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Economic Survey

2023 / 2

Economic developments in Norway

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Economic developments in Norway

Last year was characterised by high inflation, interest rate hikes and a rebound in economic activity following the Covid-19 (coronavirus) pandemic. Growth in the Norwegian economy has slowed so far this year, and mainland GDP is close to what we regard as a trend level. The key policy rate has been raised by 0.5 percentage point this year and is currently 3.25 per cent. At the same time, inflation measured by the consumer price index (CPI) has fallen after peaking in October last year, which is a sign that unemployment is rising, but from a low level. Inflation is expected to fall further going

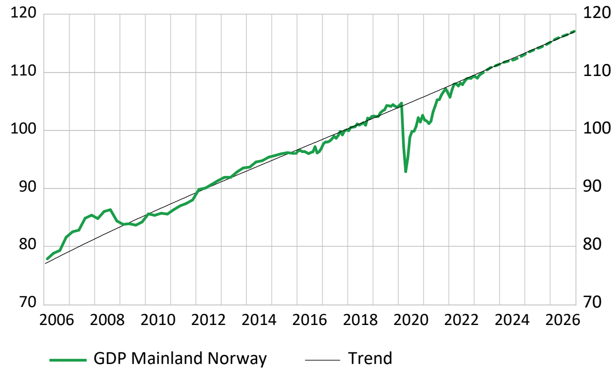
Table 1. Main macroeconomic aggregates. Accounts figures. Change from previous period. Per cent

	2021	2022	Seasonally adjusted			
			22:2	22:3	22:4	23:1
Demand and output						
Consumption in households etc.	4.4	6.9	2.4	0.4	5.2	-5.1
General government consumption	5.0	0.1	0.4	0.2	1.2	0.5
Gross fixed investment	-0.8	4.3	0.3	0.2	1.3	-0.1
Extraction and transport via pipelines	-2.1	-6.5	3.9	-2.7	5.2	-1.6
Mainland Norway	1.7	6.7	0.4	0.7	0.8	-0.6
Final domestic demand from Mainland Norway[1]	4.0	4.9	1.4	0.4	3.1	-2.6
Exports	5.8	5.9	2.2	4.6	-0.8	1.7
Traditional goods	4.6	-0.3	1.1	5.2	-1.1	0.5
Crude oil and natural gas	2.9	0.3	0.2	3.4	-1.6	0.1
Imports	1.7	9.2	3.3	3.1	1.8	0.3
Traditional goods	5.7	2.5	1.0	2.9	2.1	-4.7
Gross domestic product	3.9	3.3	1.0	1.2	-0.0	0.2
Mainland Norway	4.2	3.8	1.0	0.4	0.6	0.2
Labour market						
Total hours worked. Mainland Norway	2.5	3.9	0.8	0.4	0.4	0.6
Employed persons	1.2	3.9	0.6	0.5	0.5	0.5
Labour force[2]	1.2	1.4	0.1	-0.0	0.0	0.7
Unemployment rate. level[2]	4.4	3.2	3.2	3.2	3.2	3.7
Prices and wages						
Annual earnings	3.5	4.3	..	..	..	..
Consumer price index (CPI)[3]	3.5	5.8	2.0	1.9	1.4	1.3
CPI adjusted for tax changes and excluding energy products (CPI-ATE)[3]	1.7	3.9	1.4	1.7	1.5	1.5
Export prices, traditional goods	13.2	29.1	4.1	1.6	1.6	0.8
Import prices, traditional goods	5.3	18.0	4.3	3.5	-0.2	2.9
Balance of payment						
Current balance, bill. NOK[4]	574	1 691	345	592	361	281
Memorandum items (unadjusted level)						
Money market rate (3 month NIBOR)	0.1	1.3	0.8	1.5	2.4	2.8
Lending rate, credit loans[5]	0.5	0.7	2.5	2.9	3.8	4.4
Crude oil price NOK[6]	609	951	1 052	973	903	840
Importweighted krone exchange rate, 44 countries, 1995=100	108.8	110.0	109.8	110.8	112.3	116.8
NOK per euro	10.16	10.10	10.04	10.06	10.39	10.99

[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.

Figure 1. GDP Mainland Norway and estimated trend

Seasonally adjusted, index 2020 = 100

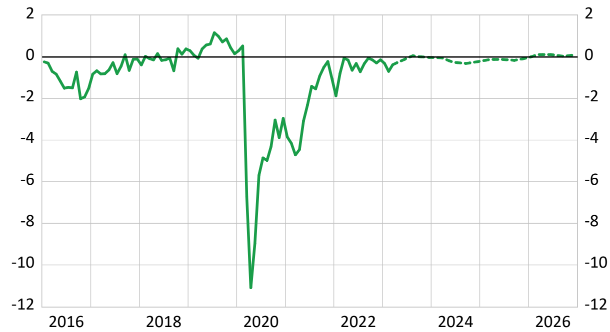


* Quarterly figures before 2016, monthly after. The trend is estimated by an HP-filter (lambda = 40 000 quarterly), but such that the trend is not directly affected by the developement of economic activity in 2020 and 2021

Source: Statistics Norway

Figure 2. Output gap, Mainland Norway

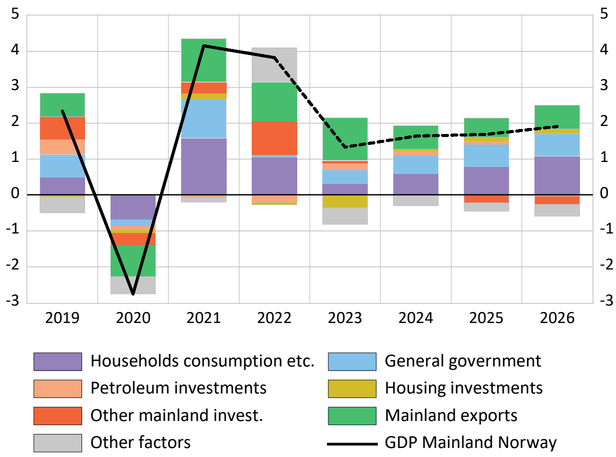
Deviation form estimated trend GDP in percent, monthly frequency



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.

forward, but with a steadily weaker krone, it will take somewhat longer than previously assumed before inflation comes down close to the inflation target. We forecast that the interest rate will be raised in both June and September, bringing the policy rate to a peak of 3.75 per cent. Although mainland GDP growth has slowed so far this year, we still expect growth in the years ahead to be close to trend, at around 1.7 per cent; see Figure 1.

The Norwegian economy reflects the effects of the weak krone at present. In 2022 one euro cost between NOK 9.40 and NOK 10.60. At the beginning of June this year a euro cost NOK 11.90. We assume that exchange rates will remain unchanged in the near term, which means a record depreciation of the krone this year, measured in terms of the import-weighted krone exchange rate.

The weak krone exchange rate means that imported goods become more expensive, thereby contributing to higher inflation in Norway in the years ahead than previously assumed. Although inflation measured by the CPI is high at present, and the krone has weakened recently, inflation is on the way down. Developments in energy prices in particular are pushing down inflation, and we expect inflation measured by the CPI to be lower than inflation measured by the CPI adjusted for tax changes and excluding energy products (CPI-ATE). Fuel prices will initially make the largest contribution to lower CPI than CPI-ATE inflation, and from August a substantial contribution is also expected from electricity prices. CPI and CPI-ATE inflation are forecast to be 5.6 and 6.0 per cent, respectively, this year. Underlying inflation remains at a high level because it takes time for higher labour costs and global inflationary impulses, measured in NOK, to be passed through into higher consumer prices. However, rapidly falling global inflation will gradually push down underlying inflation in Norway, and the annual rise in the CPI-ATE is expected to fall to around 3 per cent by the end of 2024. Given this picture, and based on developments in forward prices for energy products, CPI inflation will fall to approach the inflation target of 2 per cent in 2025.

Norges Bank has raised the policy rate from 0 per cent to 3.25 per cent since September 2021, and the interest rate increases are acting as a brake on economic activity. Norges Bank sets the interest rate primarily to stabilise inflation at around 2

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

	QNA				Projection			
	2019	2020	2021	2022	2023	2024	2025	2026
GDP Mainland Norway	2.3	-2.8	4.2	3.8	1.3	1.6	1.7	1.9
with contributions from:								
Consumption by households and non-profit organisations	0.5	-0.7	1.6	1.1	0.3	0.6	0.8	1.1
General government consumption and investment	0.6	-0.2	1.1	0.1	0.4	0.5	0.6	0.6
Petroleum investment	0.4	-0.1	-0.1	-0.2	0.2	0.1	0.1	0.0
Housing investment	-0.1	-0.1	0.2	-0.1	-0.4	0.0	0.1	0.1
Other mainland investment	0.6	-0.3	0.3	0.9	0.1	0.0	-0.2	-0.2
Exports from mainland Norway[1]	0.7	-0.9	1.2	1.1	1.2	0.7	0.5	0.7
Other factors etc.[1]	-0.4	-0.5	-0.1	0.9	-0.5	-0.3	-0.2	-0.3

[1] See explanation under Figure 3.
Source: Statistics Norway.

per cent and ensure financial stability. The central bank also takes into account that higher interest rates influence activity in the Norwegian economy, with the result that greater numbers may become unemployed in the short to medium term. Achieving a balance between these different objectives is particularly demanding in a period with higher global inflation.[1] As a result of the recent depreciation of the krone, inflation is remaining high, and we assume there will be two further interest rate hikes in 2023. In 2024 the interest rate will be cut a little again as a consequence of increasing unemployment and lower inflation, and in 2026 we forecast that the policy rate will come down to close to 2 per cent in our projection scenario

Fiscal policy as presented in the Revised National Budget is having a weakly expansionary effect on the Norwegian economy this year. According to computations performed with the KVARTS and NORA macroeconomic models, the budget will push mainland GDP up by around 0.3–0.4 per cent. In the budget, growth in public consumption and investment was forecast to be lower than trend mainland GDP growth this year, while growth in transfers had an expansionary effect. In the Government's budget proposal for 2023, spending of petroleum revenue is projected to be 3 per cent of the value of the Government Pension Fund Global (the petroleum fund) at the beginning of the year. As a result of the weak krone, the value of the petroleum fund has increased substantially, providing scope for increased spending of petroleum revenue in the years ahead without breaking the fiscal rule. However, we have assumed that spending of petroleum revenue will remain well under the 3 per cent stipulated by the rule because of a growing need to cover costs in the slightly longer term.

Household consumption, which accounts for around half of mainland GDP, rose by as much as 6.9 per cent last year, despite a high rise in prices for a number of goods and services. In the first few months of 2023, consumptions of goods excluding car purchases fell, and consumption of services increased. The ratio between consumer spending on services and on goods excluding cars has now almost reverted to the pre-pandemic level. At the same time, households' purchases abroad have picked up, and the level in Q1 was higher than before the pandemic. According to our projections, growth in real disposable income will increase from 2024 as a consequence of higher wage growth and falling inflation, but weak developments in real house prices will restrain the upturn. Higher real disposable income will result in consumption growth rising from around 0.5 per cent this year to around 3 per cent in 2026. The saving ratio will pick up through the projection period from a low level in 2023.

House prices have risen somewhat more than expected so far in 2023. Real Estate Norway's monthly house price index shows that resale home prices have continued rising for a long time following the fall in prices last autumn, despite frequent increases in mortgage rates this past year. The price level in May was unchanged from April, and we expect higher interest rates and lower real disposable income to depress house prices a little for the rest of the year, so that house prices as an annual average fall by around one and a half per cent. At the same time, both sales of new dwellings

[1] See Box 1 in Economic Survey 1/2023.

Table 3. Main economic indicators 2022-2026. Accounts and forecasts.
Percentage change from previous year unless otherwise noted

	Accounts 2022	Forecasts 2023 SN	2023 NB	2023 MoF	2024 SN	2024 NB	2024 MoF	2025 SN	2025 NB	2025 MoF	2026 SN	2026 NB
Demand and output												
Consumption in households etc.	6.9	0.6	-1.1	-0.4	1.5	1.7	0.7	2.3	2.1	..	3.2	2.1
General government consumption	0.1	1.4	1.1	1.4	1.7	1.0	..	1.8	1.1	..	2.2	1.0
Gross fixed investment	4.3	0.6	..	-0.2	2.2	..	0.4	0.5	..	..	-0.7	..
Extraction and transport via pipelines	-6.5	6.0	6.0	3.0	4.5	4.0	4.0	2.5	2.0	..	-1.0	-2.0
Industries	14.5	1.3	1.8	0.6	0.1	0.1	2.0	-3.2	2.9	..	-3.6	1.4
Housing	-1.4	-7.4	-4.0	-5.3	0.7	0.5	-2.1	2.8	3.6	..	2.9	4.7
General government	1.2	1.2	..	1.2	1.7	..	..	4.0	..	..	1.6	
Demand from Mainland Norway[1]	4.9	0.4	-0.2	0.0	1.4	1.2	0.5	1.6	1.9	..	2.1	0.0
Exports	5.9	5.0	..	4.1	2.3	..	3.0	1.4	..	..	1.0	..
Traditional goods[2]	-0.3	4.8	4.2	5.6	3.7	1.7	3.9	3.6	3.2	..	3.5	3.4
Crude oil and natural gas	0.3	3.4	..	3.1	3.1	..	4.0	0.5		..	-3.7	..
Imports	9.2	2.9	1.9	1.1	2.4	2.2	1.5	1.6	3.9	..	2.2	2.0
Gross domestic product	3.3	1.5	1.4	1.3	1.7	0.6	1.2	1.5	0.9	..	1.4	0.9
Mainland Norway	3.8	1.3	1.1	1.0	1.6	0.5	1.0	1.7	1.1	..	1.9	1.3
Labour market												
Employed persons	3.9	1.2	0.9	0.8	0.3	-0.1	0.2	0.2	0.3	..	0.5	0.5
Unemployment rate (level)	3.2	3.7	..	3.6	3.8	..	3.7	4.0	..	..	4.0	..
Prices and wages												
Annual earnings	4.3	5.3	5.1	..	4.9	4.4	..	4.1	4.0	..	4.1	3.4
Consumer price index (CPI)	5.8	5.6	4.9	5.4	3.0	3.3	3.7	2.4	2.6	..	2.2	2.1
CPI-ATE[3]	3.9	6.0	5.6	5.8	3.6	3.8	3.8	2.8	2.9	..	2.5	2.2
Housing prices[4]	5.2	-1.4	-2.9	..	-0.1	0.0	..	1.0	4.0	..	2.7	5.5
Balance of payment												
Current balance (bill. NOK)[5]	1 691	730	..	969	776	..	..	766	..	..	667	..
Current account (per cent of GDP)	30.3	14.7	..	18.8	14.9	..	..	14.3	..	..	12.3	..
Memorandum items:												
Money market rate (level)	2.1	3.8	..	3.9	3.9	..	3.5	3.1	..	..	2.4	..
Crude oil price NOK (level)[6]	951	845	..	912	805	..	845	775	..	..	752	..
Import weighted krone exchange rate (44 countries)[7]	1.2	11.4	6.7	8.2	2.0	-2.6	0.9	0.0	-1.7	..	0.0	-0.3

[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.
Source: Statistics Norway (SN). Ministry of Finance. Meld.St.1. (2022-2023) (MoF). Norges Bank. Pengepolitisk rapport 4/2022 (NB).

and housing construction are at a low level, which will exert pressure on the resale homes market in both the short and the medium term. As the rise in prices for building products abates, we expect housing investment to edge up cautiously next year and then increase more markedly through the projection period. Housing investment, which accounts for about 20 per cent of mainland investment, will thus gradually grow a little higher than in 2022 in the course of the projection period, but will remain lower than in 2017, when housing investment was record high.

Business investment accounts for about 13 per cent of mainland GDP, but normally contributes more to economic developments than this share would suggest. In the past two years, business investment has increased significantly. Last year there was especially high growth in investment in services. Manufacturing businesses report continued growth in 2023. Large individual projects in basic metals and in computer and electrical equipment are making a particular contribution to the growth, and a number of these can be linked to energy transitioning and emission cuts. An upswing in investment in power supply is also expected this year and next, but in the service industries it seems unlikely that new investment projects will compensate for the completion of existing projects. The global downturn combined with higher interest rates in Norway will place a damper on investment in the years ahead. Nonetheless, the investment level will remain higher during the projection period than it was prior to the pandemic.

