0	1,9	1,1	0,4	1,4	-1,0
Final consumption expenditure of general government	2,5	1,2	0,5	0,7	1,3	-0,4	0,0	0,0	0,2	1,0
Final consumption expenditure of central government	1,8	0,6	0,7	0,5	1,4	-0,7	0,0	0,0	-0,2	1,4
Central government, civilian	1,9	0,6	0,7	0,5	1,4	-0,7	-0,1	0,0	-0,2	1,3
Central government, defence	1,0	0,7	0,5	0,5	1,1	-0,4	0,4	-0,4	-0,5	1,8
Final consumption expenditure of local government	3,2	1,7	0,4	1,0	1,3	0,0	0,0	0,0	0,5	0,6
Gross fixed capital formation	3,6	1,0	0,9	-0,7	0,7	-4,2	4,7	1,9	2,3	-1,2
Extraction and transport via pipelines	-3,8	2,7	3,6	-8,8	9,7	-12,7	13,9	3,6	4,9	2,1
Ocean transport	-68,2	-80,8	-0,1	85,2	-97,3	945,1	-99,4	..	-307,8	27,1
Mainland Norway	7,0	1,1	0,2	0,8	-0,3	-2,4	2,9	1,6	1,2	-2,2
Industries	9,3	2,6	-6,5	7,8	-2,8	-2,9	7,0	0,2	1,5	-2,6
Service activities incidental to extraction	15,9	35,6	16,7	101,1	3,6	-18,7	10,6	19,4	1,2	18,2
Other services	12,3	-2,2	-5,8	3,9	-2,2	-5,4	6,1	-0,3	1,1	-3,7
Manufacturing and mining	-2,5	12,2	-9,5	9,3	6,9	-5,9	12,1	1,4	5,8	9,3
Production of other goods	8,1	9,2	-7,3	15,7	-9,5	6,7	6,2	0,0	0,0	-8,1
Dwellings (households)	7,0	-6,0	0,4	0,9	-5,0	-0,3	-3,4	0,0	0,2	0,7
General government	3,6	6,8	12,2	-10,0	10,1	-3,6	3,2	5,8	1,6	-4,2
Acquisitions less disposals of valuables	5,5	7,4	-8,0	7,8	2,4	-1,1	6,6	-2,2	4,9	1,1
Changes in stocks and statistical discrepancies	2,3	12,0	8,2	13,3	23,1	8,2	-19,2	-4,5	18,0	-3,6
Gross capital formation	3,5	2,3	1,6	0,7	3,3	-2,5	1,0	1,1	4,1	-1,5
Final domestic use of goods and services	2,6	1,9	0,7	0,8	1,6	-0,8	0,9	0,3	1,5	0,0
Final demand from Mainland Norway	3,3	1,6	0,4	0,8	0,7	-0,6	1,3	0,3	0,5	0,0
Final demand from general government	2,7	2,2	2,6	-1,3	2,9	-1,0	0,6	1,0	0,4	0,0
Total exports	-0,2	-0,7	0,5	-0,7	-1,3	-0,3	1,6	0,0	-0,7	2,2
Traditional goods	1,7	2,7	3,8	3,7	-0,3	-2,3	2,8	-1,6	6,4	0,8
Crude oil and natural gas	1,5	-4,7	0,7	-1,4	-5,1	-0,2	-0,4	1,7	-2,2	-2,6
Ships, oil platforms and planes	-16,1	-20,5	-60,7	-35,8	15,4	71,2	-0,2	-17,4	-67,6	165,7
Services	-3,2	1,0	2,2	-3,4	1,6	-0,1	2,6	0,9	-4,3	7,0
Total use of goods and services	1,9	1,2	0,7	0,4	0,9	-0,7	1,1	0,2	0,9	0,6
Total imports	1,6	0,6	0,6	0,1	2,9	-4,0	3,0	-0,5	1,8	2,4
Traditional goods	2,7	2,5	1,9	1,1	2,4	-2,0	1,9	0,3	1,2	4,8
Crude oil and natural gas	26,4	40,7	-3,6	-0,3	35,4	12,2	-0,2	-6,2	9,4	-24,3
Ships, oil platforms and planes	-2,2	-28,8	-12,5	-18,5	15,7	-44,4	46,1	-13,4	25,9	-40,5
Services	-0,1	0,2	0,7	0,9	1,4	-2,9	1,9	-0,2	0,4	4,3
Gross domestic product (market prices)	2,0	1,4	0,7	0,5	0,2	0,4	0,4	0,5	0,6	-0,1
Gross domestic product Mainland Norway (market prices)	2,0	2,2	0,7	0,6	0,8	0,6	0,7	0,2	1,1	0,3
Petroleum activities and ocean transport Mainland Norway (basic prices)	1,7	-3,8	0,4	0,1	-3,5	-0,3	-1,6	2,0	-2,9	-2,9
Mainland Norway (basic prices)	1,9	2,4	0,8	0,5	0,9	0,6	0,8	0,2	1,2	0,4
Mainland Norway excluding general government	1,7	2,4	0,9	0,6	0,9	0,6	0,9	0,1	1,4	0,4
Manufacturing and mining	0,0	0,9	0,2	-0,9	1,0	-0,4	1,4	0,7	1,5	0,1
Production of other goods	3,0	2,2	2,0	0,8	1,4	1,3	-0,9	-1,6	3,9	-1,5
Services incl. dwellings (households)	1,7	2,7	0,8	0,8	0,8	0,6	1,2	0,4	0,8	0,9
General government	2,3	2,3	0,6	0,2	0,9	0,5	0,4	0,6	0,5	0,4
Taxes and subsidies products	2,9	1,3	0,1	0,9	0,0	0,3	0,3	0,4	0,8	-0,2

