TALL SOM FORTELLER

Statistisk sentralbyrå
Statistics Norway

Economic Survey

2022 / 1

Economic developments in Norway

Contents

Box

Table

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) 47 29 32 89

Editing was finalised on Wednesday 16 March 2022
Published 6 April 2022

Explanation of symbols	Symbol
Data not available	..
Not for publication	:
Zero	0

Economic developments in Norway

In the course of 2021, almost the entire decline in economic activity during the pandemic was recouped. Activity in November last year was close to what we regard as a trend level for the economy. The spread of the omicron variant of COVID-19 from November 2021 and the subsequent infection control measures caused mainland GDP to dip slightly in December and January, but by no more than 1.5 per cent for the two months combined.[1] By way of comparison, mainland GDP plunged 10

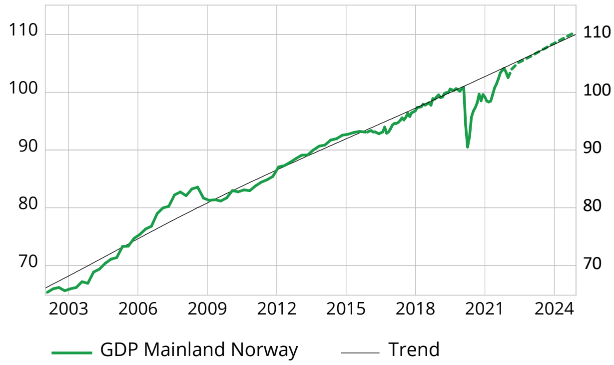
Table 1. Main macroeconomic aggregates. Accounts figures. Change from previous period. Per cent

	2020	2021	Seasonally adjusted			
			21:1	21:2	21:3	21:4
Demand and output						
Consumption in households etc.	-6.6	5.0	-3.3	2.9	6.0	3.2
General government consumption	1.8	3.9	-1.2	1.1	2.0	0.1
Gross fixed investment	-5.6	-0.3	-0.6	-0.1	-0.9	4.2
Extraction and transport via pipelines	-4.1	-2.8	-3.2	6.6	-4.7	-0.7
Mainland Norway	-3.6	0.8	-0.1	-0.8	0.0	5.2
Final domestic demand from Mainland Norway[1]	-3.6	3.7	-2.0	1.5	3.5	2.8
Exports	-1.2	4.8	-0.2	1.7	6.5	-2.6
Traditional goods	-2.5	6.7	3.8	-1.0	1.0	-2.3
Crude oil and natural gas	11.9	2.8	-4.1	4.8	6.3	-3.4
Imports	-11.9	2.0	-4.7	4.9	5.4	1.1
Traditional goods	-2.5	5.4	-4.5	6.2	2.1	-3.1
Gross domestic product	-0.7	3.9	-0.0	0.8	3.9	0.1
Mainland Norway	-2.3	4.2	-0.6	1.0	2.8	1.4
Labour market						
Total hours worked. Mainland Norway	-2.1	2.5	0.4	0.5	2.2	1.1
Employed persons	-1.5	1.2	-0.4	-0.0	2.2	1.4
Labour force[2]	0.4	2.2	-0.8	1.8	0.3	0.3
Unemployment rate. level[2]	4.6	4.4	4.7	5.0	4.0	3.5
Prices and wages						
Annual earings	3.1	3.5	..	..	..	..
Consumer price index (CPI)[3]	1.3	3.5	1.7	0.3	1.4	1.1
CPI adjusted for tax changes and excluding energy products (CPI-ATE)[3]	3.0	1.7	0.4	0.1	0.4	0.5
Export prices. traditional goods	-3.4	13.1	4.7	4.9	6.7	8.8
Import prices. traditional goods	4.2	5.5	1.6	1.4	4.3	2.2
Balance of payment						
Current balance. bill. NOK[4]	38	636	104	107	156	269
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	0.4	0.1	0.0	0.0	0.0	0.3
Lending rate. credit loans[5]	0.6	0.5	2.1	2.0	2.0	2.1
Crude oil price NOK[6]	407	609	521	577	641	695
Importweighted krone exchange rate. 44 countries. 1995=100	114.9	108.8	109.2	107.4	110.6	107.7
NOK per euro	10.72	10.16	10.26	10.09	10.33	9.97

[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.

[1] The figures presented in this report are from the preliminary national accounts for 2020, which were published on 12 February 2022. The monthly national accounts for January 2022 were published on 9 March, and monthly figures were then revised. Further details are provided in chapter 3, Box 3.2 in Økonomiske analyser 1/2022 (Norwegian text).

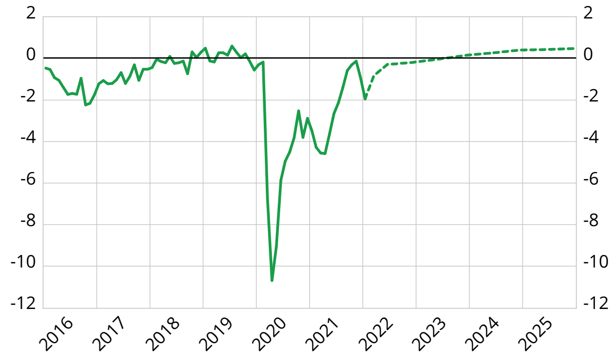
Figure 1. GDP Mainland Norway and estimated trend
Seasonally adjusted, index 2019 = 100



* Quarterly figures before 2016, monthly after. The trend is estimated by an HP-filter (lambda = 40 000 quarterly), but such that the trend is not directly affected by the developement of economic activity in 2020 and 2021

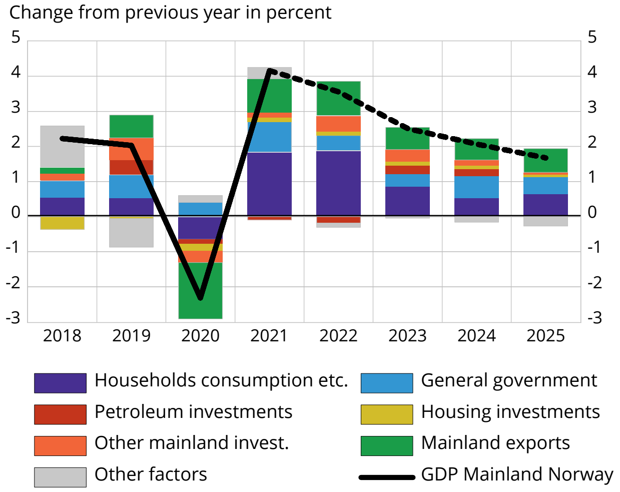
Source: Statistics Norway

Figure 2. Output gap, Mainland Norway
Deviation form estimated trend GDP in percent, monthly frequency



Source: Statistics Norway

Figure 3. Contributions to growth in GDP Mainland Norway, import adjusted
Change from previous year in percent



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 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.

per cent from February 2020 to April 2020. The great majority of infection control measures were relaxed at the end of January 2022, which in isolation implies a further marked upswing in economic activity. However, the Russian invasion of Ukraine on 24 February and the subsequent heavy sanctions imposed by Western countries have changed the outlook for both the global and the Norwegian economy. The outcome of the war in Ukraine is uncertain. We assume that some sanctions and a desire for less trade with Russia will be maintained in the somewhat longer term, even if acts of war cease. High commodity prices and subdued growth among our trading partners will thus be reflected in developments in the Norwegian economy going forward.

In connection with the outbreak of the omicron variant in December 2021, the Støre Government introduced a number of national infection control measures and several of the COVID-19 subsidy schemes were extended and renewed. According to our calculations, growth in public consumption and investment will be slightly lower than trend growth in the economy this year, which in isolation has the effect of damping down the economy. Increased transfers and the long-term effects of the support measures in 2020 and 2021 will probably compensate for this, and contribute to the overall effect of fiscal policy being expansionary nonetheless this year. According to Proposition 51 to the Storting (Prop. 51 S) published in January, the structural non-oil budget deficit for 2022 is estimated at NOK 355.1 billion. This is equivalent to 2.9 per cent of the value of the Government Pension Fund Global (the petroleum fund) at the start of the year, and roughly in line with the 3 per cent stipulated in the fiscal rule. Even though the value of the petroleum fund has fallen since the outbreak of war in Ukraine, higher commodity prices will result in higher tax and dividend revenue to the state from the production of oil, gas, electricity and metals. We assume that the spending of petroleum revenue will remain under 3 per cent in the years ahead.

During the pandemic, households shifted their consumption from services to goods. Although the domestic consumption pattern very largely normalised in the course of 2021, consumption of services slumped again in December and January as a consequence of the infection control measures im-

Table 2. Growth in GDP Mainland Norway and contributions from demand components[1]. Percentage points. Annual rate

	QNA				Projection			
	2018	2019	2020	2021	2022	2023	2024	2025
GDP Mainland Norway	2.2	2.0	-2.3	4.2	3.6	2.5	2.1	1.7
with contributions from:								
Consumption by households and non-profit organisations	0.5	0.5	-0.6	1.8	1.9	0.9	0.5	0.6
General government consumption and investment	0.5	0.7	0.4	0.9	0.4	0.4	0.6	0.5
Petroleum investment	0.0	0.4	-0.1	-0.1	-0.2	0.2	0.2	0.0
Housing investment	-0.4	-0.1	-0.2	0.1	0.1	0.1	0.1	0.1
Other mainland investment	0.2	0.6	-0.3	0.1	0.5	0.3	0.2	0.1
Exports from mainland Norway	0.2	0.7	-1.6	1.0	1.0	0.6	0.6	0.7
Other factors etc.	1.2	-0.8	0.2	0.3	-0.1	-0.0	-0.2	-0.3

[1] See explanation under Figure 3.

Source: Statistics Norway.

plemented in connection with the omicron variant. Our projections imply that households will choose a more normal composition of goods and service consumption in the course of 2022, and that consumption abroad will pick up sharply. We envisage that overall consumption growth will be just under 8 per cent as an annual average this year. This projection is based on the assumptions of no new lockdowns, that pent-up household demand is not exhausted, and that high energy prices will curb consumption growth. With prospects of growth in real disposable income, but higher real interest rates and weak developments in real house prices, overall consumption is projected to continue growing by almost 3 per cent as an annual average from 2023 to 2025. The record-high saving ratio is expected to fall relatively rapidly and remain at more normal levels for the next few years, with a slight increase towards the end of the projection period as a consequence of higher real interest rates.

The rise in house prices looks set to be slower in the years ahead. In 2021, the annualised rise in house prices was as much as 10.5 per cent, but the rise slowed through the year. The historically high rise in January this year must be viewed in in the light of more stringent requirements for survey reports in the Sale of Real Property Act from the beginning of this year, and the subsequent low supply of dwellings. We assume that the challenges related to survey reports are temporary, and that more dwellings will come onto the market in the course of the year. The supply of dwellings is also expected to increase in the longer term as housing investment appears to be picking up. An increased supply of dwellings in combination with higher interest rates will curb the rise in house prices, and real house prices are therefore likely to remain almost unchanged in the years ahead.

Petroleum investment has fallen in the last two years as a consequence of lower investment in field development. The plans reported by petroleum companies indicate lower investment activity this year again. The Storting's 2020 package of tax measures offers favourable taxation of all developments for which plans for development and operation (PDOs) are submitted before the end of 2022. PDOs for very many projects are therefore expected to be submitted this year, which will result in a marked increase in investment in subsequent years. The recent increase in prices for oil and gas futures is also likely to provide impetus to operators’ drilling plans for fields in operation. Investment is expected to increase by about 10 per cent in 2023, which will boost mainland GDP by 0.3 percentage point (see Table 2). Growth is then expected to slow, and given this scenario, the investment level will be about 2 per cent higher in 2025 than in 2019.

Business investment looks set to grow appreciably in the years ahead. Manufacturing companies report increased investment this year, and there are plans for large investment projects in the computer and electrical equipment and metals industries in particular. According to Norges Bank’s regional network, increased investment is also expected in services. These investment intention surveys were admittedly carried out before the war in Ukraine, and prospects of lower global growth will have a dampening effect on the profitability of investment at national level. On balance, we expect investment to grow by around 7 per cent this year and then to decline towards 2025.

Box 1. The war in Ukraine and the Norwegian economy

As pointed out in this report, the outlook for the global economy is highly uncertain as a consequence of the ongoing war in Ukraine. If the war should escalate and develop into a more prolonged and serious conflict in Europe the global economy could be more seriously impacted than shown in our projections. We have therefore constructed an alternative scenario which illustrates the path the Norwegian economy might take given more sombre assumptions for the global economy.

The alternative scenario presupposes, like the alternative scenario developed by the European Central Bank[1], more stringent sanctions against Russia which will result in further disruptions in global supply chains. Although direct trading with Russia accounts for a small share of euro area foreign demand, the spillover effects on the global economy – particularly via countries with stronger trade connections with Russia – will weaken activity in the euro area as a whole. The alternative scenario also assumes somewhat higher oil and gas prices as a consequence of increased market uncertainty and a minor cut in the supply of Russian gas to Europe which can only be partly compensated for by means of other sources of energy. Higher energy prices will propagate through the economies and push inflation up further in the euro area. At the same time, the alternative scenario assumes a steeper and more prolonged increase in commodity prices, which will amplify the second-round effects on inflation. The alternative scenario also assumes that more severe sanctions against Russia, coupled with existing geopolitical tensions, will lead to a more serious and prolonged increase in the global uncertainty associated with business investment. Increased uncertainty could result in higher risk premiums in financial markets, which in turn could amplify the negative effects on the economy through lower investment.

Given these assumptions, the export market indicator in the alternative scenario will be reduced by 2 per cent in 2022 compared with the projection scenario, while euro area inflation will be over 2 percentage points higher this year. In 2025 the levels of both the export market indicator and euro area inflation are assumed to have reverted to the levels in the projection scenario. The alternative scenario also presupposes that the oil price will be USD 10 and USD 5 higher per barrel in 2022 and 2023, respectively, than in the projection scenario, that the gas price will shadow the oil price, and that electricity support schemes will protect households from the effects on power prices of the higher gas price. As the increase in oil and gas prices is of relatively short duration, petroleum investment is kept constant in the alternative scenario. Financial market

Main macroeconomic aggregates 2022– 2025. Projections. Percentage deviation from the projection scenario unless otherwise indicated

	2022	2023	2024	2025
Mainland GDP (market value)	-0,5	-0,7	-0,5	-0.2
Exports, traditional goods	-1,1	-0,3	-0,4	-0,2
Exports, traditional services	-1,5	-0,8	-0,6	-0,4
Unemployment[1]	0,1	0,1	0,0	0,0
Consumption by households etc.	-0,2	-0,2	-0,4	-0,5
Business investment	-4,9	-7,9	-3,8	-0,4
Annual wages	-0,1	-0,3	-0,4	-0,4
CPI[1]	0,3	0,2	0,1	0,1
Assumptions				
Export market indicator (MII)	-2,0	-0,6	-0.4	-0.1
Consumer price euro area[1]	2,0	0,6	0,0	0,0
Crude oil price per barrel in USD[2]	10	5	0	0
Risk premium[1]	1,0	1,0	0,0	0,0

[1] The deviation is expressed in percentage points.
[2] The deviation is expressed in USD .
Source: Statistics Norway.

risk premiums are assumed in our projections to be one percentage point higher this year and next. By way of comparison, the average standard deviation of the equity risk premiums in Europe was around 3 percentage points in the period 1970–2015.[2] In the alternative scenario, monetary and fiscal policy and the exchange rate are assumed to be the same as in the projection scenario.

We used the KVARTS macroeconomic model to calculate the impact on the Norwegian economy of the more sombre assumptions for the global economy than those embedded in our projections. The effects on the Norwegian economy for the period 2022–2025 are measured as percentage difference between the alternative scenario and the projection scenario.

Overall, mainland GDP in the alternative scenario will be 0.5 per cent lower in 2022 and 0.7 per cent lower in 2023. At the end of the projection period the negative difference will be reduced to 0.2 per cent. As a consequence of weaker global demand, in 2022 exports of goods and services excluding crude oil and natural gas will be 1.1 per cent (goods) and 1.5 per cent (services) lower than the levels in the projection scenario. Increased risk premiums in financial markets will weaken business investment which will be 5 and 8 per cent lower in 2022 and 2023. Unemployment will be 0.1 percentage point higher in the alternative scenario in both 2022 and 2023 as a result of lower business investment and exports of traditional goods and services. A somewhat weaker labour market will lead to lower annual wages throughout the projection period, both in

[1] See the report "ECB staff macroeconomic projections for the euro area": https://www.ecb.europa.eu/pub/projections/html/index.en.html

[2] See Norges Bank (2016). The equity risk premium. Discussion note. 07/10/2016.

manufacturing and in the rest of the economy. A weakened ability to pay in the wage leader segment coupled with higher inflation in Norway as a consequence of higher inflation in the euro area will result in real wage development being weaker than in our projections in these years. Weaker real wage developments will mean 0.2 to 0.5 per cent lower household consumption in the period 2022–2025.