A very large number of new developments on the Norwegian continental shelf have been initiated as a consequence of high oil and gas prices and the package of tax measures adopted by the Storting in June 2020. We are thus expecting the falling trend in investment in recent years to reverse, and that there will be substantial growth this year and in 2024. Although almost half of the deliveries of capital goods in the petroleum industry are imported from abroad, the deliveries also involve considerable demand directed at mainland Norway. Some field developments are likely to be completed in 2025 and 2026, and we expect the investment level to fall a little in 2026, but to still remain slightly higher than the level in 2019.

Real wages have barely increased since 2015. Nominal wage growth last year was 4.3 per cent, a whole 1.5 percentage points lower than consumer price inflation. Following a short strike in mid-April, LO Norway and the Confederation of Norwegian Enterprise (NHO) agreed on a norm of 5.2 per cent in 2023 for annual wage growth in overall manufacturing under NHO. According to our projections, annual wage growth in the economy as a whole will be 5.3 per cent. With expected inflation of around 5.6 per cent this year, this means that real wages will fall a little this year too. Scope for wage growth going forward depends on profitability in manufacturing and the outlook for the Norwegian economy. Profitability in some manufacturing segments was good in 2022, which meant that the labour share, a measure of the share of wealth creation that accrues to workers, has shrunk considerably. This applies in particular to capital-intensive manufacturing segments. According to our calculations, the labour share will remain relatively stable in the near term. This means that nominal wage growth will be between 4 and 5 per cent in the years ahead. Given falling inflation, real wage growth will thus pick up to around 2 per cent from 2024.

The high pressures in the labour market appear to be abating slightly. A year ago, unemployment measured by the Labour Force Survey (LFS) was around 3.1 per cent, while in recent months it has been around 3.5 per cent. This is still relatively low in a macroeconomic perspective. Given weaker global growth prospects, rising interest rates and lower demand in many industries, labour market pressures will ease. Employment is thus not expected to increase as much as growth in the working age population, and the employment rate will therefore fall slightly. According to our projections, unemployment will continue to rise gradually in the years ahead, to around 4 per cent in 2025.

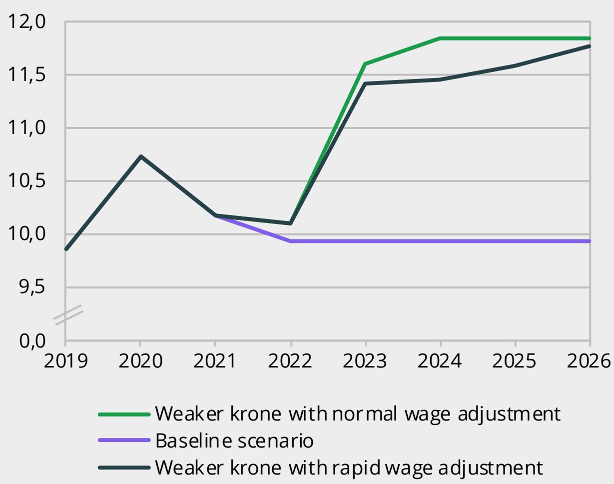
At present the picture for the Norwegian economy is a mixed one. Household purchasing power has been reduced as a consequence of both high prices and higher interest rates. At the same time, many people are in work, and unemployment is still at a low level. The record-weak krone exchange rate is putting some aspects of economic policy to the test. The depreciation of the krone means that it will take longer for the central bank to reach the inflation target. Because of the weak krone, profitability in some wage leader segments will be higher, which may increase pressure on wages and prices if the greater profitability can be rapidly extracted in the form of higher wage growth (see Box 1). Fiscal scope for manoeuvre will also increase, as the value of the petroleum fund will be higher measured in NOK. Short-term policy interests may thus make it tempting to step up the spending of petroleum revenue in the years ahead. However, if the krone remains at the current level, as we assume in this report, both fiscal policy and the social partners will probably adjust to the depreciation of the krone over a period of several years. Inflation will then fall to approach the inflation target in 2025. At the same time, Norwegian economic activity will remain close to trend in the years ahead.

Box 1. Monetary policy and wage formation with a weakened krone exchange rate

The krone depreciated by more than 10 per cent in the first five months of 2023. A major weakening of the krone may put monetary policy and wage formation to the test. A weaker krone will make it more difficult for Norges Bank to attain its inflation target. For wage leader businesses, a weaker krone will mean higher profitability. This in turn may lead to higher wage growth, either as a consequence of the centralised wage negotiations, where employees receive part of the greater value added, or through businesses with a high capacity to pay bidding up the price of labour in order to secure the labour they need. A rapid pass-through from a weakened krone to higher wage growth may result in wage-price spirals that could make the central bank's job even more difficult.[1] The result could be a sharp rise in the key policy rate, which could have a major impact on the Norwegian economy.

A feature of wage formation in Norway is that it normally takes time before increased profitability in the wage leader sector feeds through into higher pay for employees. Gjelsvik, Nymoen and Sparrman (2020) estimated that it takes more than 5 years before half of the increased profitability accrues to the employees in the form of higher pay. The half-life in the KVARTS macroeconomic model is between 3 and 4 years. A heuristic explanation for such sluggish adjustment may be that the wage leader parties have to adjust to a variable that fluctuates widely over time, and that too rapid an upward adjustment of wages may result in a large downward adjustment subsequently because an error was made regarding the profitability level in manufacturing. It is therefore reasonable to expect slow adjustment of pay in response to exchange rate fluctuations. However, the estimated half-life is not a law of nature to the effect that the behaviour of the social partners will always remain the same. In this box, we use KVARTS to analyse the consequences a weakening of the krone exchange rate can have for the Norwegian economy and monetary policy if wage adjustment should take place substantially faster than it has to date. This is done in practice by reducing the half-life of wage adjustment in KVARTS[2] from just over 3 years to only 3 months.[3]

Figure 1. Exchange rate, NOK per euro



Source: Statistics Norway

We carry out two shift analyses, one based on rapid and the other on normal wage adjustment. The effects on the Norwegian economy and monetary policy of the exchange rate changes are compared with a baseline scenario in which the krone exchange rate remains fixed at the level in mid-2022; see Figure 1. In the calculation with normal wage adjustment, economic disruptions in the currency market cause a pronounced weakening of the krone. In the calculation with rapid adjustment, the same economic disruptions are assumed in the currency market, but because the exchange rate is also determined by interest rate differentials between Norway and other countries, a different monetary policy response in the two calculations will give rise to slightly different exchange rate paths.[4] As we will see, the higher interest rate in the case with rapid wage adjustment results in a somewhat lesser weakening of the krone in the short term, but roughly the same depreciation by 2026.

In the past, Norges Bank has responded to exchange rate changes in its setting of interest rates; see Alstadheim, Bjørnland and Maih (2021). The interest rate rule as specified in Norges Bank's NEMO monetary policy model is used to capture the central bank's behaviour; see Kravik and Mimir (2019). According to this interest rate rule, the interest rate responds if wage growth changes. The interest rate is also influenced by inflationary developments, mainland activity and the real exchange rate. We disregard the fact that changes in the exchange rate may influence fiscal policy.

Figures 2 and 3 show how the interest rate and annual wages change as a consequence of a weaker krone. Tables 1 and 2 show the effects on the main macroeconomic aggregates. The normal wage adjustment case has a relatively strong impact on the Norwegian economy. The depreciation of the krone makes imported goods more expensive and contributes both directly and indirectly to higher inflation measured by the CPI. The depreciation also makes manufacturing businesses more profitable, bringing operating profits up to around NOK 15 billion in 2026. With normal wage adjustment, annual wages will increase, but the labour share will still shrink a little as a result of the strong increase in operating profits. In the absence of a monetary policy response, a weaker krone would have had an expansionary effect on economic activity. Thus the weak krone exchange rate has a fairly direct effect on all the elements in the central bank's interest rate rule. The interest rate will therefore be raised substantially, and in 2024 is 3.5 percentage points higher than in the baseline scenario. Household purchasing power is therefore impacted by both price and interest rate increases. Real disposable income is substantially reduced. This in turn places strong constraints on household consumption and mainland economic activity. The interest rate hikes and households' reduced real income directly affect the housing market in their turn. House prices fall by just under 20 per cent over a 5-year period. This makes residential construction considerably less profitable and housing investment is therefore also reduced. The weak krone additionally

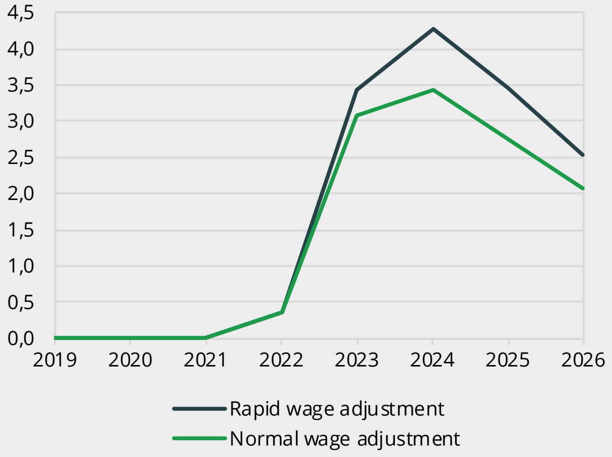
[1] In a coming article in the publication Samfunnsøkonomen Røisland (2023) considers the conditions under which wage-price spirals may arise within an analytical framework.

[2] See Boug et al. (2023) for a more detailed description of KVARTS.

[3] This means that the error correction parameter in the wage-setting relation for the wage leader is changed from 0.05 to 0.5.

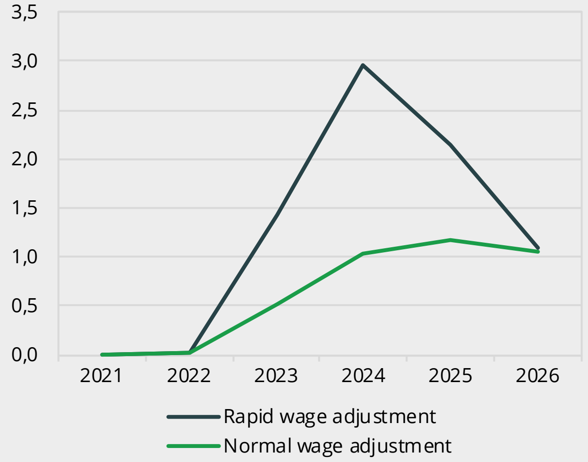
[4] See Benedictow and Hammersland (2022) for further details of the factors that influence the exchange rate in the model.

Figure 2. Money market rate. Difference from the baseline scenario in percentage points



Source: Statistics Norway

Figure 3. Annual wage growth. Difference from the baseline scenario in percentage points



Source: Statistics Norway

leads to lower imports and higher exports and a pronounced increase in manufacturing employment. Conversely, employment in market-oriented mainland service industries, which are largely sheltered from international competition, is almost unchanged. As overall employment increases more than the total labour force, unemployment will fall a little in the period analysed.

In the case of rapid wage adjustment, the central bank will be placed in an even more demanding situation. Annual wages will then increase significantly more than in the case with normal wage adjustment. In 2026, the difference is just over 3 per cent. Higher wage growth is passed through into retail prices, and inflation therefore gradually increases to a markedly higher level. The central bank, which responds directly to both price and wage inflation, will therefore further increase the interest rate, which in 2024 will be almost one percentage point higher than in the case with normal wage adjustment. In consequence mainland activity will be lower. These projections illustrate the balancing act between stabilising output and employment on the one hand and stabilising inflation on the other. In seeking to achieve this balance, a certain degree of price-wage spiral is allowed, as both annual wages and inflation will be significantly higher than in the case with normal wage adjustment. The interest rate hikes will cause the krone to strengthen a little in the short term, so that exports are reduced and imports increase. Employment will fall, but more people will enter the labour market, bringing down unemploy-

Table 1. Normal wage adjustment. Percentage difference from the baseline scenario unless otherwise stated

	2022	2023	2024	2025	2026
Mainland GDP	0.0	0.0	-0.4	-0.7	-1.1
Consumption by households etc.	-0.2	-2.3	-5.2	-6.7	-7.0
General government consumption	0.0	0.0	0.0	0.0	0.0
Mainland gross investment	0.0	-1.0	-3.0	-4.1	-6.3
Housing investment	0.0	0.1	-1.2	-6.9	-14.8
Exports excl. oil and gas	0.2	2.7	5.6	6.9	7.5
Imports	-0.1	-1.9	-4.2	-5.2	-5.6
Unemployment rate[1]	0.0	-0.2	-0.3	-0.3	-0.3
Number employed	0.0	0.3	0.5	0.6	0.4
Labour force	0.0	0.1	0.2	0.2	0.2
Annual wages	0.0	0.4	1.3	2.3	3.3
Consumer price index (CPI)	0.2	2.6	4.2	5.4	6.5
Inflation[1]	0.3	2.4	1.6	1.1	1.0
House prices	0.2	0.0	-7.5	-14.0	-18.0
Household real disposable income	-0.5	-4.8	-6.4	-5.7	-5.1
Exchange rate, NOK per euro[2]	1.8	16.9	19.4	19.4	19.4
Real exchange rate, NOK per euro[2]	1.6	13.9	14.5	13.2	12.1
Money market rate[1]	0.4	3.1	3.4	2.8	2.1
Operating profits in manufacturing (NOK bn)	0.4	6.0	12.9	15.5	15.2
Labour share, manufacturing[1]	-0.1	-1.6	-3.4	-3.5	-2.7
Hours worked	0.0	0.3	0.6	0.7	0.5
Wage-earners, manufacturing	0.0	1.1	3.4	5.2	6.5
Wage-earners, private sector services	0.0	0.1	0.0	-0.3	-0.7

[1] Difference in percentage points.
[2] A negative sign means appreciation.
Source: Statistics Norway

→

←

Table 2. Rapid wage adjustment. Percentage difference from the scenario with normal wage adjustment unless otherwise stated

	2022	2023	2024	2025	2026
Mainland GDP	0.0	0.0	-0.2	-0.2	-0.1
Consumption by households etc.	0.0	0.2	0.4	0.8	1.1
General government consumption	0.0	0.0	0.0	0.0	0.0
Mainland gross investment	0.0	0.0	-0.2	-0.4	-0.2
Housing investment	0.0	0.0	-0.2	-0.9	-1.6
Exports excl. oil and gas	0.0	-0.2	-0.9	-1.2	-1.1
Imports	0.0	0.1	0.3	0.5	0.8
Unemployment rate[1]	0.0	0.0	0.1	0.2	0.2
Number employed	0.0	0.0	-0.1	-0.2	-0.2
Labour force	0.0	0.0	0.0	-0.1	-0.1
Annual wages	0.0	0.6	2.1	3.0	3.1
Consumer price index (CPI)	0.0	-0.1	-0.2	0.2	0.7
Inflation[1]	0.0	-0.1	0.0	0.4	0.5
House prices	0.0	-0.3	-1.0	-1.2	-0.7
Household real disposable income	0.0	0.5	1.3	1.6	1.5
Exchange rate, NOK per euro[2]	0.0	-1.7	-3.3	-2.3	-0.7
Real exchange rate, NOK per euro[2]	0.0	-1.5	-3.2	-2.5	-1.4
Money market rate[1]	0.0	0.3	0.8	0.7	0.5
Operating profits in manufacturing (NOK bn)	0.0	-2.1	-7.9	-10.4	-8.4
Labour share, manufacturing[1]	0.0	0.8	2.8	3.5	2.7
Hours worked	0.0	0.0	-0.1	-0.3	-0.3
Wage-earners, manufacturing	0.0	0.0	-0.5	-1.1	-1.4
Wage-earners, private sector services	0.0	0.0	0.0	-0.1	-0.1

[1] Difference in percentage points.
[2] A negative sign means appreciation.
Source: Statistics Norway

ment slightly. Real wages will fall in the cases of both normal and rapid wage adjustment, but less so when wage adjustment is rapid.

Thus a weakening of the krone puts some aspects of economic policy to the test. A weaker krone will make it more difficult for Norges Bank to attain its inflation target. In the centralised wage negotiations, a weaker krone exchange rate will result in higher wage growth over time through employees receiving a portion of the increased value added. Outside the wage settlements, a weaker krone may also lead to businesses with a greater capacity to pay being willing to pay more in order to secure the labour they need. These mechanisms are part of the wage leader model, but if wage formation changes and wage adjustment becomes faster than it has been in the past, wage-price spirals may arise. This will make the situation even more demanding for the central bank. The interaction between monetary policy and wage formation therefore plays a central part in the effect the depreciation of the krone will have on the Norwegian economy.

