



Economic Survey

2020/ 1

Economic developments in Norway

© Statistics Norway, 2020

When using this material,
Statistics Norway must be quoted as the source.

Contents

Economic developments in Norway	1
Fiscal policy abates the crisis	5
Cautious interest rate increases from 2022	8
Gradual rebound in consumption	8
Moderate fall in house prices	10
Fall in petroleum investment	10
Marked fall in business investment.....	11
Sharp brake on foreign trade	12
Fall in activity probably over	13
Pronounced increase in the number of unemployed	13
Falling real wages next year	14
Lower energy prices curb CPI inflation this year.....	18

Box

1. Cyclical or structural shock?.....	4
2. The Norwegian economy is vulnerable to further shocks.....	6
3. Effects on the employment rate of a change in the population composition up to 2030.....	16

Tables

1. Main macroeconomic aggregates. Accounts figures. Change from previous period. Per cent ...	1
2. Growth in mainland GDP and contributions from demand components. Percentage points, annual rate	2
3. Main economic indicators 2018-2022. Accounts and forecasts. Percentage change from previous year unless otherwise noted.....	3
4. National accounts: Final expenditure and gross domestic product. At constant 2017 prices. NOK million	18
5. National accounts: Final expenditure and gross domestic product. At constant 2017 prices. Percentage change from previous period	19
6. National accounts: Final expenditure and gross domestic product. Price indices. 2017=100	20
7. National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous period	20
Main economic indicators 2010-2022. Accounts and forecasts. Percentage change from previous year unless otherwise noted	21

Questions about economic trends

– in Norway: Thomas von Brasch, thomas.vonbrasch@ssb.no, tel. (+47) 93 89 85 24

– international: Roger Hammersland, roger.hammersland@ssb.no, tel. (+47) 40 90 24 77

Editing was finalised on Tuesday 3 June 2020

Published 5 June 2020

© Statistics Norway

When using this material, Statistics Norway must be quoted as the source.

Explanation of symbols	Symbol
Data not available	..
Not for publication	:
Zero	0
Provisional or preliminary figure	*

Economic developments in Norway

The outlook for the Norwegian economy has changed completely within a short space of time. The outbreak of the coronavirus and subsequent infection control measures have caused an enormous slowdown in the Norwegian economy since mid-March. Monthly national accounts figures showed a decline in mainland GDP of 6.9 per cent from February to March, most of it due to an abrupt fall in activity in the second half of March. Monthly national accounts are discussed in more detail in Chapter 3 of *Konjunkturtendensene 20/2*. There

have been signs through April and May that the fall in economic activity has come to a halt, the infection is reduced and the authorities have eased infection control measures. Further relaxations have been carried out from 1 June, and it has been signalled that more will follow in the course of the summer. According to the national accounts, mainland GDP fell 4.7 per cent from March to April, and was thus 11.3 per cent lower than in February. At the end of May there were 65 000 fewer unemployed registered with the Norwegian Labour and

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

	2018*	2019*	Seasonally adjusted			
			19:2	19:3	19:4	20:1
Demand and output						
Consumption in households etc.	1.9	1.5	0.2	0.4	-0.4	-3.6
General government consumption	1.4	1.7	0.8	0.7	0.7	0.9
Gross fixed investment	2.8	6.1	3.1	2.8	-0.1	-5.1
Extraction and transport via pipelines	1.9	12.8	7.9	1.6	4.2	-3.4
Mainland Norway	3.0	4.3	1.8	3.1	-1.4	-5.2
Final domestic demand from Mainland Norway ¹	2.0	2.2	0.7	1.1	-0.3	-2.8
Exports	-0.2	1.5	-1.0	-1.5	5.7	-2.4
Traditional goods	2.0	4.9	-2.1	-0.2	1.5	-3.0
Crude oil and natural gas	-4.8	-4.3	-3.2	-4.2	16.8	-4.4
Imports	1.9	5.2	1.3	0.1	-0.6	-4.9
Traditional goods	3.2	5.7	-0.7	-1.3	-1.6	-1.7
Gross domestic product	1.3	1.2	0.2	0.0	1.5	-1.5
Mainland Norway	2.2	2.3	0.6	0.6	0.1	-2.1
Labour market						
Total hours worked. Mainland Norway	1.8	1.8	0.5	0.4	0.1	-2.3
Employed persons	1.6	1.6	0.4	0.2	0.1	0.0
Labour force ²	1.4	1.0	-0.4	1.5	-0.1	0.1
Unemployment rate. level ²	3.8	3.7	3.4	3.7	3.9	3.5
Prices and wages						
Annual earnings	2.8	3.5	..	..	..	..
Consumer price index (CPI) ³	2.7	2.2	0.3	0.3	0.4	0.2
CPI adjusted for tax changes and excluding energy products (CPI-ATE) ³	1.6	2.2	0.5	0.5	0.4	0.9
Export prices. traditional goods	5.9	0.3	1.5	-1.0	2.1	0.8
Import prices. traditional goods	4.5	2.5	1.2	0.7	1.0	0.6
Balance of payment						
Current balance. bill. NOK ⁴ D	252	140	26	30	19	66
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	0.6	1.1	1.0	1.3	1.5	1.3
Lending rate. credit loans ⁵	0.7	0.8	2.9	3.1	3.3	3.3
Crude oil price NOK ⁶	583	564	591	549	568	484
Importweighted krone exchange rate. 44 countries. 1995=100	104.6	107.6	106.0	107.3	110.4	114.1
NOK per euro	9.60	9.85	9.72	9.85	10.09	10.47

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

² According to Statistics Norway's labour force survey (LFS).

³ Percentage change from the same period the previous year.

⁴ Current account not adjusted for saving in pension funds.

⁵ Period averages.

⁶ Average spot price. Brent Blend.

Source: Statistics Norway and Norges Bank.

Welfare Organisation (NAV) than at the end of April, when partially unemployed and persons on labour market programmes are included.

Our projections are based on the assumption that infection will continue to be contained and that most infection control measures will be discontinued in the course of the summer, but that some will be continued for a longer period. Even then, the after-effects of the infection control measures, the low oil price and the contraction of the global economy make it likely that the Norwegian economy will remain in a downturn for several years. However future developments are shrouded in uncertainty, and a new wave of infection could place a further damper on economic activity.

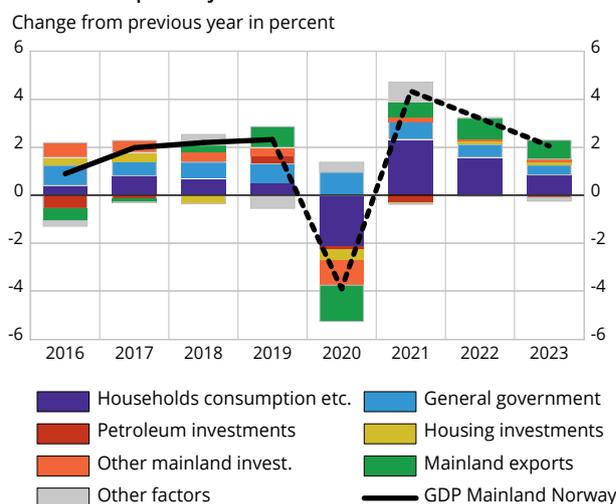
We expect household consumption to recover gradually. The infection control measures in March led to an immediate, sharp fall in household consumption of goods and services. Following the fall in goods consumption in March, the monthly national accounts show a partial rebound in April, with positive growth of 2.5 per cent. Card transaction data indicate that consumption of services also picked up from mid-April and through May. As the infection control measures are eased, consumption is expected to improve further as some of the increased savings since March are likely to be consumed in the months ahead. Towards the end of 2021 we assume that overall consumption will have reverted to the level prior to the corona virus impacting the Norwegian economy. With prospects of increased real disposable income and falling unemployment, consumption will grow by annualised averages of just over 4 per cent and 2 per cent in the last two years of the projection period.

House prices appear likely to pick up towards 2023 after falling by 1.6 per cent from February to April this year. Although real interest rates are now very low, prospects of lower real income growth coupled with somewhat lower population growth and continued great uncertainty concerning economic developments will probably lead to a moderate fall in house prices through parts of 2020. As the explanatory factors underlying house price developments pull in slightly different directions, we envisage a cautious rise in

house prices in 2021. In 2022 and 2023, activity in the Norwegian economy will normalise, while the interest rate is still expected to remain at a low level. This will contribute to a rise in house prices of around 3 per cent in each of these years.

Business investment is expected to fall markedly in 2020, as investment is very sensitive to reduced demand. In addition to lower demand, uncertainty regarding economic developments going forward contributes in itself to curbing businesses' desire to invest. We project that business investment will fall by as much as 16–17 per cent this year. Projections for the years 2021 to 2023 show weak, but positive growth in business investment. Should this be realised, the investment level will be about 10 per cent lower in 2023 than in 2019.

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 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			
	2016	2017	2018	2019	2020	2021	2022	2023
GDP Mainland Norway	0.9	2.0	2.2	2.3	-3.9	4.3	3.2	2.1
with contributions from:								
Consumption by households and non-profit organisations	0.4	0.8	0.7	0.5	-2.2	2.3	1.6	0.9
General government consumption and investment	0.8	0.6	0.7	0.8	1.0	0.7	0.5	0.4
Petroleum investment	-0.6	-0.2	0.1	0.3	-0.1	-0.3	-0.0	-0.1
Housing investment	0.3	0.4	-0.3	-0.0	-0.5	-0.1	0.1	0.1
Other mainland investment	0.6	0.5	0.4	0.3	-1.0	0.2	0.1	0.1
Exports from Mainland Norway ¹	-0.5	-0.1	0.3	0.9	-1.5	0.7	0.9	0.8
Other factors etc. ¹	-0.2	0.0	0.5	-0.5	0.4	0.8	0.0	-0.1

¹ See explanations to Figure 1.

Source: Statistics Norway.

Table 3. Main economic indicators 2019-2023. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Rcco- unts 2019*	Forecasts										
		2020			2021			2022			2023	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	SN	NB
Demand and output												
Consumption in households etc.	1.5	-6.0	-7.7	-8.5	6.6	4.9	..	4.4	4.4	..	2.3	2.9
General government consumption	1.7	3.3	3.0	3.2	2.0	4.6	..	1.9	1.3	..	1.7	1.1
Gross fixed investment	6.1	-7.6	..	2.7	-0.1	..	..	1.1	..	..	0.5	..
Extraction and transport via pipelines	12.8	-3.5	-9.0	-3.5	-10.5	-14.0	-10.4	-1.5	-3.5	..	-4.0	-2.0
Industries	5.6	-16.3	-15.8	3.4	3.3	-5.8	2.7	1.7	5.6	..	2.5	4.9
Housing	-0.9	-9.7	-10.2	2.2	-1.4	-2.3	0.8	3.0	4.1	..	2.6	4.3
General government	7.5	2.7	..	0.3	4.2	..	..	0.8	..	..	-0.8	..
Demand from Mainland Norway ¹	2.2	-4.2	-5.2	2.2	4.3	3.4	2.2	3.1	3.3	..	2.0	2.5
Exports	1.5	-4.7	..	7.3	3.8	..	3.5	5.7	..	..	3.5	..
Traditional goods ²	4.9	-5.8	-10.6	5.0	2.1	6.5	5.1	4.5	8.5	..	4.9	6.5
Crude oil and natural gas	-4.3	2.8	..	14.0	6.9	..	4.6	6.6	..	..	2.2	..
Imports	5.2	-10.7	-10.9	1.8	2.8	2.3	1.3	3.6	5.3	..	2.6	4.1
Gross domestic product	1.2	-2.9	2.4	-2.0	4.3	2.0	..	3.6	1.6	..	2.0	..
Mainland Norway	2.3	-3.9	-5.2	-4.0	4.3	3.0	..	3.2	3.3	..	2.1	2.2
Labour market												
Employed persons	1.6	-1.5	-3.1	-1.0	0.8	0.0	..	1.4	2.4	..	1.0	1.3
Unemployment rate (level)	3.7	5.1	3.5	5.1	4.5	3.5	..	4.3	3.6	..	4.1	..
Prices and wages												
Annual earnings	3.5	2.2	1.8	1.5	2.0	1.3	..	3.5	1.7	..	3.4	2.3
Consumer price index (CPI)	2.2	1.2	1.2	1.0	3.2	3.4	..	1.9	2.5	..	2.1	1.9
CPI-ATE ³	2.2	2.6	2.5	2.2	2.2	2.8	2.0	1.9	2.1	..	2.1	1.7
Housing prices ⁴	2.5	-1.0	3.0	..	1.0	3.3	..	3.6	3.4	..	2.9	..
Balance of payment												
Current balance (bill. NOK) ⁵	140	142	..	86	166	..	..	229	..	..	272	..
Current account (per cent of GDP)	3.9	4.2	..	2.6	4.6	..	..	5.9	..	..	6.7	..
Memorandum items:												
Money market rate (level)	1.6	0.7	..	0.9	0.3	..	..	0.5	..	..	0.9	..
Crude oil price NOK (level) ⁶	564	375	..	331	436	..	..	464	..	..	490	..
Import weighted krone exchange rate (44 countries) ⁷	2.9	7.8	11.3	10.1	-0.2	1.4	..	0.0	-0.2	..	0.0	-0.1

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. Pengopolitisk rapport 3/2019 (NB). Kilde: Statistisk sentralbyrå (SSB). Finansdepartementet. Meld.St.1. (2019-2020) (FIN). Norges Bank. Pengopolitisk rapport 3/2019 (NB).