Source: Statistics Norway.

Table 7. National accounts: Final expenditure and gross domestic product. Price indices. 2016=100

	Unadjusted		Seasonally adjusted							
	2017	2018*	17.2	17.3	17.4	18.1	18.2	18.3	18.4	19.1
Final consumption expenditure of households and NPISHs	102.0	104.1	101.9	102.1	102.7	102.8	103.6	104.6	105.1	105.3
Final consumption expenditure of general government	102.4	105.6	102.2	102.9	103.3	104.2	105.1	105.9	107.2	107.5
Gross fixed capital formation	100.7	103.1	101.0	100.4	101.2	102.3	102.5	103.3	104.3	103.4
Mainland Norway	102.1	105.2	102.2	102.0	103.0	103.9	104.6	105.6	106.5	107.2
Final domestic use of goods and services	101.6	104.1	101.4	101.5	102.0	103.4	103.8	104.8	104.3	105.4
Final demand from Mainland Norway	102.1	104.7	102.0	102.3	102.9	103.4	104.2	105.2	106.0	106.3
Total exports	109.2	123.6	108.7	107.1	112.9	118.7	122.2	127.6	126.4	121.6
Traditional goods	105.4	110.6	106.7	104.4	106.3	109.6	110.0	111.9	110.8	110.1
Total use of goods and services	103.6	109.0	103.3	102.9	104.7	107.3	108.5	110.6	109.8	109.5
Total imports	102.7	107.5	103.1	102.0	103.9	106.8	106.9	108.0	108.1	109.0
Traditional goods	103.7	109.3	103.8	103.1	105.9	107.7	108.3	109.8	110.8	111.3
Gross domestic product (market prices)	103.9	109.6	103.4	103.2	105.0	107.4	109.0	111.5	110.4	109.7
Gross domestic product Mainland Norway (market prices)	101.1	102.8	101.1	101.4	101.1	102.1	102.1	103.1	103.7	103.9

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted							
	2017	2018*	17.2	17.3	17.4	18.1	18.2	18.3	18.4	19.1
Final consumption expenditure of households and NPISHs	2.0	2.1	1.0	0.2	0.5	0.1	0.9	1.0	0.5	0.2
Final consumption expenditure of general government	2.4	3.1	0.8	0.7	0.4	0.9	0.8	0.8	1.2	0.2
Gross fixed capital formation	0.7	2.4	0.8	-0.5	0.7	1.1	0.2	0.9	0.9	-0.9
Mainland Norway	2.1	3.1	1.1	-0.2	1.0	0.9	0.7	1.0	0.8	0.7
Final domestic use of goods and services	1.6	2.4	0.0	0.0	0.5	1.3	0.4	1.0	-0.5	1.1
Final demand from Mainland Norway	2.1	2.6	1.0	0.3	0.6	0.5	0.8	0.9	0.7	0.3
Total exports	9.2	13.2	0.6	-1.4	5.4	5.2	3.0	4.4	-1.0	-3.8
Traditional goods	5.4	4.9	2.5	-2.2	1.9	3.1	0.4	1.7	-1.0	-0.7
Total use of goods and services	3.6	5.3	0.2	-0.4	1.8	2.4	1.2	1.9	-0.7	-0.3
Total imports	2.7	4.7	1.7	-1.0	1.8	2.8	0.1	1.1	0.0	0.9
Traditional goods	3.7	5.4	1.9	-0.6	2.7	1.7	0.5	1.4	1.0	0.4
Gross domestic product (market prices)	3.9	5.5	-0.3	-0.2	1.8	2.3	1.5	2.2	-0.9	-0.6
Gross domestic product Mainland Norway (market prices)	1.1	1.6	0.3	0.3	-0.3	1.0	0.0	1.0	0.6	0.2

Source: Statistics Norway.