The model projections are surrounded with uncertainty. We have based our calculations on the interest rate rule used in Norges Bank's NEMO model. But when the krone exchange rate weakens, the central bank will also use its discretion. For example, Norges Bank's setting of the interest rate at present is substantially lower than simple monetary policy rules would indicate.[5] This means care must be taken not to interpret the results in this box as a template for how the central bank reacts when the krone depreciates. In our calculations we have changed one structural relationship in the model, setting of wages, and kept all other variables unchanged. If one of the structures in the Norwegian economy is changed, it may also affect other parts of the economy, including the monetary policy response.

[5] See Chart 4.3 in Monetary Policy Report 1/23.

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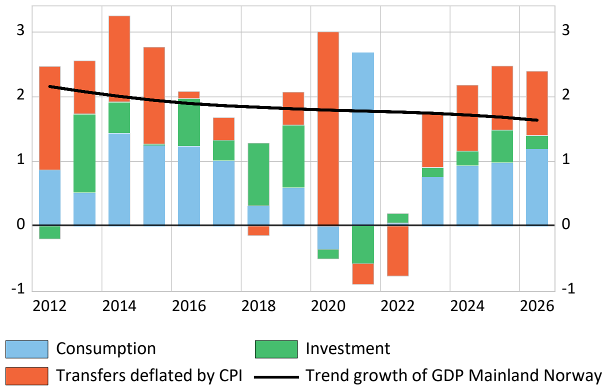
Fiscal policy adjusted for high inflation

General government consumption grew modestly in Q1 while investment growth was negative. General government consumption grew by 0.5 per cent in 2023 Q1 while local government consumption grew 1.2 per cent. Growth in public transport, administration and the Fire Department, and in arts and entertainment services contributed most to growth. Central government consumption fell 0.2 per cent in Q1, pushed down by consumption of health and social services in particular. However, this should be viewed in conjunction with the high level the previous quarter. General government payroll costs increased by 1.3 per cent, pushed up by local government payroll costs in particular. Public sector investment fell by 1.5 per cent in Q1, pushed down primarily by lower investment in central government administration and defence. One reason for the fall in defence investment was donations of armoured vehicles and other defence materiel to Ukraine.

The National Budget for 2023 (NB 23) forecast consumption of petroleum revenue, measured in terms of the structural, non-oil budget deficit, of NOK 316.8 billion in 2023. The changes proposed by the Government in Revised National Budget 2023 (RNB 23) increase spending of petroleum revenue by NOK 55.8 billion. The structural, non-oil budget deficit is accordingly projected to be NOK 372.6 billion. The increased spending of petroleum revenue is largely due to extra measures associated with the war in Ukraine, and to the adjustment of budget items as a consequence of unexpectedly high price and wage inflation. In excess of NOK 20 billion of the increased spending of petroleum revenue can be related to the war in Ukraine. The remaining budgetary weakening can be largely attributed to price and wage adjustments and to the effects of lower than expected electricity prices. The proposals submitted in RNB 23 for making adjustments for higher price and wage inflation imply a total increase in budgeted expenses of almost NOK 27 billion. Central government budget revenue also increases as a consequence of higher price and wage inflation, but the increase in expenses is higher. Lower electricity prices are projected to weaken the budget by about NOK 22 billion. This is because accrued central government revenue is being weakened more than the savings brought about by the electricity subsidy schemes. No major direct or indirect tax changes are proposed in RNB 23. The Storting has decided to introduce a 25 per cent tax on economic rent for the aquaculture industry.

Figure 4. Contributions to growth in general government

Change from previous year in percent



Source: Statistics Norway

In the Government's budget proposal for 2023, spending of petroleum revenue is forecast to be 3 per cent of the value of the petroleum fund at the beginning of 2023. Spending of the fund's capital as a share of trend mainland GDP has increased substantially in recent years. RNB 23 forecasts this spending to be 10 per cent in 2023. The value of the petroleum fund has increased substantially over the past decade as a consequence of the appreciation of assets in the financial markets and of a weaker krone. The value of the fund at the beginning of 2023 was NOK 12 429 billion. Net capital added in 2023 Q1, i.e. capital added from petroleum activities less capital withdrawals amounted to NOK 217 billion. The value of the fund at the end of the quarter was NOK 14 294 billion, which means that the total return was NOK 1 648 billion. The depreciation of the krone contributed NOK 755 billion of this amount. Income from interest and dividends plus gains on exchange and losses that cannot be related to exchange rate changes thus amount to NOK 893 billion. In RNB 23, the Norwegian State’s net cash flow from petroleum activities is forecast to be NOK 1 015.5 billion in 2023, down from a projected NOK 1 384 billion in NB 23. The downward revision is due to lower oil and gas prices. We assume that the real return on the fund will be 3 per cent, and that oil and gas prices will reflect forward prices. This will result in substantial growth in the fund in the course of the projection period. However, we have assumed that spending of petroleum revenue will be kept well under the 3 per cent target because of a growing need to cover costs in the slightly longer term.

The Norwegian economy entered 2023 with a higher level of activity, higher numbers employed and considerably higher inflation than was assumed when NB 23 was drawn up. Higher inflation than was assumed in NB 23 also meant that the original budget would have been tighter than intended. In RNB 23 the aim is therefore to revise the budget with respect to inflation and wages. The revision of the social transfers with respect to inflation and wages also results in a more even distribution of the burdens associated with high inflation. Whereas NB 23 was forecast to have an approximately neutral effect on the economy, RNB 23 is expected to push up mainland GDP by 0.3–0.4 per cent. This projection, which is based on model calculations using KVARTS and NORA, takes into account that the Nansen Programme's support for Ukraine and increased assistance to countries in the south will have little effect on activity in the Norwegian economy.

NB 23 forecast increases in general government consumption and gross investment in 2023 of 1.3 and 0.8 per cent, respectively. In RNB the projections have been revised up to 1.4 and 1.2 per cent, partly as a result of increased appropriations to compensate for the higher inflation. We are revising our projections up slightly, so that they become identical with those in RNB 23. We forecast that general government consumption and gross investment will both increase by 1.7 per cent in 2024. The growth projections for the period 2025–2026 are extrapolations of previous projections. The real value of transfers is expected to increase by 2.6 per cent in 2023, partly because old-age pensions are being regulated by as much as 8.54 per cent with effect from 1 May 2023; see the explanation in our previous report. Transfers are projected to increase by 3.2 per cent in 2024. The Government has signalled increased defence investment in the time ahead in order to meet the NATO target in 2026. NATO’s secretary general has moreover indicated that the NATO target will be raised from 2025. Plans to meet the NATO target entail extensive investment in general government throughout the projection period. We expect deliveries of F-35 fighter aircraft to extend well into 2025, and that programmes in the army, navy and air force will entail extensive investment. An increasing need for health and care workers is also expected in the time ahead.

Continued interest rate hikes

Since September 2021, Norges Bank has raised the key policy rate from 0 per cent to 3.25 per cent. The key rate increased especially fast in the summer of 2022, with hikes of 0.5 percentage point at each of the three monetary policy meetings from June to September. Following the increase in November 2022, it seemed likely that further increases would only occur in connection with the monetary policy meetings at which Norges Bank presents its new Monetary Policy Report. However, surprisingly high inflation and a weak krone exchange rate led to Norges Bank raising the policy rate also at the monetary policy meeting in May this year.

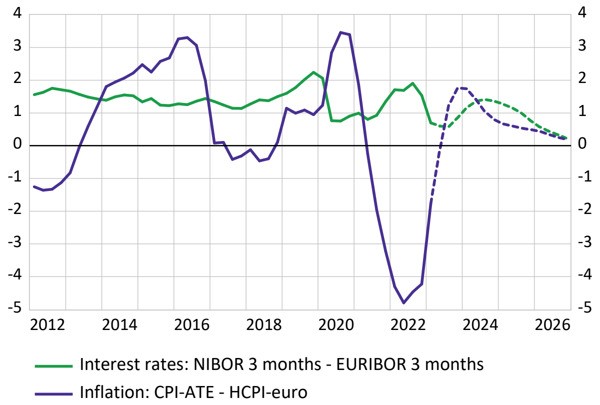
The money market rate largely shadows the key rate with a premium. In summer 2021, the 3-month money market rate was down to 0.2 per cent, and by the end of May 2022 it had risen to 1.2 per cent. The rapid increases in the policy rate caused the money market rate to increase substantially at the end of 2022, and this has continued in 2023. In early June it had risen to 4.0 per cent. Expectations of further increases in the policy rate have presumably been priced in.

Deposit and lending rates have also increased from record low levels in 2021 Q2 and Q3 . The average interest rates on loans secured on dwellings was 4.6 per cent at the end of 2023 Q1, which means an increase of 2.5 percentage points in the last eighteen months. Much of this increase took place in the last quarter of 2022, but there was also a clear increase through Q1 this year. The average deposit rate had risen to 2.1 per cent by the end of Q1 this year, an increase of 1.8 percentage points since 2021 Q2.

Foreign central banks have raised their policy rates sharply to rein in the high inflation. We have assumed in our projections that the money market rate will be close to 4 per cent in the euro area before summer. If the policy rate is far lower in Norway than abroad, it may lead to a further weakening of the krone. This in turn will make imported goods more expensive, and thereby fuel higher inflation in Norway. To avoid this, we expect that Norges Bank, too, will continue to raise the key

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

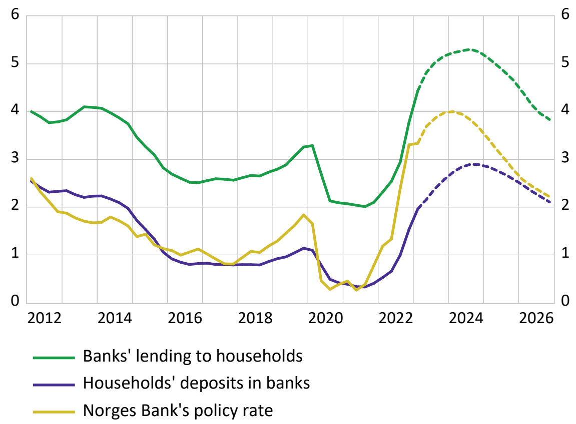
Percentage point



Source: Norges Bank and Statistics Norway

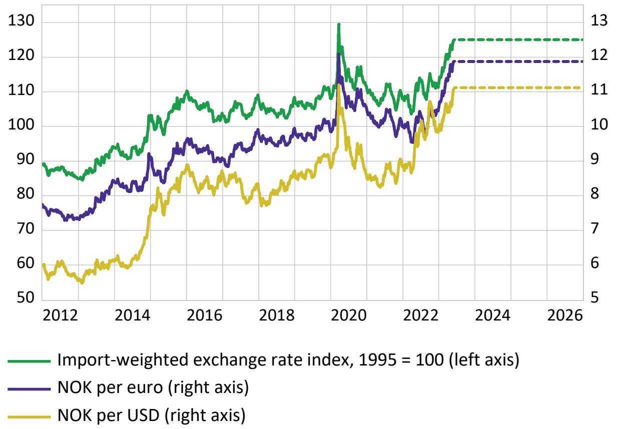
Figure 6. Norwegian interest rates

Percent



Source: Norges Bank and Statistics Norway

Figure 7. Exchange rates



Source: Norges Bank

rate. We assume there will be two further interest rate hikes in 2023. The first will probably come in June, and there may be a further increase after the summer. Each is expected to be 0.25 percentage point, which will then bring the key policy rate up to 3.75 per cent. The 3-month money market rate in Norway may then remain at 4 per cent, while lending rates will probably rise to over 5 per cent in the course of 2023.

Next year, inflation measured by the CPI will fall to 3 per cent, which will give scope for interest rate cuts. We have incorporated one interest rate cut in the second half of 2024 in our projection. The cuts will continue in 2025 and 2026, and the money market rate will fall to under 2.5 per cent in the course of 2026.

The krone has depreciated in the last 6 months. In 2022 one euro cost between NOK 9.40 and 10.60, with an annual average of NOK 10.10. At the beginning of June this year a euro cost NOK 11.90. The price of a US dollar has now reached NOK 11.10. We assume that exchange rates will remain unchanged in the near term. This means that the currencies in the import-weighted krone exchange rate have become an annualised 11 per cent more expensive in 2023. The weakening of the krone means that imported goods will become more expensive, and hence push up inflation in Norway this year.

Saving ratio on the way up

According to preliminary non-financial sector accounts figures, the real disposable income of households and non-profit organisations fell by 2.4 per cent in 2022. If we exclude share dividend disbursements, which were record high in 2021 because of adaptation to higher dividend tax from 2022, growth in real disposable income was 2.7 per cent last year.[2] Growth in real disposable income excluding dividends increased sharply in Q1 last year, but then fell for the next three quarters. In the first quarter of this year the fall in this revenue item had reversed into a moderate rise. Developments through last year and so far this year are largely attributable to increased wage income as a

[2] Only share dividends in the non-financial sector accounts, and not the tax expenses associated with them, are deducted from real disposable income excluding share dividends. This means that some of the growth in real disposable income excluding share dividends is also due to reduced taxes on dividends in 2022.

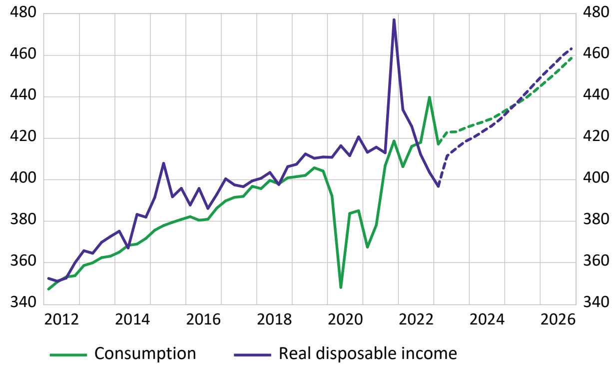
consequence of growth in employment, higher net interest expenses due to higher lending rates, and large price increases for a number of products.

According to the quarterly national accounts, total consumption by households and non-profit organisations increased by as much as 6.9 per cent in 2022. The level of overall consumption was thus just over 4 per cent higher in 2022 than in 2019. Consumption of services, in particular, with large contributions from hotel and leisure services and passenger transport, dominated the strong growth in consumption through 2022. Goods consumption did increase sharply in Q4 last year as a consequence of record high car purchases prior to the introduction of taxes on electric cars from the beginning of 2023. Towards the end of 2022, the ratio between consumption of goods and services, excluding car purchases, reverted almost to the level prior to the pandemic. In Q1 this year, overall consumption decreased by 5.1 per cent. Car purchases in particular pushed down consumption as a result of adaptation to taxes on these purchases. If we disregard the car purchases, there was nonetheless a slight fall in goods consumption in Q1. The goods consumption index for April this year shows a broad-based seasonally adjusted fall of 3.3 per cent on the previous month. Consumption of services, on the other hand, continued broad-based growth of 0.9 per cent in Q1. At the same time, household purchases abroad increased by 4.3 per cent, exceeding the pre-pandemic level for the first time.

According to the quarterly national accounts, household consumption in the second half of the year was higher than disposable income. However, the saving ratio, measured as saving as a share of disposable income, fell from 12.7 per cent in 2021 to 4.2 per cent in 2022. Last year's level has been revised up by around 0.5 percentage point in the national accounts due to saving in collective pension funds being revised up by around NOK 10 billion. On the other hand the saving ratio excluding share dividends fell from 4.5 per cent in 2021 to almost zero in 2022. Non-financial sector accounts figures show that the seasonally adjusted saving ratio fell by around 7 percentage point from 2021 Q4 to 2022 Q1, while the ratio excluding dividend payments increased by around 9 percentage points in the same period. These large changes in the saving ratio over two quarters must be viewed in

Figure 8. Income and consumption in households

Seasonally adjusted, billion 2020 NOK, quarter



Source: Statistics Norway

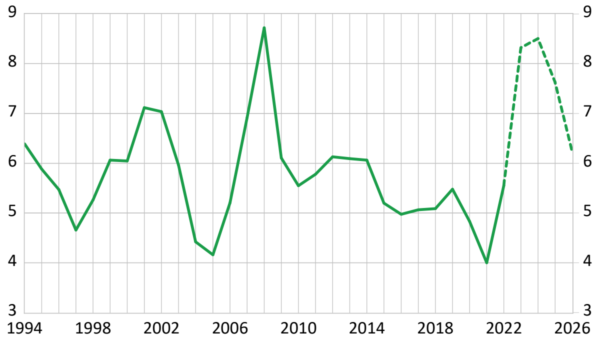
conjunction with major changes in disbursements of share dividend that are due to adaptation to the increased tax on dividends introduced last year. The saving ratio both including and excluding share dividends fell for the next three quarters of 2022 before picking up in Q1 this year. Excluding car purchases, which have fluctuated widely since the end of 2022, the saving ratio picked up markedly through the last two quarters.