Petroleum investment on the Norwegian continental shelf has been impacted by the pandemic since early March, directly by infection control measures and indirectly through a sharp fall in the oil price. The plunge in the oil price caused the majority of petroleum companies on the Norwegian continental shelf to issue warnings of substantial cuts in investment. Even if there should be adjustments in the Norwegian Government's proposed package of tax measures, petroleum investment will probably fall going forward to 2023. Whereas demand from mainland-oriented petroleum investment helped to push up growth in mainland GDP by 0.4 per cent in 2019, average petroleum investment now appears likely to push down growth in mainland GDP by

0.1 percentage point in the years to 2023 (see Figure 1 and Table 2).

Registered unemployment is falling. From 10–31 March, the number of (fully) unemployed registered with NAV, which includes those temporarily laid off, rose from about 65 000 to about 300 000. The number has subsequently decreased gradually as a consequence of a slowing of the influx of new unemployed while at the same time the decline in unemployment has increased. On 2 June, around 171 400 were registered as fully unemployed. We expect the improvement in the labour market to continue in the time ahead. Unemployment measured by the Labour Market Survey is expected to be around 5.1 per cent as an annual

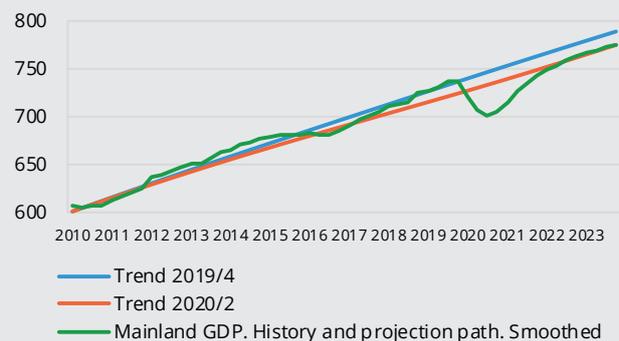
Box 1. Cyclical or structural shock?

Economic shocks may be either structural or cyclical. Cyclical changes are transitory, but structural changes are lasting and represent an underlying trend. In Statistics Norway we make trend projections with the aid of a bivariate Hodrick-Prescott filter with a relatively high smoothing parameter ($\lambda = 40\,000$). The method implies that economic shocks are largely classified as cyclical. However, the coronavirus pandemic represents a shock so great that estimated trends are also affected to a considerable degree.

In the figure we show seasonally adjusted mainland GDP (green curve) together with the projected trend (red curve). By way of comparison we also show the estimated trend as it was presented in the December 2019 Economic Developments report (blue curve). As a consequence of the method we use, the estimated trend level has been revised downwards considerably, also retroactively.

We normally illustrate cyclical developments with a figure that shows the difference between actual and trend GDP. Such a figure is directly affected by the estimated trend. If the new estimated trend is used in the usual way, the interpretation of both history and projections will change fundamentally. In December 2019, for example, we believed that the situation at the end of 2019 was cyclically neutral, in that mainland GDP was at the same level as estimated trend at that time. Given the new trend, however, the years 2017–2019 appear as a (weak) expansion. The old trend estimate also implies that the Norwegian economy will be in

Mainland GDP. Projection path and estimated trends. Billions of 2017-kroner. Quarter



Source: Statistics Norway.

a cyclical downturn throughout the projection period, while the new trend implies that the downturn will be over in the course of 2022.

There is very great uncertainty at present concerning the long-term consequences of the corona virus. Even if we do not classify the effect of the corona crisis as cyclical or structural in this report, the general message is nonetheless that despite relatively good growth in the years 2021–2023, the Norwegian economy will not be back at the old trend level.

average for 2020. Unemployment will then fall gradually to just over 4 per cent in 2023.

Real wages are likely to fall next year. As a consequence of the corona pandemic, this year's income settlement was postponed. The delayed income settlement starts on 3 August, with a deadline for agreement to be reached between the Federation of Norwegian Industries and the Norwegian United Federation of Trade Unions set as 21 August. The negotiations will be held in a situation with a high unemployment rate, which will probably mean that the pay increase contribution will be relatively low this year. A lower level of activity worldwide and associated reduction in activity in export-oriented businesses this year will also contribute to reducing the pay increase contribution. Given a carry-over of 1.1 per cent into 2020 for manufacturing, we therefore envisage that growth in average annual wages will be around 2 per cent in both 2020 and 2021. This means that real wages increase in 2020. Given somewhat rising inflation next year, real wages will therefore be reduced in 2021, by approximately as much as they are expected to increase in 2020. In 2022 and 2023, real wage growth is expected to be around 1.5 per cent.

The krone remains weak. Following its sharp depreciation in the latter half of March, Norges Bank intervened with support purchases of Norwegian kroner. The weakening was to some extent reversed, possibly also

as a consequence of higher oil prices. At the beginning of June, a euro costs NOK 10.8, and the US dollar is priced at NOK 9.7. Our projections are based on unchanged exchange rates through the whole projection period.

Monetary policy is often called the first line of defence in cyclical management. In the course of a bare two months, Norges Bank cut the key policy rate three times, by a total of 1.5 percentage points, to 0 per cent. In addition to a lower interest rate, several measures were implemented to reduce borrowing costs, which will contribute to buoying up activity through new loans to businesses. The interest rate is expected to remain at a record low level for a long time, but as the Norwegian economy gradually reverts to normal, we assume that the rate will be raised cautiously towards the end of the projection period. At the end of 2023, the key rate is expected to be 0.75 per cent. This is still considerably lower than what can be regarded as a normal interest rate level. Norges Bank itself has estimated that a normal interest rate level is between 2 and 3 per cent.

Inflation is expected to stabilise at around 2 per cent after a while. In the current year, inflation measured by the CPI will be 1.2 per cent according to our projections. The low energy prices, and expectations that they will remain low through the summer and autumn, point to relatively low inflation. Energy prices are

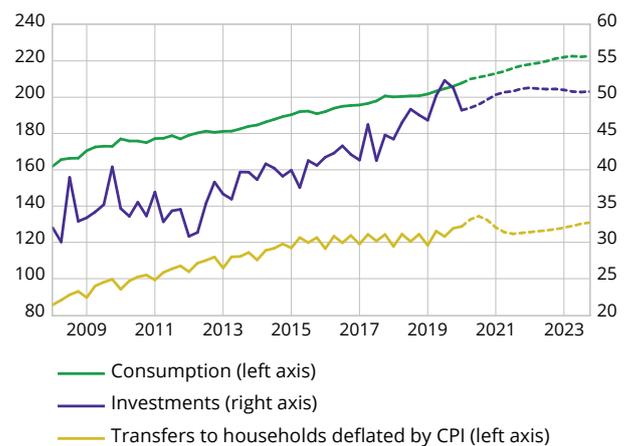
expected to push down CPI inflation by 1.3 percentage points this year. Changes in indirect taxes that were introduced in connection with the corona pandemic are forecast to reduce CPI inflation by 0.1 percentage point this year. Underlying inflation is expected to be 2.6 per cent 2020. Next year energy prices are expected to pick up, and this will push up inflation measured by the CPI to just on 3.0 per cent. The effects of the weak krone will wane going forward. This, coupled with low wage growth and increased productivity growth, gives rise to expectations that both inflation measured by the CPI and underlying inflation measured by the CPI-ATE will be around 2 per cent in 2022 and 2023.

In times of crisis, more of the responsibility for cyclical management falls to fiscal policy. Since 12 March 2020, often referred to as the day Norway shut down, tabled bills and budget allocation propositions have led to a substantial rise in public expenditure over the Fiscal Budget. Some minor tax relief schemes have also been introduced, combined with deferred deadlines for paying value-added tax and employer's social security contribution. New loan and guarantee schemes have also been approved. On Friday 29 May, further packages were presented, and the structural non-oil budget deficit is now estimated to be 4.2 per cent of the value of Government Pension Fund Global at the beginning of the year. According to the fiscal rule, the use of petroleum revenue over time shall amount to 3 per cent of the Government Pension Fund Global, but great emphasis shall be placed on smoothing fluctuations in the economy in order to ensure good capacity utilisation and low unemployment. The expansionary policy in 2020 can therefore be said to be in accordance with the fiscal rule. In the years ahead, fiscal policy is expected to normalise and petroleum revenue, measured by the structural non-oil budget deficit as a share of the resources in the Fund, will gradually fall to 3 per cent by 2023.

Although the Norwegian economy is in a deep crisis, the outlook has improved in recent weeks. Since our last projection in April, we have therefore revised growth for 2020 upwards by a full 1.4 percentage points. This means that mainland GDP is expected to fall by just under 4 per cent in 2020. The revision of the projection reflects new information about developments in the course of the disease, various measures, and economic activity. The infection rate has been reduced more quickly, infection control measures have been relaxed to a greater extent, the scope of the economic packages of measures has increased more, and there are signs of a more rapid rebound of economic activity than seemed likely at the end of April. Although it now looks as though the recovery will come earlier, the Norwegian economic situation is still serious. Lower global demand and low oil prices will mark economic developments for several years to come, even if the disease is kept under control here in Norway. At present the Norwegian economy is also unusually vulnerable to further shocks. The key rate has been reduced to 0

Figure 2. General government

Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

per cent, which is regarded as being close to a lower limit for the interest rate. This means that the key rate, which is normally the most important remedy against cyclical downturns, will not be able to ease the situation if the economic outlook should deteriorate (see Box 1). As a result, there is great uncertainty surrounding the course of the Norwegian economy going forward. We have based our projections on the assumption that the infection will be contained with few active infection control measures, but there is a risk that it may gather pace again, both nationally and internationally. In the event, the downturn could be both deeper and considerably more prolonged than we now envisage.

Fiscal policy abates the crisis

In the original budget for 2020 adopted last year, the use of petroleum revenue, or the structural, non-oil government budget deficit, was estimated to be about NOK 244 billion. However, measures to deal with the corona pandemic led to abrupt changes in fiscal policy. Since 12 March, tabled bills and budget allocation propositions have led to a substantial rise in public expenditure over the Fiscal Budget. Tax relief schemes have also been introduced, combined with deferred deadlines for paying value-added tax and employer's social security contribution. New loan and guarantee schemes have also been approved.

In the macroeconomic analysis in the Revised National Budget 2020 it is assumed that the acute infection situation will last for three months, and that the economy will then rebound fairly rapidly. The fiscal measures coupled with the automatic stabilisers entail a substantial weakening of the budget. The use of petroleum revenue, measured as the structural non-oil budget deficit, is projected to be NOK 425 billion in the revised analysis, and accounts for over 13 per cent of trend mainland GDP.

At the beginning of 2020, the value of the Government Pension Fund Global (GPF) was just under NOK 10 100 billion. Measured in relation to this initial value,

Box 2. The Norwegian economy is vulnerable to further shocks

The corona pandemic led to a dramatic change in the outlook for the Norwegian economy. Prior to the outbreak, growth in the next few years appeared likely to be at about the trend level. Instead, the economy has now landed in a deep slump.

From autumn 2018 and up to the autumn of 2019, Norges Bank had raised the key policy rate by a total of 1 percentage point, from 0.5 per cent to 1.5 per cent. In contrast to central banks in a number of other countries, Norges Bank therefore had scope for manoeuvre when the corona crisis struck in March this year. This scope for manoeuvre has been used to the full since then, and the key rate has been cut in three steps, to 0 per cent.

The low interest rate is likely to boost the recovery of the Norwegian economy as the majority of infection control measures are gradually eased. In order to illustrate this, we have made an estimate using the KVARTS macromodel, where we allow the interest rate to remain at the level of 2019 Q4 for the remainder of the projection period. Table 1 compares this counterfactual scenario with the projection scenario in this economic report. The comparison indicates that mainland GDP would have been about 0.6 per cent lower in 2021 without the interest rate cuts, and the difference increases to 1.4 per cent by the end of the projection scenario in 2023. Norges Bank's rate cuts thus appear to be contributing to a more rapid recovery than would otherwise have been the case.

The uncertainty surrounding developments in the Norwegian economy is unusually great, and is associated first and foremost with the course of the infection and duration of infection control measures. A new wave of the virus, either in Norway or abroad, could lead to new slowdowns for the

Norwegian economy. At the same time, the scope for manoeuvre of monetary policy is in many respects exhausted, as the interest rate is already zero. Although the central bank has not excluded the possibility of the key rate being cut further, it has indicated clearly that they are uncertain about the net benefit of a negative interest rate. As a consequence of the lack of monetary policy scope for manoeuvre, the Norwegian economy is now vulnerable to new shocks.

Against this backdrop, we perform two further model estimates in KVARTS. The estimates are based on the assumption of a new global wave of the virus, which leads to a lower level of economic activity among Norway's trading partners. Specifically, we link our estimates to one of the alternative scenarios for the global economy in the April edition of the IMF World Economic Outlook.¹ In this scenario, activity falls by a good 7 per cent in 2021 compared with the IMF's baseline scenario (see figure). The IMF baseline scenario is in fact roughly in line with developments in the global economy in our projection scenario.

In order to isolate the effects of lower demand from our trading partners, we make no other changes associated with developments in the Norwegian economy. For example, Norway's fiscal policy is assumed to be unchanged. Conversely, the oil price is expected to fall in line with the IMF's alternative scenario. We additionally assume that the interest rate in the euro area is kept at the current low level throughout the period, while inflation in the euro area is 0.5 percentage point lower each year in the estimation.