Main economic indicators 2007-2022

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

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017*	2018*	Forecasts			
													2019	2020	2021	2022
Demand and output																
Consumption in households etc.	5,3	1,7	0,0	3,8	2,3	3,5	2,8	2,1	2,6	1,3	2,2	2,0	2,1	2,6	2,4	2,5
General government consumption	2,0	2,4	4,1	2,2	1,0	1,6	1,0	2,7	2,4	2,1	2,5	1,2	1,7	1,7	1,6	1,4
Gross fixed investment	12,2	1,1	-6,8	-6,4	7,5	7,6	6,3	-0,3	-4,0	5,2	3,6	1,0	4,9	1,0	-0,2	0,4
Extraction and transport via pipelines	9,3	5,5	2,9	-8,0	11,4	14,6	19,0	-1,8	-12,2	-16,0	-3,8	2,7	14,5	-2,5	-1,2	2,3
Mainland Norway	14,2	0,9	-10,4	-6,4	5,0	7,4	2,9	0,4	-0,2	10,7	7,0	1,1	2,5	1,4	0,1	-0,1
Industries	22,7	3,1	-18,4	-9,5	1,1	10,5	-3,2	-0,7	-2,8	16,5	9,3	2,6	4,0	0,9	-0,5	-0,6
Housing	2,7	-9,0	-8,1	-1,6	17,0	10,9	5,3	-1,4	3,2	6,6	7,0	-6,0	1,0	2,1	-0,2	-0,7
General government	8,7	7,2	7,7	-4,8	1,1	-1,8	11,8	4,4	0,2	6,7	3,6	6,8	1,4	1,4	1,3	1,3
Demand from Mainland Norway ¹	6,4	1,7	-1,4	1,2	2,5	3,7	2,3	1,9	2,0	3,5	3,3	1,6	2,1	2,1	1,6	1,6
Stockbuilding ²	0,4	0,4	-1,8	1,3	0,2	-0,5	0,5	-0,2	-0,1	-0,3	0,4	0,0	-0,3	-0,0	-0,0	-0,0
Exports	1,4	0,1	-4,1	0,6	-0,8	1,6	-1,7	3,1	4,7	1,1	-0,2	-0,7	2,3	5,9	2,9	1,8
Traditional goods	9,2	3,5	-8,0	3,3	-0,1	-0,2	1,3	3,1	6,9	-8,6	1,7	2,7	5,7	3,6	2,1	2,4
Crude oil and natural gas	-2,4	-1,3	-1,6	-6,9	-5,6	0,5	-5,5	2,7	2,1	4,9	1,5	-4,7	-0,7	11,1	4,4	0,9
Imports	10,0	3,2	-10,3	8,4	3,9	3,0	5,0	2,4	1,6	3,3	1,6	0,6	4,0	2,3	1,2	1,9
Traditional goods	7,2	1,2	-12,1	9,2	4,6	2,6	2,3	2,1	3,2	-0,1	2,7	2,5	5,1	1,6	0,2	1,1
Gross domestic product	3,0	0,5	-1,7	0,7	1,0	2,7	1,0	2,0	2,0	1,2	2,0	1,4	2,1	3,0	2,0	1,6
Mainland Norway	5,7	1,8	-1,7	1,9	1,9	3,7	2,3	2,2	1,4	1,1	2,0	2,2	2,5	2,2	1,8	1,7
Manufacturing	3,8	2,7	-7,8	2,1	1,7	2,0	3,3	2,8	-4,6	-4,9	0,0	0,9	5,6	3,9	2,4	1,5
Labour market																
Total hours worked, Mainland Norway ³	4,8	3,6	-2,0	0,2	1,7	1,8	0,3	1,4	0,7	0,5	0,4	1,7	1,9	1,6	0,4	0,6
Employed persons	4,1	3,2	-0,5	-0,5	1,5	2,1	1,1	1,2	0,4	0,2	1,1	1,5	1,5	0,5	0,4	0,5
Labor force ⁴	2,5	3,0	0,2	0,6	1,3	1,6	1,2	0,7	1,5	0,2	-0,2	1,4	1,1	0,8	0,4	0,5
Participation rate (level) ⁴	72,6	73,5	72,5	71,7	71,5	71,4	71,2	70,7	71,0	70,4	69,7	70,2	70,6	70,8	70,8	70,8
Unemployment rate (level) ⁴	2,5	2,7	3,3	3,8	3,4	3,3	3,8	3,6	4,5	4,7	4,2	3,8	3,6	3,6	3,6	3,5
Prices and wages																