We forecast that real disposable income excluding share dividends will fall by around 0.5 per cent in 2023. This is about 1.5 percentage points lower than the projection in our last economic report, and is largely attributable to stronger growth in real wage income less net wage transfers to other countries than assumed in our last publication. We have revised up the growth forecast for the consumption deflator in the national accounts, which includes Norwegians' consumption abroad, from 5.5 per cent to close to 7 per cent in 2023.[3] The upward revision is in part attributable to the more pronounced depreciation of the krone than foreseen in the last report. Given our assumptions, average annual growth in real disposable income in the years 2024 to 2026 will be around 3.5 per cent. Both wage income and public transfers will pick up in real terms in pace with substantially lower inflation in the last three years of the projection period. Net interest expenses will also contribute to income growth as mortgage rates fall as a consequence of cuts in the policy rate. The level of the household interest burden, measured as interest expenses after tax as a share of disposable

[3] For a description of differences between the consumption deflator in the national accounts and the consumer price index, see Box 3.2 in Økonomiske analyser 1/2023 (Norwegian text).

Figure 9. Household interest burden

Interest expenses after tax as a share of disposable income in percent



Source: Statistics Norway

income, is forecast to be 7.5–8.5 per cent in the years 2023–2025. In 2026 it will fall to close to 6 per cent. By way of comparison, the average annual interest burden was 5.5 per cent in the 10-year period 2010–2019.

We envisage consumption growth of around 0.5 per cent in 2023, a good deal lower than forecast in our last report. This growth projection is based on a sharp seasonally adjusted fall observed in Q1 this year from a high level in 2022 Q4 and expected moderate growth through the following three quarters. Consumption growth as an annual average will then be around 2.5 per cent in the years 2024 to 2026. Developments in overall consumption in the projection period are being driven by growth in real disposable income, but constrained by weak developments in real house prices and higher after-tax real interest rates, particularly in the years 2023 and 2024.

According to our projections for income and consumption developments, seasonally adjusted consumption will be higher than seasonally adjusted income throughout 2023 and in much of 2024. The saving ratio will nonetheless be an annualised average of around 3.5 per cent for 2023 and 2024, as this ratio also includes saving in collective pension funds. In 2025 and 2026 disposable income will again be higher than overall consumption, and the saving ratio will rise to around 5 per cent when saving in collective pension funds is included. Higher real after-tax interest rates will boost the ratio. As an annual average, the saving ratio excluding dividend payments will be 3 percentage points lower in the projection period as, according to our assumptions, dividends will account for 3 per cent of disposable income. Our projections imply that the saving ratio excluding share dividends in 2026 will be somewhat lower than its average annual level in the ten-year period 2010–2019.

Housing investment continues to fall this year

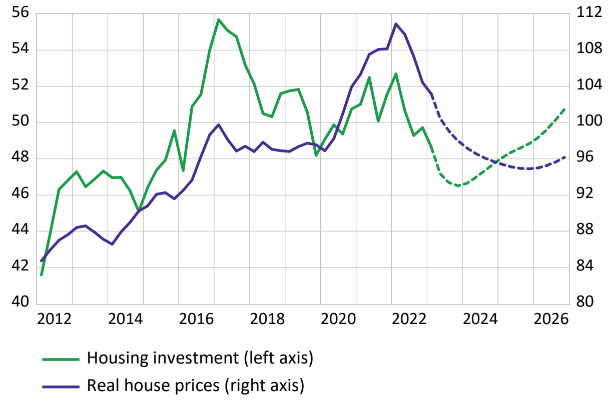
Developments in resale home prices have been somewhat stronger than expected so far in 2023. Statistics Norway's house price index shows that prices for resale homes fell by 0.3 per cent from 2022 Q4 to 2023 Q1, after adjustment for normal seasonal fluctuations. Real Estate Norway's monthly house price index shows that house prices fell sharply at the end of 2022, but that this fall was reversed in the course of the first 5 months of this year. The growth is occurring despite large increases in mortgage rates. The relaxation of the lending regulations which took effect in January this year may have contributed to this rise in house prices.

In our previous economic report we took into account that the rise in house prices might be boosted by the relaxation of the lending regulations that took effect in January. We therefore raised the projection path somewhat compared with that in the report published in December, but envisaged that house prices for the year as a whole would fall.

Real Estate Norway's monthly price index shows that despite frequent increases in mortgage rates this past year, resale home prices are continuing to increase following the fall in prices in autumn last year. The rise in prices has been so strong that the price level in May this year was approximately the same as in May last year. The rise in house prices gathered pace in the first 4 months of the year, from a rate of 0.1 per cent in January to 0.7 per cent in April. In May there was no growth in the index for the country as a whole, but the underlying indices for Norway's major cities show varying movements. House prices in Kristiansand, Oslo and Stavanger rose by up to 0.8 per cent, while they fell by up to 0.7 per cent in Bergen, Tromsø and Trondheim.

The volume of resale homes sold so far this year is at approximately the same level as in previous years. A very large number of homes were sold in March, but because of Easter fewer were sold in April. The number of homes on the market at any time this year has so far been somewhat higher

Figure 10. Housing market
Seasonally adjusted. Left axis: billion 2020 NOK, quarter
Right axis: index, 2020 = 100



Source: Statistics Norway

than the levels in 2021 and 2022. The supply side of the market thus does not appear to be unusually tight. The average time on the market is also at approximately the same level as in 2021, after being very low in 2022.

Figures from the Norwegian Homebuilder Association show that the number of housing starts up to and including April was 50 per cent lower than in the same period in 2022. This will have negative consequences for housing investment going forward. The tendency is closely associated with falling sales of new dwellings, which at present are 45 per cent lower than in 2022. The figures for March and April are approximately the same as during the first lockdown due to the outbreak of the Covid pandemic in 2020. As explained in previous quarterly reports, most recently in *Economic Survey 1/2023*, there are many factors underlying the low sales and limited housing starts. The rise in prices for important building materials remains strong. Statistics Norway's construction cost index shows an annual rise of 6 per cent in April. Other factors that play a part are slow processing of construction permits by local government, higher mortgage rates and great uncertainty concerning future house prices. According to the quarterly national accounts, housing investment fell by 2.2 per cent from 2022 Q4 to 2023 Q1. This means that the decline in housing investment so far this year has exceeded the negative growth in the projection path for the whole of 2023 in our previous report. We are therefore revising down our projections for growth in housing investment by 4.2 percentage points, to a fall of just over 7 per cent for 2023. As the rise in price for building materials abates, we expect housing investment to edge up again next year, with growth of about half a percent, but to gather pace in 2025 and for the remainder of the projection period.

In our model, several economic variables are involved in determining resale home prices. The interest rate level and household real disposable income play a particular part. So far, the rise in house prices has proved robust in the face of higher interest rates and a higher cost of living for households. There is therefore great uncertainty associated with our projections, for example with respect to the size and duration of the effect of the relaxation of the mortgage regulations and the low level of activity in the market for new dwellings. In isolation, both these factors will apply upward pressure on house prices. The real interest rate is expected to be positive from 2024 onwards. Our projection for growth in household real disposable income in 2023 is -0.3 per cent. Both factors apply downward pressure on inflation, but not as much as assumed in our previous report. Finance Norway publishes the Consumer Confidence Indicator, which measures Norwegians' expectations regarding the future. Figures for 2023 Q2 show that Norwegians are generally pessimistic, but far more pessimistic regarding Norway's economy than regarding their own financial situation. Norwegians' expectations regarding their own financial situation have improved substantially compared with the low in 2022 Q4. We are accordingly raising our projection for the rise in house prices slightly compared with our last report. House prices are expected to fall in 2023 nonetheless, but towards the end of 2024 and into 2025 the rise in nominal prices is expected to pick up. However, the rise in real house prices, defined as nominal house prices deflated by the national accounts consumption deflator, is forecast to fall by more than 10 per cent through 2023 and 2024. This is a somewhat sharper fall than in our previous report, but growth will become positive again when inflation falls towards the end of the projection period.

Many new field developments means growth in petroleum investment

Following growth of 14.3 per cent in 2019, petroleum investment has fallen in the three subsequent years, so that the level in 2022 was 10.5 per cent lower than in 2019. According to seasonally adjusted national accounts figures, investment fell by 1.6

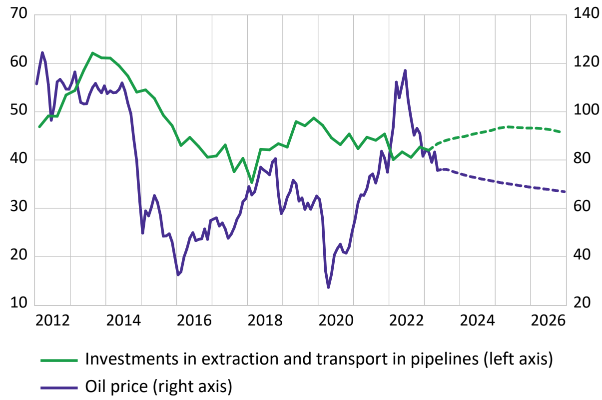
per cent from 2022 Q4 to Q1. However, investment in Q1 this year was 5.2 per cent higher than in Q1 last year. The upswing was driven by higher investment in production platforms, rigs and modules. Investment prices increased by 8.1 per cent in Q1 compared with the same quarter last year.

The fluctuations in petroleum investment are very largely driven by investment in developments. The other main categories have either exhibited more stable development or their investment levels are too small for variations from year to year to significantly affect aggregate petroleum investment. The Storting package of tax measures that was adopted in June 2020 to support the industry in connection with the sharp fall in the oil price early in the Covid pandemic, coupled with high oil and gas prices, has triggered a very large number of new developments on the Norwegian continental shelf. We therefore expect the falling investment in recent years to reverse into clear growth this year and next. Less new developments than normal are expected in subsequent years. As some of the ongoing developments reach completion, we assume that growth will slow in 2025, and that investment will then fall moderately in 2026.

The petroleum companies' investment plans for the current year and next year are surveyed in Statistics Norway's quarterly investment intentions survey (KIS). In the last survey from May, the nominal projection for 2023 is approximately NOK 198 billion, which is an increase of 5 per cent compared with the projection in the previous survey in February. The increase is taking place largely in fields in operation and field developments. In light of the pronounced depreciation of the krone since the previous survey, we assume that some of the increase in the projection is due to the petroleum companies having priced in higher investment prices in their budgets for 2023. We forecast nominal investment growth of 13 per cent this year. Given an assumed rise in investment prices of 7 per cent, this will result in a 6 per cent growth in volume. We are raising the growth in volume by 1 percentage point, mainly because the investment projection in the survey was somewhat stronger than expected.

The projection in the most recent survey for total investment in oil and gas activities in 2024 is approximately NOK 182 billion, which is about 2 per cent higher than the projection published in February.

Figure 11. Petroleum investments and oil price
Seasonally adjusted. Left axis: billion 2020 NOK, quarter
Right axis: USD per barrel



Source: Statistics Norway

We assume there will be relatively moderate investment in 2024 in developments for which plans for development and operation (PDOs) have not yet been delivered, and which are therefore not included in the survey. Investment in 2024 in some of the other categories, particularly fields in operation, is assumed to be markedly higher than the figures in the last survey. We forecast 4.5 per cent growth in volume for 2024, down 1.5 percentage points from the previous report. As we have increased growth this year by 1 percentage point, the forecast investment level for 2024 is only marginally lower than in the previous report.

We forecast investment growth of 2.5 per cent in 2025 and a fall of 1 per cent in 2026. This will result in a slightly lower investment level in 2025 than forecast in our previous report, and marginally lower than the level we last forecast for 2026. The slightly downward revised projections for the years 2024–2026 are partly attributable to the cancellation of one of the development projects for which a PDO was submitted in December. The smallest of the ongoing field developments added last year will be completed in 2025 or early 2026. We assume that the associated investments will not be fully compensated for by upcoming developments, which will involve more moderate investment growth in 2025 and a slight fall in 2026. Given this scenario, the investment level in 2026 will be slightly higher than in 2019.

In Q1 this year, oil and gas extraction was 2.9 per cent higher than in the same period last year. Liquid production increased by 2.5 per cent, while gas production increased by 3.2 per cent compared with 2022 Q1. The Norwegian Petroleum Directorate forecasts that growth in extraction will be 3 per cent this year and 2.4 per cent next year. Petroleum production is expected to increase by 1.5 per cent in 2025 before falling gradually through the remainder of this decade.

Transition to renewable energy in manufacturing promotes growth in business investment

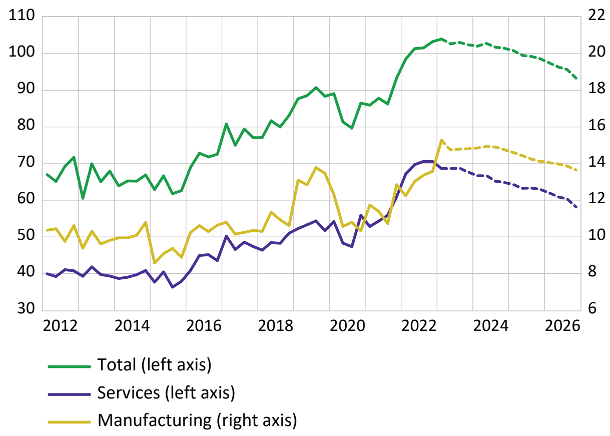
Preliminary national accounts figures show that business investment rose by 1.7 per cent in 2022 Q4 and 0.7 per cent in 2023 Q1. Investment in manufacturing and mining rose by 1.6 and 12.6 per cent, respectively, in these quarters. Growth in investment in other goods production also picked up, from 1.5 per cent in 2022 Q4 to 7.4 per cent in 2023 Q1.

According to Statistics Norway's investment intentions survey for 2023 Q2, investment in manufacturing and mining will increase sharply in the course of 2023 and 2024. Large individual projects in basic metals and in computer and electrical equipment will make a particular contribution to the growth, and several of these can be linked to the transition to renewable energy and emission cuts. Higher investment growth is reported for 2024 as well, with large individual projects constantly linked to “the green transition”. Mining businesses also forecast growth in 2023 and 2024. Particularly strong growth is expected in the years ahead as a result of planned investment of close to NOK 2.9 billion in the Engebø project, whereof NOK 1.4 billion in 2023.

Businesses also report strong growth in investment in power supply in 2023 and 2024, largely associated with a sharp upswing in electricity distribution. The production stage will detract from growth, as several windpower projects have been completed in recent years and few new ones have been added. Some of the growth forecast for 2024 can also be linked to investment in district heating and other power supply, but there is considerable uncertainty associated with the projection because the costs of these projects have risen substantially recently. It appears likely that Government support for offshore windpower will have to be increased from NOK 15 billion to NOK 23 billion in order for projects to be practicable, which creates further uncertainty as to whether the investment actually

Figure 12. Investments Mainland Norway

Seasonally adjusted, billion 2020 NOK, quarter



Source: Statistics Norway

will take place. Private sector investments in power production, such as Equinor's Trollvind development outside Bergen, also appear likely to be postponed or put on hold indefinitely because of increased costs.

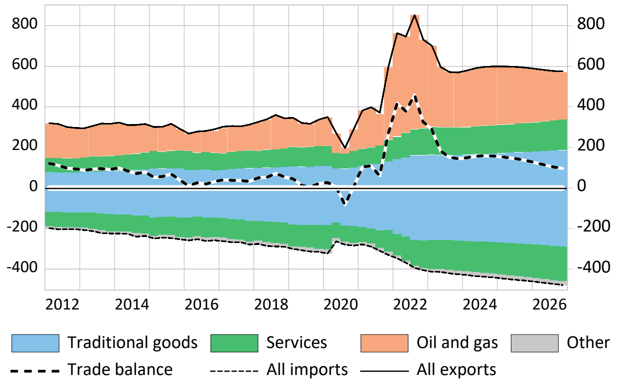
In our projections, overall business investment is forecast to increase by about 1 per cent in 2023. We forecast that growth in manufacturing and mining will be about 13 per cent in 2023, driven primarily by strong growth in manufacturing, but also by strong growth in mining. The fact that overall business investment will be considerably lower nonetheless is mainly due to weak developments in investment in service industries. The businesses that reported to Norges Bank's Regional Network in March 2023 stated that high price and cost inflation, higher interest rates and few new public sector contracts would depress activities for the next twelve months. Service industries expect the investment level to be approximately unchanged this year compared with last year’s level. Fairly strong growth in manufacturing and mining in 2024 is expected to push growth in business in investment up slightly next year. However, the long-term effects of the interest rate hikes will restrain investment a little in 2025 and 2026.