On the basis of these assumptions we carry out one model estimation in which the interest rate is kept constant at the current level, and one in which we allow the interest rate equation in KVARTS to determine the interest rate level. As the IMF's alternative scenario extends to 2024, we include this year, too, in our estimates, even though our main projection only extends to 2023.

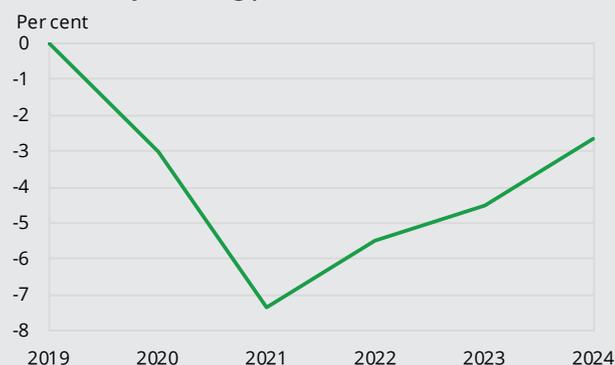
In the estimate with the interest rate determined by the model, the interest rate level in Norway falls by 1.7 percentage points by 2024, as a consequence of the negative shock to the global economy. In purely technical terms, this means that the interest rate moves from zero to negative. It is important to point out that KVARTS does not take account

Table 1. Deviation from the projection scenario. Counterfactual scenario with fixed interest rate

	2020	2021	2022	2023
Mainland GDP	-0.1	-0.6	-1.2	-1.4
Number employed	0	-0.2	-0.4	-0.7
Unemployment, % points	0	0.1	0.2	0.3
Consumer price index (CPI)	0	-0.4	-0.6	-0.6
Import-weighted krone exchange rate (44 countries)	-1	-4.7	-4.6	-3.3
Money market rate (level)	1.2	1.5	1.3	1

Source: Statistics Norway.

GDP Norway's trading partners. Deviation from the



Source: Statistics Norway.

Table 2. Deviation from the projection scenario. Endogenous interest rate

	2020	2021	2022	2023	2024
Mainland GDP	-0.7	-1.9	-1.8	-1.6	-1.1
Number employed	-0.1	-0.7	-1.3	-1.7	-1.9
Unemployment (percentage points)	0.1	0.4	0.6	0.8	0.8
Consumer price index (CPI)	-0.1	-0.1	-0.1	-0.3	-0.4
Import-weighted krone exchange rate (44 countries)	0.0	1.9	2.7	3.1	4.1
Money market rate (level)	0.0	-0.1	-0.5	-1.1	-1.7

Assumptions

Export market indicator	-6.3	-15.7	-11.5	-9.1	-5.3
Crude oil price, in USD	-2.7	-8.5	-5.7	-4.0	-3.7
Consumer price euro area	0.0	-0.5	-1.0	-1.5	-2.0

Source: Statistics Norway.

of the fact that the effect of such an interest rate cut would probably be different from what it would in normal circumstances where the interest rate is positive both before and after the cut. The estimate must therefore be interpreted as an attempt to illustrate the significance of restrictions on the scope for manoeuvre of monetary policy.

In Table 2 we show some main variables from the estimation, presented as deviations from the projection scenario. Mainland GDP growth falls by 0.7 per cent in 2020 and by almost 2 per cent in 2021. The decline is due primarily to lower demand for exports, but also to the lower oil price, which depresses activity in petroleum-related industries. With effect from 2022, however, growth picks up again, partly as a consequence of a certain global recovery and partly as a consequence of the lower interest rate, which also leads to a weaker krone exchange rate. Towards the end of the period, mainland GDP is 1.1 per cent lower than in the projection scenario, which means that almost half of the “shock” has been reversed, partly through a lower interest rate.

In the estimate with a constant interest rate corresponding to the current level, the recovery is substantially more sluggish; see Table 3. The activity level in 2024 is still 1.5 per cent lower than in the projection scenario, which indicates that only a quarter of the shock has been reversed.

Table 3. Deviation from the projection scenario. Exogenous interest rate

	2020	2021	2022	2023	2024
Mainland GDP	-0.7	-1.9	-1.9	-1.9	-1.5
Number employed	-0.1	-0.7	-1.3	-1.8	-2.0
Unemployment (percentage points)	0.1	0.4	0.6	0.8	0.9
Consumer price index (CPI)	-0.1	-0.1	-0.2	-0.5	-0.8
Import-weighted krone exchange rate (44 countries)	0.0	1.7	1.9	1.3	1.0
Money market rate (level)	0.0	0.0	-0.2	-0.6	-0.8

Source: Statistics Norway.

The message is that a further reduction in global activity could lead to a more prolonged downturn in Norway than if the interest rate had not been fixed by a lower limit. However, the absence of the interest rate as “first line of defence” may lead to responsibility for cyclical management falling to a greater extent to fiscal policy. As an example, we have therefore calculated how much personal taxes must be reduced to compensate for the lack of monetary policy response. In order for the decline in mainland GDP to be the same in the two scenarios above, we find that tax must be cut by an average of NOK 19 billion annually up to 2024 in the fixed interest rates scenario. This corresponds to a fiscal policy response of the order of 0.6 per cent of mainland GDP.

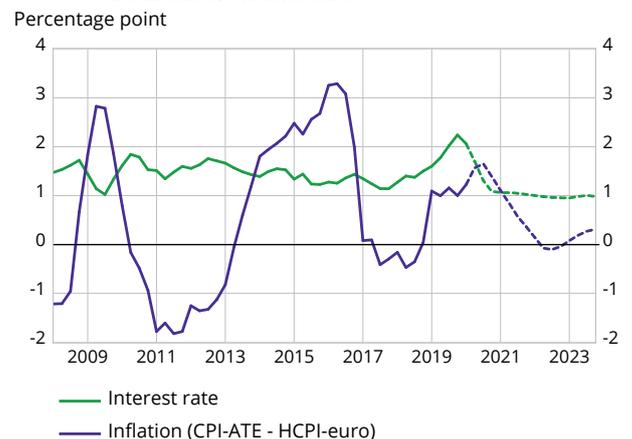
the structural, non-oil deficit is estimated to account for 4.2 per cent of the value of the Fund in the 2020 budget. The deficit far exceeds the 3 per cent path of expected real return on the Fund. However, it is in line with the fiscal rule, which places great emphasis on the fact that the 3 per cent path can be departed from in order to smooth fluctuations in the economy and to ensure good capacity utilisation and low unemployment.

The Government commenced a gradual, cautious phasing out of measures after Easter. Day-care centres and schools were gradually opened followed by a relaxation of measures targeting working life. The plan is that society should be back in a more or less normal state by 15 June, i.e. about three months after the extensive measures were introduced. The Government presented new emergency measures in Prop. 127 S to the Storting on 29 May. It is proposed continuing to grant cash subsidies to businesses until the end of August. However, expenditure for cash support has been reduced by NOK 20 billion compared with the projection in the Revised National Budget 2020. It is proposed that a pay supplement be given to businesses that take back temporarily laid off staff over the next few months, and that the lay-off rules be revised, so that employers have an obligation to pay 10 days’ wages from 1 September. Tax relief on wealth tax on working capital and increased housing taxation are also intended to stimulate employment and the private sector. The government further proposes a green restructuring package of NOK 3.6 billion over 3 years, and support for entrepreneurs, study places and inclusion in working life. The new measures

imply weakening the budget by a total of NOK 26 billion. Overall, the budget weakening since last autumn thus comes to NOK 243 billion.

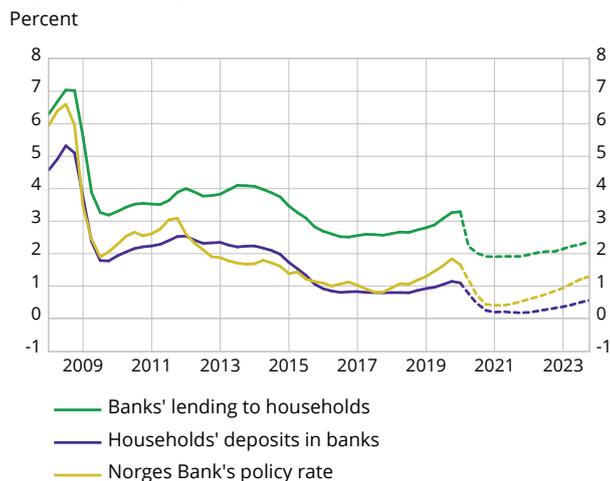
On the way out of the crisis, it is assumed that fiscal policy will be normalised. The purpose of the highly expansionary policy in 2020 is to prevent businesses going bankrupt and unemployment from being prolonged. However, the expansionary fiscal policy and infection control measures in the first half of 2020 have led to increased household saving. Some of this saving will probably be consumed in the period after the measures are removed. This will reduce the need for further expansionary fiscal policy. We forecast that growth in

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



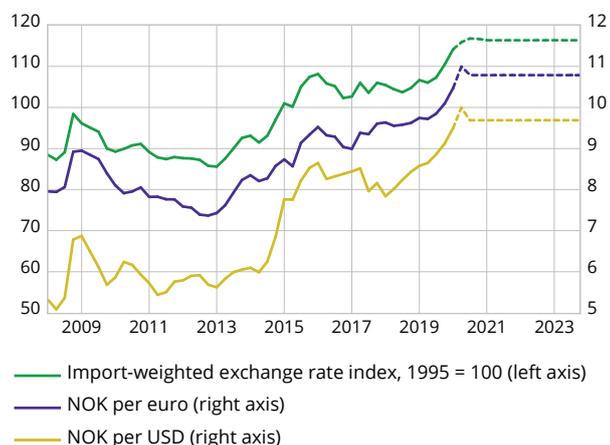
Source: Norges Bank and Statistics Norway

Figure 4. Norwegian interest rates



Source: Norges Bank and Statistics Norway

Figure 5. Exchange rates



Source: Norges Bank

public consumption and growth in general government investment will be 3.3 per cent and 2.7 per cent, respectively, in 2020. The high growth in public consumption in 2020 must also be viewed in light of the fact that the Norwegian Broadcasting Corporation has been reclassified as public consumption as from January 2020.

Transfer are expected to increase by 14.4 per cent in real terms. In the years ahead, fiscal policy is expected to normalise and spending of petroleum revenue, measured by the structural non-oil budget deficit as a share of the petroleum fund, to gradually be reduced to 3 per cent in 2023.

There is great uncertainty associated with the projections for fiscal policy. A new wave of infection could lead to a new round of measures to control the infection. Behavioural changes designed to avoid infection could also lead to major consequences for fiscal policy. There is also considerable uncertainty associated with future developments in international share prices, and in oil and gas prices and production. The outcome may be a fall in the value of the GPF, which in turn will reduce the future scope for manoeuvre of fiscal policy.

Cautious interest rate increases from 2022

In just under two months, Norges Bank has cut the key policy rate three times, by a total of 1.5 percentage points, to 0 per cent. The first two cuts in mid-March took place at extraordinary monetary policy meetings. One reason for these cuts given by Norges Bank at the second of these meetings was that “Lower borrowing costs for existing and new loans can make it easier for Norwegian enterprises to weather a difficult period.” The last cut, in May, was 0.25 percentage point. At the same time, the central bank stated that it did not envisage making further rate cuts.

Money market rates have gradually shadowed the key rate, and the three-month money market rate is now 0.3 per cent. Lending rates have also been sharply reduced, and the feed-through of these rates since the change in the money market rate has been faster than normal.

In addition to lower interest rates, other measures have been adopted to reduce borrowing costs and help to maintain activity through new loans to businesses. The support scheme for businesses that have suffered a substantial fall in turnover enables them to have some of their net interest expenses covered. At present this support scheme applies until the end of May, but it is proposed extending it to the end of August. A government guarantee for new loans to businesses has been approved. The equity requirement for banks has been reduced, with the result that they do not need to be so restrictive in their lending to uncertain projects.

The krone depreciated sharply in the latter half of March, and Norges Bank intervened with support purchases of Norwegian kroner. The depreciation has to a large extent been reversed subsequently, but the krone is still weak viewed in a historical perspective. At the beginning of June, a euro costs NOK 10.8, and one US dollar is priced at NOK 9.7. Our projections are based on unchanged exchange rates through the whole projection period.

Our projections for the Norwegian economy show a much reduced increase in unemployment and an appreciably reduced fall in mainland GDP compared with our previous report. The fall in GDP this year is less than forecast by Norges Bank in its last report in May, and the GDP growth we envisage next year is higher than the last projection from Norges Bank. If developments in the Norwegian economy proceed according to our current forecasts, we believe Norges Bank will raise the key rate cautiously in the years ahead. The first interest rate increase is expected in 2022, and by the end of 2023 the key rate is expected to be 0.75 per cent.