We have seen that the combination of the assumptions in the alternative scenario will mean a worse situation for the Norwegian economy than in the projection scenario, but that the impact on the Norwegian economy will be less than on the euro area economy. This must be viewed in light of the fact that Norway has less trade with Russia and Ukraine than many other European countries. In addition, exports of goods and services other than crude oil and natural gas only make up about 20 per cent of mainland GDP. By way of comparison, exports from the EU as a whole account for 47 per cent of GDP. The export shares of Sweden and Denmark are 45 and 55 per cent, respectively. That the negative impact will not be greater is also partly attributable to Norway's large energy sector, and Norway will experience further terms of trade gains as a consequence of the assumptions in the alternative scenario. If the effects on the global economy of the war in Ukraine were to be even more serious than assumed in the alternative scenario, developments in the Norwegian economy could deteriorate further this year and in the next few years.

As a consequence of the assumptions of higher oil and gas prices, the Norwegian state's petroleum income will increase considerably more in 2022 and 2023 than in our projections. This could increase the fiscal scope for manoeuvre. On the other hand, greater global uncertainty with a more prolonged and escalating conflict in Europe could result in steep falls on world stock exchanges this year and next. In isolation, this could reduce the value of the petroleum fund and the fiscal scope for manoeuvre. We have chosen as a technical assumption to keep fiscal policy constant in the alternative scenario, and we have not analysed the possibility that any changes in the value of the fund might affect long-term fiscal scope for manoeuvre.

The krone depreciated sharply in March 2020, from around NOK 10.0 per euro prior to the outbreak of COVID-19 in Norway, to over NOK 12.0 in mid-March 2020. The krone has since appreciated, and in mid-March 2022 the euro cost NOK 9.9. We assume an unchanged krone exchange rate in the near term, which implies an appreciation of 1.9 per cent from 2021 to 2022, measured by the import-weighted krone exchange rate.

Last year higher energy prices led to inflation of as much as 3.5 per cent. Further increases in energy prices as a consequence of the war in Ukraine are generating strong inflationary impulses this year too. The bottlenecks in the production of goods and services that are affecting the global economy are having the same effect. The appreciation of the krone and the electricity subsidy schemes introduced by the government are easing the increased pressure on prices, however. The rise in the consumer price index (CPI) is projected to be 3.3 per cent this year. In the absence of the electricity subsidy schemes, the rise would have been a full 4.5 per cent. Lower electricity prices will lead to CPI inflation falling to 1.8 per cent in 2023 and remaining at around 2 per cent in 2024 and 2025, approximately in line with the inflation target.

After well over a year with a record low key policy rate of 0 per cent, Norges Bank raised the rate by 0.25 percentage point in both September and December last year, so that the rate is now 0.5 per cent. The interest rate hikes in the last half of 2021 are probably the first of a series that will come in the next few years. At the same time, the central bank will proceed cautiously with its interest rate increases. This year we expect the policy rate to be raised by 0.25 percentage point each quarter, and by a further 0.25 percentage point in 2023, and then left at this level until 2025. The key policy rate will then be 1.75 per cent, money market rates close to 2 per cent and the average interest rate on loans secured on dwellings around 3.5 per cent from 2023. This is in line with what Norges Bank describes as a normal interest rate level.

Unemployment measured by the Labour Force Survey (LFS) is now lower than the average for the ten-year period 2010–2019. The average unemployment rate in the 3-month period from November 2021 to January 2022 was 3.3 per cent. The abolition of infection control measures in Norway now makes it possible for employment in those industries that have not yet recovered to normalise again. At the same time, the negative demand impulses in the global economy due to the war in Ukraine will place a damper on employment development in Norway. According to our projections, LFS unemployment will be 3.5 per cent as an annual average in 2022. Inward labour migration is

Table 3. Main economic indicators 2021-2025. Accounts and forecasts. Percentage change from previous year unless otherwise noted

	Acco-unts 2021	Forecasts										
		2022			2023			2024			2025	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	SN	NB
Demand and output												
Consumption in households etc.	5.0	7.8	6.0	10.4	3.3	6.0	4.4	2.2	2.0	..	2.4	..
General government consumption	3.9	1.2	0.8	0.1	1.2	0.5	..	2.0	0.3	..	1.6	..
Gross fixed investment	-0.3	3.3	..	1.4	4.3	..	1.6	3.2	..	..	1.0	..
Extraction and transport via pipelines	-2.8	-6.0	-6.0	-8.3	9.0	10.0	0.4	6.5	9.0	..	0.0	..
Industries	2.2	7.2	2.2	6.0	5.3	6.3	2.6	2.4	5.9	..	0.9	..
Housing	2.6	2.5	3.5	2.1	2.2	2.4	2.9	2.0	0.7	..	1.6	..
General government	-3.1	2.2	..	1.3	1.2	..	..	3.0	..	..	1.7	..
Demand from Mainland Norway[1]	3.7	5.2	3.6	5.9	2.7	4.0	2.8	2.2	0.6	..	1.9	..
Exports	4.8	4.2	..	5.6	3.5	..	5.4	2.6	..	..	1.5	
Traditional goods[2]	6.7	1.8	4.8	8.0	2.5	4.0	5.9	2.8	2.6	..	3.2	..
Crude oil and natural gas	2.8	3.3	..	1.9	4.9	..	6.1	2.3	..	..	-1.3	..
Imports	2.0	8.2	5.8	10.8	4.3	8.6	4.8	3.6	4.6	..	3.0	..
Gross domestic product	3.9	3.5	4.3	3.6	2.7	2.5	2.9	2.1	1.3	..	1.3	..
Mainland Norway	4.2	3.6	3.5	3.6	2.5	2.0	2.5	2.1	1.0	..	1.7	..
Labour market												
Employed persons	1.2	2.4	2.5	2.5	0.8	0.7	0.8	0.5	0.3	..	0.8	..
Unemployment rate (level)	4.4	3.5	3.6	3.5	3.6	..	3.4	3.6	..	..	3.6	..
Prices and wages												
Annual earnings	3.5	3.6	3.2	..	3.8	3.6	..	3.8	3.5	..	3.6	..
Consumer price index (CPI)	3.5	3.3	2.7	..	1.8	1.5	..	1.9	2.0	..	1.9	..
CPI-ATE[3]	1.7	2.1	1.7	..	2.0	2.0	..	2.1	2.0	..	2.1	..
Housing prices[4]	10.5	4.8	2.8	..	3.6	0.7	..	2.4	2.3	..	0.9	..
Balance of payment												
Current balance (bill. NOK)[5]	636	1065	..	..	811	..	..	637	..	..	515	..
Current account (per cent of GDP)	15.3	21.7	..	..	16.7	..	..	13.1	..	..	10.4	..
Memorandum items:												
Money market rate (level)	1.9	1.2	..	..	1.7	..	..	2.0	..	..	2.0	..
Crude oil price NOK (level)[6]	609	887	..	..	776	..	..	720	..	..	687	..
Import weighted krone exchange rate (44 countries)[7]	-5.3	-1.9	-0.9	..	-0.2	-2.6	..	0.0	-0.7	..	0.0	..

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

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

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

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

[5] Current account not adjusted for saving in pension funds.

[6] Average spot price. Brent Blend.

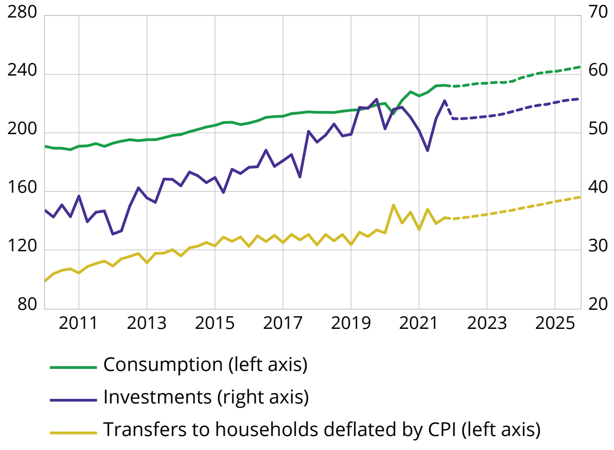
[7] Increasing index implies depreciation. Ministry of Finance forecasts trade-weighted exchange rate.

Source: Statistics Norway (SN). Ministry of Finance. Projections in material for the Government budget conference 2022, published 14 March 2022 (MoF). Norges Bank. Monetary Policy Report 4/2021 (NB).

expected to pick up gradually, which will reduce the pressures in the labour market. In 2023 and 2024 we forecast that unemployment will be around 3.6 per cent.

Growth in real wages appears likely to remain temporarily low this year. Last year real wages remained unchanged, and this year the war in Ukraine will affect the ability to pay of many companies in the wage leader segment. According to our projections, annual wage growth will be 3.6 per cent in 2022, slightly higher than projected inflation. Growth in real wages is expected to increase in the years ahead. Lower energy prices both push down inflation and improve the profitability of wage leader enterprises. The nominal growth in annual wages is expected to rise to just under 4 per cent in 2023, while inflation will be lower. Given this scenario, the growth in real wages will be around 2.0 per cent for all the years 2023–2025.

Figure 4. General government
Seasonally adjusted, billion 2019 NOK, quarter



Source: Statistics Norway

On balance, the upturn and a further normalisation of the Norwegian economy appear likely to continue, but this presupposes that COVID-19 is kept under control and that the vaccines are effective on any new mutations of the virus. We forecast that mainland GDP will increase by 3.6 per cent this year. This is slightly weaker than forecast in our previous economic report, and is attributable to weaker global growth prospects. Mainland economic growth is subsequently expected to decline to around 2 per cent through the remainder of the projection period. Given this scenario, the Norwegian economy will be almost cyclically neutral for the next two years.

The uncertainty regarding economic developments in Norway is extraordinary. It is attributable primarily to the pandemic, the war in Ukraine, the sanctions against Russia and the effects they will have on energy prices and bottlenecks in the production of goods and services that now characterise the global economy. We have assumed that some sanctions and a desire for less trade with Russia will be maintained in the somewhat longer term, even if acts of war cease. It is assumed that the bottlenecks in the global economy are temporary, however. If these assumptions do not hold true, the consequences for the Norwegian economy might be more negative than indicated in our projections. Box 1 provides an alternative scenario for how the Norwegian economy will be affected if the war, the sanctions and the global economic bottlenecks prove to be more prolonged than we have assumed. Even in such a scenario, however, we forecast that the Norwegian economy will grow appreciably more than trend in 2022.

Fiscal policy with stimulus packages

The phase-out of infection control measures normalised the public consumption pattern through the second half of 2021. Central government consumption rose by 1.6 per cent in 2021 Q4 following growth of 3.0 per cent in Q3. Local government consumption rose by 2.2 per cent in Q4 after growth of 5.9 per cent in Q3. The reopening of cultural institutions such as museums, libraries and cinemas, and increased activity associated with COVID vaccination, testing and tracing pushed up this consumption. General government investment rose by 4.4 per cent in 2021 Q4 after falling by 3.8 per cent in the previous quarter.

The structural, non-oil deficit for 2021 amounted to NOK 379.3 billion according to the final balanced budget. The structural, non-oil deficit for 2022 is projected in the final balanced budget to be NOK 322.4 billion, which is identical to the estimate in the National Budget. However, measures associated with the outbreak of the omicron virus, the high electricity prices and the war in Ukraine have increased the forecast deficit. At the beginning of December, the Støre Government introduced a number of national infection control measures to ease the burden on the healthcare service. Several COVID subsidy schemes were extended and renewed. The Government reduced the period employers have to cover sick pay to 5 days for the period 1 December to 30 June 2022. COVID-related measures for the unemployed and furloughed were extended until the end of January 2022. A new wage subsidy scheme based on fall in turnover was introduced for December, January and February. The COVID subsidy schemes for the cultural, charity and sports sector were extended up to summer 2022. COVID subsidy schemes for businesses were extended until the end of February. However, subsidies must be repaid if the recipient operates with a profit for the year as a whole, or distributes a dividend. Economic COVID measures adopted or proposed for 2022 amount to NOK 28.3 billion according to Prop. 51 S.

In Prop. 44 L (2021–2022) the Government proposed that the state should cover the half of household electricity expenses that are due to an average electricity price higher than 70 øre per kWt excluding VAT. The subsidy scheme was to apply from 1 December 2021 to 31 March 2022 for monthly energy consumption of up to 5 000 kWt per household. Negotiations with the Socialist Left party led to the subsidy rate being increased to 55 per cent. In Prop. 50 L (2021–2022) the subsidy rate was increased to 80 per cent for the period January 2022 up to and including March 2022. The Government recently adopted a resolution extending the electricity subsidy to March 2023. Prop. 46 S (2021-2022) additionally proposed extra disbursements to recipients of housing support in the period January to March 2022 to assist in covering high electricity expenses. These measures are additional to the Støre Government's electricity tax cuts. Higher power prices that increase tax and dividend revenue to the State will reduce the budget deficit, however. The measures adopted or proposed to provide protection against high electricity expenses amount to close to NOK 13 billion (book value) in 2022, of which NOK 10.2 billion has been adopted or proposed since the final balanced budget. The extension announced in March is additional. Prop. 51 S forecasts a structural non-oil budget deficit for 2022 of NOK 355.1 billion. The Government is additionally planning to donate NOK 2 billion and military material to Ukraine. Norges Bank Investment Management, which manages the Government Pension Fund Global (petroleum fund), is also planning to phase out its investments in Russia.

Box 2. The import-weighted krone exchange rate and the trade-weighted exchange rate index

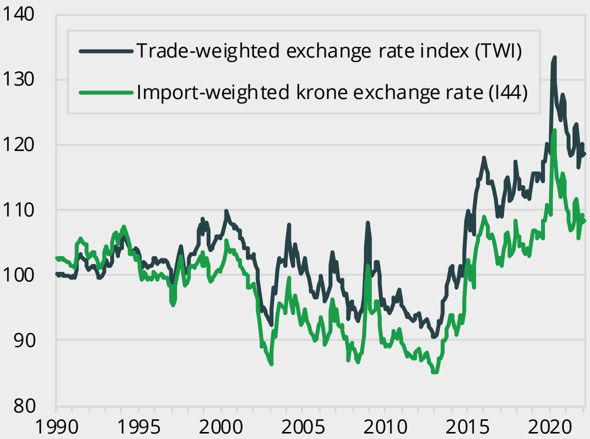
Approximately 60 per cent of Norway's foreign trade in traditional goods takes place with countries that are not in the EU monetary union. Traditional goods are exports and imports of goods excluding oil, gas, ships and platforms. The krone exchange rate as measured against the euro accordingly provides limited information about the international value of the Norwegian krone. It is therefore important to supplement with alternative exchange rate indicators that provide a more accurate expression of the breadth of Norway's trading pattern. Examples of these are the trade-weighted exchange rate index (TWI) and the import-weighted krone exchange rate (I44).

The trade-weighted exchange rate index is calculated from the exchange rates of the Norwegian krone against the currencies of Norway's 25 most important trading partners, and is a geometrical average based on OECD current trade weights. The weights in the import-weighted krone exchange rate are calculated on the basis of the composition of imports of traditional goods from Norway's 44 most important trading partners. Both indices are structured in such a way that high values mean a weak krone and low values a strong krone.

In the figure, both indices show that the krone was consistently weaker in the 1990s than from early in the 2000s and up to 2013. The krone was record-strong in early 2013, then depreciated markedly, partly as a result of the decline in the petroleum industry. However, the paths of the two indices are not quite coincident. For example, in January 2013 the krone measured by the import-weighted exchange rate was around 20 per cent stronger than the average for the 1990s, whereas according to the trade-weighted index it was only 13 per cent stronger. This reflects the fact that the two indices are constructed for somewhat different purposes. The weights in the trade-weighted exchange rate index are intended to reflect the competitiveness of Norwegian manufacturing in both the export and the domestic market, and not merely to have relevance for the domestic market and Norwegian prices. The different paths are due to the fact that the krone strengthened considerably more in relation to countries from which Norway has substantial imports than in relation to countries to which it has substantial exports. The international purchasing power of the krone was accordingly strengthened more than the international competitiveness of Norwegian manufacturing, viewed in isolation, was weakened by the exchange rates. This trend was particularly pronounced from 1993 to 2004.