Reduced, but still large trade surplus

A sharp rise in prices for natural gas and crude oil resulted in total exports having a record high value last year, reaching a peak in 2022 Q3. Subsequently, the price of natural gas in particular, but also of oil, has fallen sharply. The value of total exports in the last two quarters was considerably reduced. The fall in value in Q1 this year was less than that

Figure 13. Foreign trade

Exports (positive axis), imports (negative axis) and balance of trade
Value (current prices), seasonally adjusted, billion NOK, quarter



Source: Statistics Norway

in Q4 last year, partly because oil and gas prices fell less, but also because exports of traditional goods, services, oil and gas all increased in volume. The big export product groups basic metals and engineering products both reported a high growth in volume in Q1 this year, and were responsible for exports of traditional goods increasing slightly. The high growth in overall service exports in 2021 and 2022 continued into 2023. Foreigners' consumption in Norway increased through 2022, and growth was high in Q1 this year. Administrative and support services also contributed substantially to a pronounced increase in overall service exports in Q1.

There were minor changes in the price indices for overall goods and service exports, apart from oil and gas prices. Traditional goods continued to rise in price, but at a slowing rate. Fish, fish products and industrial chemicals – all major export product groups – rose substantially in price in Q1 this year, while prices for basic metals and engineering products fell. Prices for service exports as a whole fell slightly, in large part due to a marked fall in prices for information services.

Total imports only increased slightly in Q1 this year. Imports of cars peaked in Q4 last year, before the notified increase in tax on electric cars from Q1 this year. The expedited car sales resulted in reduced car imports in Q1, and this contributed substantially to reducing goods imports. Norwegians' travel abroad increased sharply through 2022, and the growth continued in Q1. Growth in overall service imports was broad-based. A persistent weakening of the krone through 2022 and Q1 this year has not yet halted the increase in Norwegians' foreign travel. Whereas prices for imported goods rose in Q1, prices for service imports only dipped slightly.

The uncertainty regarding global economic developments in the next few years has not abated since our last report. We have revised down slightly our projection for growth in demand from our trading partners this year, but otherwise kept projections of increasing growth approximately unchanged for the next three years. High interest rates and a weak krone will dampen growth in domestic demand this year, before demand increases again in the last three years of the projection period. This points to growth in mainland exports being higher than growth in imports. We have assumed unchanged exchange rates going forward, and expect import prices to rise more than export prices, so that mainland Norway has a terms of trade loss in the years 2023–2026.

With the exception of the Covid year of 2020, oil and gas exports have ensured a trade surplus every year except 1989. Following a peak in 2022 Q3, energy prices are on their way down. The forward market points to a further fall over the next few years. The value of oil and gas exports is mainly determined by oil and gas prices, as export volumes will not change much in the next few years. This year we forecast that there will be a large fall in the value of oil and gas exports, but after that no major changes are expected during the projection period.

Last year's record high trade surplus may be more than halved this year, and reduced to a third during the projection period. The trade surplus will still end up close to the previous peak in 2008. When an increasing income and current transfers surplus is added, the total – the current account balance – as a share of GDP is forecast to fall from 30 per cent in 2022 to 15 per cent this year and by a further couple of percentage points by 2026.

Stable Norwegian economy

Mainland GDP grew by 0.2 percent in 2023 Q1. This weak development follows a period of moderate growth in the mainland economy which has persisted since the reopening of society early last year. Towards the end of 2022, however, the economy showed signs of slowing. At the time of our last publication, several industries reported reduced

Box 2. Projections for the GDP in current prices are uncertain

In this economic report we are publishing projections for gross domestic product (GDP) in current prices for the very first time. These supplement our projections in fixed prices, which measure changes in output volume. GDP in current prices is closely associated with various policy targets. Examples are NATO's target that 2 per cent of the GDP of each member country should be spent on defence, or the Norwegian Government's target that spending on research and development should account for 3 per cent of GDP.[1] Another long-standing target has been that the development assistance budget should account for at least 1 per cent of gross domestic income (GDI), a target that is of course also closely linked to developments in GDP.[2] Our projections for GDP in current prices can thus act as an early guideline for decision-makers. However, since GDP in current prices is closely linked to wealth creation in the petroleum sector, and is therefore strongly affected by fluctuations in commodity prices and exchange rates, this variable is highly volatile.

GDP in current prices is a measure of the value of overall economic activity in Norway, and expresses the economic value added through production of goods and services. To illustrate why one should be cautious in interpreting projections of this variable, we perform a shift analysis using the KVARTS macroeconomic model, based on historical figures. In using historical figures, it is assumed that there is no uncertainty associated with variables others than those affected by the shift analysis. This makes it easier to compare results with the actual outturn. We have chosen the years 2021 and 2022 because these years were characterised by economic disruptions and market conditions that were difficult for projection-makers to capture in advance. The krone strengthened during this period and oil and gas prices surged. In the shift analysis, we take as starting points two different scenarios for the exchange rate and oil and gas prices. The one shows how GDP in current prices developed, with the actual movements in these variables, while the other shows hypothetical developments if the exchange rate level and forward oil and gas prices had remained unchanged from the end of 2020. As we assume an unchanged exchange rate and unchanged forward oil and gas prices in the analysis, the second scenario will correspond to a projection for these variables published in December 2020 with a projection horizon of two years. The shift analysis illustrates how much our projections for GDP in current prices may differ as a consequence of varying exchange rates and oil and gas prices.

Figure 2. GDP in current prices

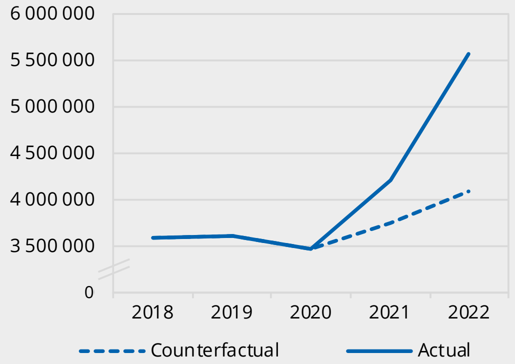
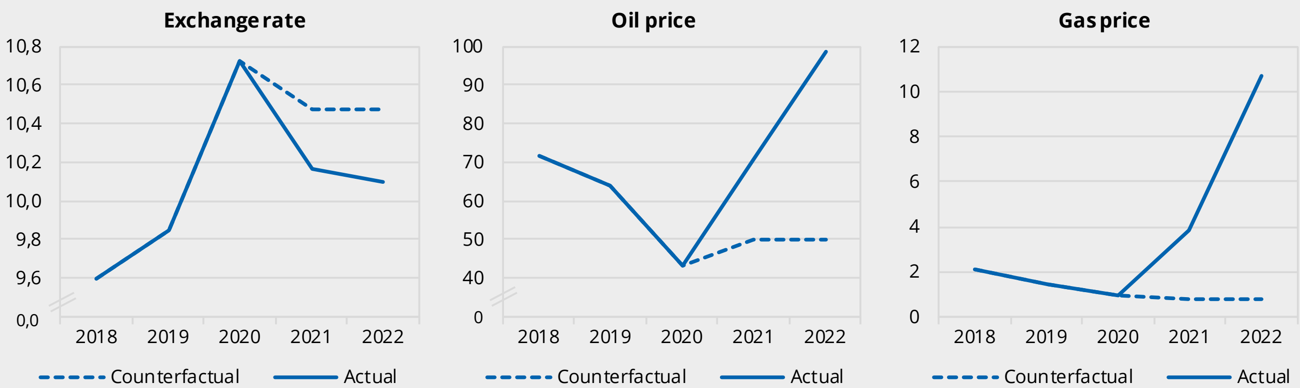


Figure 1 shows developments in the exchange rate and in oil and gas prices in the two scenarios. The starting point for the second scenario is the exchange rate at the end of 2020, when one euro cost NOK 10.47. The exchange rate is therefore set at this value through 2021 and 2022. In December 2020, the forward price of oil, ICE Brent Crude on the Intercontinental Exchange (ICE), was about USD 50 per barrel for deliveries up to two years ahead. In the shift analysis, we therefore assume, along with an unchanged exchange rate, an oil price of USD 50 per barrel in 2021 and 2022. For gas the forward price, given by ICE Dutch TTF, was about USD 16.5 for 2021 and USD 15.8 for 2022, per MWh. We use these figures to adjust the price index in the national accounts for Norway's gas production in the projection period.

Figure 2 shows actual (solid line) and counterfactual (broken line) developments based on an unchanged exchange rate and unchanged oil and gas prices. The difference between the two scenarios for GDP growth in current prices is 13.7 percentage points in 2021 and as much as 23.1 percentage points in 2022. The difference can be mainly attributed to oil and gas prices. The difference between the two scenarios amounts to 11.2 per cent in 2021 and a full 26.8 per cent in 2022. The shift analysis thus illustrates the uncertainty latent in GDP projections in current prices, but it is important to point out that this is a highly unusual situation due partly to the crisis in Ukraine from February 2022.

Figure 1. Skifts in the exchange rate (NOK per euro) and oil and gas prices



[1] See Long-term plan for research and higher education 2023–2032.
[2] GDI is defined as GDP less capital income and wages to other countries, net.

new orders, expectations of reduced household demand and negative prospects. The weak developments in Q1 appear to substantiate that growth of mainland economic activities is on the decline. Mainland GDP remained at our estimated trend level through 2023 Q1. Statistics Norway is now publishing projections for GDP at current prices; see Box 2.

The general picture for the mainland economy was mixed in Q1, and developments in industries diverged widely. A marked fall in wholesale and retail trade had the greatest impact. The introduction of taxes on electric cars from 1 January this year led to car sales being historically high towards the end of 2022 and record low at the beginning of 2023. This pushes down the mark-up in wholesale and retail trade in Q1. Mainland GDP excluding wholesale and retail trade shows growth of 0.4 per cent. Car purchases had reverted to normal levels in March, but dipped slightly in April. As car purchases were far lower at the beginning of the year than they seem likely to be going forward, this in isolation will probably push up mainland GDP in the quarter ahead.

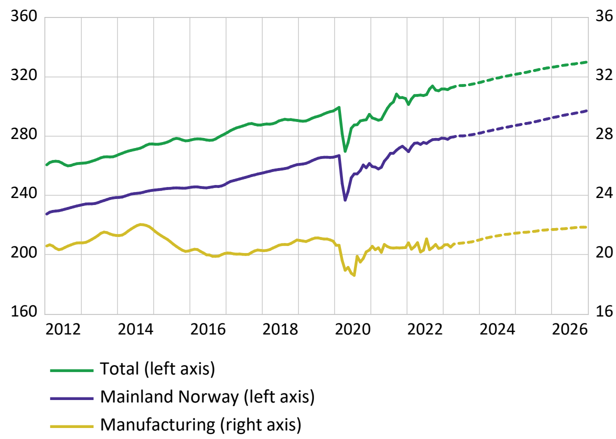
Value added grew in most other service industries, and household consumption of services has remained buoyant so far this year. Professional, scientific and technical services provided large positive contributions to mainland GDP growth. Value added also increased in accommodation and food services, cultural activities, ICT and services associated with oil and gas extraction

On aggregate, value added in manufacturing and mining grew by 0.5 per cent in Q1. Growth was attributable mainly to manufacturing segments that deliver goods to the petroleum industry, in particular the construction of oil platforms and modules, and to the electronics and machinery and equipment industry. This may be attributable to the fact that many field development projects on the Norwegian continental shelf were submitted late last year. Developments in other manufacturing segments were generally negative.

There was an increase in volume in most primary industries and in electricity production in Q1. However, activity in aquaculture shrank significantly. Value added in the construction industry grew by 0.4 per cent. Developments in the industry

Figure 14. Gross domestic product

Seasonally adjusted, billion 2020 NOK, month



Source: Statistics Norway

through 2022 were almost flat. The costs of materials for residential construction have been high, and increases in interest rates have curbed housing demand. According to Statistics Norway's building statistics, the figures for housing starts in Q1 were the lowest seen for more than 10 years. Construction companies in Norges Bank's Regional Network report a reduction in new orders, and expect activity to slow going forward.

The volume of crude oil and natural gas extraction increased by 0.4 per cent in Q1. Higher oil production on the continental shelf pushed up figures, while gas production fell slightly. The fall in price for petroleum products, and natural gas in particular, led to a 0.9 per cent fall in overall GDP, measured in current prices. The value of production and exports from the Norwegian continental shelf remains very high, nonetheless.

Growth in 2023 Q1 was the lowest seen since the same period a year ago, when the economy was still affected by the pandemic and lockdown. Nevertheless, the national accounts figures for the quarter show a stronger picture in several areas than businesses envisaged at the time of our last publication, and the profitability of the industries appears to be good on balance; see Figure 3.5 in Økonomiske analyser 2/2023 (Norwegian text).

Industrial leaders in the business tendency survey for manufacturing, mining and quarrying previously reported an expected decline in production in early 2023, but preliminary national accounts figures show growth due to the high level of activity among suppliers to the petroleum industry. In the most recent publication of the survey, suppliers to the petroleum industry report expected growth up to the summer, but other manufacturing segments have a pessimistic view of the outlook.

In Norges Bank's Regional Network's Q1 report, service businesses report that household demand has been higher than expected so far this year. If developments in wholesale and retail trade are excluded, there was broad-based growth among service providers in Q1. Construction activity has also remained buoyant so far this year, despite signs for some time of a decline.

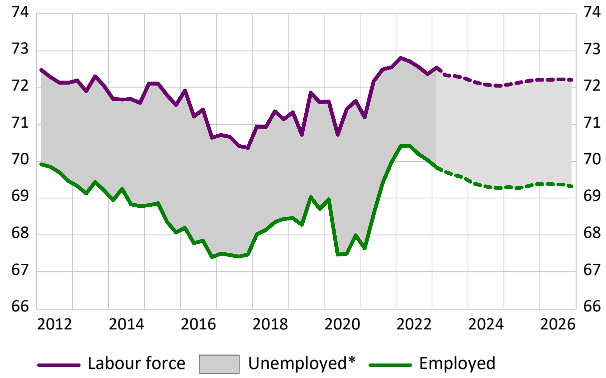
In our projections, annual mainland GDP growth is forecast to be 1.3 per cent this year, the same as in our last economic report. The projection for the years ahead has been revised slightly upward because of somewhat higher forecast growth in mainland investment and in public consumption, but economic activity is still forecast to remain close to trend through the projection period.

Minor changes in unemployment and employment

Pressures in the labour market remain high. Employment is high and unemployment low, with small movements since our last publication. There are signs of the high pressures in the labour market abating somewhat, but the various labour market indicators do not give an entirely consistent picture. The Labour Force Survey (LFS) indicates somewhat increasing unemployment which is not reflected in figures from the Norwegian Labour and Welfare Organisation (NAV). According to the LFS, the increase in employment is weaker than suggested by the national accounts figures, but this may be partly because they are based on somewhat different populations. For example, the LFS only covers persons registered as resident in Norway. According to Statistics Norway, the stock of job vacancies was at a historically high level in 2023 Q1, while NAV reports a fall in new vacancies at the beginning of 2023.[4] The various indicators are based on different definitions and methods, and it is therefore not unnatural that they yield partly divergent results.[5] But the differences between the two unemployment indicators are now larger than usual, which adds extra uncertainty regarding the state of the labour market. One cause of the differences in the unemployment figures is that there is an increase in young people in education who are trying to get a job, frequently part-time. The NAV statistics do not capture these to the same extent as the LFS.