Gradual rebound in consumption

The infection control measures led to an immediate and sharp fall in household consumption of goods and services, of 4.2 per cent and 15.7 per cent, respectively,

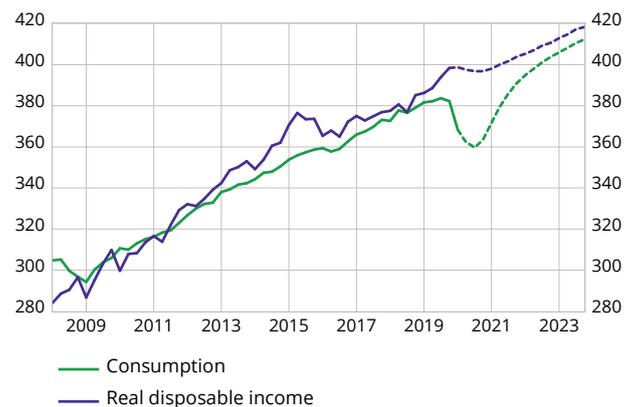
in March. The decline was particularly pronounced in the product groups clothing and footwear and own vehicles, while the decline in service consumption was broad-based as a result of the close-down or infection control regulation of most sectors of the service industry. The fall in March led to total consumption falling by 3.6 per cent in the first quarter of this year. The monthly national accounts show a partial rebound in April from the fall in goods consumption in March, with growth of 2.5 per cent. The product groups clothing and footwear and furniture and household items contributed in particular to the upswing in April. In the same period, consumption of services continued the broad-based decline in March, with a fall of 12.4 per cent. This must be viewed in light of the fact that a partial reopening of service industries only took place in late April and early May. However, card transaction data provide clear indications that consumption of services picked up from mid-April and through May.

Growth in real disposable income in 2019, including and excluding share dividend disbursements, is estimated to be about 3 per cent. If we exclude share dividend disbursements, which is income with a limited tendency to prompt consumption, growth in real disposable income in 2020 could be the same as in 2019. Wage income will dampen growth in real disposable income through weaker growth in real wages and a significant fall in employment through the period with infection control measures this year. However, a strong increase in government transfers, primarily through increased disbursements to a large number of laid-off and unemployed workers during the corona crisis, will contribute positively to growth in real disposable income. Lower net capital expenses will also push up growth in real disposable income this year as a consequence of record-low mortgage rates. Given the low borrowing rates, the household interest burden, i.e. interest expenses in relation to disposable income, will fall from over 5 per cent last year to close to 4 per cent this year. In 2021 we forecast that growth in real disposable income will fall by a full 2 percentage points, to around 1 per cent. Although wage income in nominal terms will pick up in pace with a gradual rebound of the Norwegian economy, a sharp decline in government transfers coupled with higher consumer price inflation of over 3 per cent will curb growth in real disposable income next year. For the years 2022 and 2023 we forecast that growth in real disposable income will pick up to just under 2 per cent or a little lower.

We now project a fall in consumption of around 6 per cent this year, compared with about 10 per cent as projected in our last economic report. The revision relates to the new data on goods consumption, which picked up sharply in April, and on service consumption, which showed clear signs of a rebound from mid-April and through May. Given a further relaxation of infection control measures and reopening of businesses, service consumption will probably continue to pick up through the second half of this year. Towards the end of 2021

Figure 6. Income and consumption in households

Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

Figure 7. Housing market

Seasonally adjusted. Left axis: billion 2017 NOK, quarter
Right axis: index, 2017 = 100



Source: Statistics Norway

we assume that overall consumption will have returned to the level before the corona crisis hit the Norwegian economy. With prospects of increased real disposable income and falling unemployment, but weak developments in real house prices and assets in real terms, consumption will grow by just over 3 per cent as an annual average in the last two years of the projection period.

The saving ratio, measured as a share of disposable income including disbursements of share dividend, increased by just over 2 percentage points from 2018 to 2019, to 8 per cent last year. The fall in overall consumption in Q1 this year resulted in an increase in the saving ratio of almost 3 percentage points, to just under 13 per cent, in the same period. Our projections imply that some of this increased saving will be consumed in the months ahead, so that the saving ratio as an annual average may be around 12.5 per cent this year. Next year the saving ratio will fall to around 7.5 per cent, and then further to around 5 per cent towards the end of the projection period. The saving ratio excluding disbursements of share dividend, on the other hand, will increase by 3.5 per cent in 2019 to around 10.5 per

cent this year, before falling back to just under 3 per cent in 2023.

Moderate fall in house prices

The quarterly house price index of Statistics Norway shows a slight seasonally adjusted fall in house prices for the country as a whole of 0.1 per cent in 2020 Q1. Infection control measures in March were reflected relatively immediately, also in the housing market. According to Real Estate Norway's monthly house price statistics, seasonally adjusted house prices fell by 1.5 per cent in March following a similar rise in prices through January and February combined. A similar or greater fall in house prices in a single month has not been seen since the financial crisis in 2008. The same statistics show that house prices fell by a further 0.2 per cent in April. The fact that the fall in prices was not greater in April may be attributable to the ban on visits to cabins, which probably helped to keep activity in the housing market buoyant at Easter. At the same time, the Norwegian Homebuilder Association reported that sales of new dwellings plummeted by as much as 47 per cent in March and 45 per cent in April in relation to the same months in 2019. This tendency in sales of new dwellings followed weak sales figures in January and February as well. The market for new dwellings accordingly appears to have borne the brunt of the infection control measures during the corona crisis.

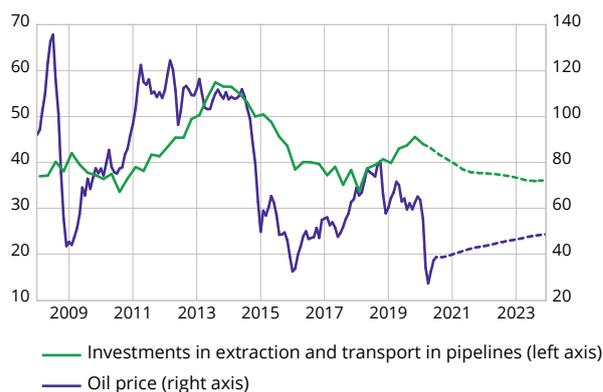
According to the quarterly national accounts (QNA) housing investment fell through the second half of 2019 and continued to fall by 4.9 per cent in Q1 this year, in pace with a falling underlying trend in housing starts. The monthly national accounts show that housing investment fell by a further 1.3 per cent in April. Developments in sales of new dwellings so far this year point to a continued weak underlying trend in housing starts, and hence also in housing investment, well into 2021. We forecast that housing investment will fall by close to 10 per cent as an annual average this year, while the decline will be far more moderate next year. For the years 2022 and 2023 we forecast a cautious rise in investment, such that the investment level in 2023 will be 12.5 per cent lower than the peak level of 2017.

In our projections we assume a reciprocal effect between house prices and the supply of dwellings. All else being equal, lower housing investment, which leads to less growth in the supply of dwellings, will lead to higher house prices. We also assume a reciprocal relationship between house prices and household borrowing. Our projections show that the rise in debt will fall from around 5 per cent in 2019 to just over 3 per cent this year. Debt growth will then rise to 4.5 per cent next year and to 5.5 per cent in the years 2022 and 2023. In isolation, lower debt growth through the projection scenario will push down house prices.

In addition to the supply of dwellings and household borrowing, house prices are determined by developments in real disposable income, real interest rates

Figure 8. Petroleum investments and oil price

Seasonally adjusted. Left axis: billion 2017 NOK, quarter
Right axis: USD per barrel



Source: Statistics Norway

and population size. Although real interest rates are now very low, prospects of lower real income growth coupled with somewhat lower population growth and continued great uncertainty concerning economic developments will probably lead to a moderate fall in house prices through 2020. We now forecast a fall in house prices of an annualised average of around 1 per cent this year compared with a rise of 2.5 per cent last year. As the explanatory factors underlying house price developments pull in slightly different directions, we envisage a cautious rise in house prices through the years 2021–2023. Given inflation of around 1 to 3 per cent, developments in real house prices will be weak throughout the projection period.

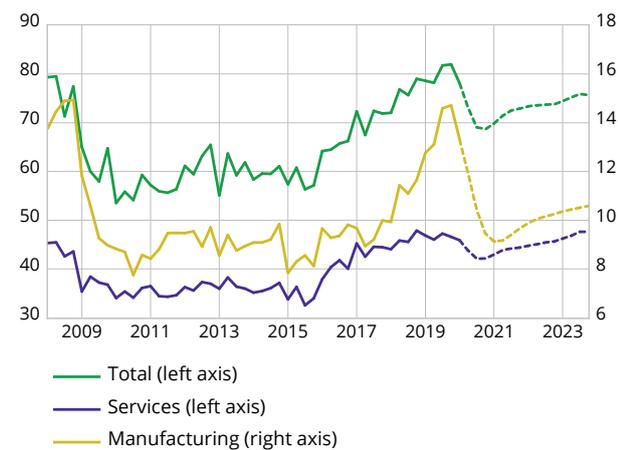
Fall in petroleum investment

According to the national accounts, petroleum investment increased by 12.8 per cent in 2019. The backdrop to the strong growth last year was rebound effects after the fall in oil prices in the period 2014–2016. There were prospects already before the outbreak of the virus of a levelling off of investment in 2020, a substantial decline in 2021 and then relatively flat investment developments. Petroleum investment on the Norwegian continental shelf was impacted by the pandemic from early March, directly through Norwegian infection control measures and indirectly through a sharp fall in the oil price. The impact on investment was not particularly large in the first quarter, nonetheless. According to preliminary seasonally adjusted quarterly national accounts figures, the decline in investment volume in Q1 was only 3.4 per cent compared with 2019 Q4. The Q1 investment volume displayed growth of as much as 10.8 per cent compared with the same quarter in 2019.

The sharp fall in the oil price led to most petroleum companies on the Norwegian continental shelf warning of substantial cuts in investment. At the same time, the industry submitted a concrete proposal to the authorities to make a temporary change in the taxation rules in order to improve the liquidity of the petroleum companies, to enable the industry to adhere to pre-existing investment plans. At the end of April the Norwegian

Figure 9. Investments, Mainland Norway

Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

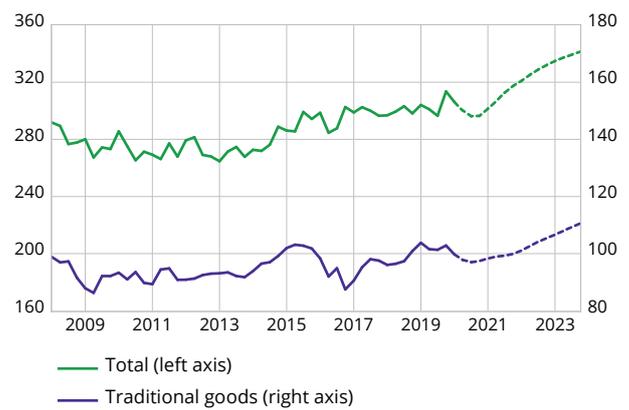
Government presented a proposal for a package of tax measures that differed somewhat from the industry's own proposals in that the tax measures were less extensive and their duration shorter. The industry was not satisfied with the proposal, and signalled that the measures would not prompt more investment. The Government's proposal is to be considered in June by the Storting, with several large parties maintaining that the Government's package of measures does not go far enough.

According to Statistics Norway's most recent investment survey (KIS), licensees on the Norwegian continental shelf estimate nominal investment in 2020 at NOK 180 billion, which indicates a fall in nominal terms of 1.9 per cent in 2020. Plans for development and operation (PDOs) are expected to be submitted this year for the Hod Redevelopment and Bredablikk projects, among others. In the survey, the petroleum companies' projections for 2021 are reported as about a nominal NOK 146 billion, which is 15.9 per cent lower than the corresponding projection for 2020. We also expect PDOs for a number of projects to be submitted in 2021, including Noaka, Eldfisk North, Grevling and Lavrans. We now forecast that petroleum investment will shrink by around 4 per cent in 2020 and by about 10 per cent in 2021.

We expect extensive investment in the large Noaka and Wisting projects in both 2022 and 2023. While we assume that tax changes will prompt escalation of projects and hence high investment activity in fields in operation in 2022, we anticipate that the phasing out of the temporary tax measures will lead to a fall in this investment category in 2023. Almost all the developments that are now included in the investment intentions survey will have been phased out and be in operation in 2023. Although there will be higher investment in 2023 than in 2022 in developments that are expected to come in the years 2020–2023, we assume that this will not be enough to fully compensate for the fall in investment in ongoing developments from 2022

Figure 10. Exports

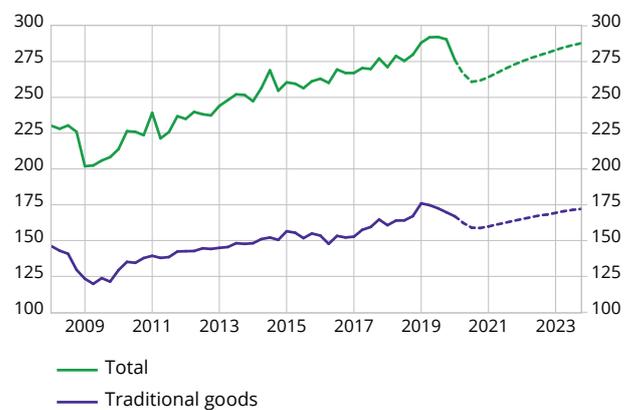
Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

Figure 11. Imports

Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

to 2023. We therefore forecast that the volume of petroleum investment will fall by 1 per cent and 4 per cent in 2022 and 2023, respectively.