In recent years the two indices have nonetheless provided a somewhat similar picture of the krone's movements. From January 2013 to April 2020, currencies in the imported exchange rate index strengthened by 44 per cent, which corresponds to the krone depreciating by 30 per cent. Measured by the trade-weighted exchange rate index, the krone weakened a little more in the same period, by almost 32 per cent. From April 2020 to February 2022, the krone strengthened by about 12.5 per cent measured by both the import-weighted exchange rate and the trade-weighted exchange rate index.

The import-weighted krone exchange rate (I44) and tradeweighted exchange rate index (TWI). 1995=100



Source: Statistics Norway.

The continuation of electricity subsidies and other minor adjustments will further increase the deficit.

The forecast deficit for 2022 is equivalent to 2.9 per cent of the petroleum fund, which is within the limit defined by the fiscal rule. However, growth in the fund's value in recent years implies increased use of petroleum revenue measured in NOK. Spending of petroleum revenue in 2022 will account for 10.4 per cent of trend mainland GDP, which is higher than prior to the pandemic, when spending amounted to 7.7 per cent. Projections also show that fiscal policy in 2020 and 2021 will continue to stimulate economic activity in 2022. In our projections for 2023– 2025, we assume that petroleum revenue spending, measured as the structural non-oil budget deficit as a percentage of the value of the fund, will remain at just under 3 per cent, given normal developments in the value of the fund. However, large changes in stock exchange prices and invested capital may affect the percentage used.

We forecast percentage changes in general government consumption and gross investment of 1.2 and 2.2 per cent, respectively, in 2022, somewhat higher than the projections in the National Budget. Investment growth is increased somewhat compared with the previous projection as a result of higher expected military defence investment. The growth projections for the period 2023–2025 are extrapolations of previous projections, with stable deliveries of fighter aircraft. Public transfers, which in the last report were expected to increase in real terms by 0.8 per cent in 2022, are now expected to increase by 1.3 per cent. The upward revision is mainly due to higher expected sickness absence as a consequence of omicron infection. Pension payments will increase gradually in the projection period. Investment in energy production and a green restructuring package may result in more expansionary fiscal policy, but the effect will depend on both the financing and the design of the measures.

A long war in Ukraine coupled with extensive sanctions against Russia may result in even higher global market prices for oil, metals and wheat than we have observed recently. Prices for oil and gas supplied to Europe will probably also be very high. Given such a scenario, tax and dividend revenue to the state from oil and gas production, which is channelled into the petroleum fund, and from electricity and metal production, which reduces the budget deficit, will be enormous. On the other hand, a prolonged war increases the probability of a sharp fall in prices on global stock exchanges. Such a price fall would inflict large losses on the Norwegian state by reducing the value of the petroleum fund. Expenses associated with acceptance of refugees are additional. Developments in the war and the possibility of new variants of the COVID virus thus create substantial uncertainty for fiscal policy.

Four interest rate increases this year

After well over a year with a record low key policy rate of 0 per cent, Norges Bank raised the rate by 0.25 percentage point in September 2021. The rise in interest rates continued at the December monetary policy meeting, so the key rate is now 0.5 per cent.

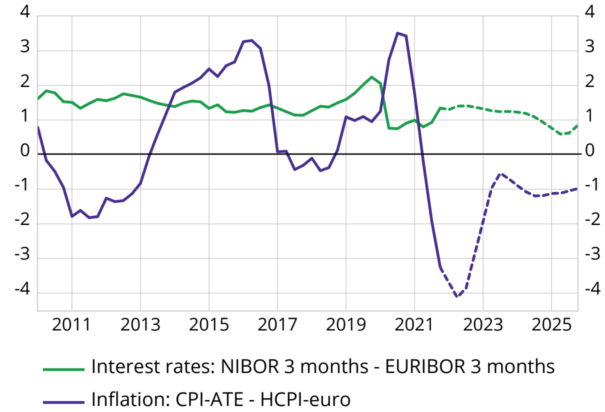
Money market rates shadow the key rate. The three-month money market rate was down to 0.2 per cent in summer 2021. By the end of the year it had risen to 1.0 per cent, and it continued to increase in 2022. In the middle of March 2022 it was 1.4 per cent. The fixed income market has priced in that the money market rate will rise to 2.2 per cent in December this year and remain at just over this level in subsequent years.

Deposit and lending rates increased in 2021 Q4 after being record low in Q2 and Q3. The average interest rate on loans secured on dwellings was 2.20 per cent at the end of Q4, an increase of 0.2 percentage point on the end of the previous quarter. The average deposit rate at the end of 2021 was 0.46 per cent, 0.1 percentage point higher than at the end of Q3, and 0.15 percentage point higher than at the end of Q2.

The interest rate hikes in the second half of 2021 are probably the first of a series that will come in the next few years. At the same time, the central bank will proceed cautiously with its interest rate increases. The war in Ukraine and accompanying sanctions against Russia have led to us revising down global economic growth. Weaker global economic growth may result in lower interest rates worldwide than previously envisaged, although higher inflation may have a countering effect. In isolation, a lower interest rate scenario internationally will contribute to curbing the Norwegian

Figure 5. Interest rate and inflation differential between NOK and euro

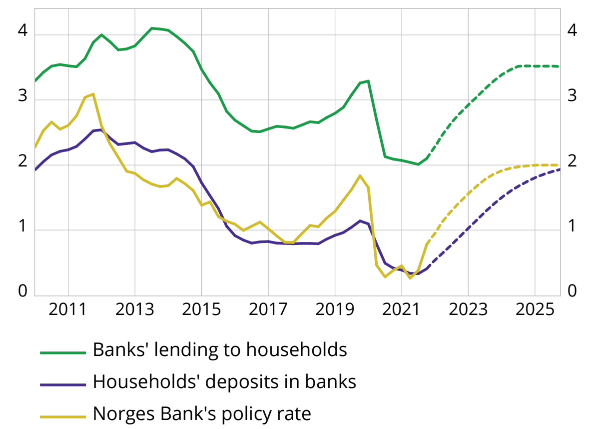
Percentage point



Source: Norges Bank and Statistics Norway

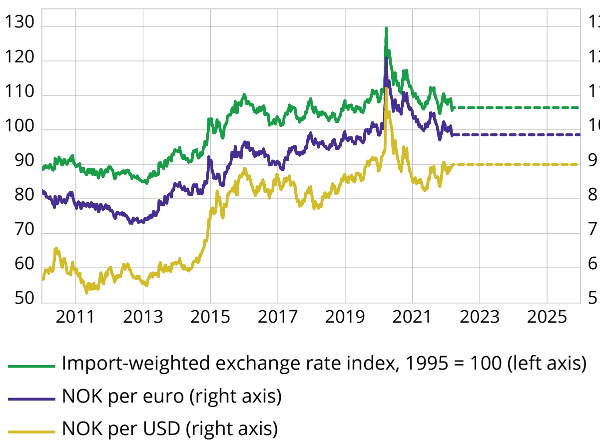
Figure 6. Norwegian interest rates

Percent



Source: Norges Bank and Statistics Norway

Figure 7. Exchange rates



Source: Norges Bank

interest rate hikes. We have also revised down the growth projection for the Norwegian economy, which points towards a lower interest rate path in Norway than in our previous economic report. At the same time, our unemployment projection is relatively low. Inflation measured by the consumer price index (CPI) is now high, but this is largely due to the recent surge in energy prices. According to our projections, the consumer price index adjusted for taxes and excluding energy products (CPI-ATE), will rise in line with the inflation target. Thus the inflation projections do not push the interest rate path either up or down.

As in previous projections, we assume unchanged exchange rates going forward. In mid-March, the EUR-NOK exchange rate was 9.9 and the USD was worth NOK 9.0. If these and other exchange rates remain unchanged in the near term, the krone will appreciate by an annualised 1.9 per cent from 2021 to 2022, measured in terms of the import-weighted krone exchange rate. This assumed appreciation of the krone will follow strengthening also from 2020 to 2021.

Despite the two interest rate hikes in 2021, the interest rate level at the beginning of 2022 remained very low. We therefore expect Norges Bank to continue its interest rate increases going forward. Norges Bank has forecast that the spread between the key rate and the money market rate will edge down to 0.3 percentage point from this summer. If it does, we believe that Norges Bank will increase the key rate at every monetary policy meeting at which a Monetary Policy Report is submitted. This implies an increase of 0.25 percentage point in every quarter in 2022. One further interest rate hike in 2023 would bring the key policy rate up to 1.75 per cent. The money market rate could then be close to 2 per cent, which we also assume for 2024 and 2025. This would bring the average interest rate on loans secured on dwellings up to 3.5 per cent.

Saving ratio down towards a more normal level

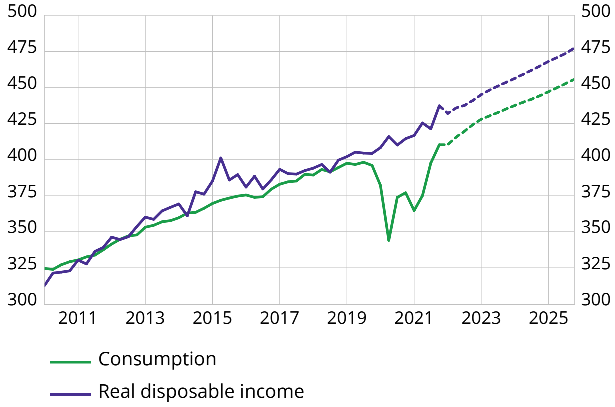
Growth in real disposable income for households and non-profit organisations combined is estimated in the non-financial sector accounts to be 3.2 per cent in 2021 compared with 2.0 per cent in 2020. If we exclude dividend disbursements, which increased by almost 25 per cent last year, partly due to the increase in tax on dividend with effect from 2022, growth in real disposable income was 2.2 per cent, roughly the same as in 2020. This is also consistent with average annual growth in the ten-year period 2010–2019.

Households experienced major changes in the composition of their income and expenses during the coronavirus pandemic, with infection control measures, periodic business closures and very low interest rates. As a result of the fall in employment, wage income resulted in negative growth in real disposable income of over one percentage point in 2020, but its contribution to growth in 2021 was well over 2.5 percentage points. The contribution of public transfers to growth was just under 3 percentage points in 2020 as a consequence of record disbursements to a large number of furloughed and unemployed workers. Public transfers have not accounted for such a large contribution to growth since 2009. In 2021 the contribution of public transfers to growth was almost zero. Net interest expenses with low lending rates made clear positive contributions to growth in real disposable income in both 2020 and 2021. The household interest burden, i.e. interest expenses as a share of disposable income, fell from 5.5 per cent in 2019 to 4.6 per cent in 2020 and further to 3.9 per cent in 2021.

The household consumption pattern also changed substantially during the pandemic. When infection control measures placed stringent restrictions on consumption of services, households adapted by increasing their consumption of goods. After a fall caused by the outbreak of the pandemic, goods consumption made a rapid recovery and increased strongly through the last three quarters of 2020. Conversely, service consumption fell significantly more through the first half of 2020 than was recouped in the second half. According to the quarterly national accounts, goods consumption grew by 6.5 per cent as an annual average in the first year of the pandemic, while service consumption fell by 10.3 per cent. These developments in consumption of goods and services, coupled with the fall in Norwegians' consumption abroad, resulted in a fall in overall consumption of a record 6.6 per cent in 2020. In the course of 2021, as society reopened, consumption of services rose sharply, while goods consumption remained high. After seven months of continuous growth, service consumption fell by 6.6 per cent in December according to the monthly national accounts. Goods consumption fell by 0.7 per cent in the same month, so that consumption by households and non-profit organisations combined fell by 3.3 per cent. The fall in consumption in December can be largely explained by new infection control measures for service industries in connection with the omicron variant and the bringing forward of goods purchases to November because of delays in the international goods transport system. On an annual basis, overall consumption grew by 5 per cent in 2021, but was still about 2 per cent lower than the level in 2019.

Figure 8. Income and consumption in households

Seasonally adjusted, billion 2019 NOK, quarter



Source: Statistics Norway

Overall consumption fell by a further 3.3 per cent in January this year, indicating that Q1 growth may be weak. Consumption of services dipped by 0.9 per cent as the infection control measures introduced in December also applied in January. Goods consumption fell 4.4 per cent in the first month of the year. Falling by 7.4 per cent and 22.9 per cent, respectively, electricity consumption and car purchases made a particular contribution to the fall in goods consumption. Whereas the fall in electricity consumption was due to higher than normal temperatures and very high electricity prices in the winter, the fall in car purchases can be viewed against the backdrop of record high sales of new passenger cars in 2021. According to the Norwegian Road Federation, sales of new passenger cars, particularly electric cars, surged 24.7 per cent last year compared to almost zero growth the previous year. The record sales in 2021 can be attributed to substantial saving by households through the coronavirus pandemic.

As overall income remained high and consumption fell sharply, the saving ratio, measured as saving as a share of disposable income, rose from 7.0 per cent in 2019 to 14.2 per cent in 2020. Such a high annual saving ratio has not previously been recorded in the non-financial sector accounts. The saving ratio excluding share dividend disbursements increased from 2.2 per cent to 9.9 per cent in the same period. In the course of 2021, the saving ratios including and excluding share dividend payments dipped to 13.1 per cent and 7.9 per cent, respectively. By way of comparison, the average annual saving ratios in the ten-year period 2010–2019 were 6.7 per cent and 2.9 per cent. Thus households still have substantial savings as a consequence of the pandemic.

We now forecast that growth in real disposable income, adjusted for share dividend disbursements, will be over 1.5 per cent this year. This is a downward revision of about 1 percentage point compared with our previous report, and is largely attributable to weaker developments in real wage income forecast for this year. On the basis of our assumptions, average annual growth in real disposable income in the years 2023–2025 will be around 3 per cent. Both wage income and public transfers will pick up in real terms in pace with substantially lower expected inflation in the years ahead and will provide major positive contributions to real disposable income. Net interest expenses will dampen growth in real income in the years 2023–2025 as a whole when the mortgage rates faced by households continue to rise in pace with an increasing key policy rate. During this period, the level of the household interest burden will rise to about 6 per cent, which is a little higher than the average in the ten-year period 2010–2019.

We envisage that overall consumption growth will be just under 8 per cent as an annual average this year. Underlying this projection, which is a downward revision on the last report in line with the downward revision of real income growth, are assumptions that there will be no new lockdowns and that household pent-up demand is not exhausted. The total consumption level in 2022 could thus be more than 5 per cent higher than the level in 2019. Because of the war in Ukraine, however, there is great uncertainty surrounding our consumption projections. We forecast that overall consumption will increase further by an annualised average of just over 2.5 per cent in the last three years of the projection period. Developments in these years will be driven by growth in real disposable income, but curbed by higher real after-tax interest rates and weak developments in real house prices, particularly in 2024 and 2025.

According to our projections for income and consumption developments, the saving ratio will fall to 8.5 per cent as an annual average this year. It will be somewhat higher in both 2024 and 2025, spurred by higher real after-tax interest rates. The saving ratio adjusted for share dividend disbursements will fall to around 2 per cent this year and rise gradually to about 3.5 per cent in 2025. These projections imply that the saving ratio will revert to normal levels through the projection period.

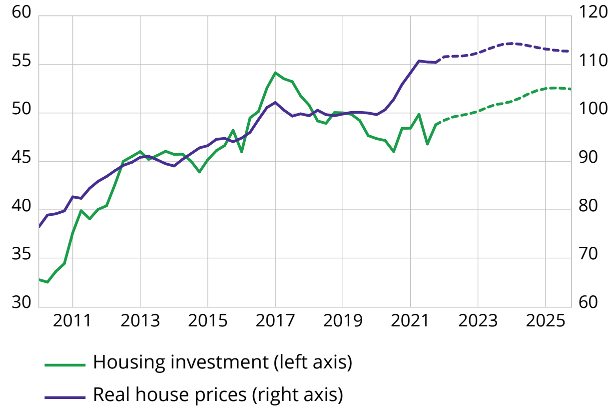
Prospects of lower growth in the housing market

House prices rose by 10.5 per cent for 2021 as a whole, but at a rate that declined through the year. According to Statistics Norway's seasonally adjusted price index, house prices rose by 3.5 and 2.5 per cent in Q1 and Q2, respectively, but by only 1.0 and 0.8 per cent in the last two quarters.

Real Estate Norway's monthly statistics show a steep rise in house prices in the first months of 2022, at 2.1 per cent in January and 0.7 per cent in February. January growth was historically high, and far higher than the so-called "January effect", which features a strong rise in prices in the first month of the year. The sharp rise must be viewed in light of the introduction of more stringent requirements for survey reports in the Sale of Real Property Act, which entered into force at the beginning of the year. This created bottlenecks in the housing market, resulting in fewer dwellings on the market all over Norway. The weak supply side is reflected in the statistics over number of dwellings put up for sale, number of unsold dwellings and turnaround time, which have all been at historically low levels so far this year. It is reasonable to assume that the challenges related to survey reports are temporary, and that more dwellings will come onto the market in the course of the year.