Figure 15. Labour market status

Percent of population in working age, LFS



* Unemployment is measured as share of population in working age

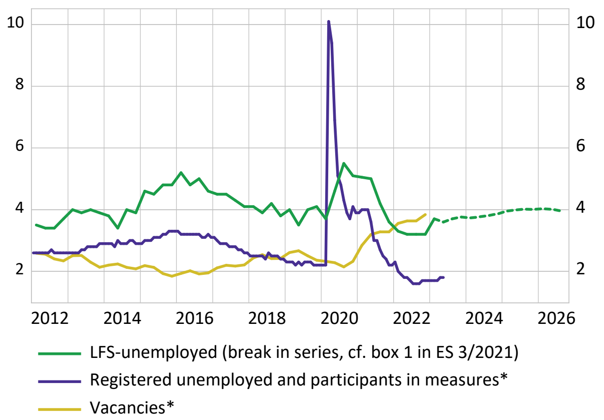
Source: Statistics Norway

According to the LFS, seasonally adjusted unemployment rose to 3.7 per cent in 2023 Q1 after lying at between 3.1 and 3.2 per cent throughout 2022. This is nonetheless appreciably lower than the average for the period 2010–2019, which was 4.1 per cent. Part of the explanation for the higher unemployment is that the labour force continued to grow, reaching a temporary peak in 2023 Q1. The first quarter figures go up to March, while the seasonally adjusted 3-month moving average for March includes figures for April. Unemployment increased to 3.7 per cent, from 3.4 per cent for the previous 3-month period. Monthly trend figures are published in addition to the 3-month moving average. The trend figures represent the long-term tendency of the monthly figures. In April 2023, unemployment was 3.5 per cent according to the trend figures.

[4] Vacancies are described rather differently by NAV and Statistics Norway. In the NAV statistics, vacancies are presented as jobs added in the course of the month. They cover vacancies that are either reported to NAV or published in the media. Thus the NAV statistics do not cover informal announcements or other types of attempts to fill vacancies. Statistics Norway's statistics consist of a sample survey which estimates the number of vacancies at the end of the middle month of the quarter, and are intended to cover all types of announcements.

[5] The article Hvorfor ulike arbeidsledighetstall? [Why different unemployment figures?] provides a thorough description of the differences between the unemployment figures published by NAV and 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

LFS unemployment among persons aged 15–24 has increased appreciably in the last two quarters. In 2022 Q3 it had fallen to 9.4 per cent, close to the lowest figure observed for this age group since the financial crisis. However, it increased to 10.8 per cent in Q4, and further to 11.6 per cent in 2023 Q1. This increase coincided with historically high employment for this age group.

The seasonally adjusted registered unemployment figure published by NAV has been at a historically low level since the beginning of 2022. After lying at 1.7 per cent for 8 consecutive months, it increased to 1.8 per cent in April 2023. Thus there is little sign of the increase in LFS unemployment to be found in the NAV figures. This is probably because persons aged 15–24 who are trying to get work go to NAV less frequently than other groups, because many of them do not have a right to unemployment benefit. The number of fully unemployed laid off persons is still low, and in March 2023 accounted for only 0.2 per cent of the labour force.

According to the LFS, there was weak growth in seasonally adjusted employment through 2022, with growth of 0.3 per cent from 2022 Q1 to 2023 Q1. In 2023 Q1, 69.4 per cent of the adult population was employed, compared to 69.9 per cent in 2022 Q1. By way of comparison, the average employment rate was 68.8 per cent in the 10-year period 2010–2019. However, it was 71.3 per cent (adjusted for breaks) in 2009 Q1, i.e. almost 2 percentage points higher. Employment has also been over the level of around 69–70 per cent during several periods prior to the break in 2021. It should also be noted that the break in 2021 resulted in an increase in employment.

The employment rate among persons aged 15–24 peaked in March 2023 at 58.5 per cent, measured as a 3-month moving average. By way of comparison, the average was 52.3 per cent in the period 2010–2019.

Another group in which employment has increased in recent years consists of immigrants, i.e. residents born abroad with foreign parents and grandparents. In 2022 Q4, the number of wage-earners classified as immigrants was higher than ever, but then dipped slightly by 0.7 per cent to 2023 Q1. The figure is still higher than in 2022 Q1. In 2022, 32 500 Ukrainian citizens immigrated to Norway, and we expect about as many in 2023.[6]

The national accounts show solid growth in both employment and hours worked. Employment rose by 0.5 per cent from 2022 Q4 to 2023 Q1, while hours worked increased by 0.6 per cent. Employment was then 2.2 per cent higher than a year earlier, and hours worked were 2.1 per cent higher. The hotel and restaurant industry and professional, scientific and technical services reported particularly strong developments in 2022, with employment in both cases increasing by 1.7 per cent from 2022 Q4 to 2023 Q1. There were also strong developments in transport excluding shipping, and to some extent in arts, entertainment and other services.

According to the national accounts, developments in employment this past year have been appreciably stronger than shown by the LFS. According to the LFS, employment in 2023 Q1 was only 0.3 per cent higher than one year previously, whereas the national accounts report growth of 2.2 per cent. The populations covered by the two statistics are somewhat different. The LFS only looks at residents, while the national accounts cover persons who work in mainland activities, irrespective of whether they are resident in Norway or not. This means in practice that the national accounts differ from the LFS in including non-residents who work

[6] See memo from the Norwegian Directorate of Immigration: https://www.udi.no/statistikk-og-analyse/statistikknotater/tre-ulike-scenarioer-for-antall-flyktninger-fra-ukraina/ [Three different scenarios for the number of refugees from Ukraine].

in activities located in Norway. In addition, the LFS is a sample survey, which implies sampling uncertainty. The most recent national accounts figures, i.e. the figures for 2023 Q1, are based on statistics only for January and February, while the March figures are projections.[7] The self-employed figures lack a sufficiently solid source and are estimated. We are nonetheless somewhat uncertain as to why developments in the two statistics this past year are so different, and why the difference is substantially larger than usual. Thus there is somewhat more uncertainty than normal surrounding developments in employment.

The number of foreign commuters (non-resident wage-earners) was 84 000 in 2023 Q1, which is somewhat higher than the average for Q1 in the period 2016–2019 and roughly the same level as in 2020 Q1, the period immediately before the pandemic.

In 2023 Q1 the labour force was at the highest level ever measured, 0.7 per cent higher than in 2022 Q1. The participation rate, i.e. the labour force as a share of the population, was 72.7 per cent in March 2023, calculated as a seasonally adjusted 3-month moving average. This is approximately the same level as in March and April 2022, when it was 72.9 per cent, the highest level observed since 2010.

Demand for labour was at a high level in 2021 and 2022. According to NAV, 71 100 new jobs were added in March 2022, the highest level observed in the past 5 years. However, the supply of new jobs has fallen through 2023, and in April was 35 000. The average number of new jobs in the 3-month period February to April was 28 per cent lower in 2023 than in the same period in 2022.

Statistics Norway provides figures for the stock of vacancies in relation to the total number of jobs, based on a questionnaire circulated among businesses. This survey includes more types of announcements than are covered by NAV's figures. According to Statistics Norway, the number of vacancies in 2023 Q1 was at the highest level recorded since the start of the survey in 2010. The share of vacancies increased from 2022 Q4 by 0.9 percentage point, to 4.3 per cent.

The labour market was tight through 2022 and early 2023. Going forward, we expect growth to follow the historical trend, which will result in weak employment developments due to solid productivity growth. We expect 1.2 per cent employment growth in 2023 and then low growth for the remainder of the projection period. Given this development, employment will keep pace with the increase in the working age population, with the result that the employment share falls and unemployment rises somewhat, to a historically normal level. We envisage unemployment of 3.7 per cent in 2023, roughly as in our previous economic report. Weak employment growth will then result in a gradual increase in unemployment, to 4.0 per cent in 2026. By way of comparison, average unemployment in the period 2010–2019 was 4.2 per cent. The labour force will grow by between 0.2 and 0.6 per cent annually through the projection period.

High wage growth this year

Following a short strike in mid-April, LO Norway and the Confederation of Norwegian Enterprise (NHO) agreed on a norm of 5.2 per cent in 2023 for annual wage growth in overall manufacturing under the Confederation of Norwegian Enterprise (NHO). For manufacturing workers, who account for over half of employees in businesses under the NHO, the wage carry-over into 2023 will contribute 1.4 percentage points, while for clerical employees in manufacturing it will contribute 2 percentage points. The centrally negotiated pay increases are calculated to contribute 2.1 percentage points, while the majority of clerical workers in manufacturing will only receive locally (not centrally) negotiated pay increases. The remainder of the projected annual wage growth in manufacturing is wage drift, defined as the sum of all factors that influence annual wages other than the contributions from carry-over and pay increases, including the outcome of local wage negotiations.

Growth in average monthly basic earnings in 2023 Q1 compared with the same quarter last year was 4.4 per cent. Wage growth for persons with the same job the previous year was 5.3 per cent, while it was 7.0 per cent for those who changed jobs in

[7] The key source for calculating employment in the national accounts is reflected in the statistic Number of employments and earnings. It consists of a total count of businesses. Employment and jobs are reported along with wages, which means that employment can be viewed in conjunction with wages, payroll tax and advance tax deductions by employers.

the course of the year.[8] Of the major industries, education, with growth of 2.6 per cent, and health and social services, with growth of 3.6 per cent, pushed down average wage growth in 2023 Q1. Growth in average monthly basic earnings was 4.7 per cent for manufacturing and 4.8 per cent for wholesale and retail trade, and hence made a positive contribution to the average growth rate in 2023 Q1.

In 2023 Q1 the labour market featured a large number of vacancies (measured as stock), with a seasonally adjusted increase of 11.5 per cent from 2022 Q4 to 2023 Q1.[9] A large share of the increase occurred in wholesale and retail trade and construction, with increases of 4 000 and 2 800 jobs, respectively. The level of vacancies in these industries is at a historically high level, and combined they accounted for about 22.3 per cent of vacancies in 2023 Q1.

At an aggregated level, the combination of low unemployment, measured by seasonally adjusted LFS figures, which in Q1 were lower than the average for Q1 in the period 2010–2022, and a historically high level of vacancies, indicates a relative shortage of qualified labour. This movement along the Beveridge curve, which stems from the business cycle, points towards a tight labour market. This may mean that employers have to offer higher wages in order to recruit new employees, with the overall effect of pushing up wage growth.[10]

On the other hand, the increase in unemployment (measured by seasonally adjusted LFS figures) from 3.2 per cent in 2022 Q4 to 3.7 per cent in 2023 Q2, combined with the increase in vacancies in the same period, indicates less effective matching of employers with employees.[11] In the long term, such a potential outward shift of the Beveridge curve, attributable to structural changes in the economy, may lead to reduced wage growth. At the same time, the rise in unemployment is not driven by an increase in the number of persons who lose their jobs, but rather by more people registering as job seekers.[12] This may suggest that it is the improved possibilities on the labour market, and not necessarily changes in structural conditions, with more unemployed as a result of greater mismatch, that have caused the movements in the Beveridge curve in the last quarters.

Our projection for annual wage growth in 2023 has been adjusted up from 5.0 per cent in our previous report, to 5.3 per cent. The projection is surrounded by uncertainty associated with developments in the tightness of the labour market and the possibility of wage growth exceeding the norms established by the income settlement. Although the annual wage growth projection has been revised up, the projection for the rise in the consumer price index (CPI) for this year of 5.6 indicates a decline in real wages. Going forward, we expect CPI inflation of just over 2 per cent, and hence annual growth in real wages of about 2 per cent by 2026.

The weak krone is contributing to higher underlying inflation

The annual rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) has been stable for the past months. The 12-month rise in the CPI-ATE in March and April 2023 was 6.2 and 6.3 per cent, respectively. In the first 4 months of the year, prices measured by the CPI-ATE rose by an average of 6.2 per cent compared with last year. The annual rise in the consumer price index (CPI) has been somewhat higher than the rise in the CPI-ATE so far this year.

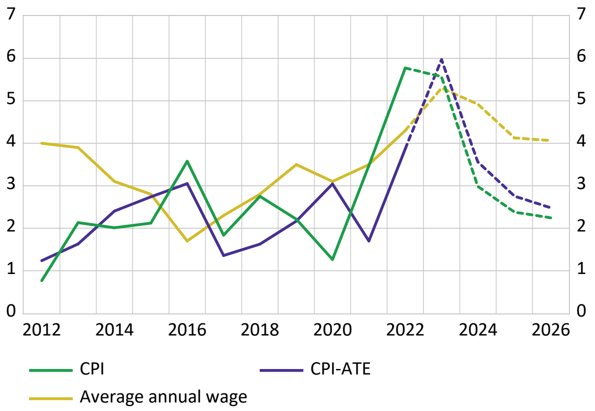
The difference between CPI and CPI-ATE inflation is partly due to developments in energy prices, particularly electricity prices, but also to some extent to increased taxes. Household electricity prices including grid charges are included in the CPI as an average price for Norway. Even with an enhanced energy support scheme for households, higher spot prices for power in Central and Northern Norway in the first months of this year contributed to inflation. In the period January–April, spot prices for electricity in these parts of Norway did not reach the threshold level of 70 øre/kWh which

[8] See Kvile, J. (2023): Flere jobber og høyere lønn i første kvartal [More jobs and higher earnings in the first quarter].
[9] See Rothe, J. S. and Gading, R. (2023): Talet på ledige stillinger fortsett å auke [The number of vacancies continues to rise].
[10] The Beveridge curve shows the relationship between unemployment and the job vacancy rate.
[11] Such reduced matching effectiveness may be due to geographical factors (new jobs being announced in labour market regions where there are not many job seekers) or qualification-related factors (job seekers do not possess the skills in the form of education or professional experience that employers are now looking for).

[12] See Lien, H. (2023): Flere arbeidsledige i første kvartal [More unemployed in Q1].

Figure 17. Consumer price indices and annual wage

Change from previous year in percent



Source: Statistics Norway

triggers energy support, either this year or last. The rate for most special taxes has been adjusted by 2.8 per cent for inflation for 2023. In isolation, this moderate adjustment dampens the rise in prices for many groups of goods and services in the CPI. Higher vehicle taxes and the reintroduction of air passenger tax from 1 July 2022 have nonetheless contributed to net changes in taxes on goods other than energy products, pushing up inflation by about 0.2 percentage point in the first months of this year.

Prices measured by the CPI rose by an average of 6.6 per cent compared with last year in the period January–April. The difference between the CPI-ATE and the CPI was thus 0.4 percentage point on average for this period. Going forward, we expect lower energy prices compared with the same month in 2022, and that in contrast to earlier this year, CPI inflation will be lower than CPI-ATE inflation for the remainder of the year. We initially expect fuel prices to make the largest contribution to lower CPI than CPI-ATE inflation, and from August we also expect substantial contributions from electricity prices. The air passenger tax, which will be fully phased into the 12-month rise in prices in July 2023, is also contributing a little.

In our March economic report, CPI and CPI-ATE inflation were projected to be 5.0 and 5.4 per cent, respectively, for 2023. Since the last report, all leading indicators that determine inflation developments in our macroeconomic model have been revised on the basis of new, updated data. This applies to the import-weighted krone exchange rate, global consumer prices and import prices for processed goods, crude oil prices, electricity prices and wage projections; see Figure 18. Of these key variables, it is particularly a new weakening of the krone exchange rate since March that has led to inflation projections being revised up. We now forecast that CPI and CPI-ATE inflation will be 5.6 and 6.0 per cent, respectively, for 2023. The annual projections for household energy prices have undergone little revision. Overall, they are expected to fall by about 4 per cent from 2022 to 2023. As in the previous economic report, energy prices are expected to reduce CPI inflation by 0.6 percentage point, measured by the difference between the consumer price index excluding energy prices (CPI-AE) and the CPI. The net effect of tax increases on goods other than energy products is forecast, as it was in March, to increase CPI inflation by 0.2 percentage point, so that the overall difference between CPI-ATE and CPI inflation is still forecast to be 0.4 percentage point for 2023.

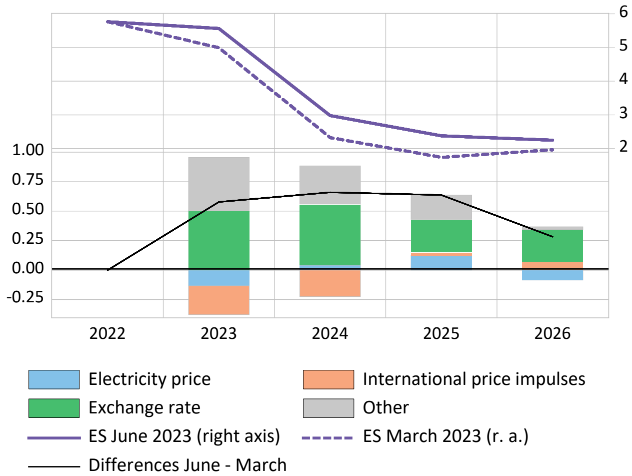
There is a considerable difference in our projections for inflation measured by the national accounts household consumption deflator and by the CPI in 2023. We forecast that the national accounts consumption deflator will increase by 6.9 per cent, which is 1.3 percentage point higher than our projection for CPI inflation. The CPI is included in its entirety in the national accounts consumption deflator, but it does not cover all the consumption groups in the national accounts. Among other things, data on prices for financial services such as banks' interest rate margins in relation to households are not covered. Nor are Norwegians' purchases abroad, whether it be on travel or directly over the internet, included in the CPI and the rise in prices for this product category is forecast to be high, given the current weak krone exchange rate. This means that the increase in the national accounts consumption deflator differs significantly from CPI inflation in our projections.