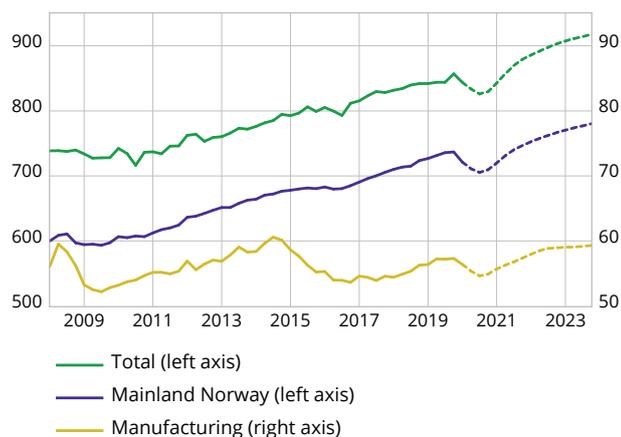
Petroleum production was subdued in 2019. Gas production was 5.6 per cent lower than in 2018, while extraction of liquids (crude oil, NGL and condensate) in 2019 was 6.2 per cent lower than the previous year. As a consequence of Johan Sverdrup coming onstream, the Norwegian Petroleum Directorate expects oil and gas extraction to increase by 9.5 per cent this year. The Directorate's projections have been lowered somewhat since the Government decided to cut oil production in 2020, with effect from June this year. Extraction of liquids is expected to increase by 17.8 per cent, and extraction of gas by 1.6 per cent. In the years 2021–2023, gas production is expected to remain relatively stable at roughly the same level as in 2020, while oil production is expected to increase moderately in these years. The Directorate expects oil and gas production in 2023 to be only 4 per cent lower than in the record year of 2004.

Marked fall in business investment

Mainland business investment increased by more than 20 per cent in the period 2016 to 2019, and investment

Figure 12. Gross domestic product

Seasonally adjusted, billion 2017 NOK, quarter



Source: Statistics Norway

as a share of GDP rose to well over the average for the last 20 years. Partly because of the high level of investment, and partly because of prospects of lower activity growth both in Norway and internationally, we were expecting a decline in investment going forward even before the outbreak of the virus.

Statistics Norway's survey of manufacturing business intentions in February, i.e. before the corona pandemic, indicated a fall in investment of more than 10 per cent this year. Now there are prospects of a more pronounced fall. The latest survey conducted in April indicates – not surprisingly – a steeper fall, of around 18 per cent. However, the estimate was made in current prices, and therefore indicates a larger fall in constant prices if we take rising investment prices into account.

There are also prospects of a marked fall in investment in sectors other than manufacturing, as a consequence of lower capacity utilisation and less profitability in businesses. At the same time, the uncertainty around economic developments going forward is unusually great, which in itself will place a damper on businesses' willingness to invest. This uncertainty probably applies particularly to service industries. Investment in service industries accounts for approximately 60 per cent of total mainland investment, and the service-providing industries thus dominate overall investment developments.

We forecast that business investment will fall by as much as 16–17 per cent this year. Forecasts for the years 2021 to 2023 show weak, but positive growth in business investment. Given this development, the investment level will be about 10 per cent lower in 2023 than in 2019. Business investment will nonetheless account for around 14 per cent of mainland GDP – still higher than the average for the last 20 years.

Sharp brake on foreign trade

Political unrest and trade tensions characterised global trade last year and global market growth was very low.

Improved cost-competitiveness as a consequence of the depreciation of the krone and low growth in labour costs compared with trading partners kept Norwegian mainland exports at a high level in 2019 and into 2020. Increased cost-competitiveness is not immediately reflected fully in export volumes, and the effect is probably not exhausted. But these slow structural effects are now dominated by quite extraordinary circumstances. In Norway and most other countries, extensive infection control measures against the corona virus have led to sharply reduced exports and imports in some areas, particularly tourism and other services involving close interpersonal contact. As the measures in most countries, including Norway, were not introduced until March, the Q1 figures reflect relatively small effects. The decline is first apparent in the monthly figures for April.

Weekly figures for goods declared in customs in the first couple of weeks in May point to large reductions in exports and imports in Q2 and thus for the year as a whole. Oil and gas exports are largely determined by production. The Johan Sverdrup field – the third largest on the Norwegian continental shelf – came onstream in the fourth quarter of last year and contributed strongly to pushing up exports almost back to the peak level in 2017. The authorities have decided to cut oil production from the current high level by 13 per cent in June and 7 per cent in the second half of this year, but not gas production. The cuts are thus expected to reduce exports of oil and gas combined by less than 5 per cent in the second half of the year. Because of the high level in early 2020, exports in 2020 are projected to increase compared with 2019. The regulation will be discontinued at the end of 2020.

There is great uncertainty as to the speed and degree of return to more normal social and economic conditions, and as to how domestic and foreign circumstances will affect Norwegian foreign trade. A greater or lesser shut-down of society in Norway and among our trading partners affects the need and ability to and possibility of exporting and importing goods and services. Uncertainty regarding the further course of the corona virus and about government policy results in great uncertainty about global trade this year and for the remainder of the projection period. We have assumed a gradual normalisation from and including Q3 this year, but mainland trade with other countries will shrink in Q2 and on an annual basis. From and including next year, a rebound will result in growth in both exports and imports for the remainder of the projection period. The discontinuation of oil production cuts at the end of this year will generate a growth impulse in 2021. And when the Johan Castberg field and phase 2 of the Johan Sverdrup field start production according to plan in late 2022, exports of oil and gas may be boosted.

The trade surplus varies substantially with oil and gas prices. Reduced oil and gas exports and lower prices contributed most to reducing the trade surplus in 2019.

This year further reductions are expected to result in a trade deficit, for the first time since 1998. In the years 2021–2023 we expect a rising oil price in NOK to boost a growing trade surplus. Added to a surplus on the balance of income and current transfers, the result will be a growing current account surplus. The current account surplus as a share of GDP is expected to increase from just under 4 per cent this year to over 6 per cent in 2023.

Fall in activity probably over

The Norwegian economy changed abruptly after the outbreak of the corona virus and subsequent infection control measures that were introduced in Norway and the rest of the world. At the same time the oil price has fallen sharply. Updated projections in the national accounts show that mainland GDP fell by 6.9 per cent from February to March. However, a further fall in activity from March to April was less pronounced, as described in Chapter 3 of *Konjunkturteendensene 20/2* (in Norwegian only). Overall, the economy contracted by 11.3 per cent from February to April. The contraction was particularly pronounced in several service industries, both market-oriented and public sector. The infection control measures brought about a sharp decline in areas such as culture and entertainment, and in the hotel and restaurant industry. Production in most manufacturing segments was also impacted, both those that deliver for domestic consumption and those that produce for export. The infection control measures led to closed day-care centres, schools and educational institutions. Activity in day-care centres was estimated to have ceased almost completely, while activity in schools was somewhat reduced. Activity in a number of health and care services, both public and market-oriented, was also reduced.

The infection has now been reduced, and infection control measures have been relaxed recently. Day-care centres and schools were re-opened at the end of April, and the ban on going to cabins was rescinded. Businesses with one-on-one contact, such as hairdressers and health-related activities, were allowed to resume their activities. The authorities have also given notification that further relaxations of infection control measures will come. These relaxations will contribute to activity picking up going forward.

The abrupt contraction in the Norwegian economy is therefore probably behind us. However, there is considerable uncertainty surrounding further developments in the economy. Recovery does not just depend on the course of the disease and infection control measures in Norway, but also to a large extent on the oil price and on global developments. The petroleum industry has been impacted by the corona crisis. The recent sharp fall in the oil price may lead to some investment projects being postponed, which will apply brakes to the economy. Our projections show that this, combined with weak domestic consumption and low activity

among our trading partners, will depress activity this year. This decline will be broad-based.

Manufacturing is expected to benefit from growth gradually picking up among our trading partners, and a weak krone exchange rate. The construction industry has been growing strongly in recent years, and activity was at a high level until the outbreak of the virus. Falling housing investment will contribute to construction activity slowing markedly this year, but then increasing in subsequent years. We also forecast that the service industries will be hard hit this year, before picking up later in the projection period. Growth in general government is expected to remain fairly stable.

Even if measures are relaxed gradually, their after-effects and the contraction in the global economy will probably lead to the Norwegian economy remaining in a slump for a good while. We forecast that mainland GDP will fall by about 4 per cent this year. There are three more business days in 2020 than in 2019, which in isolation will curb the decline by about 0.5 percentage point. Mainland economic growth is expected to pick up subsequently, to around 4 per cent in 2021 before falling back somewhat for the remainder of the projection period. The recovery in the mainland economy will be broad-based, but it will take time before we are at the same level as before the outbreak of the virus.

Pronounced increase in the number of unemployed

During the upturn, growth in employment rose from 2017 to mid-2019, after which employment growth slowed. Both employment developments and the fall in the number of vacancies since the middle of 2019 reflect more sluggish demand for labour even before the corona crisis struck.

The abrupt halt in the Norwegian economy has resulted in a marked increase in registered unemployment. From 10 March to 31 March, the number registered with NAV as unemployed (fully unemployed) rose from about 65 000 to about 300 000. The number of unemployed has subsequently declined gradually because the influx of new job-seekers has slowed while at the same time the decline in unemployment has increased. On 2 June around 171 400 were registered as fully unemployed, which is 6.1 per cent of the labour force. The increase is mainly attributable to people on temporary lay-offs, as they are registered as unemployed in the NAV statistics. The course of unemployment measured by the Labour Force Survey (LFS) will be different. In the LFS, persons who are fully laid off are registered as employed until they have been laid off for 3 months. This means that unemployment measured by the LFS will be significantly lower than the NAV statistics in Q2 this year. The LFS figures will increase as a consequence of (i) persons who have been laid off for over 3 months being regarded as unemployed, (ii) an increase in dismissals, and (iii) new persons who want to enter the labour market failing to find jobs. This may result

Figure 13. Labour market status

Percent of population in working age, LFS



in a sharp increase in LFS unemployment figures in Q2 and Q3 this year, for which we are making projections.

We assume that many of those who are now laid off will become employed again when the scope of the infection control measures is reduced. This means that registered unemployment will fall going forward. An expansionary fiscal policy, low interest rates, record-weak krone and falling real wages will contribute to curbing the impact on the labour market. Potentially high growth in youth unemployment may be counteracted to some extent by some young people continuing their schooling, as we have seen in previous cyclical downturns. According to our calculations, unemployment measured by the LFS will rise to around 5.1 per cent as an annual average in 2020. Such a high level and duration of unemployment as measured by the LFS have not been experienced since the banking crisis in the early 1990s. Recovery among our trading partners and more open borders going forward will promote growth in employment.

At the same time, slower growth in the working age population will lead to somewhat slower growth in the labour force. According to our projections, unemployment will decrease to 4.1 per cent towards the end of the projection period. The employment share is projected to fall through 2020 and then gradually rise. It is the cyclical contribution, and not composition effects among the employed, that leads to this increase in the employment rate (see Box 3 on the effect of demographic changes on the employment rate going forward). At the end of the projection period the employment rate is forecast to be 67.9 per cent, which is low in a historical perspective. Total employment is forecast to fall by 1.5 per cent this year. In the years 2021–2023, employment is expected to grow by around 1.1 per cent annually on average.

Falling real wages next year

In 2020 Q1, growth in average monthly wages compared with the same quarter the previous year was 3.2 per cent, which was a little lower than the previous quarters. The growth rate was pushed down by retail trade and manufacturing, where wage growth

rates were 2.9 and 2.8 per cent, respectively. Growth in construction and in health and social services was somewhat higher than the average, at 4.0 and 3.5 per cent, respectively. The quarterly figures for average first quarter monthly wages are based on February, which means that the increase in lay-offs resulting from the infection control measures implemented against the corona pandemic is not captured in these figures.

Although this development in average monthly wages at quarterly level will not fully reflect developments in average annual wages, partly because of the treatment of percentages of full positions and back pay, it can provide some indication of the first-quarter growth in average annual wages.

As a general rule, we can decompose growth in average annual wages into contributions from carry-over, pay increase and wage drift. The carry-over is the difference between the annual wage level at the end of the previous year and the average annual wage level that same year, and provides important information about annual wage growth for the current year. The pay increase covers the increase in wages resulting from central negotiations, while wage drift is the sum of all the other factors that affect annual wages other than the contributions from carry-over and pay increase.

The postponed income settlement negotiations start on 3 August, with a deadline for agreement to be reached between the Federation of Norwegian Industries and the Norwegian United Federation of Trade Unions set at 21 August. An agreement between the parties will then take place in a situation where the unemployment rate is high, which will probably lead to the pay increase contribution remaining relatively low this year.

A lower activity level globally and associated reduced activity in export-oriented enterprises in the current year are factors that will reduce the contribution from the pay increase. Conversely, wage drift as a consequence of composition effects will probably make a positive contribution to growth in average annual wages. With a carry-over of 1.1 per cent into 2020 for manufacturing, we thus envisage that growth in annual average wages will be 2.2 per cent in 2020. The projection is somewhat higher than in the previous economic report because of a lower unemployment projection than previously, and somewhat better profitability in export-oriented enterprises. Our projections point to a rise in the consumer price index (CPI) of 1.2 per cent in the current year, largely as a consequence of lower energy prices. We therefore envisage growth in real wages of 0.9 per cent in 2020.

Moreover, we forecast CPI inflation of 3.2 per cent in 2021, and growth in average annual wages of 2.0 per cent the same year, such that real wages fall by 1.2 per cent in 2021. Wage growth appears likely only to pick up to previous levels in 2022 and then to stabilise at about 3.5 per cent for the remainder of the projection

Box 3. Effects on the employment rate of a change in the population composition up to 2030

Changes in population composition affect the share of the population that is employed as a result of different employment in different population groups. For example, there are increasing numbers of elderly people, and in isolation this pushes down the employment rate because employment is lower among the elderly than among the rest of the population. In this box we examine how changes in the population composition with respect to age, immigration and educational level from 2019 to 2030 could influence the share employed among people of working age (15–74 years).