National accounts figures show that housing investment rose by 4.3 per cent in Q4 last year after falling over 6 per cent the previous quarter. Total growth in housing investment in 2021 ended at 2.5

Figure 9. Housing market
Seasonally adjusted. Left axis: billion 2019 NOK, quarter
Right axis: index, 2019 = 100



Source: Statistics Norway

per cent. According to the Norwegian Homebuilders' Association (Boligprodusentene), sales of new dwellings fell through the first two months of the year, from about the same level as in last January to the lowest level recorded for February. Housing starts this year have been at a moderate level compared with previous years. Developments in sales figure must be viewed against the backdrop of the rise in prices for building products and the uncertainty surrounding the war in Ukraine. According to our calculations, housing investment will rise by 2.5 per cent this year again. We then foresee that growth will slow to about 1.5 per cent towards the end of the projection period, prompted by higher interest rates.

In our KVARTS macroeconomic model, there is a reciprocal effect between house prices and the supply of dwellings. Higher housing investment will lead to higher growth in the supply of dwellings, and hence to lower house prices in the years ahead. Gradual interest rate increases also point to lower house prices.

A combination of increased interest expenses and high income growth, coupled with stable housing construction and low population growth point to a moderate rise in prices going forward. As interest rates rise and income growth normalises, the rise in house prices will also slow. This is reflected in household borrowing, which in Statistics Norway's KVARTS macroeconomic model increases in pace with house prices. Our projections indicate that annual debt growth will decrease from over 5 per cent in 2022 to a bare 4 per cent in 2025.

However, there are a number of uncertainty factors that may affect the housing market going forward. The ongoing pandemic and war in Ukraine are leading to increased energy prices and high costs for materials. The war is also increasing global uncertainty and creating international turbulence. This may detract from the desire to invest. However, a less pronounced increase in interest rates as a consequence of the war may have a counteracting effect.

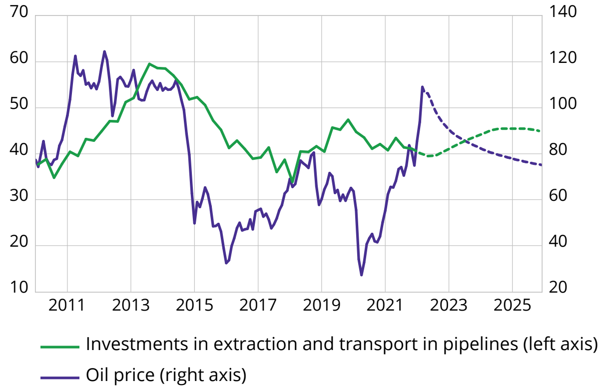
On balance, we forecast that house prices will rise by just under 5 per cent this year. This projection is largely based on house price movements through 2021 and into 2022. We then assume a gradually slowing annual rise in house prices of just over 3 per cent in 2023 to just under 1 per cent in 2024 and 2025.

Fall in petroleum investment in 2022 reverses into solid growth in 2023

Following growth of 14.3 per cent in 2019, petroleum investment fell by 4.1 per cent in 2020. According to preliminary national accounts figures, investment fell by a further 2.8 per cent in 2021. The decline was driven by markedly lower investment in the largest field developments on the Norwegian continental shelf. In addition, several developments were completed, and investment in these was therefore phased out. Investment in new developments was far from extensive enough to compensate for this decline. There was higher investment in 2021 than in 2020 in the other investment categories, particularly exploration, concept studies and fields in operation, and this helped to ease the fall in overall petroleum investment. Exploration activity picked up again last year after slumping in 2020 as a consequence of very low oil prices attributable to the pandemic. Last year investment in fields in operation was largely driven up by higher oil and gas prices and favourable tax rules. The course of investment through the year was relatively uneven. A seasonally adjusted fall of 3.2 per cent in Q1 was reversed into growth of 6.6 per cent in Q2. In Q3 and Q4, seasonally adjusted investment fell by 4.7 and 0.7 per cent, respectively.

Statistics Norway surveys the petroleum companies' investment plans for the current year and the following year through the quarterly survey of intended investment in oil and gas, manufacturing,

Figure 10. Petroleum investments and oil price
Seasonally adjusted. Left axis: billion 2019 NOK, quarter
Right axis: USD per barrel



Source: Statistics Norway

mining and power supply (KIS). The nominal projection for 2022 in the last survey is approximately NOK 160 billion. This is 3.3 per cent higher than the projection in the last survey, but is nonetheless 8.1 per cent lower than the projection for 2021 published at the same time last year. The decline that is indicated this year is broad-based, and investment in all categories is expected to fall compared with corresponding projections published for 2021. A pronounced fall in field development contributes most to the forecast decline in 2022. Several development projects were completed last year, and others are approaching completion, and their investment peaks therefore occurred earlier. Development projects are not included in the investment survey until a plan for development and operation (PDO) is submitted to the authorities. The Storting package of tax measures, adopted in June 2020 to aid the industry in tackling the sharp fall in oil prices in the wake of the COVID pandemic, offers favourable tax rules for all developments for which PDO’s are submitted before the end of 2022. PDOs for very many projects are therefore expected to be submitted towards the end of the year. Investment this year in projects with PDOs that are only submitted in Q4 will only be modest. It will be higher for those with PDOs submitted earlier in the year. PDOs for developments such as Eldfisk Nord, Brasse, Trine and Trell are expected early in the year. Overall, we forecast that investment in the developments will increase by NOK 7 million over and above that now included in the survey. Our projections for petroleum investment are closely linked to our projections for movements in the oil price, which are based on forward prices. The energy crisis in Europe this autumn, and the ongoing war in Ukraine have resulted in a pronounced increase in both gas and oil prices. We anticipate that this may encourage operators to expand their drilling programmes for fields in operation in excess of their current budgets. The increase in drilling activity may nonetheless crowd out some exploration activity as rigs are switched from exploration to production drilling. We accordingly forecast that the volume of petroleum investment will fall by 6 per cent this year. This is a 2 percentage point lower fall than projected in our previous report, mainly because we assume that very high product prices will trigger increased investment activity.

In the survey's initial projection for 2023, investment is forecast to be about NOK 131 billion. The projection indicates a nominal fall of about 5 per cent in 2023 compared with the corresponding projection published for 2022. It is the categories fields in operation, shutdown and abandonment, and exploration and concept studies that will push down investment compared with the initial projection for 2022. The projections for field development point the opposite way. A sharp upturn is also indicated in the categories pipeline transport and onshore activities for next year, but these contribute minimally to reducing the projected decline in overall investment. There will be very high investment associated with the many developments launched this year, which will substantially raise development investment compared to what is now included in the survey. Moreover, we assume that next year the high oil and gas prices will again provide impetus for far higher investment than that in the initial projection for fields in operation. We forecast that fixed investment will increase by 9 per cent in 2023.

Our projections are based mainly on the investment intentions survey, but this survey only collects investment costs and estimates for the current and the following year. Other sources of information are therefore particularly important for the last two years in our forecast horizon, which now extends to 2025. The many PDOs expected to be submitted in 2022 will probably generate very high investment in field development in both 2024 and 2025. Investment in development projects tends to be highest in the second or third year, depending on the scope of the project. The large projects tend to have highest investment in the third year, while investment in smaller projects is often highest in the second development year. As the great majority of scheduled projects will come at the end of 2022, 2023 can be regarded as the first development year for them. According to our calculations, investment in field development will therefore be appreciably higher in 2024 than in 2023. The majority of the coming developments are small or medium-sized, while some are large. Investment in most of the small ones is likely to be highest in 2024, and in the large ones it is likely to be higher in 2025. This means that development investment is likely to level off in 2025. We accordingly forecast a growth in volume of 6.5 per cent in 2024, and that investment in 2025 will be at approximately the same level as in 2024. Given this scenario, investment in 2024 and 2025 will be approximately 2 per cent higher than in 2019.

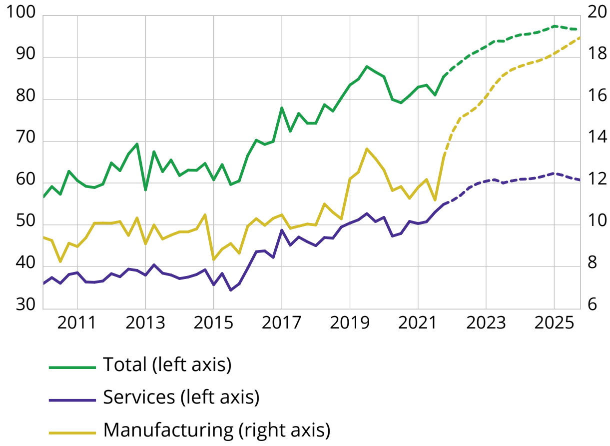
In 2021 petroleum production ended 2 per cent higher than in 2020. Liquid production increased by 1.2 per cent, while gas production increased by 2.7 per cent. Liquid production increased mainly as a result of higher production on Johan Sverdrup, while high gas prices pushed up gas production towards the end of the year. The Norwegian Petroleum Directorate forecasts that extraction growth will be 2.6 per cent this year and 4.7 per cent next year. The Ministry of Petroleum and Energy recently granted licences to increase gas production beyond what is included in the Petroleum Directorate's forecast for this year. These licences are not included in our projections. Petroleum production is expected to increase by 2 per cent in 2024 before gradually falling in the second half of this decade. The production level in 2031 is expected to be 18 per cent lower than in 2024.

Business investment is picking up

According to seasonally adjusted national accounts figures, business investment rose by 5.4 per cent in 2021 Q4. Investment increased in all mainland industries apart from services associated with extraction, which fell by 3.1 per cent. Growth was clearly highest in manufacturing and mining, at 18.1 per cent. Growth in the categories other goods production and other services was over 3 per cent. As a result of developments in 2021, the level of investment in manufacturing and mining, extraction-related services and other services was considerably higher than the level in 2020 Q4. Investment in manufacturing and mining has rebounded to the pre-pandemic level, while investment in other services has exceeded the pre-pandemic level.

Figure 11. Investments Mainland Norway

Seasonally adjusted, billion 2019 NOK, quarter



Source: Statistics Norway

Annual growth in business investment was 2.1 per cent in 2021, which is higher than the projection of 1.5 per cent in our last report. This is mainly due to the astonishingly strong growth in manufacturing and mining in Q4.

Statistics Norway surveys businesses' investment intentions for the current and coming year in manufacturing, mining and power supply. The last publication in February shows that manufacturing investment increased by around 4 per cent in current prices from 2020 to 2021, whereas the previous survey indicated a decline of 1.5 per cent. The final investment figures were markedly higher than forecast in the previous survey, largely due to higher investment in rubber, plastic, minerals, etc. The projection for 2022 indicates a surge in manufacturing investment of a whole 37.8 per cent compared with the corresponding projection for 2021 published in February last year. Growth is driven by the computer and electrical equipment industries. These two industries, together with basic metals, account for close to 80 per cent of growth for 2022.

Investment in power fell by 23 per cent in 2021 due to a decline in both the manufacturing and the distribution segments. The negative tendency is projected to continue in 2022, with a fall of 20 per cent attributable mainly to the completion of existing projects and few new windpower projects.

According to the March report of Norges Bank's Regional Network, businesses expect substantial investment growth in the coming year, even though the estimates have been reduced since the previous survey in December. Retail trade foresees stable investment developments, while manufacturing and service industries foresee a growing rate of investment.

A climate-related transition to renewable energy may substantially influence investment in the years ahead. On balance, such a transition will result in increased investment in mainland businesses. Statistics Norway’s survey of businesses’ investment intentions indicates that this is the case for the current year. Manufacturing companies are investing mainly to reduce emissions and to achieve greater energy efficiency. Several battery factories and hydrogen plants are in the start-up and planning phase, and some companies have launched pilot facilities. If these companies are successful in their technological development, and plans for full-scale production are realised, it will mean tens of billions of kroner in investment in the years ahead.

Developments in business investment will depend on the course of the ongoing pandemic and the war in Ukraine. Global uncertainty and international turbulence coupled with high energy prices and rising inflation may detract from the desire to invest.

We now forecast growth in business investment of around 7 per cent for the current year. Growth in business investment in 2023 is expected to be just over 5 per cent, falling to around 1–2 per cent towards the end of the projection period.

Huge current account surplus

In 2021 as in 2020, foreign trade reflected developments in the COVID-19 pandemic and infection control measures in Norway and abroad. A decline in the first half of the year was followed by an upswing in trade volumes, and especially in prices, in the second half of the year. Very high gas prices made a particular contribution to a historically high trade surplus in 2021.

Following a slight increase in 2021 Q3, the volume of exports of traditional goods fell in Q4, according to seasonally adjusted national accounts figures. Exports of engineering products and of fish and fish products declined, while exports of refined petroleum products increased. Growth in exports of traditional goods was high throughout 2021. Oil and gas exports fell in Q4 last year, but from high levels, following high second and third quarter growth. Oil exports were reduced more than gas exports. Both oil and gas exports are limited by production capacity, so the rise in gas prices through 2021 affected the export volume to a limited degree. Service exports picked up strongly in the second half of last year following flat developments through the first half of the year, thereby repeating the pattern of 2020. Foreigners’ consumption in Norway, which is regarded as exports, doubled in 2021 Q3 and then doubled again in Q4. The level of foreigners’ consumption remains low nonetheless, and was much lower in Q4 than in the same quarter in 2019. Transport and transport services increased relatively substantially in the second half of last year. The largest service category, shipping, maintained a volume through 2021 that was roughly 10 per cent higher than in 2020. This indicates increased global trade.

Export prices for both goods and services increased strongly in 2021, particularly in the second half of the year. There was a high rise in world market prices for important Norwegian export goods including commodities such as gas, oil, refined petroleum products, electricity, metals and farmed fish. Electricity and natural gas had the highest export prices, which increased several hundred per cent through 2021. The export price for natural gas reached a historically high level in Q3 last year, and went on to almost double in Q4. Gas was then several times more expensive than oil per energy unit, due to a rare combination of climate-related and market conditions in Europe. The rise in export prices through 2021 for the other aforementioned commodity-based products was over 20 per cent. The export price index for service exports as a whole picked up appreciably from Q2 last year. Shipping accounted for the largest contribution, with a price rise of about 30 per cent through the last three quarters of 2021. As with growth in volume, the rise in shipping prices indicates that global trade increased in 2021 after the abrupt halt in 2020 induced by the pandemic.

Seasonally adjusted imports of goods fell in Q4 last year. The largest decline was seen for non-military ships and boats, which also fell substantially on an annual basis. Imports of metals and metal products fell in both Q3 and Q4. The receipt of six fighter aircraft in the second half of the year added to growth in imports of goods. A pronounced increase in overall goods imports in Q2 and Q3 contributed

Box 3. Import shares

Consumption of goods and services can be decomposed into final deliveries – i.e. for consumption, investment and exports – and intermediate inputs, which constitute a production factor. Some of the final deliveries are imported. The remainder are delivered by Norwegian manufacturers, who use imported intermediate inputs to varying degrees.

This box shows estimated import shares for the Norwegian economy. A static input-output model is used for the purpose and applied to the last year with final national accounts figures, which is 2019. For purposes of comparison, we also show import shares for the previous year. The calculations below therefore do not capture changes in import shares as a consequence of the pandemic. The analysis takes account of imported intermediate inputs, also through subcontractors, in addition to direct imports of final deliveries. However, the static input-output model does not take account of factors such as changes in relative prices, the knock-on effects of changes in earnings, any need for changes in production capacity (investment) and changes in interest and exchange rates.

Investment is the main group of final delivery categories with the highest share of imports. We decompose total new investments by both type and industry. The import share in construction investment is relatively modest, while it is high for aircraft and ships. Other types of investment also have a considerable share of imports. Shipping has by far the highest import share of the industries. The share of petroleum-related imports fell somewhat in 2018, but is nonetheless appreciably higher than the average for other investment.

Consumption accounts for a little more than half of total final deliveries, with roughly the same import share as the Norwegian economy as a whole. There is wide variation among the various consumption subgroups. Norwegians' consumption abroad is regarded in its entirety as imports. Vehicles account for a substantial share of imports, as very few cars are manufactured in Norway. The reason their import share is not higher than 47.9 per cent is that mark-ups and taxes account for a large share of the costs of vehicle purchases. The subgroup 'Miscellaneous goods' – which consists of goods such as clothing and footwear, furnishings and electronics – also has a relatively high import share of 45.2 per cent. Energy products are largely produced in Norway, but despite Norway's high oil production, a substantial amount of petrol and diesel fuel is imported. In periods of low electricity production, power is also imported from neighbouring countries. On aggregate, energy products consumed by households have an import share of 5.9 per cent. Apart from energy products and dwellings, public sector consumption, which consists largely of labour costs, is the consumption component with the lowest import share.