Wages per standard man-year	5,4	6,3	4,2	3,7	4,2	4,0	3,9	3,1	2,8	1,8	2,3	2,8	3,3	3,5	3,5	3,5
Consumer price index (CPI)	0,7	3,8	2,2	2,4	1,3	0,6	2,1	2,1	2,1	3,6	1,8	2,7	2,5	1,7	1,9	2,0
CPI-ATE ⁵	1,4	2,6	2,6	1,3	1,0	1,3	1,5	2,5	2,7	3,1	1,4	1,6	2,5	2,1	2,1	2,1
Export prices, traditional goods	2,4	2,8	-6,0	4,5	5,8	-1,9	2,7	3,4	2,0	4,0	5,4	4,9	1,5	2,6	2,2	1,9
Import prices, traditional goods	3,7	3,9	-1,5	0,0	4,0	0,3	1,5	4,4	4,7	1,8	3,7	5,4	3,1	2,0	2,0	2,0
Housing prices	12,6	-1,1	1,9	8,2	8,0	6,8	4,0	2,7	6,1	7,0	5,0	1,4	2,1	0,9	1,4	1,4
Income, interest rates and exchange rate																
Household real income	5,6	3,4	3,0	2,1	4,2	4,4	4,0	2,9	5,5	-1,7	1,4	2,4	2,4	3,5	2,2	2,1
Household saving ratio (level)	0,9	3,8	5,2	4,0	5,9	7,1	7,5	8,5	10,3	7,3	6,7	6,5	6,6	7,7	7,7	7,4
Money market rate (level)	5,0	6,2	2,5	2,5	2,9	2,2	1,8	1,7	1,3	1,1	0,9	1,1	1,6	2,0	2,1	2,1
Lending rate, credit loans(level) ⁶	5,0	6,8	4,0	3,4	3,6	3,9	4,0	3,9	3,2	2,6	2,6	2,7	3,0	3,4	3,6	3,6
Real after-tax lending rate, banks (level)	2,9	1,1	0,7	0,1	1,3	2,1	0,8	0,8	0,1	-1,6	0,1	-0,7	-0,2	0,9	0,8	0,8
Importweighted krone exchange rate (44 countries) ⁷	-1,8	0,0	3,3	-3,7	-2,4	-1,2	2,2	5,3	10,5	1,8	-0,8	0,1	1,8	0,0	0,0	0,0
NOK per euro (level)	8,02	8,22	8,73	8,01	7,79	7,47	7,81	8,35	8,95	9,29	9,33	9,60	9,76	9,78	9,78	9,78
Current account																
Current balance (bill. NOK) ⁸	287	408	261	284	346	371	316	331	246	125	186	285	276	329	358	348
Current account (per cent of GDP)	12,1	15,5	10,6	10,9	12,3	12,4	10,2	10,5	8,1	4,0	5,7	8,1	7,6	8,6	9,0	8,4
International indicators																
Exports markets indicator	6,3	1,3	-10,4	11,3	6,0	1,1	1,9	4,8	5,3	3,8	5,0	3,4	3,8	3,2	3,2	3,6
Consumer price index, euro-area	2,1	3,3	0,3	1,6	2,7	2,5	1,4	0,4	0,2	0,2	1,5	1,8	1,3	1,4	1,6	1,7
Money market rate, euro(level)	4,3	4,6	1,2	0,8	1,4	0,6	0,2	0,2	0,0	-0,3	-0,3	-0,3	-0,3	-0,3	-0,3	0,0
Crude oil price NOK (level) ⁹	425	556	391	485	622	651	639	628	432	379	453	582	540	496	486	483

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 Employees.

⁴ According to Statistics Norway's labour force survey(LFS). Break in data series in 2006.

⁵ CPI adjusted for tax changes and excluding energy products.

⁶ Yearly average. Lending rate, banks until 2006, thereafter credit lines, secured on dwellings.

⁷ Increasing index implies depreciation.

⁸ Current account not adjusted for saving in pension funds.

⁹ Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was June 4 2019.