We calculate an alternative employment rate by keeping the employment rates in each population group at their levels in 2019, but setting the size of each group as it is expected to be in 2030. The difference between the total employment rate thus obtained and the actual employment rate in 2019 provides a rough estimate of the importance of the expected changes in population composition between 2019 and 2030. The calculations correspond to Table 3 in Bhuller and Eika (2020), which analyses the effects of age, immigration and educational level on the employment rate in the period 2000–2017.

The populations are defined by the 4 200 combinations of 60 one-year age groups (for persons of working age, 15–74 years), 7 immigrant categories, 5 educational levels and 2 sexes.¹ The employment rate of each of the groups in 2019 is calculated with the aid of microdata from Statistics Norway's register-based employment statistics. In order to project the population composition to 2030, we use the MOSART microsimulation model. The projections, which are described by Cappelen et al. (2018), assume that the population develops in line with the population projections from 2018 (Leknes et al., 2018), while choices of education are calibrated on the basis of data for 2009 to 2016.

The table shows that changes in the age and immigration composition push the employment rate down by 0.6 and 0.5 percentage point, respectively. This is because the share of the elderly and the share of immigrants from Country group 3 (Asia, Africa, South America and Central and Eastern Europe outside the EU) increases towards 2030, and these groups have lower employment than the rest of the population. This effect is counteracted by increased educational level, which pushes up the employment rate by 1.3 percentage points. On balance, the calculations show that changes in the population composition will have little effect on the employment rate.

The projections are reminiscent of the projections of Bhuller and Eika (2020) which apply to the period from 2000 to 2017. The effect of age and education is greater in the period prior to 2017 than after, because the oldest birth cohorts were initially very small and with low educations compared to the younger birth cohorts, while this difference is substantially smaller in the period we are considering here. The changes in the population composition with respect to age and education will therefore be smaller towards 2030

¹ Immigrant categories: Immigrants from Country group 1 (Western Europe, Canada, the US, Australia and New Zealand; Norwegian-born with immigrant parents from Country group 1; Immigrants from country group 2 (countries in Central and Eastern Europe that became EU members in 2004 or later); Norwegian-born with immigrant parents from Country group 2; Immigrants from Country group 3 (Asia, Africa, South America and Central and Eastern Europe outside the EU); Norwegian-born with immigrant parents from Country group 3; The rest of the population (persons without immigrant background). Educational levels: did not complete upper secondary education; completed upper secondary education; completed bachelor's degree; completed master's degree; educational data not available.

Employment with different population compositions when the employment rate in each population group is the same as in 2019

	Employment rate	Difference from actual rate
Age, immigration and educational composition as in 2019	67	0
Age composition as in 2030	66,4	-0,6
Immigrant composition as in 2030	66,5	-0,5
Educational composition as in 2030	68,3	1,3
Age, immigration and educational composition as in 2030	67,2	0,2

¹ The employment rate is in accordance with definitions in Statistics Norway's register-based employment statistics, as the share of persons aged 15 to 74 who performed income-generating work of at least one hour's duration in the third week of November, and persons who have such work, but who were temporarily absent. The actual employment rate in 2019 (first row) assumes a population composition for 2019 that is consistent with the projections, and therefore differs somewhat from the employment rate reported in official statistics. The calculations correspond to Table 3 in Bhuller and Eika (2020).

than they have been for the past 20 years. The effect of immigration will be somewhat stronger in the period to 2030, because of low labour force participation and high immigration for Country Group 3.

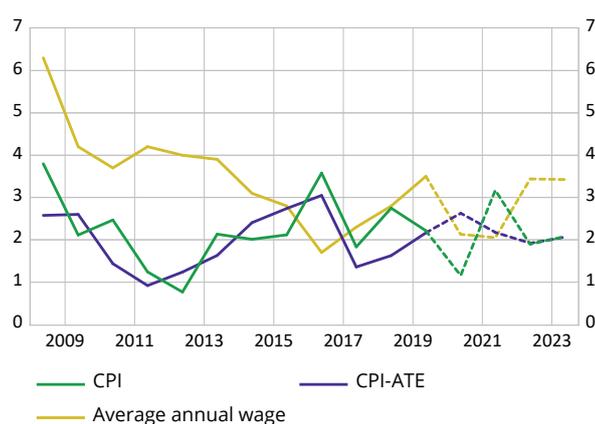
The projections must be viewed as an illustration, and there are important reservations. For example, the different population groups may experience different (exogenous) changes in employment. Bhuller and Eika (2019) show that employment among the elderly and immigrants increased significantly between 2000 and 2017, which curbed the negative effect on the employment rate of the increase in size of these groups. If this tendency continues, it will further curb the effects of population changes. Demographic changes per se may also affect employment within the demographic groups. These effects are not taken into account in the estimations, and Bhuller and Eika (2020) show that the employment rate trend over limited time periods first and foremost shadows economic developments. See also Bhuller and Eika (2020) for a further description of methods and reservations.

References

- Bhuller, M. and Eika, L. (2019). Sysselsettingen i Norge fra 2000 til 2017 – kan endringer i befolkningssammensetning forklare alt? [Employment in Norway from 2000 to 2017 – can changes in the population composition explain everything?] Appendix to NOU 2019:7. Oslo: ASD.
- Bhuller, M. and Eika, L. (2020). Nedgang i sysselsettingen fra 2000 -2017 – kan endringer i befolkningssammensetningen forklare alt? [Decline in employment in Norway from 2000 to 2017 – can changes in the population composition explain everything?] Søkelys på arbeidslivet, 01, -02, 20-37.
- Cappelen, Å., Dapi, B., Gjefsen, H. M., Sparrman, V. and Stølen, N. M. (2018) Framskrivinger av arbeidsstyrken og sysselsettingen etter utdanning mot 2035 [Projections for the labour force and employment after education up to 2035]. Statistics Norway, Reports 2018/36.
- Leknes, S., Løkken, S. A., Syse, A. and Tønnessen, M. (2018). Befolkningsframskrivingene 2018: Modeller, forutsetninger og resultater [Population projections 2018: Models, assumptions and results]. Statistics Norway, Reports 2018/21.

Figure 14. Consumer price indices and annual wage

Change from previous year in percent



Source: Statistics Norway

period. We expect CPI inflation of about 2 per cent in 2022 and 2023, so that real wage growth will be around 1.5 per cent in these years.

Lower energy prices curb CPI inflation this year

Between July last year and the beginning of March this year, the import-weighted krone exchange rate depreciated by over 7 per cent. When the krone depreciated markedly through March, it was thus from an already low level. Despite rising wage growth and a persistently weak krone, underlying inflation measured as the 12-month rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) was surprisingly low and stable in the second half of last year and up to March this year. With the exception of the January index for 2020, which showed an annual rise of 2.9 per cent, the inflation rate measured by the CPI-ATE remained at around 2 per cent throughout the period. The 12-month rise in February and March was thus back to 2.1 per cent after the high value in January. Since the summer of 2019, the annual rise in the consumer price index (CPI) has been appreciably lower than the rise in the CPI-ATE. The difference between CPI and CPI-ATE inflation was due to developments in energy prices, particularly electricity prices, while tax changes were of lesser importance. The difference between CPI and CPI-ATE inflation averaged 1.2 percentage points in 2020 Q1 compared with 2019 Q1. The 12-month rise in CPI inflation was as low as 0.7 per cent in March.

The CPI rose by 0.4 per cent from March to April this year. The shut-down of a number of service industries had consequences for the computing of the CPI in April. Services where there was total or almost total loss of consumption accounted for just over 10 per cent of the total CPI. The prices for more than 70 per cent of the lost service consumption were extrapolated by the change in total CPI from March to April. This applied *inter alia* to consumption groups such as hotel and restaurants, culture and entertainment, personal care

and day-care services. Prices were estimated for just under 30 per cent of lost services on the basis of seasonal factors. Service categories with a distinct seasonal character are hotels, charter tours and foreign travel. Until the situation for the individual service categories normalises, we will have to continue to use alternative methods for projecting price developments for services where data input is lacking.

In April the 12-month rise in the CPI-ATE was 2.8 per cent, compared with a rise of 2.1 per cent the previous month. The main reason for the rise was that prices for food products and non-alcoholic beverages rose by 0.9 per cent from March to April this year, whereas they declined by 0.8 per cent in the same month in 2019. Fresh products such as fruit and vegetables have risen substantially in price in recent months. One contributory cause is probably the weak krone. Easter this year was not characterised by the same special offers in food shops as 2019, which may explain some of the rise in prices in May. After Easter, however, grocery chains reduced the prices of a number of products, which may curb inflation going forward. The recent appreciation of the krone may also curb the rise in prices for fresh products such as fruit and vegetables. As a consequence of the corona pandemic, this year's agricultural settlement was conducted by means of simplified negotiations between the State and the farmers' unions. According to the Government, the agreement will result in limited price increases for domestically produced food products next year.

A decomposition of the sub-indices in the CPI-ATE by supplier sector shows that imported goods other than agricultural goods also pushed up inflation in April. Prices for product groups such as furniture and white goods have picked up strongly. Cars also increased in price from March to April, but the rise is moderate so far. Car importers have given notice of an increase in car prices recently, while other importers have chosen to wait and watch developments in the krone exchange rate. Although some of the depreciation of the krone was reversed from March to the end of May, the import-weighted krone exchange rate has weakened by a good 11 per cent since July last year. Car prices will probably increase somewhat when new contracts are entered into for cars that are not in stock. A number of new car models are being introduced in the course of the year and are contributing to increased competition, particularly in the electric car market. This may moderate price inflation. The State Wine and Liquor Monopoly (Vinmonopolet) regulates its prices periodically and the average rise in prices for its range of products was 2.4 per cent with effect from 1 May. The product group clothing and footwear is among those encountering the greatest competition from online trading, and the rise in prices in this group is expected to be moderate.

Norwegian electricity prices are linked to European power prices through power exchange between the Nordic countries and Europe. In addition, the

Norwegian electricity price is affected by precipitation quantities and temperatures. The mild winter caused a sharp fall in electricity prices in the Nordic countries. With record quantities of snow in the mountains and expectations of full reservoirs after the thaw, Norwegian electricity prices have been considerably lower than prices in southern Sweden and Denmark since February. Forward prices in the power market indicate that electricity prices will remain low through the summer and autumn before rising somewhat towards the winter. According to the forward prices, some of this year's decline in prices will be reversed next year, and the price will then rise at a moderate rate for the next few years. According to Statnett, the first of two new cables for power exchange with other countries – the NordLink between Norway and Germany – will be completed in the course of the year. Next year the Norwegian-British cable North Sea Link will begin operating. Increased transmission capacity will help to even out the power prices between Norway and the European market. In addition to the price of the power itself, electricity prices to consumers include grid charges and taxes. On the basis of forward prices in the power market, we expect the price of electricity, including grid charges, to fall by 25 per cent as an annual average from 2019 to 2020, but to rise by about 20 per cent next year. In the remainder of the projection period, we assume that electricity prices, including grid charges, will more or less parallel CPI inflation.

The outbreak of the corona pandemic led to a sharp fall in the oil price, which in its turn has resulted in a considerable fall in fuel prices. We forecast that fuel prices will fall by about 8 per cent as an annual average in the current year. We assume that in the years ahead prices will pick up again in pace with developments in the price of crude oil in Norwegian kroner. Given the projected rise in electricity prices, energy prices as a whole will push down CPI inflation by 1.3 percentage points this year.

One of the measures in connection with the corona pandemic is a reduction in the low rate for value-added tax from 12 to 6 per cent from 1 April up to and including 31 October 2020. The low rate applies *inter alia* to personal transport, hotels and culture and entertainment. In the CPI-ATE for April, this was treated in such a way that services where there was virtually no consumption were not affected by a change in value-added tax, while taxes were adjusted for service groups where there was consumption. Because of the general uncertainty it is difficult to forecast what effect this will have on the CPI. We assume for the present that it will push down CPI inflation by an annualised 0.1 per cent.

The restructuring of fuel taxes from 1 January is also expected to push down CPI inflation by 0.1 percentage point this year, and is factored into the projections for developments in energy prices. Other special tax rates for 2020 are adjusted for inflation. We have adjusted the special tax rates for inflation for the years 2021 to

2023. We assume that the special taxes for all the years 2021–2023 have a neutral effect on CPI inflation.

A weaker krone will contribute to an increase in imported inflation this year, but will also affect inflation in the somewhat longer term because of time lags in cost developments and price-setting. The impact of the weaker krone on Norwegian import prices is lessened by the fact that inflation abroad is slowing and by the shift over time of some import demand to countries that have boosted their competitiveness relative to Norway. Pulling in the same direction are the direct and indirect effects of low wage growth and low energy prices, as imported goods are also affected by domestic cost inflation through mark-ups and transport margins. We also assume that the rise in housing rents (observed and imputed), which count for about 20 per cent in the CPI-ATE), will be about 2 per cent in the current year and contribute to stabilising inflation. The uncertainty in price developments is greater than usual. Data on prices for services were cut off as a result of the shut-down in April due to the corona pandemic. When they reopen, hairdressers, dentists and operators in personal well-being have given notice of a price supplement for infection control measures. This may push up the rise in service prices slightly. For a period, capacity utilisation and earnings in some parts of the business sector have been very low. This gives operators incentives to increase their prices in order to improve their bottom lines. We forecast that CPI-ATE inflation will be 2.6 per cent in 2020. Given the projected developments in energy prices and special taxes, CPI inflation this year will be 1.2 per cent, which is 1.4 percentage points lower than the rise in the CPI-ATE.