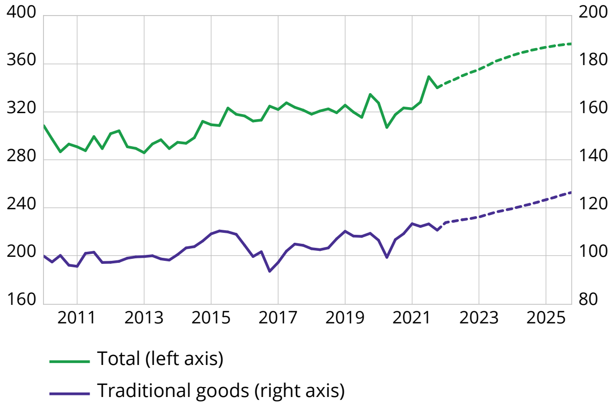
There are also substantial variations among the different export subgroups. Exports of shipping services and traditional goods have a high import content due to the fact that a large proportion of the intermediate inputs are purchased outside Norway. Exports of oil and gas are distinguished by the low share of imports involved, because most of the production value originates from the Norwegian continental shelf, and thus consists of petroleum rent.

Import shares

	Share of final deliveries, in per cent[1]	Import share in per cent	
		2018	2019
Consumption	**51.0**	**19.5**	**23.8**
Consumption by households and non-profit organisations	32.9	25.9	30.8
Consumption by non-profit organisations	1.8	..	17.3
Goods consumption	13.7	..	37.8
Food and beverages	4.3	30.4	30.3
Energy products etc.	1.1	4.7	5.9
Own vehicles	2.4	42.6	47.9
Miscellaneous goods	5.9	44.5	45.2
Consumption of services	14.8	..	13.9
Dwellings	5.6	7.5	7.4
Other services	9.2	18.8	17.8
Norwegians' consumption abroad	2.6	100.0	100.0
Public sector consumption	18.1	9.5	11.0
New investments	**19.9**	**36.2**	**36.9**
By type:			
Buildings and infrastructure	9.1	22.3	22.3
Aircraft and ships	1.1	64.6	72.5
Other types	9.7	48.2	46.7
By industry:			
Mainland Norway	15.7	32.9	34.4
General government	4.4	31.1	31.6
Manufacturing	1.1	46.8	46.4
Other goods-producing industries	1.7	43.3	45.9
Housing	4.1	22.3	22.3
Other service industries	4.4	39.3	41.2
Extraction and pipeline transport	3.7	46.8	43.1
Shipping	0.5	65.6	71.6
Exports	**26.9**	**18.7**	**21.3**
Mainland Norway	16.1	25.8	25.3
Inventories	9.0	28.5	28.8
Services	6.0	19.9	20.0
Foreigners' consumption in Norway	1.1	..	24.2
Other services	4.9	..	19.1
Oil and gas	9.6	3.1	3.9
Shipping etc.	2.3	67.3	68.5
Total use of goods and services	**100.0**	**24.4**	**25.8**

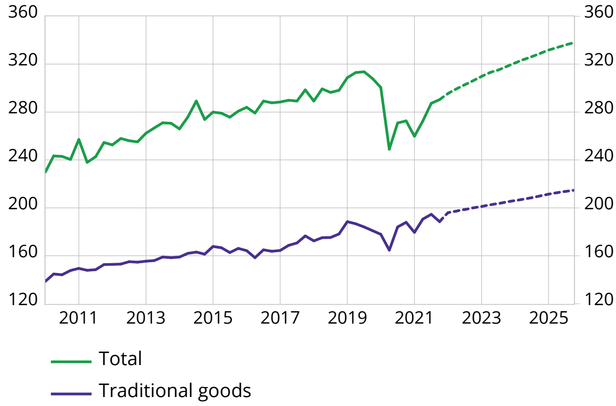
[1] Goods and service consumption does not include share of foreigners' consumption.

Figure 12. Exports
Seasonally adjusted, billion 2019 NOK, quarter



Source: Statistics Norway

Figure 13. Imports
Seasonally adjusted, billion 2019 NOK, quarter



Source: Statistics Norway

to high growth in 2021. After falling in 2021 Q1 and Q2, Norwegians' consumption abroad, which is regarded as imports, picked up strongly and doubled in both Q3 and Q4. Consumption abroad accounted for most of the growth in overall service imports in the second half of the year. As growth started from a low level, overall service imports were nonetheless lower in 2021 than in 2020. Growth in goods imports was also responsible for growth in imports of goods and services combined. Prices for imported goods increased more than for imported services in 2021. The krone strengthened in the course of 2021, which may have checked the rise in import prices slightly. A high rise in global commodities prices explains the high rise in prices for product groups such as metals and refined petroleum products.

A fairly extreme rise in prices in important Norwegian export markets, particularly for gas, semi-refined products and commodities, and a more normal rise in prices for Norwegian imports resulted in very high terms of trade gains in 2021. At the same time, total exports increased slightly more than total imports, measured in constant 2019 prices, also when oil and gas exports are excluded (they only accounted for a small increase). In total, the very large terms of trade gain and the small gain on volume resulted in a very high trade surplus of about NOK 516 billion in 2021. In 2020 there was a trade deficit of NOK 3 billion. In addition to the trade surplus, a record high petroleum fund contributed to a net factor income and current transfers surplus of NOK 125 billion last year. The trade surplus and net factor income and current transfers surplus combined raised the current account surplus as a share of GDP from 1 per cent in 2020 to about 15 per cent in 2021.

As in 2020, we are facing an unusual, difficult and very uncertain future. Russia's invasion of Ukraine is already affecting Norway's external account in the form of higher energy prices, while there has thus far been little or no effect on prices for Norwegian import goods. Norway's trade revenue looks set to increase enormously as a consequence of the war in Ukraine and sanctions against Russia, because prices for Norwegian export goods are expected to rise more than prices for imports. The especially high energy prices are expected to yield record revenue for Norway this year.

Forecast market growth among our trading partners in the coming years has been revised down somewhat from the previous projection. Mainland goods exports are accordingly expected to grow substantially less this year and in the following three years. Exports of services, which fell much more than exports of goods during the pandemic, are still forecast to grow considerably, but without reaching the pre-pandemic trend level in the course of the projection period. Growth in oil and gas exports is constrained by production, and in the short term cannot be increased very much, even though prices are high. Very high energy prices will contribute substantially to the trade surplus this year being even higher than last year's record level. From 2023, energy prices are expected to fall to less extreme levels. The trade surplus will thus shrink slightly from next year, while remaining at a very high level. The war in Ukraine may affect the net factor income and transfers surplus via share prices, dividend payments and development aid/

transfers. Nevertheless, large net factor income and transfers surpluses continue to be expected, and the current account surplus as a share of GDP is forecast to creep up to over 21 per cent this year and then fall towards 10 per cent in 2025.

The upswing in production continues at a slower pace

At the end of 2021, the pandemic had set its mark on the Norwegian economy for almost two years, and it continued to do so into 2022. Developments in activity are closely linked to the course of the pandemic and the various infection control measures. The gradual reopening of society began in April last year, and mainland economic activity grew each month from April up to and including November. In June 2021, mainland GDP was higher than the level in February 2020, the last month before the pandemic struck Norway with full force, and in November activity was close to estimated trend; see Figure 1.

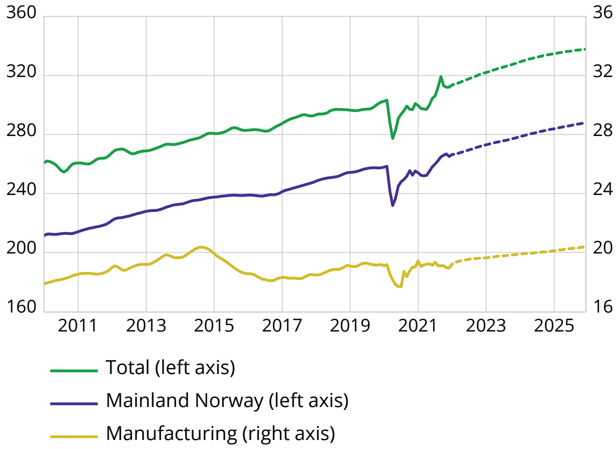
The recovery has been driven by the upswing in the service industries in particular. This applies to industries with extensive one-on-one contact, industries that use a large amount of foreign labour, and tourism, travel and cultural activities, which have been hard hit by the pandemic and infection control measures. Retail trade enjoyed a sharp upswing as a consequence of households' altered consumption pattern and of closed borders. Non-cyclical industries such as traditional fishing and power production have also held up well through the pandemic, and this has contributed to growth in the mainland economy.

The more infectious omicron variant led to a number of infection control measures being reintroduced in December last year and remaining in place until mid-February this year. This led to less activity at the end of 2021, when accommodation and food service activities were once more substantially reduced and there was some decline in the transport and culture industries. The downturn in the Norwegian economy continued in January, but was modest compared with previous periods of infection control measures. Most of the decline was due to factors other than the pandemic, such as reduced electricity production and fishing.

It is reasonable to suppose that the decline in activity around the turn of the year will be followed by

Figure 14. Gross domestic product

Seasonally adjusted, billion 2019 NOK, month



Source: Statistics Norway

a new upswing in activity now that society has reopened. But there is still great uncertainty associated with future economic developments. In our previous report, the greatest uncertainty factor was a new wave of infection with the omicron variant. However, the impact was milder than expected, and control measures could be lifted earlier than envisaged in December last year. There is nonetheless still a possibility of a new coronavirus variant developing that is resistant to the basic immunity that has been accumulated in the wake of vaccination and/or infection in the population.

The greatest downside risk associated with our projections is related to the risk of the ongoing war in Ukraine escalating and developing into something more prolonged and serious. In isolation, economic activity will be dampened as a result of lower demand from our trading partners in the wake of the war in Ukraine and the subsequent sanctions. In our projections, we have revised down growth in European countries both this year and in 2023 compared to our previous report. We therefore expect the upturn in the Norwegian economy to continue, but that the growth rate will be slower than in our previous projection.

The low domestic consumption contributed strongly to depressing activity through 2020 and into 2021. However, the relaxation of infection control measures since April last year lifted consumption before a new downturn occurred around the end of 2021 as a consequence of infection and restrictions. As COVID-19 measures were abolished in February this year, and households have historically high levels of savings, we expect domestic consumption to continue growing. This will push up activity this year and in the remainder of the projection period.

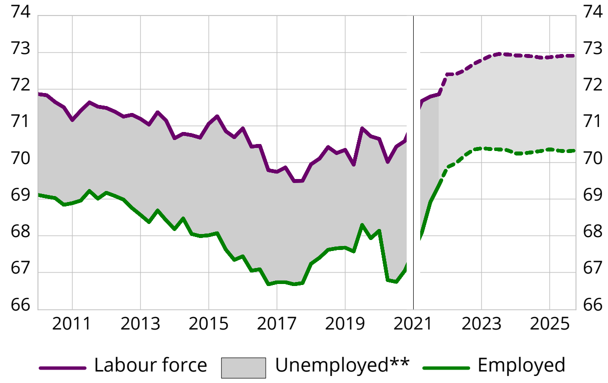
The industry mix is fairly different from before the pandemic, and activity in many service industries is lower than pre-pandemic levels. The upturn going forward is expected to be particularly pronounced in the areas hard hit by the infection control measures during the pandemic. This applies in particularly to the service industries cultural activities, food service activities and travel. We also expect an upswing in other areas. After several years of solid growth and a high level of activity, production in the construction industry fell after the outbreak of the virus, but will probably pick up again in the next few years in pace with increased housing investment. General government activity is also expected to remain buoyant.

The upturn and a further normalisation of the Norwegian economy may thus continue, but this presupposes that COVID-19 remains under control and that the vaccines are effective against any new mutations of the virus. New restrictions and a further escalation of the war in Ukraine may slow the economic recovery, both in Norway and in many other countries. We forecast that mainland GDP will increase by 3.6 per cent this year. This upturn is weaker than forecast in our previous economic report, which is attributable to the weaker global growth prospects. Mainland economic growth is subsequently assumed to slow for the remainder of the projection period.

A tighter labour market

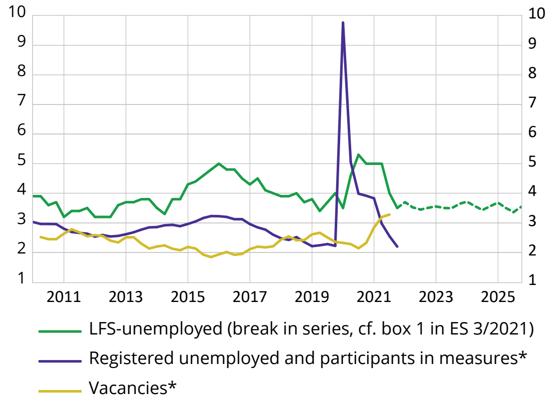
For the past two years, the labour market has been severely affected by measures implemented to manage the COVID-19 pandemic. From the time when the first extensive measures were implemented in March 2020 until the end of 2021, restrictions have had an especially strong impact on workers in service industries, such as accommodation and food service activities, and workers on short-term stays in Norway. The restrictive measures were combined with an expansionary monetary and fiscal policy which provided a strong stimulus to the economy as a whole. High unemployment through 2020 and in the first half of 2021 was followed by a decline in the second half of the year. Unemployment is now lower than the average for the ten-year period 2010– 2019.

Figure 15. Labour market status
Percent of population in working age, LFS*



* Break in LFS data series from 1. quarter 2021
** Unemployment is measured as share of population in working age
Source: Statistics Norway

Figure 16. Unemployed and number of vacancies
Percent of labour force and of the sum of occupied and vacant positions, seasonally adjusted and smoothed



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

According to the Labour Force Survey (LFS), average unemployment in the period from 2020 Q2 up to and including 2021 Q2 was 5.0 per cent, with a peak at 5.1 per cent in 2021 Q2. It then fell to 4.2 per cent in 2021 Q3 and 3.4 per cent in Q4, which represented 99 000 unemployed persons. The increase in LFS unemployment at the beginning of the pandemic would have been higher if unemployed furloughed workers had been included. At the beginning of the pandemic, there were up to 184 500 fully unemployed furloughed persons, but the number fell relatively rapidly, and in December 2021 there were only 7 800 unemployed furloughed workers.

Unemployment adjusted for breaks and seasonal variations was 3.5 per cent in 2021 Q4 and fell further to 3.3 per cent in December (the monthly figure is calculated as the average over the 3-month period November 2021–January 2022), compared to a historical average of 3.9 per cent in

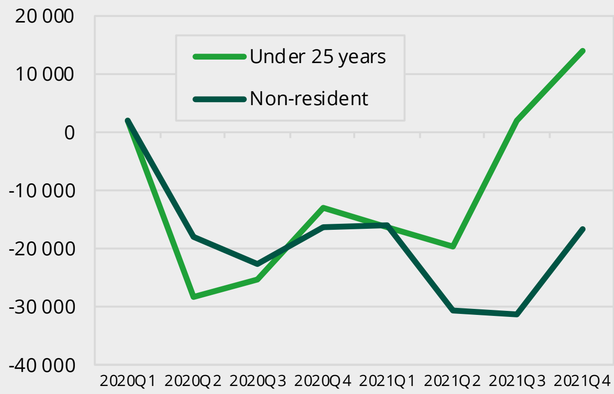
Box 4. Labour market groups especially impacted by the pandemic

Since the introduction of the first infection control measures in March 2020 and up to the end of 2021, some groups in the labour market have been more severely impacted than others. The effects have been particularly great for the group of wage-earners aged under 25, and for non-resident wage-earners.

Developments for these two groups have largely fluctuated in pace with changes for all wage-earners, but with greater relative variation. Many young workers have had jobs in industries, such as accommodation and food services, that have faced varying infection control measures.[1] Non-residents, who more often have jobs in industries such as manufacturing, construction and temporary labour services, have also been strongly affected by restrictions on travel to and from Norway.[2] Non-resident wage-earners have also previously been found to be more vulnerable to business cycles than other groups.[3]

A particular feature of young workers is that they often take vacation jobs. Young people, particularly school pupils and students, will be especially drawn to work during holidays. In both 2020 and 2021 there was a peak in the number of wage-earners under the age of 25 in the summer months, with numbers falling through the late summer and autumn. The upswing and peak around the summer for young workers was lower in 2020 than in 2021, reflecting the fact that in summer 2021 infection control measures were less extensive and that vaccination was more prevalent.

Change in number of wage-earners compared with same quarter in 2019. Wage-earners under 25 years old and non-resident wage-earners



[1] 1 The number of wage-earners under 25 years old is taken from Table 11656 in Statistikkbanken, while the number of non-resident wage-earners is taken from Table 13352 in Statistikkbanken.