With a weighting of about 12 per cent, higher food prices have contributed substantially to the rise in the CPI this past year. There has been a double digit 12-month rise in prices for food and non-alcoholic beverages from July 2022 to April this year, with the exception of February and March this year when the price rise was just under 9 per cent. In April the year-on-year rise in prices for this product group was 10.5 per cent. Suppliers to grocery chains normally adjust their prices to the

retailers on two main dates, 1 February and 1 July. The substantial increases in food prices that were announced as applying from 1 February this year were constrained by competition between grocery chains. Consumer prices appear initially to have been revised up by less than the increase in underlying purchase prices as a result of lower mark-ups by the grocery chains. According to the CPI by supplier sector there is a high rise in prices for both imported and domestically produced agricultural products. The Norwegian Institute of Bioeconomy Research (NIBIO) reports that Norwegian food self-sufficiency is less than 50 per cent. Both Norwegian and international factors therefore have a strong bearing on further movements in food prices.
The Government has reached agreement with the Norwegian Farmers' Union on a new agricultural agreement for the coming year. The agreement entails an overall increase of NOK 4.15 billion in potential earnings for 2023 and 2024. NOK 864 million of the potential income is assumed to be covered through higher target prices and NOK 376 million through other expected price rises. NOK 2.9 billion is assumed to be covered through increased transfers from the government budget. According to the Norwegian Ministry of Agriculture, the effect of the increase in commodities on the price index for food and non-alcoholic beverages in the CPI is forecast to be 1 per cent in isolation, which means that the direct contribution to annual CPI inflation will be about 0.1 percentage point. The draft agricultural agreement will be considered by the Storting in June. A large portion of food imports consists of goods that cannot be produced in Norway, such as exotic fruits, sugar and coffee. Norway also imports large quantities of cheese, vegetables and meat, from the EU among other suppliers. According to the Norwegian Agriculture Agency, the rise in prices for agricultural products is high in the EU as well. Drought in Spain and the knock-on effects of high energy and fertilizer costs in agriculture, coupled with a bird flu pandemic, have reduced the production capacity for a number of agricultural products and led to supply side shortages. A high rise in food prices is not a phenomenon unique to Norway, and given the weak exchange rate, the rise in prices for imported goods may be higher than previously assumed for a while to come. In the longer term, it must be assumed that lower energy and fertilizer costs will bring European food prices down again.

Figure 18. New and old estimates of CPI inflation

Contributions to changes in the forecasts from March 2023 to June 2023



Source: Statistics Norway

Volume taxes, which are independent of underlying producer prices, make up a large portion of prices in the food and beverage group alcoholic beverages and tobacco. These taxes were raised moderately from 2022 to 2023, and this is helping to curb the rise in prices for this consumption group. According to the CPI, the 12-month rise in prices for alcoholic beverages and tobacco products has been 4 to 5 per cent so far this year, and in April ended at 5.2 per cent. Moreover, there is a high rise in prices in some product groups with a high content of imported goods. Product groups such as furniture and household items, and audiovisual, photographic and IT equipment have become more expensive, and the year-on-year rise in prices for these product groups was recorded as over 10 per cent in April. Clothing and footwear contribute to bringing down price inflation as usual. There was a slight decline in the price level for vehicle purchases from January to April, and the year-on-year rise for this product group has declined. Competition in the vehicle market has increased, with falling sales of new cars since the New Year and a decline in prices for market-leading makes. On balance, the increase in prices for imported goods in recent months has followed a rising trend, and a weak krone probably means that the increase in prices for imported goods will be somewhat higher than assumed earlier this year.

In transport services, air travel in particular has pushed up inflation so far this year. Since the New Year, the price level for air passenger transport has exhibited a rising trend, and the inflation rate in the period January to April was very high. It was somewhat dampened in April, however, partly because prices for air travel were also high last year during the Easter holidays. Factors contributing to the high rise in prices include a shortage of air travel capacity after the pandemic, high energy prices and the reintroduction of air passenger taxes. The winding up of the low-cost airline Flyr has led to less competition on some stretches. We assume that prices for air travel will remain at a high level in 2023. The rise in prices for air travel, coupled with the weak krone, has consequences for the rise in prices for charter tours, which has been about 13 per cent year-on-year so far this year and is expected to remain high. Prices for other transport services are far more stable. These are mainly travel with public transport, where prices normally vary to a lesser extent through the year after the February price regulation.

The price level for accommodation services has been relatively stable so far this year, and the 12-month rise has slowed in recent months. One reason for this is probably the far lower energy costs this year than last year in Southern Norway. So far this year the 12-month rise in prices for restaurant services has been just over 8 per cent. A moderate rise in alcohol taxes has also contributed to dampening the rise in prices for this service group. This year’s relatively low electricity spot prices, compared with last year’s high prices, are contributing to a lower year-on-year rise in prices for hotel and restaurant services later in the year.

The house rent index in the CPI consists of actual rent and imputed rent, the latter intended to express the value of the service that their dwelling provides for owner-occupiers and unit owners in housing cooperatives. Prices for imputed rent shadow movements in prices for equivalent dwellings in the rental market. According to the CPI by supplier sector, the 12-month rise in rent as a whole increased gradually from 2.9 per cent in January to 3.4 per cent in April. Existing rents are largely regulated by means of the CPI. Given higher interest rates and high demand for rental homes, we assume that the rise in rental prices will continue to gather pace this year.

The overall picture in the electricity market is the same as in our previous report. A cold spring led to spot prices long being somewhat higher than forecast earlier in the year. In May the spring thaw and production of a large amount of unregulated power led to a marked fall in price in all Norwegian power price areas. Spot prices in Southern Norway were nonetheless so high at the beginning of May that the threshold for energy support was also exceeded, with average spot prices of over 70 øre/kWh. Despite some negative spot prices in Central and Northern Norway towards the end of the month, average spot prices for northern price areas were almost double last year’s low May prices. The European gas price has been roughly halved since the New Year, and the spot price for gas at the beginning of June was back at a level that was normal before Russia began to hold back gas supplies to Europe in autumn 2021. This has contributed to a further fall in European spot prices for power. The forward price for Nordic power for delivery in the years ahead has fallen since mid-March, measured in euro. Given the depreciation of the krone in recent months, the decline measured in NOK will be far more modest. When the thaw is over in June, it will tend more to be the producers of regulatable hydropower that set electricity prices. At the end of week 21, reservoir levels in all Norwegian price areas were close to normal. Forward prices for the summer indicate that monthly average prices in Southern Norway will probably be slightly over the threshold of 70 øre/kWh that triggers energy support, with lower prices in Central and Northern Norway. There is a recommendation from the Storting Standing Committee on Energy and the Environment for a support scheme from 1 September based on the average of hour-by-hour prices, which is to be considered by the Storting. The energy support scheme will be approved, but the Storting majority makes allowance for the fact that the distribution companies need time to develop the systems necessary for implementation of the scheme. The introduction of energy support based on hour-by-hour prices may therefore be delayed. In our projections, we have assumed that the scheme will be introduced on 1 September as planned. We forecast that household electricity prices including grid charges and energy support will continue to fall moderately in the course of the projection period. An expected fall in spot prices in the years ahead will mean major cost savings for the business sector, which mainly has power contracts that shadow spot prices and does not take part in the energy support scheme that applies to households. In our model, fuel prices largely shadow crude oil prices in NOK with a premium consisting of special taxes. With the oil price in our projection scenario as the starting point, we also assume that fuel prices will fall moderately in the years ahead.

We have adjusted the special tax rates for inflation for the years 2024– 2026 and expect them to have a neutral effect on CPI inflation, while the scheme with a reduced consumption tax on electricity in Q1 is maintained, and the orientation of energy support is retained as it is in 2023 Q4. As usual, the exchange rates in our calculations are maintained at their levels at the time of making forecasts. Global inflation has been adjusted down since our previous economic report, but the krone has depreciated further, and this is the primary reason that CPI-ATE inflation has been revised substantially upwards, also for the years ahead. Because the effects of fixing consumer prices are time lagged, the whole path of underlying inflation is raised, and assuming a large carry-over in the CPI-ATE at the end of each year going forward, we will not approach the inflation target until 2026. In the medium term, we still assume that the global cost picture will normalise, and that the rise in import prices will gradually fall back to more normal levels of around 2 per cent when the exchange rate effects of a weak krone are exhausted. An expected fall in electricity spot prices will mean lower costs for the business sector. Given the projections on which import prices and wage and productivity growth in this report are based, CPI-ATE inflation is forecast to increase by 3.6 per cent from 2023 to 2024. It will then slow gradually to 2.5 per cent in 2026. An expected moderate overall fall in household energy prices in the years ahead will cause CPI inflation to be somewhat lower than CPI-ATE inflation in the years 2024–2026.

Table 4. National accounts: Final expenditure and gross domestic product. At constant 2020 prices. NOK million

	Unadjusted		Seasonally adjusted							
	2021	2022	21:2	21:3	21:4	22:1	22:2	22:3	22:4	23:1
Final consumption expenditure of households and NPISHs	1 570 547	1 678 656	378 109	406 798	418 682	406 319	416 148	417 972	439 819	417 228
Household final consumption expenditure	1 484 909	1 582 492	358 385	383 506	394 683	383 346	392 268	393 722	415 457	393 108
Goods	773 703	745 782	194 194	199 553	197 610	185 099	184 016	182 920	199 968	175 421
Services	696 978	772 249	165 031	179 340	186 809	187 953	192 723	193 428	195 372	197 206
Direct purchases abroad by resident households	30 449	111 118	1 591	9 097	18 839	20 413	27 093	29 409	32 546	33 938
Direct purchases by non-residents	-16 220	-46 657	-2 432	-4 484	-8 576	-10 118	-11 564	-12 035	-12 429	-13 458
Final consumption expenditure of NPISHs	85 638	96 164	19 724	23 292	23 999	22 973	23 880	24 250	24 362	24 120
Final consumption expenditure of general government	950 044	950 897	236 379	241 367	240 600	236 028	236 993	237 461	240 348	241 523
Final consumption expenditure of central government	473 666	477 149	117 233	120 290	121 014	117 444	118 652	119 458	121 534	121 235
Central government, civilian	418 699	420 633	103 570	106 475	107 077	103 422	104 571	105 358	107 215	106 780
Central government, defence	54 967	56 515	13 663	13 815	13 937	14 022	14 081	14 100	14 319	14 455
Final consumption expenditure of local government	476 378	473 749	119 146	121 077	119 587	118 584	118 342	118 003	118 814	120 288
Gross fixed capital formation	941 857	982 511	234 596	232 723	241 321	244 050	244 864	245 266	248 373	248 013
Extraction and transport via pipelines	176 326	164 840	44 717	44 061	45 378	40 081	41 662	40 550	42 658	41 996
Ocean transport	-460	738	-165	-823	-1 039	1 456	-29	-17	-670	833
Mainland Norway	765 991	816 932	190 044	189 485	196 982	202 513	203 231	204 733	206 385	205 184
Industries	353 301	404 585	87 815	86 249	93 366	98 488	101 349	101 561	103 254	103 961
Service activities incidential to extraction	6 010	8 061	1 219	1 514	2 107	1 584	2 021	1 599	2 860	2 577
Other services	224 072	278 060	54 308	55 906	60 975	67 151	69 713	70 589	70 566	68 653
Manufacturing and mining	46 680	52 177	11 384	10 731	12 851	12 246	13 027	13 365	13 573	15 280
Production of other goods	76 539	66 288	20 904	18 098	17 433	17 507	16 587	16 009	16 254	17 450
Dwellings (households)	205 137	202 367	52 486	50 080	51 554	52 679	50 665	49 291	49 722	48 630
General government	207 554	209 980	49 743	53 157	52 063	51 346	51 217	53 881	53 409	52 594
Acquisitions less disposals of valuables	161	292	27	65	63	68	76	76	72	85
Changes in stocks and statistical discrepancies	121 157	127 747	26 749	30 702	17 728	30 853	31 298	35 139	15 435	34 999
Gross capital formation	1 063 176	1 110 550	261 373	263 490	259 112	274 971	276 238	280 482	263 880	283 097
Final domestic use of goods and services	3 583 766	3 740 103	875 861	911 655	918 395	917 317	929 379	935 915	944 047	941 848
Final demand from Mainland Norway	3 286 582	3 446 486	804 532	837 650	856 265	844 859	856 372	860 166	886 552	863 935
Final demand from general government	1 157 598	1 160 877	286 122	294 524	292 663	287 374	288 211	291 342	293 757	294 117
Total exports	1 179 719	1 249 187	290 087	301 562	308 148	300 291	306 922	321 188	318 605	324 133
Traditional goods	429 579	428 417	110 905	106 161	104 922	103 292	104 459	109 886	108 713	109 302
Crude oil and natural gas	379 606	380 616	95 043	99 162	96 215	93 862	94 096	97 270	95 722	95 804
Ships, oil platforms and planes	20 368	3 386	3 461	8 716	6 409	1 642	615	696	433	578
Services	350 165	436 767	80 679	87 524	100 601	101 495	107 752	113 336	113 737	118 449
Total use of goods and services	4 763 485	4 989 289	1 165 948	1 213 217	1 226 543	1 217 608	1 236 301	1 257 102	1 262 653	1 265 982
Total imports	1 166 965	1 274 898	280 668	300 102	309 021	303 536	313 531	323 207	328 960	330 041
Traditional goods	779 268	798 509	195 439	199 765	191 065	193 400	195 238	200 912	205 134	195 398
Crude oil and natural gas	15 218	10 329	6 148	2 509	3 129	2 602	2 507	2 547	2 920	3 665
Ships, oil platforms and planes	36 807	21 386	7 231	11 257	11 494	8 122	4 859	5 046	3 360	4 915
Services	335 672	444 674	71 850	86 571	103 333	99 413	110 927	114 702	117 546	126 063
Gross domestic product (market prices)	3 596 520	3 714 392	885 280	913 115	917 522	914 072	922 770	933 896	933 693	935 941
Gross domestic product Mainland Norway (market prices)	3 194 851	3 317 147	787 532	807 278	816 587	817 509	825 554	829 176	834 256	835 583
Petroleum activities and ocean transport	401 670	397 245	97 748	105 838	100 935	96 563	97 216	104 720	99 437	100 358
Mainland Norway (basic prices)	2 775 849	2 894 246	684 088	700 531	709 768	712 445	719 704	724 257	728 365	729 868
Mainland Norway excluding general government	2 047 305	2 149 781	503 693	516 084	524 044	528 381	533 903	537 496	540 608	541 715
Manufacturing and mining	243 407	245 151	61 349	61 346	61 362	61 669	61 250	61 833	61 536	61 823
Production of other goods	342 760	351 872	85 578	84 864	86 418	88 202	87 499	87 321	86 913	87 425
Services incl. dwellings (households)	1 461 138	1 552 758	356 766	369 874	376 264	378 510	385 155	388 341	392 159	392 467
General government	728 544	744 465	180 395	184 447	185 724	184 065	185 800	186 761	187 757	188 153
Taxes and subsidies products	419 002	422 901	103 444	106 747	106 819	105 063	105 850	104 919	105 891	105 714

Source: Statistics Norway.