As the exchange rate is kept constant through the projection scenario, the effects of changes in exchange rates will gradually be phased out in the longer term and imported inflation will then be more similar to global inflation. Low wage growth, higher productivity growth with the rise in output next year, and phasing out of the inflationary impulses generated by a weak krone exchange rate will lead to CPI-ATE inflation falling to 2.2 per cent in 2021. Given increased energy prices next year, CPI inflation for 2021 is projected to be 3.2 per cent, which is 1.0 percentage point higher than CPI-ATE inflation. In 2022 and 2023 CPI-ATE inflation is approximately in line with Norges Bank's inflation target and CPI inflation is projected to be close to CPI-ATE inflation for these years. Wage growth increases further on in the projection scenario, but productivity growth and low imported inflation curb the effects of the increased wage growth.

Table 4. National accounts: Final expenditure and gross domestic product. At constant 2017 prices. NOK million

	Unadjusted		Seasonally adjusted								
	2018	2019	18.1	18.2	18.3	18.4	19.1	19.2	19.3	19.4	20.1
Final consumption expenditure of households and NPISHs	1 500 206	1 522 201	372 593	377 698	376 565	379 088	381 615	382 200	383 629	382 237	368 297
Household final consumption expenditure	1 417 981	1 437 353	352 258	357 097	355 940	358 124	360 457	360 915	362 205	360 759	347 708
Goods	640 205	640 576	159 975	162 540	160 701	161 110	162 033	162 186	161 383	160 655	158 501
Services	701 524	720 203	173 801	175 342	176 692	176 998	178 870	179 686	181 026	182 318	173 162
Direct purchases abroad by resident households	122 364	124 765	30 195	30 672	30 087	31 487	31 476	31 064	31 749	30 458	25 373
Direct purchases by non-residents	-46 112	-48 190	-11 713	-11 457	-11 539	-11 470	-11 922	-12 021	-11 953	-12 671	-9 329
Final consumption expenditure of NPISHs	82 224	84 848	20 334	20 601	20 625	20 964	21 158	21 285	21 424	21 478	20 589
Final consumption expenditure of general government	801 937	815 871	200 153	200 407	200 660	200 804	201 800	203 352	204 693	206 026	207 825
Final consumption expenditure of central government	392 673	399 263	98 167	98 151	98 316	98 060	98 718	99 475	100 195	100 892	103 134
Central government, civilian	346 289	351 493	86 561	86 532	86 708	86 509	86 987	87 586	88 219	88 723	91 079
Central government, defence	46 385	47 770	11 606	11 619	11 608	11 551	11 732	11 890	11 977	12 169	12 055
Final consumption expenditure of local government	409 264	416 608	101 986	102 256	102 344	102 744	103 082	103 877	104 498	105 134	104 691
Gross fixed capital formation	832 088	883 233	198 882	208 455	209 404	214 582	212 711	219 239	225 478	225 183	213 672
Extraction and transport via pipelines	152 688	172 288	33 741	38 688	39 437	40 682	39 878	43 026	43 726	45 551	44 013
Ocean transport	763	3 058	486	17	-214	474	372	658	804	1 225	452
Mainland Norway	678 637	707 887	164 656	169 750	170 181	173 426	172 461	175 555	180 948	178 408	169 207
Industries	303 888	320 838	72 017	76 817	75 670	78 986	78 614	78 207	81 740	81 974	78 071
Service activities incidental to extraction	5 966	8 682	1 250	1 613	1 338	1 750	1 909	2 256	2 163	2 344	1 835
Other services	183 409	186 831	44 044	45 794	45 539	47 847	46 854	46 023	47 249	46 566	45 863
Manufacturing and mining	44 194	55 237	9 928	11 430	11 094	11 650	12 759	13 107	14 589	14 713	13 306
Production of other goods	70 318	70 088	16 796	17 979	17 698	17 739	17 092	16 821	17 739	18 351	17 066
Dwellings (households)	187 929	186 205	48 414	46 436	46 163	46 901	47 006	47 126	46 906	45 137	42 913
General government	186 820	200 844	44 225	46 497	48 349	47 539	46 842	50 223	52 302	51 296	48 223
Acquisitions less disposals of valuables	416	439	102	108	103	103	112	108	110	109	97
Changes in stocks and statistical discrepancies	110 952	102 398	34 290	27 099	25 143	28 902	29 808	29 852	25 719	20 172	23 752
Gross capital formation	943 456	986 070	233 275	235 662	234 650	243 587	242 631	249 199	251 308	245 464	237 522
Final domestic use of goods and services	3 245 599	3 324 141	806 021	813 766	811 875	823 479	826 046	834 752	839 630	833 728	813 644
Final demand from Mainland Norway	2 980 780	3 045 958	737 401	747 854	747 407	753 319	755 876	761 108	769 270	766 671	745 329
Final demand from general government	988 758	1 016 714	244 378	246 903	249 009	248 344	248 641	253 575	256 996	257 323	256 048
Total exports	1 194 483	1 211 827	296 856	299 451	303 197	298 152	304 123	301 066	296 543	313 585	306 133
Traditional goods	388 242	407 109	96 036	96 428	97 311	100 891	103 779	101 566	101 359	102 860	99 724
Crude oil and natural gas	437 789	419 079	109 360	108 966	112 172	107 735	105 442	102 107	97 791	114 182	109 198
Ships, oil platforms and planes	10 991	11 316	3 674	3 623	2 832	863	2 876	4 450	2 531	1 459	2 578
Services	357 461	374 324	87 787	90 434	90 882	88 664	92 026	92 943	94 863	95 084	94 633
Total use of goods and services	4 440 082	4 535 968	1 102 877	1 113 217	1 115 072	1 121 632	1 130 168	1 135 818	1 136 173	1 147 313	1 119 777
Total imports	1 102 205	1 159 548	271 086	278 962	275 470	279 795	288 195	291 920	292 103	290 465	276 187
Traditional goods	652 115	689 268	160 722	163 916	164 052	167 069	175 967	174 742	172 514	169 724	166 914
Crude oil and natural gas	19 101	20 932	4 854	5 064	4 375	4 398	4 102	4 085	5 953	6 408	5 930
Ships, oil platforms and planes	35 739	34 029	8 378	10 504	8 067	8 790	6 696	9 992	9 139	8 203	6 710
Services	395 250	415 319	97 131	99 479	98 976	99 538	101 431	103 101	104 497	106 130	96 632
Gross domestic product (market prices)	3 337 877	3 376 421	831 791	834 255	839 602	841 837	841 973	843 897	844 070	856 848	843 590
Gross domestic product Mainland Norway (market prices)	2 853 368	2 919 673	710 012	713 418	715 067	723 585	726 844	731 307	735 842	736 712	721 140
Petroleum activities and ocean transport	484 509	456 747	121 779	120 836	124 535	118 251	115 129	112 591	108 228	120 136	122 450
Mainland Norway (basic prices)	2 473 955	2 535 192	614 962	618 791	620 161	628 420	630 908	635 351	639 341	640 014	627 408
Mainland Norway excluding general government	1 847 520	1 897 267	459 736	462 721	463 002	470 475	472 495	476 323	479 501	479 393	468 767
Manufacturing and mining	217 915	224 947	54 412	54 883	55 340	56 275	56 382	57 221	57 203	57 288	56 407
Production of other goods	330 307	336 888	83 488	82 208	80 943	84 583	83 454	84 782	85 750	84 598	83 629
Services incl. dwellings (households)	1 299 299	1 335 432	321 837	325 631	326 719	329 617	332 660	334 320	336 548	337 508	328 730
General government	626 435	637 925	155 225	156 069	157 159	157 945	158 413	159 028	159 841	160 620	158 641
Taxes and subsidies products	379 413	384 481	95 050	94 628	94 906	95 165	95 935	95 955	96 501	96 698	93 733

Source: Statistics Norway.

Table 5. National accounts: Final expenditure and gross domestic product. At constant 2017 prices. Percentage change from previous period

	Unadjusted		Seasonally adjusted								
	2018	2019	18.1	18.2	18.3	18.4	19.1	19.2	19.3	19.4	20.1
Final consumption expenditure of households and NPISHs	1,9	1,5	-0,2	1,4	-0,3	0,7	0,7	0,2	0,4	-0,4	-3,6
Household final consumption expenditure	1,8	1,4	-0,3	1,4	-0,3	0,6	0,7	0,1	0,4	-0,4	-3,6
Goods	0,7	0,1	-1,6	1,6	-1,1	0,3	0,6	0,1	-0,5	-0,5	-1,3
Services	2,3	2,7	0,6	0,9	0,8	0,2	1,1	0,5	0,7	0,7	-5,0
Direct purchases abroad by resident households	4,2	2,0	2,5	1,6	-1,9	4,7	0,0	-1,3	2,2	-4,1	-16,7
Direct purchases by non-residents	0,3	4,5	0,9	-2,2	0,7	-0,6	3,9	0,8	-0,6	6,0	-26,4
Final consumption expenditure of NPISHs	4,1	3,2	1,8	1,3	0,1	1,6	0,9	0,6	0,7	0,3	-4,1
Final consumption expenditure of general government	1,4	1,7	-0,3	0,1	0,1	0,1	0,5	0,8	0,7	0,7	0,9
Final consumption expenditure of central government	0,8	1,7	-0,7	0,0	0,2	-0,3	0,7	0,8	0,7	0,7	2,2
Central government, civilian	0,8	1,5	-0,9	0,0	0,2	-0,2	0,6	0,7	0,7	0,6	2,7
Central government, defence	1,3	3,0	0,4	0,1	-0,1	-0,5	1,6	1,3	0,7	1,6	-0,9
Final consumption expenditure of local government	1,9	1,8	0,2	0,3	0,1	0,4	0,3	0,8	0,6	0,6	-0,4
Gross fixed capital formation	2,8	6,1	-2,4	4,8	0,5	2,5	-0,9	3,1	2,8	-0,1	-5,1
Extraction and transport via pipelines	1,9	12,8	-12,0	14,7	1,9	3,2	-2,0	7,9	1,6	4,2	-3,4
Ocean transport	-19,1	300,6	56,7	-96,6	..	-321,6	-21,6	77,0	22,1	52,4	-63,1
Mainland Norway	3,0	4,3	-0,2	3,1	0,3	1,9	-0,6	1,8	3,1	-1,4	-5,2
Industries	6,8	5,6	0,2	6,7	-1,5	4,4	-0,5	-0,5	4,5	0,3	-4,8
Service activities incidental to extraction	40,7	45,5	-15,0	29,1	-17,1	30,8	9,1	18,2	-4,1	8,4	-21,7
Other services	3,7	1,9	-0,9	4,0	-0,6	5,1	-2,1	-1,8	2,7	-1,4	-1,5
Manufacturing and mining	16,7	25,0	-0,6	15,1	-2,9	5,0	9,5	2,7	11,3	0,9	-9,6
Production of other goods	7,3	-0,3	5,1	7,0	-1,6	0,2	-3,6	-1,6	5,5	3,5	-7,0
Dwellings (households)	-6,2	-0,9	0,1	-4,1	-0,6	1,6	0,2	0,3	-0,5	-3,8	-4,9
General government	7,5	7,5	-1,3	5,1	4,0	-1,7	-1,5	7,2	4,1	-1,9	-6,0
Acquisitions less disposals of valuables	7,2	5,6	-13,9	5,6	-4,7	0,2	8,9	-3,7	1,9	-1,0	-10,6
Changes in stocks and statistical discrepancies	3,2	-7,7	10,1	-21,0	-7,2	15,0	3,1	0,1	-13,8	-21,6	17,7
Gross capital formation	2,9	4,5	-0,7	1,0	-0,4	3,8	-0,4	2,7	0,8	-2,3	-3,2
Final domestic use of goods and services	2,1	2,4	-0,3	1,0	-0,2	1,4	0,3	1,1	0,6	-0,7	-2,4
Final demand from Mainland Norway	2,0	2,2	-0,2	1,4	-0,1	0,8	0,3	0,7	1,1	-0,3	-2,8
Final demand from general government	2,5	2,8	-0,5	1,0	0,9	-0,3	0,1	2,0	1,3	0,1	-0,5
Total exports	-0,2	1,5	0,1	0,9	1,3	-1,7	2,0	-1,0	-1,5	5,7	-2,4
Traditional goods	2,0	4,9	-1,6	0,4	0,9	3,7	2,9	-2,1	-0,2	1,5	-3,0
Crude oil and natural gas	-4,8	-4,3	-1,2	-0,4	2,9	-4,0	-2,1	-3,2	-4,2	16,8	-4,4
Ships, oil platforms and planes	-38,2	3,0	70,8	-1,4	-21,8	-69,5	233,3	54,7	-43,1	-42,3	76,7
Services	5,4	4,7	1,9	3,0	0,5	-2,4	3,8	1,0	2,1	0,2	-0,5
Total use of goods and services	1,4	2,2	-0,2	0,9	0,2	0,6	0,8	0,5	0,0	1,0	-2,4
Total imports	1,9	5,2	-2,2	2,9	-1,3	1,6	3,0	1,3	0,1	-0,6	-4,9
Traditional goods	3,2	5,7	-2,5	2,0	0,1	1,8	5,3	-0,7	-1,3	-1,6	-1,7
Crude oil and natural gas	39,0	9,6	26,7	4,3	-13,6	0,5	-6,7	-0,4	45,7	7,6	-7,4
Ships, oil platforms and planes	-19,3	-4,8	-4,7	25,4	-23,2	9,0	-23,8	49,2	-8,5	-10,2	-18,2
Services	0,9	5,1	-2,6	2,4	-0,5	0,6	1,9	1,6	1,4	1,6	-8,9
Gross domestic product (market prices)	1,3	1,2	0,4	0,3	0,6	0,3	0,0	0,2	0,0	1,5	-1,5
Gross domestic product Mainland Norway (market prices)	2,2	2,3	0,6	0,5	0,2	1,2	0,5	0,6	0,6	0,1	-2,1
Petroleum activities and ocean transport	-3,7	-5,7	-0,8	-0,8	3,1	-5,0	-2,6	-2,2	-3,9	11,0	1,9
Mainland Norway (basic prices)	2,4	2,5	0,6	0,6	0,2	1,3	0,4	0,7	0,6	0,1	-2,0
Mainland Norway excluding general government	2,3	2,7	0,6	0,6	0,1	1,6	0,4	0,8	0,7	0,0	-2,2
Manufacturing and mining	0,8	3,2	-0,3	0,9	0,8	1,7	0,2	1,5	0,0	0,1	-1,5
Production of other goods	2,0	2,0	1,3	-1,5	-1,5	4,5	-1,3	1,6	1,1	-1,3	-1,1
Services incl. dwellings (households)	2,6	2,8	0,5	1,2	0,3	0,9	0,9	0,5	0,7	0,3	-2,6
General government	2,6	1,8	0,8	0,5	0,7	0,5	0,3	0,4	0,5	0,5	-1,2
Taxes and subsidies products	1,0	1,3	0,9	-0,4	0,3	0,3	0,8	0,0	0,6	0,2	-3,1