Source: Statistics Norway.

The figure shows changes in the number of workers under the age of 25 and in the number of non-residents through 2020 and 2021 compared with the same quarter in 2019. Up to the first quarter of 2020, the change in the number of wage-earners was approximately the same for both groups, but in the last three quarters of 2021 persons under 25 clearly did better than non-residents. The changes relative to the sizes of the groups were much more pronounced for non-residents than for those under 25, in that in 2021 there were five times as many wage-earners under the age of 25 as non-resident wage-earners. In 2021 Q4 the number of wage-earners under the age of 25 had increased by 4 per cent compared to 2019 Q4, while the number of non-residents wage-earners had fallen by 17 per cent. The strong growth in employment among young people may indicate that the fall in the number of non-residents opened up opportunities in the labour markets, but it should be noted that we do not know what happened with the jobs previously carried out by non-residents.

[1] Non-residents are defined as persons registered in the National Population Registry Office with a planned stay in Norway of less than six months. Non-residents include persons with a temporary personal identity number or who are registered as having emigrated, but still work in Norway.

[2] See the article: Bakke, Stine (2018): Lønnstakere på korttidsopphold mer konjunkturutsatt. [Wage-earners on short-term stays more vulnerable to business cycles]. Available at: https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/lonnstakerne-pa-korttidsopphold-mer-konjunkturutsatt

[3] See the articles: Horgen, Erik Herstad (2018): Unge viktige for å holde hjulene i gang om sommeren [Young people important for keeping the wheels going round in the summer], available at: https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/unge-viktige-for-a-holde-hjulene-i-gang-om-sommeren and Grini, Knut Håkon and Tonje Køber (2020): I år er sommerjobben mer usikker [Summer jobs are more uncertain this year], available at: https://www.ssb.no/arbeid-og-lonn/artikler-og-publikasjoner/i-ar-er-sommerjobben-mer-usikker

the decade prior to the pandemic. Unemployment in December 2021 was 0.6 percentage point lower than in the same month in 2019, the year before the pandemic hit Norway. Unemployment adjusted for breaks and seasonal variations in the age group 15–25 years was 9.7 per cent in December 2021, 0.9 percentage point lower than in December 2019. Unemployment among women in the same age group fell by 1.2 percentage points in this period. A more detailed account of groups in the labour market particularly affected by the pandemic is provided in Box 4.

Employment and the labour force have both increased, and are now at higher levels than before the pandemic. According to the LFS, employment increased by 0.2 per cent from Q3 to Q4 and in 2021 Q4 was 3.1 per cent higher than in 2019 Q4. The labour force fell by 0.5 per cent from 2021 Q3 to Q4, but was still 2.7 per cent higher than in 2019 Q4. The break- and seasonally adjusted participation rate was around 71.4 per cent in the final months of 2021, which is close to the highest level observed since 2012.

The number of vacancies remained at a high level through 2021, peaking in Q2. The number fell somewhat in Q3 and Q4, but in 2021 Q4 was still 44 per cent higher than in the same quarter of 2020 and 35 per cent higher than in 2019 Q4.

The unemployment statistics of the Norwegian Labour and Welfare Organisation (NAV) confirm the impression that there is some pressure in the labour market. Registered unemployment fell for the most part through 2021, and in December accounted for 2.2 per cent of the labour force. Unemployment stabilised in the first two months of 2022 and was 2.3 per cent in February. By way of comparison, average unemployment in the period 2010–2019 was 2.7 per cent. The number of long-term unemployed, i.e. those who have been unemployed for more than 26 weeks, peaked in summer 2021 at around 40 per cent of the unemployed, but has fallen since. In February 2022, 20 300 persons were long-term unemployed, accounting for 31.5 per cent of all the unemployed.

The national accounts also show an increase in employment, which has now reached a higher level than before the COVID outbreak. Employment in 2021 Q4 was 3.2 per cent higher than in the same quarter the previous year, and 1.4 per cent higher than in 2019 Q4. The number of hours worked was 4.2 per cent higher than in the same period the previous year, and 0.6 per cent higher than in 2019 Q4. Employment developments have not been equally positive in all industries. Some industries that were particularly hard hit by the infection control measures still have lower employment than before the pandemic struck. Employment in accommodation and food service activities was 5.7 per cent lower in 2021 Q4 than in 2019 Q4. In Q4, employment in transport was 4.9 per cent lower, and in administrative and support services 3.8 per cent lower than in the same quarter two years previously. Conversely, employment in culture, entertainment and other services is now higher than in 2019. Another group which still has lower employment than prior to the pandemic is workers on short-term stays. In 2019 Q4, 3.6 per cent of all jobs were occupied by non-resident wage-earners, while in the corresponding quarter in 2021 this figure had fallen to 2.9 per cent, a reduction of 16 400 persons.

At the end of 2021 there were signs of a tight labour market, with unemployment that was lower than the average for recent years and employment that was higher than before the pandemic struck. Infection control measures have now been abolished in Norway, making it possible for employment to normalise also in those industries that have not yet recovered. There is nonetheless great uncertainty associated with developments in the Norwegian economy because of high inflation and the ongoing war in Ukraine. Monetary and fiscal policy may be tightened, both because the extraordinary measures introduced during the pandemic are being phased out and because interest rates have been exceptionally low for a long time. Even though the war in Ukraine means high revenue for the Norwegian state, we assume that it will increase the prices of many products and possibly dampen demand from our trading partners, causing weaker labour market developments than would otherwise have been the case. It is likely, therefore, that the labour market tightening seen at the end of 2021 will not continue to the same extent in the coming years. In 2022 we expect growth in hours worked of 2.1 per cent and employment growth of 2.4 per cent. Growth will be appreciably weaker in 2023, partly because the number of working days will fall by 0.9 per cent. In 2024 and 2025, annual growth in hours worked of 1.0 and 1.4 per cent, respectively, is expected. Employment is projected to increase by between 0.5 and 0.8 per cent in the period 2023 to 2025. We foresee average LFS unemployment of 3.5 per cent in 2022 followed by around 3.6 per cent in the period up to 2025. The labour force will grow by 0.9 per cent in 2022 and 1.0 per cent in 2023, and then increase negligibly, while changes in the participation rate will be modest. This is roughly as expected in our previous report, but with expectations of somewhat stronger employment growth in 2022 and somewhat lower unemployment through the projection period.

Weak growth in real wages

National accounts figures show growth in average annual wages of 3.5 per cent from 2020 to 2021. Given consumer price inflation of 3.5 per cent from 2020 to 2021, this means unchanged average real wages in 2021. A steadily tighter labour market coupled with increased bonus payments pushed up annual wage growth in 2021. As in 2020, growth in market-oriented industries in 2021 was somewhat higher than in general government. In retail trade and repair of motor vehicles, for example, average annual wages increased by 4.6 per cent in 2021, while the growth rate for professional, scientific and technical services was 5.5 per cent. Teaching and health and care services, two industries in which a large share of the services are provided by the public sector, reported annual wage growth of 2.2 and 3.0 per cent, respectively, in 2021.

The Technical Reporting Committee on Income Settlements (TBU) calculates annual wage growth for the largest negotiating areas. Preliminary calculations by TBU show annual wage growth for manufacturing workers in businesses under the Confederation of Norwegian Enterprise (NHO) of about 2.7 per cent in 2021, while the corresponding growth rate for clerical employees in manufacturing was roughly 3.2 per cent. Overall, annual wage growth for NHO manufacturing businesses is estimated to be 3.0 per cent in 2021. This is somewhat higher than the norm of 2.7 per cent estimated by NHO, in agreement with the Norwegian Confederation of Trade Unions (LO), for the 2021 wage settlement.

Growth in average annual wages can be decomposed into contributions from carry-over, pay increases 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 year, and provides important information about annual wage growth for the current year. The negotiated pay increase is the wage increase arising from central negotiations. Wage drift is the sum of all factors that affect annual wages other than carry-over and negotiated pay increase.

For manufacturing employees in NHO businesses, the carry-over was 1.0 percentage point, the negotiated pay increase 0.7 percentage point and wage drift 1 percentage point in 2021. For retail employees under the Federation of Norwegian Enterprise (Virke), where annual wage growth in 2021 has so far been estimated to be about 4.7 per cent, wage drift was 3.6 percentage points, with bonus payments contributing 1.4 percentage points. By way of comparison, wage drift for these enterprises averaged 2 percentage points over the period 2017– 2021.

The carry-over into 2022 for manufacturing employees in NHO businesses overall is estimated by the TBU to be about 1.3 percentage points, with 1 percentage point for manufacturing workers and about 1.3 percentage points for clerical employees in manufacturing. The carry-over from 2021 to 2022 is 1.6 percentage points for both central and local government employees, including 1.8 percentage points for municipally employed teachers. The estimated combined carry-over to 2022 is so far estimated to be 1.6 percentage points, which is higher than the average for the period 2017–2021.

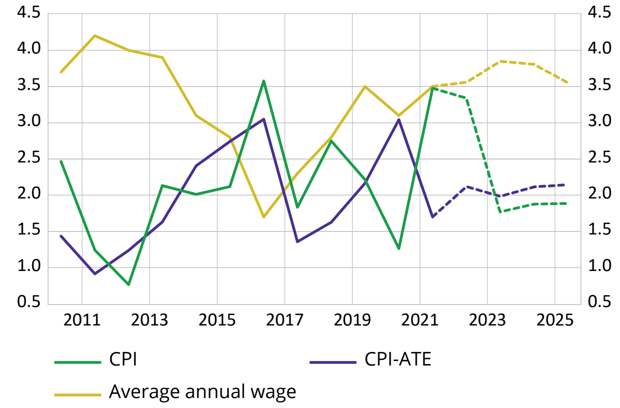
According to our calculations, annual wage growth will be 3.6 per cent in 2022 before increasing to just under 4 per cent approaching 2025. The war in Ukraine may bring about a further increase in the price of factor inputs through 2022 and hence reduce ability to pay to some extent, but this could be countered by several other factors. First and foremost, continued solid growth is expected in the profitability of some manufacturing and private service segments, which in turn may contribute positively to developments in annual wages. Vacancy figures in 2021 Q4 also show that there is still high demand for labour, and this pressure in the labour market may contribute to pushing up wage growth for the current year.[2]

Prospects of higher underlying inflation

The annual rise in the consumer price index (CPI) ended at 3.5 per cent in 2021, and inflation was thus appreciably higher than in 2020, when the CPI rose 1.3 per cent. The main reason for the higher inflation rate in 2021 was electricity prices, which were record-high in 2021 after being historically low in 2020. Electricity prices pushed up inflation through the whole of 2021, but particularly in the second half of the year. After falling at the start of the coronavirus pandemic in spring 2020, fuel prices have also increased substantially, and contributed to a higher overall rise in CPI inflation last year. The increase rates were modest compared with the rise in electricity prices, however. Electricity costs, including grid charges, rose by 71 per cent, and fuel prices rose by 12 per cent in 2021. The consumer price index excluding energy prices (CPI-AT) rose by 1.2 per cent from 2020 to 2021, making

[2] See the paper: Gading, Rakel (2022): Framleis stor etterspurnad etter arbeidskraft [Still strong demand for labour], available at: https://www.ssb.no/arbeid-og-lonn/sysselsetting/statistikk/ledige-stillingar/artikler/framleis-stor-etterspurnad-etter-arbeidskraft.

Figure 17. Consumer price indices and annual wage
Change from previous year in percent



Source: Statistics Norway

the contribution of energy products to higher CPI inflation a whole 2.3 percentage points. Underlying inflation measured by the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) was 1.7 per cent in 2021, and was thus 1.3 percentage points lower than in 2020, when the annual rise was 3.0 per cent. A lower rise in prices for both imported goods and goods and services produced in Norway pushed down CPI-ATE inflation from 2020 to 2021. In 2021, reductions in taxes on beer, wine, snus, chocolate and sugar products and non-alcoholic beverages contributed to reducing CPI inflation. A positive contribution to CPI inflation of 2.3 percentage points from energy products and a negative 0.5 percentage point from reductions in taxes on goods other than energy products brought the difference between the CPI-ATE and CPI inflation rates to 1.8 percentage points.

The 12-month rise in the CPI-ATE fell from 2.7 per cent in January 2021 to 0.9 per cent in October. This can largely be attributed to the exchange rate shock at the start of the pandemic in spring 2020, which resulted in high imported inflation and increased underlying inflation later in 2020. The appreciation of the krone from summer 2020 and into 2021 led to very low underlying inflation later in 2021. With increased rises in global prices for commodities, metals and shipping, and a strong rise in energy prices, underlying inflation was expected to pick up towards the end of last year. The annual rise in the CPI-ATE increased from 0.9 per cent in October to 1.8 per cent in December before falling to 1.3 per cent in January 2022. In February 2022, the 12-month rise in the CPI-ATE increased to 2.1 per cent. The most recent monthly movements are related to developments in prices for food and alcoholic beverages, which have risen very slowly this past year, and which fell from December to January, while there was a substantial price rise from January to February. Adjusted for tax changes, the 12-month rise in prices for food and alcoholic beverages in the CPI-ATE was negative in January, at -1.2 per cent, but reversed to a positive 1.3 per cent in February. Following the outbreak of war in Ukraine, global food prices are expected to increase further and lead to a higher rise in prices for food in Norway as well in the months ahead.

The Minister of Agriculture has signalled that the Government will take steps to increase Norway's food production because of the war in Ukraine, and in particular has announced that the offer in this year's agricultural settlement will contain higher target prices for grains and increased subsidies for fertilizer and other factor inputs over the state budget, to increase the profitability of grain production. Both Ukraine and Russia are among the world’s largest wheat exporters. According to the Directorate of Agriculture, global wheat prices have soared since the end of February and early March from an already high level as a result of the war in Ukraine. The UN Food and Agriculture Organisation (FAO) estimated on 11 March 2022 that lower production of grains and sunflower seed would lead to global fodder and food prices rising between 8 and 22 per cent from the current levels. According to Felleskjøpet, the market regulator for grain, in 2021 there was over 70 per cent Norwegian grain in Norwegian bread and other Norwegian grain-based products. To ensure that the flour and fodder concentrate industry is assured of access to products that are not produced in sufficient quantities in Norway it is necessary to import grain through import quotas with a reduced duty rate. The duty rate is normally set such that imported grain is approximately as expensive as Norwegian grain. In the current situation, where the global price of wheat is higher than Norwegian prices, the duty rate on import quotas is set at zero. According to Nortura, the market regulator for eggs and meat, in 2021 the market was again characterised by increased demand for eggs and meat as a consequence of the authorities’ measures against the spread of COVID-19. It was not possible to increase the production of raw materials in pace with demand, which resulted in increased imports. At

Table 4. The consumer price index – goods and services by consumption group

	Weight[1]	Change on previous year, per cent					
		2018	2019	2020	2021	Jan.2022	Feb.2022
Total	**1 000**	**2.7**	**2.2**	**1.3**	**3.5**	**3.2**	**3.7**
Food and non-alcoholic beverages	128.6	2.5	1.0	3.2	-2.0	-1.6	0.8
Alcoholic beverages and tobacco	42.0	2.2	2.7	2.7	-1.8	1.7	2.5
Clothing and footwear	50.9	-3.4	1.0	-1.7	-1.3	-2.3	-0.9
Housing, lighting, fuels	246.2	5.0	1.9	-3.5	10.0	7.2	5.8
Of which: Electricity including grid charges	39.7	25.6	0.7	-29.4	70.8	19.7	8.9
Furnishings, household equipment	68.9	1.2	2.4	6.8	3.7	3.6	4.9
Health	33.9	1.6	2.6	2.9	3.0	2.3	2.3
Transport	149.7	3.5	3.0	1.6	2.1	4.1	4.6
Of which: Purchase of vehicles	68.2	2.8	1.1	1.8	2.0	1.8	1.9
Communications	23.7	1.0	3.2	4.8	1.5	0.3	1.3
Recreation and culture	107.9	2.4	2.9	3.4	3.1	2.1	3.1
Education	4.9	6.2	4.3	3.1	1.9	2.0	2.0
Restaurants and hotels	56.2	2.8	2.6	2.1	3.3	5.1	5.4
Miscellaneous goods and services	87.2	1.5	1.4	3.6	2.6	1.8	2.1

[1] The weights apply from January 2022 to December 2022.
Source: Statistics Norway

Table 5. The consumer price index adjusted for tax changes and excluding energy products (CPI-ATE). by supplier sector

	Weight[1]	Change on previous year. per cent					
		2018	2019	2020	2021	Jan.2022	Feb.2022
Total	**1 000**	**1.6**	**2.2**	**3.0**	**1.7**	**1.3**	**2.1**
Norwegian products	146.6	1.3	2.1	3.0	1.4	-0.2	1.5
Imported goods	363.4	0.7	1.3	2.9	1.5	1.2	2.4
Rent	219.6	1.6	1.7	1.5	1.3	1.6	1.8
Services excluding rent	270.4	2.5	3.7	4.1	2.3	2.0	2.1
- with wages as dominant price factor	91.5	2.8	2.9	3.0	3.6	2.1	2.8
- with other important price components as well	178.8	2.4	4.0	4.6	1.7	1.8	1.8

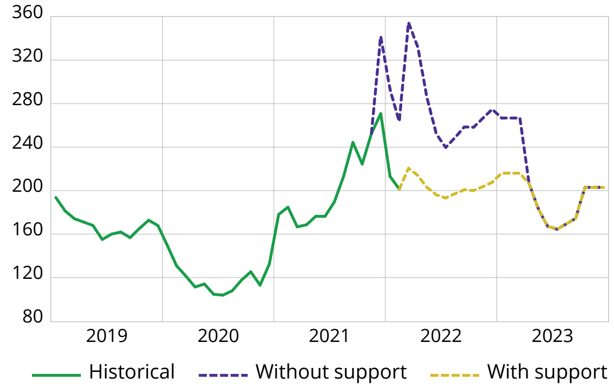
[1] The weights apply from January 2022 to December 2022.
Source: Statistics Norway

the end of the year there was little meat in regulatory stocks, while more eggs were produced than there was demand for in 2021. The need for meat additional to Norwegian production can initially be met by means of quota imports with reduced duty rates. Agricultural policy helps to ensure that global food prices do not feed through fully into the prices faced by consumers. The largest changes in food prices normally take place on two dates (1 February and 1 July) after new target prices are fixed in the agricultural negotiations. The extent to which the Government's investment in higher Norwegian food production is reflected in higher inflation depends on how much of the agricultural settlement takes the form of increased target prices and how much is financed through increased subsidies over the national budget. Food constitutes about 11 per cent of the basket of goods in the consumer price index. If the current situation persists, a continued rise in food prices must be expected. Higher global food prices will be of importance, but the orientation of the agricultural negotiations, developments in the costs of other factor inputs for producers and grocery chains, and mark-ups all contribute to great uncertainty regarding the effects on prices to consumers.