Table 5. National accounts: Final expenditure and gross domestic product. At constant 2020 prices. Percentage change from previous period

	Unadjusted		Seasonally adjusted							
	2021	2022	21:2	21:3	21:4	22:1	22:2	22:3	22:4	23:1
Final consumption expenditure of households and NPISHs	4.4	6.9	2.9	7.6	2.9	-3.0	2.4	0.4	5.2	-5.1
Household final consumption expenditure	4.7	6.6	2.7	7.0	2.9	-2.9	2.3	0.4	5.5	-5.4
Goods	5.8	-3.6	3.9	2.8	-1.0	-6.3	-0.6	-0.6	9.3	-12.3
Services	3.8	10.8	1.0	8.7	4.2	0.6	2.5	0.4	1.0	0.9
Direct purchases abroad by resident households	-8.0	264.9	-18.7	471.7	107.1	8.4	32.7	8.5	10.7	4.3
Direct purchases by non-residents	-5.3	187.6	-26.8	84.4	91.2	18.0	14.3	4.1	3.3	8.3
Final consumption expenditure of NPISHs	0.6	12.3	7.1	18.1	3.0	-4.3	4.0	1.5	0.5	-1.0
Final consumption expenditure of general government	5.0	0.1	1.9	2.1	-0.3	-1.9	0.4	0.2	1.2	0.5
Final consumption expenditure of central government	5.3	0.7	1.7	2.6	0.6	-3.0	1.0	0.7	1.7	-0.2
Central government, civilian	5.6	0.5	1.8	2.8	0.6	-3.4	1.1	0.8	1.8	-0.4
Central government, defence	2.9	2.8	0.7	1.1	0.9	0.6	0.4	0.1	1.6	0.9
Final consumption expenditure of local government	4.7	-0.6	2.0	1.6	-1.2	-0.8	-0.2	-0.3	0.7	1.2
Gross fixed capital formation	-0.8	4.3	0.6	-0.8	3.7	1.1	0.3	0.2	1.3	-0.1
Extraction and transport via pipelines	-2.1	-6.5	5.6	-1.5	3.0	-11.7	3.9	-2.7	5.2	-1.6
Ocean transport	-102.8	-260.5	-110.5	399.5	26.4	-240.1	-102.0	-42.4	..	-224.3
Mainland Norway	1.7	6.7	0.4	-0.3	4.0	2.8	0.4	0.7	0.8	-0.6
Industries	5.0	14.5	2.2	-1.8	8.3	5.5	2.9	0.2	1.7	0.7
Service activities incidential to extraction	-5.0	34.1	3.1	24.2	39.2	-24.8	27.6	-20.9	78.9	-9.9
Other services	8.9	24.1	2.7	2.9	9.1	10.1	3.8	1.3	0.0	-2.7
Manufacturing and mining	6.1	11.8	-3.1	-5.7	19.8	-4.7	6.4	2.6	1.6	12.6
Production of other goods	-5.0	-13.4	3.7	-13.4	-3.7	0.4	-5.3	-3.5	1.5	7.4
Dwellings (households)	3.0	-1.4	2.9	-4.6	2.9	2.2	-3.8	-2.7	0.9	-2.2
General government	-4.5	1.2	-5.1	6.9	-2.1	-1.4	-0.3	5.2	-0.9	-1.5
Acquisitions less disposals of valuables	-3.0	81.1	348.2	136.6	-2.2	7.1	11.9	0.9	-5.6	17.7
Changes in stocks and statistical discrepancies	-10.5	5.4	-20.5	14.8	-42.3	74.0	1.4	12.3	-56.1	126.7
Gross capital formation	-2.0	4.5	-2.1	0.8	-1.7	6.1	0.5	1.5	-5.9	7.3
Final domestic use of goods and services	2.6	4.4	1.1	4.1	0.7	-0.1	1.3	0.7	0.9	-0.2
Final demand from Mainland Norway	4.0	4.9	2.0	4.1	2.2	-1.3	1.4	0.4	3.1	-2.6
Final demand from general government	3.2	0.3	0.6	2.9	-0.6	-1.8	0.3	1.1	0.8	0.1
Total exports	5.8	5.9	3.0	4.0	2.2	-2.5	2.2	4.6	-0.8	1.7
Traditional goods	4.6	-0.3	5.7	-4.3	-1.2	-1.6	1.1	5.2	-1.1	0.5
Crude oil and natural gas	2.9	0.3	4.6	4.3	-3.0	-2.4	0.2	3.4	-1.6	0.1
Ships, oil platforms and planes	112.1	-83.4	94.1	151.8	-26.5	-74.4	-62.5	13.0	-37.8	33.5
Services	7.5	24.7	-4.1	8.5	14.9	0.9	6.2	5.2	0.4	4.1
Total use of goods and services	3.4	4.7	1.6	4.1	1.1	-0.7	1.5	1.7	0.4	0.3
Total imports	1.7	9.2	2.6	6.9	3.0	-1.8	3.3	3.1	1.8	0.3
Traditional goods	5.7	2.5	3.8	2.2	-4.4	1.2	1.0	2.9	2.1	-4.7
Crude oil and natural gas	-11.5	-32.1	82.8	-59.2	24.7	-16.8	-3.6	1.6	14.6	25.5
Ships, oil platforms and planes	-16.6	-41.9	6.0	55.7	2.1	-29.3	-40.2	3.8	-33.4	46.3
Services	-3.8	32.5	-4.1	20.5	19.4	-3.8	11.6	3.4	2.5	7.2
Gross domestic product (market prices)	3.9	3.3	1.2	3.1	0.5	-0.4	1.0	1.2	0.0	0.2
Gross domestic product Mainland Norway (market prices)	4.2	3.8	1.4	2.5	1.2	0.1	1.0	0.4	0.6	0.2
Petroleum activities and ocean transport	1.9	-1.1	-0.6	8.3	-4.6	-4.3	0.7	7.7	-5.0	0.9
Mainland Norway (basic prices)	4.2	4.3	1.4	2.4	1.3	0.4	1.0	0.6	0.6	0.2
Mainland Norway excluding general government	3.9	5.0	1.4	2.5	1.5	0.8	1.0	0.7	0.6	0.2
Manufacturing and mining	3.8	0.7	0.0	0.0	0.0	0.5	-0.7	1.0	-0.5	0.5
Production of other goods	3.1	2.7	1.0	-0.8	1.8	2.1	-0.8	-0.2	-0.5	0.6
Services incl. dwellings (households)	4.1	6.3	1.7	3.7	1.7	0.6	1.8	0.8	1.0	0.1
General government	5.1	2.2	1.4	2.2	0.7	-0.9	0.9	0.5	0.5	0.2
Taxes and subsidies products	3.7	0.9	2.0	3.2	0.1	-1.6	0.7	-0.9	0.9	-0.2

Source: Statistics Norway.

Table 6. National accounts: Final expenditure and gross domestic product. Price indices. 2020=100

	Unadjusted		Seasonally adjusted							
	2021	2022	21:2	21:3	21:4	22:1	22:2	22:3	22:4	23:1
Final consumption expenditure of households and NPISHs	102.9	107.6	102.3	103.1	104.1	104.0	106.5	108.7	110.7	111.7
Final consumption expenditure of general government	102.3	109.1	102.0	101.1	104.0	107.6	108.5	109.7	110.5	112.0
Gross fixed capital formation	103.8	111.5	102.8	104.4	106.0	107.9	110.9	112.3	114.8	115.0
Mainland Norway	104.5	112.5	103.4	105.3	106.9	108.9	111.8	113.4	115.6	115.7
Final domestic use of goods and services	102.3	106.7	100.4	108.7	100.7	103.3	106.7	109.3	106.4	109.4
Final demand from Mainland Norway	103.1	109.2	102.5	103.0	104.7	106.2	108.3	110.1	111.8	112.8
Total exports	149.0	248.2	137.2	123.0	194.5	254.3	243.0	265.2	229.2	216.0
Traditional goods	113.2	146.1	108.3	113.6	126.2	140.1	145.9	148.2	150.6	151.8
Total use of goods and services	113.9	142.1	109.6	112.2	124.3	140.5	140.5	149.2	137.4	136.7
Total imports	104.0	119.3	102.9	103.5	107.0	114.2	117.7	122.0	123.3	125.2
Traditional goods	105.3	124.2	102.8	105.1	109.5	118.3	123.4	127.7	127.5	131.2
Gross domestic product (market prices)	117.1	150.0	111.7	115.1	130.1	149.2	148.3	158.6	142.4	140.7
Gross domestic product Mainland Norway (market prices)	102.9	107.6	102.2	103.1	104.5	105.8	107.0	108.3	109.3	111.6

Source: Statistics Norway.

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

	Unadjusted		Seasonally adjusted							
	2021	2022	21:2	21:3	21:4	22:1	22:2	22:3	22:4	23:1
Final consumption expenditure of households and NPISHs	2.9	4.5	0.2	0.8	1.0	-0.1	2.4	2.1	1.8	1.0
Final consumption expenditure of general government	2.3	6.6	0.0	-0.9	2.9	3.4	0.9	1.1	0.7	1.4
Gross fixed capital formation	3.8	7.5	1.0	1.6	1.5	1.9	2.7	1.3	2.2	0.1
Mainland Norway	4.5	7.6	1.1	1.8	1.5	1.8	2.7	1.4	1.9	0.1
Final domestic use of goods and services	2.3	4.3	2.8	8.2	-7.3	2.6	3.3	2.5	-2.7	2.8
Final demand from Mainland Norway	3.1	5.8	0.3	0.5	1.7	1.4	2.0	1.7	1.5	0.9
Total exports	49.0	66.6	1.3	-10.3	58.1	30.7	-4.4	9.1	-13.6	-5.8
Traditional goods	13.2	29.1	3.2	4.9	11.1	11.0	4.1	1.6	1.6	0.8
Total use of goods and services	13.9	24.8	2.5	2.5	10.7	13.1	0.0	6.2	-7.9	-0.5
Total imports	4.0	14.8	1.0	0.6	3.4	6.7	3.0	3.6	1.1	1.5
Traditional goods	5.3	18.0	-0.4	2.3	4.2	8.0	4.3	3.6	-0.2	3.0
Gross domestic product (market prices)	17.1	28.1	2.9	3.1	13.0	14.7	-0.7	7.0	-10.2	-1.1
Gross domestic product Mainland Norway (market prices)	2.9	4.6	0.7	0.9	1.3	1.3	1.1	1.3	0.9	2.1

Source: Statistics Norway.

Table 8. Main economic indicators 2014-2026. Accounts and forecasts[1, 2]

										Forecasts			
	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Demand and output													
Consumption in households etc.	2.1	2.7	1.1	2.2	1.4	1.0	-6.2	4.4	6.9	0.6	1.5	2.3	3.2
General government consumption	2.7	2.4	2.3	1.9	0.6	1.1	-0.5	5.0	0.1	1.4	1.7	1.8	2.2
Gross fixed investment	-0.3	-4.0	3.9	2.6	2.2	9.5	-4.1	-0.8	4.3	0.6	2.2	0.5	-0.7
Extraction and transport via pipelines	-1.8	-12.2	-16.0	-5.4	0.7	14.3	-3.3	-2.1	-6.5	6.0	4.5	2.5	-1.0
Mainland Norway	0.4	-0.2	9.0	6.8	1.5	6.3	-3.1	1.7	6.7	-0.9	0.7	0.1	-0.6
Industries	-0.7	-2.8	12.6	9.2	3.1	10.3	-5.3	5.0	14.5	1.3	0.1	-3.2	-3.6
Housing	-1.4	3.2	6.6	7.3	-6.5	-1.1	-1.6	3.0	-1.4	-7.4	0.7	2.8	2.9
General government	4.5	0.2	6.4	2.6	8.1	7.5	-1.1	-4.5	1.2	1.2	1.7	4.0	1.6
Demand from Mainland Norway[3]	1.9	2.0	3.1	3.1	1.2	2.3	-3.9	4.0	4.9	0.4	1.4	1.6	2.1
Exports	3.8	3.9	0.4	1.6	-1.5	2.1	-2.3	5.8	5.9	5.0	2.3	1.4	1.0
Traditional goods	4.2	6.5	-11.2	0.9	2.0	5.1	-0.8	4.6	-0.3	4.8	3.7	3.6	3.5
Crude oil and natural gas	3.0	1.3	5.4	5.2	-4.6	-2.9	10.5	2.9	0.3	3.4	3.1	0.5	-3.7
Imports	2.2	1.9	1.9	1.8	1.4	5.3	-9.9	1.7	9.2	2.9	2.4	1.6	2.2
Traditional goods	2.1	2.7	-1.4	3.5	2.8	6.2	-2.7	5.7	2.5	-1.6	2.4	1.8	2.4
Gross domestic product	2.0	1.9	1.2	2.5	0.8	1.1	-1.3	3.9	3.3	1.5	1.7	1.5	1.4
Mainland Norway	2.2	1.4	0.9	2.2	1.9	2.3	-2.8	4.2	3.8	1.3	1.6	1.7	1.9
Manufacturing	2.7	-4.4	-4.1	-0.1	1.6	2.1	-5.7	3.8	0.7	1.7	2.5	1.2	1.0
GDP in current prices (NOK billion)	3 162	3 130	3 116	3 323	3 577	3 597	3 462	4 212	5 571	4 964	5 207	5 372	5 444
Labour market													
Total hours worked. Mainland Norway	1.4	0.6	0.6	0.5	1.6	1.5	-2.1	2.5	3.9	0.2	0.7	0.5	1.1
Employed persons	1.0	0.4	0.3	1.1	1.6	1.6	-1.5	1.2	3.9	1.2	0.3	0.2	0.5
Labor force[4]	0.7	1.5	0.2	-0.2	1.4	1.0	0.4	1.2	1.4	0.6	0.2	0.5	0.5
Participation rate (level)[4]	71.7	71.9	71.3	70.6	71.1	71.4	71.3	72.1	72.6	72.3	72.1	72.1	72.2
Unemployment rate (level)[4]	3.8	4.7	4.9	4.4	4.0	3.9	4.7	4.4	3.2	3.7	3.8	4.0	4.0
Prices and wages													
Wages per standard man-year	3.1	2.8	1.7	2.3	2.8	3.5	3.1	3.5	4.3	5.3	4.9	4.1	4.1
Consumer price index (CPI)	2.0	2.1	3.6	1.8	2.7	2.2	1.3	3.5	5.8	5.6	3.0	2.4	2.2
CPI-ATE[5]	2.4	2.7	3.0	1.4	1.6	2.2	3.0	1.7	3.9	6.0	3.6	2.8	2.5
Export prices, traditional goods	2.7	2.6	4.5	4.7	5.1	0.1	-3.5	13.2	29.1	-1.7	-0.5	0.9	1.0
Import prices, traditional goods	4.1	5.0	2.5	3.2	4.1	2.5	4.3	5.3	18.0	5.0	1.1	1.5	1.4
House prices	2.7	6.1	7.0	5.0	1.4	2.5	4.3	10.5	5.2	-1.4	-0.1	1.0	2.7
Income, interest rates and excange rate													
Household real disposable income	2.4	5.3	-1.6	2.0	0.9	2.0	1.1	3.6	-2.4	-1.5	2.9	3.6	4.0
Household saving ratio (level)	7.8	9.8	6.9	6.6	5.9	7.1	12.9	12.7	4.2	3.0	4.3	4.9	5.2
Money market rate (3 month NIBOR) (level)	1.7	1.3	1.1	0.9	1.1	1.6	0.7	0.5	2.1	3.8	3.9	3.1	2.4
Lending rate, credit loans (level)[6]	3.9	3.2	2.6	2.6	2.7	3.0	2.6	2.1	2.9	4.9	5.3	4.9	4.1
Real after-tax lending rate, banks (level)	0.3	-0.2	-0.6	-0.5	-0.1	0.3	0.0	-0.4	0.3	1.8	2.1	1.8	1.2
Importweighted krone exchange rate (44 countries)[7]	5.3	10.5	1.8	-0.8	0.1	2.9	6.7	-5.3	1.2	11.4	2.0	0.0	0.0
NOK per euro (level)	8.35	8.95	9.29	9.33	9.60	9.85	10.72	10.16	10.10	11.62	11.88	11.88	11.88
Current account													
Current balance (bill. NOK)[8]	374	282	163	210	320	136	38	574	1 691	730	776	766	667
Current account (per cent of GDP)	11.8	9.0	5.2	6.3	9.0	3.8	1.1	13.6	30.3	14.7	14.9	14.3	12.3
International indicators													
Exports markets indicator	4.7	5.3	3.8	5.6	4.3	3.3	-7.6	9.5	7.8	1.5	1.8	3.6	3.8
Consumer price index, euro-area	0.4	0.2	0.2	1.5	1.8	1.2	0.3	2.6	8.4	5.0	2.2	2.0	2.0
Money market rate, euro (level)	0.2	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	0.3	3.3	2.5	2.0	2.0
Crude oil price US dollar (level)[9]	100	53	45	55	72	64	43	71	99	78	72	70	68
Crude oil price NOK (level)[9]	627	431	379	452	583	564	407	609	951	845	805	775	752

[1] Percentage change from previous year unless otherwise noted.
[2] Some time series may have been revised after the publication of the Economic Survey.
[3] Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.
[4] Labour force survey: Break adjusted figures.
[5] CPI adjusted for tax changes and excluding energy products.
[6] Yearly average. Credit lines. secured on dwellings.
[7] Increasing index implies depreciation.
[8] Current account not adjusted for saving in pension funds.
[9] Average spot price Brent Blend.
Source: Statistics Norway. The cut-off date for information was 7 June 2023.