Source: Statistics Norway.

Table 6. National accounts: Final expenditure and gross domestic product. Price indices. 2017=100

	Unadjusted		Seasonally adjusted								
	2018	2019	18.1	18.2	18.3	18.4	19.1	19.2	19.3	19.4	20.1
Final consumption expenditure of households and NPISHs	102,2	104,5	101,0	101,8	102,6	103,2	103,8	104,2	104,5	105,3	105,4
Final consumption expenditure of general government	103,1	106,2	102,1	102,8	103,3	104,2	105,3	105,7	106,7	107,2	109,2
Gross fixed capital formation	102,3	104,9	101,4	101,8	102,7	103,3	103,8	104,8	105,2	105,8	106,4
Mainland Norway	102,7	105,2	101,6	102,4	103,3	103,6	104,4	105,0	105,4	106,0	106,5
Final domestic use of goods and services	102,5	104,9	101,4	102,3	103,2	103,2	104,2	104,2	105,0	105,9	106,9
Final demand from Mainland Norway	102,6	105,1	101,5	102,2	102,9	103,6	104,3	104,8	105,3	106,0	106,7
Total exports	113,6	108,2	108,7	112,6	117,5	115,3	110,1	108,8	106,3	107,4	103,6
Traditional goods	105,9	106,2	103,7	106,1	106,4	106,5	104,8	106,4	105,3	107,5	108,4
Total use of goods and services	105,5	105,8	103,3	105,1	107,1	106,4	105,8	105,4	105,3	106,3	106,0
Total imports	104,5	107,7	103,2	104,3	105,3	105,2	105,9	107,1	108,3	109,5	109,6
Traditional goods	104,5	107,1	102,9	104,3	105,5	105,4	105,5	106,8	107,5	108,6	109,3
Gross domestic product (market prices)	105,8	105,1	103,4	105,3	107,7	106,8	105,8	104,8	104,3	105,2	104,8
Gross domestic product Mainland Norway (market prices)	101,9	104,1	100,9	101,4	102,0	103,1	103,3	103,7	104,3	104,9	106,0

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted								
	2 018	2 019	18.1	18.2	18.3	18.4	19.1	19.2	19.3	19.4	20.1
Final consumption expenditure of households and NPISHs	2,2	2,3	0,3	0,7	0,8	0,6	0,5	0,4	0,3	0,8	0,1
Final consumption expenditure of general government	3,1	3,0	1,4	0,7	0,4	1,0	1,1	0,3	1,0	0,5	1,8
Gross fixed capital formation	2,3	2,5	1,3	0,4	0,9	0,6	0,4	1,0	0,4	0,6	0,5
Mainland Norway	2,7	2,4	0,7	0,7	0,9	0,3	0,8	0,6	0,4	0,5	0,5
Final domestic use of goods and services	2,5	2,4	0,6	0,9	0,9	0,0	1,0	0,0	0,8	0,9	1,0
Final demand from Mainland Norway	2,6	2,5	0,7	0,7	0,7	0,6	0,7	0,4	0,5	0,7	0,7
Total exports	13,6	-4,8	5,6	3,6	4,4	-1,9	-4,5	-1,2	-2,3	1,0	-3,5
Traditional goods	5,9	0,3	2,5	2,3	0,3	0,2	-1,6	1,6	-1,0	2,1	0,8
Total use of goods and services	5,5	0,3	1,9	1,7	2,0	-0,7	-0,6	-0,4	-0,1	0,9	-0,3
Total imports	4,5	3,1	1,7	1,1	1,0	-0,1	0,7	1,1	1,2	1,1	0,1
Traditional goods	4,5	2,5	1,6	1,4	1,1	-0,1	0,1	1,3	0,6	1,0	0,7
Gross domestic product (market prices)	5,8	-0,6	2,0	1,9	2,3	-0,8	-1,0	-0,9	-0,5	0,9	-0,4
Gross domestic product Mainland Norway (market prices)	1,9	2,2	0,6	0,5	0,6	1,1	0,2	0,3	0,6	0,5	1,1

Source: Statistics Norway.

Main economic indicators 2010-2023

Accounts and forecasts. Percentage change from previous year unless otherwise noted¹

	2010	2011	2012	2013	2014	2015	2016	2017	2018*	2019*	Forecasts			
											2020	2021	2022	2023
Demand and output														
Consumption in households etc.	3.8	2.4	3.5	2.8	2.1	2.7	1.1	2.2	1.9	1.5	-6.0	6.6	4.4	2.3
General government consumption	2.2	1.1	1.5	1.0	2.7	2.4	2.3	1.9	1.4	1.7	3.3	2.0	1.9	1.7
Gross fixed investment	-6.4	7.5	7.5	6.3	-0.3	-4.0	3.9	2.6	2.8	6.1	-7.6	-0.1	1.1	0.5
Extraction and transport via pipelines	-8.0	11.4	14.6	19.0	-1.8	-12.2	-16.0	-5.4	1.9	12.8	-3.5	-10.5	-1.5	-4.0
Mainland Norway	-6.4	5.0	7.4	2.9	0.4	-0.2	9.0	6.8	3.0	4.3	-9.2	2.3	1.7	1.5
Industries	-9.2	1.1	10.5	-3.2	-0.7	-2.8	12.6	9.2	6.8	5.6	-16.3	3.3	1.7	2.5
Housing	-1.6	17.0	10.9	5.3	-1.4	3.2	6.6	7.3	-6.2	-0.9	-9.7	-1.4	3.0	2.6
General government	-5.3	1.1	-1.8	11.8	4.5	0.2	6.4	2.6	7.5	7.5	2.7	4.2	0.8	-0.8
Demand from Mainland Norway ²	1.2	2.5	3.7	2.3	1.9	2.0	3.1	3.1	2.0	2.2	-4.2	4.3	3.1	2.0
Exports	0.6	-0.8	1.7	-1.8	3.4	4.3	1.1	1.7	-0.2	1.5	-4.7	3.8	5.7	3.5
Traditional goods	3.3	-0.1	-0.2	1.3	3.1	6.9	-8.6	1.7	2.0	4.9	-5.8	2.1	4.5	4.9
Crude oil and natural gas	-6.9	-5.6	0.5	-5.5	2.7	2.1	4.9	5.1	-4.8	-4.3	2.8	6.9	6.6	2.2
Imports	8.4	3.9	2.9	5.0	2.0	1.9	2.7	1.9	1.9	5.2	-10.7	2.8	3.6	2.6
Traditional goods	9.2	4.6	2.2	1.8	1.9	2.8	-0.2	3.8	3.2	5.7	-8.6	1.4	3.1	2.5
Gross domestic product	0.7	1.0	2.7	1.0	2.0	2.0	1.1	2.3	1.3	1.2	-2.9	4.3	3.6	2.0
Mainland Norway	1.9	1.9	3.7	2.3	2.2	1.4	0.9	2.0	2.2	2.3	-3.9	4.3	3.2	2.1
Manufacturing	2.1	1.7	2.0	3.3	2.8	-4.6	-4.2	0.0	0.8	3.2	-4.2	3.2	4.1	0.4
Labour market														
Total hours worked. Mainland Norway	0.2	1.7	1.7	0.4	1.4	0.7	0.6	0.3	1.8	1.8	-1.4	2.1	1.1	0.0
Employed persons	-0.3	1.4	2.0	1.1	1.0	0.5	0.3	1.2	1.6	1.6	-1.5	0.8	1.4	1.0
Labor force	0.6	1.3	1.5	1.2	0.7	1.5	0.2	-0.2	1.4	1.0	0.1	0.0	1.1	0.9
Participation rate (level)	71.7	71.5	71.4	71.2	70.7	71.0	70.4	69.7	70.2	70.5	70.2	70.0	70.5	70.8
Unemployment rate (level)	3.8	3.4	3.3	3.8	3.6	4.5	4.7	4.2	3.8	3.7	5.1	4.5	4.3	4.1
Prices and wages														
Wages per standard man-year	3.7	4.2	4.0	3.9	3.1	2.8	1.8	2.3	2.8	3.5	2.2	2.0	3.5	3.4
Consumer price index (CPI)	2.5	1.2	0.8	2.1	2.0	2.1	3.6	1.8	2.7	2.2	1.2	3.2	1.9	2.1
CPI-ATE ³	1.4	0.9	1.2	1.6	2.4	2.7	3.0	1.4	1.6	2.2	2.6	2.2	1.9	2.1
Export prices. traditional goods	4.5	5.8	-1.9	2.7	3.4	2.0	4.0	5.2	5.9	0.3	0.8	2.2	2.4	2.0
Import prices. traditional goods	0.0	4.0	0.3	1.4	4.3	4.6	1.7	3.5	4.5	2.5	2.9	2.1	2.1	2.1
Housing prices	8.2	8.0	6.8	4.0	2.7	6.1	7.0	5.0	1.4	2.5	-1.0	1.0	3.6	2.9
Income, interest rates and exchange rate														
Household real income	2.8	4.3	4.4	4.0	2.3	5.4	-1.6	2.0	1.5	3.0	0.3	1.1	2.0	1.6
Household saving ratio (level)	3.8	5.9	6.9	7.2	7.7	9.8	6.9	6.6	5.9	8.0	12.5	7.4	5.5	5.0
Norges Bank's policy rate (level)	2.5	2.9	2.2	1.8	1.7	1.3	1.1	0.9	1.1	1.6	0.7	0.3	0.5	0.9
Lending rate. credit loans(level) ⁴	3.4	3.6	3.9	4.0	3.9	3.2	2.6	2.6	2.7	3.0	2.4	1.9	2.0	2.3
Real after-tax lending rate. banks (level)	0.1	1.3	2.1	0.8	0.8	0.1	-1.6	0.1	-0.7	0.2	0.7	-1.6	-0.3	-0.3
Importweighted krone exchange rate (44 countries) ⁵	-3.7	-2.4	-1.2	2.2	5.3	10.5	1.8	-0.8	0.1	2.9	7.8	-0.2	0.0	0.0
NOK per euro (level)	8.01	7.79	7.47	7.81	8.35	8.95	9.29	9.33	9.60	9.85	10.76	10.79	10.79	10.79
Current account														
Current balance (bill. NOK) ⁶	281	346	374	317	341	250	138	152	252	140	142	166	229	272
Current account (per cent of GDP)	10.8	12.4	12.6	10.3	10.8	8.0	4.5	4.6	7.1	3.9	4.2	4.6	5.9	6.7
International indicators														
Exports markets indicator	11.1	6.1	1.1	1.9	4.8	5.3	3.9	5.5	3.5	2.4	-13.0	9.1	6.4	4.0
Consumer price index. euro-area	1.6	2.7	2.5	1.4	0.4	0.2	0.2	1.5	1.8	1.2	0.3	0.9	1.5	1.8
Money market rate. euro(level)	0.8	1.4	0.6	0.2	0.2	0.0	-0.3	-0.3	-0.3	-0.4	-0.6	-0.6	-0.3	0.0
Crude oil price US dollar (level) ⁷	80	111	112	109	100	53	45	55	72	64	39	45	48	51
Crude oil price NOK (level) ⁷	485	622	650	639	627	431	379	452	583	564	375	436	464	490

¹ Percentage change from previous year unless otherwise noted.

² Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.

³ CPI adjusted for tax changes and excluding energy products.

⁴ Yearly average. Credit lines, secured on dwellings.

⁵ Increasing index implies depreciation.

⁶ Current account not adjusted for saving in pension funds.

⁷ Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was June 3 2020.