Observed and imputed rents, which account for over 20 per cent of consumption in the CPI, increased slightly through the second half of 2021 and have risen further at the start of 2022. The 12-month rise in rents was 1.6 per cent in January and 1.8 per cent in February. When rents increase more than they have done in the past, it contributes to pushing CPI-ATE inflation above Norges Bank's inflation target. Higher construction costs and nominal interest rates will help to maintain the rise in rents in the near term.

Air passenger transport contributed to slowing the rise in prices in January and February, with a considerable fall in prices. Because of the COVID-19 pandemic and very low travel figures, prices were imputed for parts of 2021. Given the develop-

Figure 18. Consumer price of electricity
Historical developement and forecast with and without support schemes. Grid rent and taxes are included. Index, 2015=100



Source: Statistics Norway

ments observed in oil prices and fuel costs, there is reason to expect that the rise in prices for air travel will pick up going forward.

Norwegian electricity prices are linked to European power prices through power exchange among the Nordic countries and Europe. Two new cables for power exchange with other countries, specifically Germany and the UK, came onstream last year. Electricity prices in 2021 were at a historically high level, both in Norway and in the countries around us. The electricity market in Norway is divided up into different price areas, and it is the southern areas that experienced the highest prices. On average, the spot price in Central and Northern Norway was approximately half the average spot price in Southern Norway in 2021.

Bottlenecks in the transmission network have contributed to these substantial price differences among the Norwegian spot price areas, and the differences appear to be persisting in the medium term. After rising very strongly in the second half of last year, spot prices fell in southern areas from record-high levels in December 2021 to February this year. A mild winter in Norway and Europe added to this tendency. Following Russia's invasion of Ukraine, spot prices in Southern Norway have again been well over NOK 2/kWh in periods in March. The price increases can primarily be attributed to an explosive rise in prices for gas and coal in Europe. This drives up prices for power futures contracts on the Continent, which in turn impacts the Nordic power market.

In the Nordic countries, most of the financial power futures trading takes place on the Nasdaq OMX exchange. As usual, we base our projection on the price for Nordic System Price futures contracts. Up until 2019, there were relatively small differences between the Nordic System Price and realised spot prices in the underlying Norwegian and Nordic electricity price areas. As the price differentials widened, we chose to supplement the system price with prices for Electricity Price Area Differentials (EPAD), which are forward contracts that cover the difference between the area price and the Nordic System Price. An area price differs from the system price when there are constraints in the transmission grid, and EPAD allows members of the exchange to hedge against this price differential. In the projection, price forecasts for the various Nordic price areas are weighted to give a common Norwegian spot price based on consumption ratios, and the area prices also form a basis for calculating electricity subsidies for households in areas that meet the requirements for support.

The Government has signalled that the temporary scheme of electricity subsidies to households will be extended up to March 2023 under the same conditions applying in 2022 Q1. We have made this the basis for our projection, and also assume that the low energy tax rate in Q1 will be maintained throughout the period with electricity subsidies. Statnett, the system operator of the Norwegian power system, has announced that the transmission grid tariff rate for general consumption will be set at zero from 1 April as a result of high income due to price differentials between Norway and other countries. We assume that local grid companies will extend the change in the central tariff to households, and that the previously announced rise in grid charges will not take place. In the projection, households' average grid charges excluding all taxes are approximately unchanged on an annual basis from 2021 to 2022. Figure 18 illustrates developments in the electricity price in the projection scenario as it is measured in the CPI, with and without subsidy schemes.

Forward power prices have risen very strongly since the outbreak of war in Ukraine, but in mid-March they fell back from the highest peaks. One reason for this is that the market has taken a more optimistic view of the supply situation for Russian gas. The figures in this projection are based on observed forward prices at the end of Week 10. On the basis of an assumed extension of the electricity subsidy scheme and reduced electricity tax, the average price of electricity including grid charges will only increase marginally from 2021 to 2022, and even if the subsidy schemes are terminated the average price will fall back by degrees in the years ahead. A gradual equalisation of Norwegian area prices will contribute to this development, as will an expectation that the European power market will normalise going forward. Fuel prices largely shadow developments in the oil price, and are undergoing a pronounced rise this year, projected to be 22 per cent. Given our projections for the oil price and the USD exchange rate, prices at the pump will dip somewhat in the second half of the year from the current high levels, but are expected to remain high in the years ahead. Fuel taxes will increase somewhat overall in 2022, but an increase in the CO2 tax will be partly compensated for by a reduced road tax. The effects of changes in taxes on energy products and the electricity subsidy are included in the price projections for energy products. Overall, higher prices for energy products are forecast to push up CPI inflation by 1.0 percentage point in 2022. The electricity subsidy and reduced tax on electricity consumption are forecast to curb the overall rise in the CPI by 1.2 percentage points in 2022.

In order to calculate the overall differential between the CPI and the CPI-ATE, the effect of tax increases excluding energy products must be added to the contribution from energy products. At the outset, the special taxes for 2022 were adjusted 1.3 per cent for inflation, in line with the proposal in last year's National Budget. Account must be taken of tax changes that were introduced or phased out in the course of 2021, and which have price effects extending into 2022. This applies to taxes on non-alcoholic beverages, which were discontinued on 1 July 2021, and the reversal of the low VAT rate from 1 October 2021. The Storting has elected to postpone the planned reintroduction of the air passenger tax until 1 July 2022. The tax on tobacco products has increased by 5 per cent more than the ordinary price adjustment from year-end. The one-off charge for passenger cars using fossil fuel and plug-in hybrid cars has risen, and in addition a full road traffic insurance tax and registration transfer fee (reduced rate) have been introduced for electric cars. Overall, tax changes on goods other than energy products are expected to push up CPI inflation by 0.2 percentage point in 2022. There is great uncertainty regarding cost developments going forward because of the war in Ukraine. It is expected that increased global market prices for commodities and freight and high energy prices will feed through into consumer prices in the months ahead. Higher inflation among our trading partners may lead to a higher rise in prices for finished products. The conflict may lead to a scarcity of some commodities and other factor inputs worldwide, which may have the effect of pushing up prices in Norway as well. The appreciation of the krone both last year and this will dampen the effects of higher global inflation. Changes in the krone exchange rate will affect prices for imported goods with a lag, and although we keep the exchange rate constant in the projection scenario as usual, it takes time for all the exchange rate effects to be exhausted. A shift of imports towards low-cost countries may also curb prices for imported goods. In the longer term, we assume that the global cost picture will normalise, and that the rise in import prices will gradually revert to more normal levels of around 2 per cent.

On the basis of the forecasts on which wage and productivity growth in this projection are based, CPI inflation is projected to be 3.3 per cent in 2022. Given the assumptions concerning developments in prices for energy products and for overall tax increases excluding energy products, the total difference between the CPI and the CPI-ATE is 1.2 percentage points in our projections. This means that CPI-ATE inflation will rise from 1.7 per cent to 2.1 per cent from 2021 to 2022.

For the years 2023–2025 we have adjusted the special tax rates for inflation with the exception of the electricity tax, which will rise again when the subsidy schemes are discontinued. We therefore assume that the special taxes excluding taxes on energy products will have a neutral effect on CPI inflation in the years ahead. CPI-ATE inflation will be approximately in line with Norges Bank's inflation target of 2 per cent for the remainder of the projection period. A gradual fall in electricity prices will leave CPI inflation 0.2 percentage point lower than CPI-ATE inflation in the years 2023–2025.

Table 6. National accounts: Final expenditure and gross domestic product. At constant 2019 prices. NOK million

	Unadjusted		Seasonally adjusted							
	2020	2021	20:1	20:2	20:3	20:4	21:1	21:2	21:3	21:4
Final consumption expenditure of households and NPISHs	1 475 350	1 548 628	382 138	343 975	373 794	377 066	364 679	375 093	397 715	410 352
Household final consumption expenditure	1 399 898	1 467 470	361 262	326 872	355 390	358 472	347 174	356 530	375 850	387 426
Goods	724 943	766 144	169 780	177 145	188 153	192 272	188 477	193 692	194 746	193 786
Services	663 908	691 907	177 436	150 561	166 430	168 386	160 250	163 815	177 902	187 211
Direct purchases abroad by resident households	27 918	25 443	25 508	685	3 813	2 115	1 476	1 426	7 781	14 751
Direct purchases by non-residents	-16 871	-16 024	-11 462	-1 519	-3 005	-4 300	-3 029	-2 403	-4 579	-8 322
Final consumption expenditure of NPISHs	75 452	81 158	20 877	17 104	18 404	18 594	17 504	18 563	21 865	22 926
Final consumption expenditure of general government	883 555	917 596	220 145	213 112	222 291	228 045	225 250	227 718	232 207	232 545
Final consumption expenditure of central government	437 404	450 722	108 744	104 998	110 754	112 996	110 237	111 549	114 180	114 796
Central government, civilian	384 686	396 852	95 823	91 933	97 488	99 527	96 843	98 075	100 726	101 247
Central government, defence	52 718	53 870	12 920	13 065	13 267	13 469	13 394	13 474	13 454	13 550
Final consumption expenditure of local government	446 151	466 874	111 402	108 113	111 537	115 048	115 014	116 169	118 027	117 748
Gross fixed capital formation	903 710	901 033	230 386	225 021	222 337	225 615	224 152	223 816	221 832	231 061
Extraction and transport via pipelines	171 482	166 621	44 747	43 520	41 088	42 080	40 738	43 424	41 372	41 072
Ocean transport	5 625	2 234	2 135	347	1 618	1 524	1 675	137	148	273
Mainland Norway	726 603	732 178	183 504	181 154	179 630	182 010	181 739	180 256	180 312	189 716
Industries	325 798	333 007	85 453	80 006	79 238	80 931	82 948	83 428	81 089	85 453
Service activities incidential to extraction	2 708	2 527	857	758	624	463	580	614	675	654
Other services	197 898	209 064	51 792	47 319	47 954	50 810	50 330	50 754	53 057	54 920
Manufacturing and mining	47 435	48 406	12 627	11 647	11 832	11 272	11 793	12 164	11 195	13 215
Production of other goods	77 757	73 009	20 177	20 281	18 828	18 385	20 244	19 897	16 162	16 663
Dwellings (households)	188 904	193 825	47 335	47 146	46 007	48 400	48 419	49 838	46 782	48 776
General government	211 901	205 347	50 716	54 002	54 386	52 680	50 371	46 989	52 441	55 486
Acquisitions less disposals of valuables	158	270	85	8	41	23	0	41	105	124
Changes in stocks and statistical discrepancies	90 245	85 408	33 096	11 020	24 034	13 495	17 864	19 642	23 484	14 181
Gross capital formation	994 113	986 711	263 568	236 049	246 412	239 133	242 016	243 499	245 421	245 365
Final domestic use of goods and services	3 353 017	3 452 935	865 851	793 136	842 497	844 244	831 945	846 310	875 344	888 262
Final demand from Mainland Norway	3 085 508	3 198 403	785 788	738 241	775 715	787 121	771 668	783 066	810 234	832 612
Final demand from general government	1 095 456	1 122 943	270 861	267 113	276 676	280 724	275 622	274 707	284 648	288 031
Total exports	1 276 402	1 337 203	327 411	306 938	317 696	323 284	322 534	328 074	349 284	340 054
Traditional goods	422 840	451 171	106 425	99 249	106 680	109 146	113 283	112 156	113 244	110 633
Crude oil and natural gas	518 501	533 037	123 451	130 143	129 902	131 734	126 284	132 381	140 660	135 942
Ships, oil platforms and planes	8 333	13 335	3 333	1 690	2 183	1 126	1 573	3 082	7 704	975
Services	326 728	339 661	94 203	75 855	78 932	81 278	81 393	80 454	87 677	92 503
Total use of goods and services	4 629 419	4 790 139	1 193 263	1 100 074	1 160 193	1 167 527	1 154 479	1 174 383	1 224 627	1 228 315
Total imports	1 091 492	1 113 430	300 507	248 906	270 831	272 536	259 818	272 492	287 296	290 332
Traditional goods	717 639	756 633	177 835	164 653	184 064	187 886	179 518	190 590	194 533	188 499
Crude oil and natural gas	22 214	19 194	6 973	4 996	4 692	5 506	4 452	8 147	2 867	3 581
Ships, oil platforms and planes	32 766	29 735	9 985	8 865	8 581	5 335	6 100	5 616	10 088	7 931
Services	318 872	307 869	105 713	70 393	73 494	73 809	69 748	68 138	79 808	90 321
Gross domestic product (market prices)	3 537 927	3 676 709	892 756	851 167	889 362	894 991	894 661	901 891	937 331	937 983
Gross domestic product Mainland Norway (market prices)	2 992 002	3 116 548	757 981	713 535	749 036	763 057	758 417	765 725	787 063	798 412
Petroleum activities and ocean transport	545 925	560 161	134 775	137 632	140 327	131 934	136 244	136 166	150 268	139 572
Mainland Norway (basic prices)	2 601 672	2 706 243	661 360	620 626	650 039	662 404	659 446	664 825	683 078	692 739
Mainland Norway excluding general govern-ment	1 929 791	2 008 189	492 946	459 201	480 511	489 853	488 793	492 251	506 273	514 717
Manufacturing and mining	220 897	227 470	56 802	53 641	54 742	56 755	57 608	57 530	57 509	57 002
Production of other goods	361 249	371 694	89 529	88 239	90 407	91 549	92 603	92 019	93 429	92 488
Services incl. dwellings (households)	1 347 645	1 409 025	346 615	317 321	335 363	341 549	338 582	342 701	355 335	365 228
General government	671 881	698 053	168 414	161 425	169 527	172 550	170 653	172 574	176 805	178 022
Taxes and subsidies products	390 330	410 305	96 621	92 909	98 997	100 654	98 971	100 900	103 985	105 673

Source: Statistics Norway.

Table 7. National accounts: Final expenditure and gross domestic product. At constant 2019 prices. Percentage change from previous period

	Unadjusted		Seasonally adjusted							
	2020	2021	20:1	20:2	20:3	20:4	21:1	21:2	21:3	21:4
Final consumption expenditure of households and NPISHs	-6.6	5.0	-3.5	-10.0	8.7	0.9	-3.3	2.9	6.0	3.2
Household final consumption expenditure	-6.3	4.8	-3.5	-9.5	8.7	0.9	-3.2	2.7	5.4	3.1
Goods	6.5	5.7	-0.6	4.3	6.2	2.2	-2.0	2.8	0.5	-0.5
Services	-10.3	4.2	-5.1	-15.1	10.5	1.2	-4.8	2.2	8.6	5.2
Direct purchases abroad by resident households	-77.6	-8.9	-15.7	-97.3	456.6	-44.5	-30.2	-3.4	445.7	89.6
Direct purchases by non-residents	-67.5	-5.0	-15.7	-86.7	97.8	43.1	-29.6	-20.7	90.5	81.8
Final consumption expenditure of NPISHs	-11.7	7.6	-3.4	-18.1	7.6	1.0	-5.9	6.0	17.8	4.9
Final consumption expenditure of general government	1.8	3.9	0.5	-3.2	4.3	2.6	-1.2	1.1	2.0	0.1
Final consumption expenditure of central government	3.2	3.0	1.1	-3.4	5.5	2.0	-2.4	1.2	2.4	0.5
Central government, civilian	3.0	3.2	1.1	-4.1	6.0	2.1	-2.7	1.3	2.7	0.5
Central government, defence	4.6	2.2	1.4	1.1	1.5	1.5	-0.6	0.6	-0.1	0.7
Final consumption expenditure of local government	0.6	4.6	-0.2	-3.0	3.2	3.1	0.0	1.0	1.6	-0.2
Gross fixed capital formation	-5.6	-0.3	-7.0	-2.3	-1.2	1.5	-0.6	-0.1	-0.9	4.2
Extraction and transport via pipelines	-4.1	-2.8	-5.6	-2.7	-5.6	2.4	-3.2	6.6	-4.7	-0.7
Ocean transport	-77.5	-60.3	-79.6	-83.8	366.8	-5.8	9.9	-91.8	8.2	84.2
Mainland Norway	-3.6	0.8	-3.4	-1.3	-0.8	1.3	-0.1	-0.8	0.0	5.2
Industries	-5.0	2.2	-1.3	-6.4	-1.0	2.1	2.5	0.6	-2.8	5.4
Service activities incidential to extraction	-35.1	-6.7	-24.7	-11.6	-17.8	-25.7	25.2	5.8	10.0	-3.1
Other services	-3.5	5.6	2.0	-8.6	1.3	6.0	-0.9	0.8	4.5	3.5
Manufacturing and mining	-8.0	2.0	-4.2	-7.8	1.6	-4.7	4.6	3.1	-8.0	18.1
Production of other goods	-5.3	-6.1	-6.0	0.5	-7.2	-2.4	10.1	-1.7	-18.8	3.1
Dwellings (households)	-4.0	2.6	-0.7	-0.4	-2.4	5.2	0.0	2.9	-6.1	4.3
General government	-1.1	-3.1	-9.0	6.5	0.7	-3.1	-4.4	-6.7	11.6	5.8
Acquisitions less disposals of valuables	-61.0	70.8	-19.3	-90.1	391.8	-43.5	-98.7	..	154.3	17.9
Changes in stocks and statistical discrepancies	-14.7	-5.4	178.6	-66.7	118.1	-43.9	32.4	10.0	19.6	-39.6
Gross capital formation	-6.6	-0.7	1.4	-10.4	4.4	-3.0	1.2	0.6	0.8	0.0
Final domestic use of goods and services	-4.5	3.0	-1.1	-8.4	6.2	0.2	-1.5	1.7	3.4	1.5
Final demand from Mainland Norway	-3.6	3.7	-2.4	-6.1	5.1	1.5	-2.0	1.5	3.5	2.8
Final demand from general government	1.3	2.5	-1.5	-1.4	3.6	1.5	-1.8	-0.3	3.6	1.2
Total exports	-1.2	4.8	-2.1	-6.3	3.5	1.8	-0.2	1.7	6.5	-2.6
Traditional goods	-2.5	6.7	-2.6	-6.7	7.5	2.3	3.8	-1.0	1.0	-2.3
Crude oil and natural gas	11.9	2.8	-3.2	5.4	-0.2	1.4	-4.1	4.8	6.3	-3.4
Ships, oil platforms and planes	-32.8	60.0	65.2	-49.3	29.1	-48.4	39.7	95.9	149.9	-87.3
Services	-14.7	4.0	-1.5	-19.5	4.1	3.0	0.1	-1.2	9.0	5.5
Total use of goods and services	-3.6	3.5	-1.3	-7.8	5.5	0.6	-1.1	1.7	4.3	0.3
Total imports	-11.9	2.0	-2.4	-17.2	8.8	0.6	-4.7	4.9	5.4	1.1
Traditional goods	-2.5	5.4	-1.8	-7.4	11.8	2.1	-4.5	6.2	2.1	-3.1
Crude oil and natural gas	-8.9	-13.6	-2.0	-28.4	-6.1	17.3	-19.1	83.0	-64.8	24.9
Ships, oil platforms and planes	-8.4	-9.3	42.1	-11.2	-3.2	-37.8	14.3	-7.9	79.6	-21.4
Services	-28.0	-3.5	-6.3	-33.4	4.4	0.4	-5.5	-2.3	17.1	13.2
Gross domestic product (market prices)	-0.7	3.9	-1.3	-4.7	4.5	0.6	0.0	0.8	3.9	0.1
[Gross domestic product Mainland Norway (market prices)	-2.3	4.2	-1.8	-5.9	5.0	1.9	-0.6	1.0	2.8	1.4
Petroleum activities and ocean transport	9.1	2.6	1.5	2.1	2.0	-6.0	3.3	-0.1	10.4	-7.1
Mainland Norway (basic prices)	-2.4	4.0	-1.6	-6.2	4.7	1.9	-0.4	0.8	2.7	1.4
Mainland Norway excluding general government	-3.0	4.1	-1.8	-6.8	4.6	1.9	-0.2	0.7	2.8	1.7
Manufacturing and mining	-2.5	3.0	-1.3	-5.6	2.1	3.7	1.5	-0.1	0.0	-0.9
Production of other goods	0.5	2.9	-0.1	-1.4	2.5	1.3	1.2	-0.6	1.5	-1.0
Services incl. dwellings (households)	-4.0	4.6	-2.3	-8.5	5.7	1.8	-0.9	1.2	3.7	2.8
General government	-0.5	3.9	-0.9	-4.1	5.0	1.8	-1.1	1.1	2.5	0.7
Taxes and subsidies products	-2.1	5.1	-3.5	-3.8	6.6	1.7	-1.7	1.9	3.1	1.6

Source: Statistics Norway.

Table 8. National accounts: Final expenditure and gross domestic product. Price indices. 2019=100

	Unadjusted		Seasonally adjusted							
	2020	2021	20:1	20:2	20:3	20:4	21:1	21:2	21:3	21:4
Final consumption expenditure of households and NPISHs	101.7	104.4	101.1	101.2	101.9	102.0	103.3	103.5	104.8	105.7
Final consumption expenditure of general government	102.5	105.3	101.9	104.7	102.3	101.2	104.3	104.6	104.3	107.8
Gross fixed capital formation	103.1	107.3	101.6	104.0	103.3	103.6	104.3	106.4	108.5	109.7
Mainland Norway	102.5	107.3	101.1	103.2	103.0	102.6	104.0	106.4	108.8	109.8
Final domestic use of goods and services	102.6	105.1	101.9	102.1	102.1	103.7	103.5	105.3	107.2	103.9
Final demand from Mainland Norway	102.1	105.3	101.3	102.7	102.3	101.9	103.7	104.5	105.5	107.2
Total exports	86.2	128.8	91.7	80.1	86.1	86.8	101.0	110.4	132.0	169.2
Traditional goods	96.6	109.2	101.2	97.0	93.6	95.2	99.7	104.6	111.6	121.4
Total use of goods and services	98.0	111.7	99.1	96.0	97.7	99.0	102.8	106.7	114.2	122.0
Total imports	103.4	108.4	102.1	104.4	103.1	104.0	104.6	106.1	109.9	112.5
Traditional goods	104.2	109.9	101.2	97.0	93.6	95.2	99.7	104.6	111.6	121.4
Gross domestic product (market prices)	96.4	112.7	98.1	93.5	96.1	97.5	102.2	106.9	115.6	124.9
Gross domestic product Mainland Norway (market prices)	101.7	104.8	101.9	102.2	101.5	101.4	102.8	104.1	104.8	107.0

Source: Statistics Norway.

Table 9. National accounts: Final expenditure and gross domestic product. Price indices. Percentage change from previous period

	Unadjusted		Seasonally adjusted							
	2020	2021	20:1	20:2	20:3	20:4	21:1	21:2	21:3	21:4
Final consumption expenditure of households and NPISHs	1.7	2.7	0.2	0.1	0.7	0.1	1.2	0.2	1.2	0.9
Final consumption expenditure of general government	2.5	2.7	0.9	2.7	-2.3	-1.0	3.0	0.3	-0.3	3.3
Gross fixed capital formation	3.1	4.0	1.0	2.4	-0.7	0.3	0.7	2.0	1.9	1.1
Mainland Norway	2.5	4.7	0.8	2.1	-0.2	-0.4	1.4	2.3	2.3	0.9
Final domestic use of goods and services	2.6	2.4	0.0	0.3	0.0	1.6	-0.2	1.7	1.8	-3.1
Final demand from Mainland Norway	2.1	3.2	0.5	1.3	-0.4	-0.4	1.8	0.7	1	1.6
Total exports	-13.8	49.5	-5.9	-12.7	7.4	0.8	16.4	9.3	19.6	28.2
Traditional goods	-3.4	13.1	-0.1	-4.2	-3.5	1.7	4.7	5.0	6.7	8.8
Total use of goods and services	-2.0	13.9	-1.6	-3.1	1.8	1.3	3.8	3.8	7.1	6.8
Total imports	3.4	4.8	0.2	2.3	-1.3	0.9	0.6	1.4	3.6	2.3
Traditional goods	4.2	5.5	0.5	3.8	-1.2	-0.4	1.6	1.5	4.2	2.2
Gross domestic product (market prices)	-3.6	16.9	-1.8	-4.7	2.7	1.5	4.9	4.5	8.2	8.1
Gross domestic product Mainland Norway (market prices)	1.7	3.0	1.0	0.3	-0.7	-0.1	1.4	1.3	0.6	2.1

Source: Statistics Norway.

Table 10. Main economic indicators 2013-2025. Accounts and forecasts. Percentage change from previous year unless otherwise noted

										Forecasts			
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Demand and output													
Consumption in households etc.	2.8	2.1	2.7	1.1	2.2	1.6	1.1	-6.6	5.0	7.8	3.3	2.2	2.4
General government consumption	1.0	2.7	2.4	2.3	1.9	0.5	1.3	1.8	3.9	1.2	1.2	2.0	1.6
Gross fixed investment	6.3	-0.3	-4.0	3.9	2.6	2.2	9.5	-5.6	-0.3	3.3	4.3	3.2	1.0
Extraction and transport via pipelines	19.0	-1.8	-12.2	-16.0	-5.4	0.7	14.3	-4.1	-2.8	-6.0	9.0	6.5	0.0
Mainland Norway	2.9	0.4	-0.2	9.0	6.8	1.5	6.3	-3.6	0.8	4.5	3.4	2.5	1.3
Industries	-3.2	-0.7	-2.8	12.6	9.2	3.1	10.3	-5.0	2.2	7.2	5.3	2.4	0.9
Housing	5.3	-1.4	3.2	6.6	7.3	-6.5	-1.1	-4.0	2.6	2.5	2.2	2.0	1.6
General government	11.8	4.5	0.2	6.4	2.6	8.1	7.5	-1.1	-3.1	2.2	1.2	3.0	1.7
Demand from Mainland Norway[1]	2.3	1.9	2.0	3.1	3.1	1.3	2.3	-3.6	3.7	5.2	2.7	2.2	1.9
Exports	-1.8	3.4	4.3	1.1	1.7	-1.2	1.1	-1.2	4.8	4.2	3.5	2.6	1.5
Traditional goods	1.3	3.1	6.9	-8.6	1.7	1.5	4.9	-2.5	6.7	1.8	2.5	2.8	3.2
Crude oil and natural gas	-5.5	2.7	2.1	4.9	5.1	-5.0	-3.7	11.9	2.8	3.3	4.9	2.3	-1.3
Imports	5.0	2.0	1.9	2.7	1.9	1.4	5.1	-11.9	2.0	8.2	4.3	3.6	3.0
Traditional goods	1.8	1.9	2.8	-0.2	3.8	2.9	5.6	-2.5	5.4	4.4	2.8	2.4	2.5
Gross domestic product	1.0	2.0	2.0	1.1	2.3	1.1	0.7	-0.7	3.9	3.5	2.7	2.1	1.3
Mainland Norway	2.3	2.2	1.4	0.9	2.0	2.2	2.0	-2.3	4.2	3.6	2.5	2.1	1.7
Manufacturing	3.3	2.8	-4.6	-4.2	0.0	1.7	2.0	-2.5	3.0	3.1	1.1	1.1	1.3
Labour market													
Total hours worked. Mainland Norway	0.4	1.4	0.6	0.6	0.5	1.6	1.5	-2.1	2.5	2.1	0.4	1.0	1.4
Employed persons	1.1	1.0	0.4	0.3	1.1	1.6	1.6	-1.5	1.2	2.4	0.8	0.5	0.8
Labor force	1.2	0.7	1.5	0.2	-0.2	1.4	1.0	0.4	2.2	0.9	1.2	0.4	0.4
Participation rate (level)	71.2	70.7	71.0	70.4	69.7	70.2	70.5	70.4	72.1	72.4	73.0	72.9	72.9
Unemployment rate (level)	3.8	3.6	4.5	4.7	4.2	3.8	3.7	4.6	4.4	3.5	3.6	3.6	3.6
Prices and wages													
Wages per standard man-year	3.9	3.1	2.8	1.7	2.3	2.8	3.5	3.1	3.5	3.6	3.8	3.8	3.6
Consumer price index (CPI)	2.1	2.0	2.1	3.6	1.8	2.7	2.2	1.3	3.5	3.3	1.8	1.9	1.9
CPI-ATE[2]	1.6	2.4	2.7	3.0	1.4	1.6	2.2	3.0	1.7	2.1	2.0	2.1	2.1
Export prices. traditional goods	2.7	3.4	2.0	4.0	5.2	6.2	0.7	-3.4	13.1	12.0	-2.1	-0.4	0.4
Import prices. traditional goods	1.4	4.3	4.6	1.7	3.5	4.6	2.5	4.2	5.5	5.2	0.4	0.9	1.2
Housing prices	4.0	2.7	6.1	7.0	5.0	1.4	2.5	3.9	10.5	4.8	3.6	2.4	0.9
Income. interest rates and excange rate													
Household real income	4.0	2.3	5.4	-1.6	2.0	1.0	2.1	2.0	3.2	2.7	3.1	2.4	2.4
Household saving ratio (level)	7.2	7.7	9.8	6.9	6.6	5.9	7.0	14.2	13.1	8.5	8.6	9.0	9.2
Norges Bank's policy rate (level)	1.8	1.7	1.3	1.1	0.9	1.1	1.6	0.7	0.5	1.2	1.7	2.0	2.0
Lending rate. credit loans(level)[3]	4.0	3.9	3.2	2.6	2.6	2.7	3.0	2.6	2.1	2.6	3.1	3.5	3.5
Real after-tax lending rate. banks (level)	0.7	0.8	0.1	-1.6	0.1	-0.7	0.2	0.7	-1.8	-1.3	0.6	0.8	0.8
Importweighted krone exchange rate (44 countries)[4]	2.2	5.3	10.5	1.8	-0.8	0.1	2.9	6.7	-5.3	-1.9	-0.2	0.0	0.0
NOK per euro (level)	7.81	8.35	8.95	9.29	9.33	9.60	9.85	10.72	10.16	9.88	9.86	9.86	9.86
Current account													
Current balance (bill. NOK)[5]	317	341	250	138	180	283	103	38	636	1065	811	637	515
Current account (per cent of GDP)	10.3	10.8	8.0	4.5	5.5	8.0	2.9	1.1	15.3	21.7	16.7	13.1	10.4
International indicators													
Exports markets indicator	1.8	4.8	5.4	3.8	5.6	4.1	3.1	-8.4	9.2	6.9	4.8	4.5	5.0
Consumer price index. euro-area	1.4	0.4	0.2	0.2	1.5	1.8	1.2	0.3	2.6	5.2	1.2	2.0	2.0
Money market rate. euro(level)	0.2	0.2	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	-0.2	0.5	0.8	1.5
Crude oil price US dollar (level)[6]	109	100	53	45	55	72	64	43	71	98	86	80	76
Crude oil price NOK (level)[6]	639	627	431	379	452	583	564	407	609	888	776	720	687

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

[2] CPI adjusted for tax changes and excluding energy products.

[3] Yearly average. Credit lines, secured on dwellings.

[4] Increasing index implies depreciation.

[5] Current account not adjusted for saving in pension funds.

[6] Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was 16 March 2022.