



# Economic Survey

2023 / 4

Economic developments in Norway

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Questions about economic trends

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

– international: Roger Hammersland, roger.hammersland@ssb.no, tel. (+47) 47 29 32 89

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Not for publication	: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

# Economic developments in Norway

The Norwegian economy is characterised by high inflation and interest rate hikes. Mainland growth has been below trend. At the same time, pressures in the labour market have been relatively high, but these, too, have abated somewhat compared with last year. The key policy rate has been raised by 1.5

percentage points so far this year and is currently 4.25 per cent. Inflation measured by the consumer price index (CPI) has fallen since peaking in October last year, but underlying inflation remains high. The depreciation of the krone so far this year means that it will take a little longer in Norway than

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

	2021	2022	Seasonally adjusted			
			22:4	23:1	23:2	23:3
<b>Demand and output</b>						
Consumption in households etc.	5.1	6.2	4.1	-5.2	0.4	0.5
General government consumption	3.6	1.1	0.9	0.4	0.9	0.9
Gross fixed investment	0.7	5.2	0.7	-1.0	0.7	-2.1
Extraction and transport via pipelines	-0.9	-7.2	4.3	-3.3	6.1	9.1
Mainland Norway	1.6	7.6	-1.9	1.0	-0.7	-3.8
Final domestic demand from Mainland Norway <sup>1</sup>	3.9	5.1	1.7	-2.2	0.3	-0.4
Exports	6.1	4.7	-2.9	-0.2	0.4	-0.8
Traditional goods	6.7	-1.7	-0.6	0.9	3.0	-1.0
Crude oil and natural gas	0.2	1.3	-3.4	-1.0	-0.5	-1.4
Imports	1.8	12.3	1.3	-2.5	2.2	-2.5
Traditional goods	5.4	3.1	0.8	-4.7	1.5	-3.2
Gross domestic product	3.9	3.0	-0.7	0.2	-0.5	-0.5
Mainland Norway	4.5	3.8	0.4	0.1	0.0	0.1
<b>Labour market</b>						
Total hours worked. Mainland Norway	2.4	3.9	0.3	0.4	0.1	0.2
Employed persons	1.1	3.9	0.5	0.4	0.0	0.1
Labour force <sup>2</sup>	2.2	1.4	0.0	0.7	0.4	0.6
Unemployment rate. level <sup>2</sup>	4.4	3.2	3.2	3.7	3.4	3.6
<b>Prices and wages</b>						
Annual earnings	3.5	4.3	..	..	..	..
Consumer price index (CPI) <sup>3</sup>	3.5	5.8	1.2	1.3	1.6	0.3
CPI adjusted for tax changes and excluding energy products (CPI-ATE) <sup>3</sup>	1.7	3.9	1.5	1.5	1.8	1.1
Export prices. traditional goods	12.6	29.3	-0.5	0.7	-2.4	-4.3
Import prices. traditional goods	5.0	15.6	-0.5	2.8	0.0	-2.5
<b>Balance of payment</b>						
Current balance. bill. NOK <sup>4</sup>	574	1680	359	279	171	183
<b>Memorandum items (unadjusted level)</b>						
Money market rate (3 month NIBOR)	0.1	1.3	2.4	2.8	3.2	3.9
Lending rate. credit loans <sup>5</sup>	0.5	0.7	3.8	4.4	4.8	5.3
Crude oil price NOK <sup>6</sup>	609	951	903	840	832	897
Importweighted krone exchange rate. 44 countries. 1995=100	108.8	110.0	112.3	116.8	122.3	117.7
NOK per euro	10.16	10.10	10.39	10.99	11.66	11.40

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

<sup>2</sup> According to Statistics Norway's labour force survey (LFS).

<sup>3</sup> Percentage change from the same period the previous year.

<sup>4</sup> Current account not adjusted for saving in pension funds.

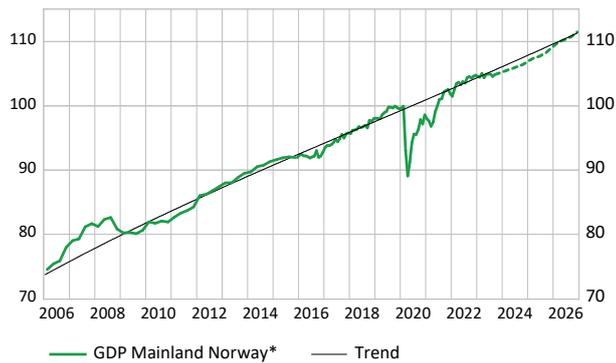
<sup>5</sup> Period averages.

<sup>6</sup> Average spot price. Brent Blend.

Source: Statistics Norway and Norges Bank.

**Figure 1. GDP Mainland Norway and estimated trend**

Seasonally adjusted, index 2021 = 100

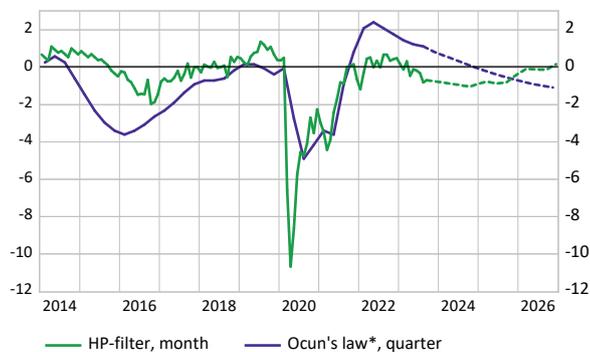


\* Quarterly figures before 2016, monthly after. The trend is estimated by an HP-filter (lambda = 40 000 quarterly), but such that the trend is not directly affected by the development of economic activity in 2020 and 2021.

Source: Statistics Norway

**Figure 2. Output gap, Mainland Norway**

Deviation from estimated trend GDP in percent, monthly and quarterly frequency



\* The series «Okun's law» is based on a one-to-one correspondence between the rate of unemployment and the output gap, cf. box 2.1 i ES 4/2022. The rate of unemployment is measured relative to the historical average after year 2000

Source: Statistics Norway

among many of our trading partners for inflation to fall to a more normal level. A sharp fall in housing investment will curb mainland GDP growth going forward, and we expect unemployment to increase to slightly over 4 per cent in the next few years.

The krone remains weak in a historical perspective. Whereas one euro cost NOK 10.50 at the end of 2022, the price had risen to NOK 12.00 by the end of May this year. Since then, the weakening has been reversed only slightly, and measured by the imported krone exchange rate, the krone is expected to have depreciated by almost an annualised 9 per cent in 2023. There is great uncertainty surrounding exchange rate movements, and research has shown that an unchanged exchange rate is a good forecast. In our projections, we assume that the exchange rate will remain at its level in early December in the years ahead.

The depreciation of the krone through 2023 means that it will take a little longer for inflation to fall in Norway. A weaker krone makes importing goods and services more expensive. Although underlying inflation measured by the CPI-ATE is high at present and the krone has weakened this year, inflation has slowed recently, curbed by falling energy prices in particular. CPI and CPI-ATE inflation are forecast to be 5.6 and 6.3 per cent, respectively, this year. Underlying inflation is maintained at a high level by the weakening of the krone and by the fact that it takes time for higher labour costs and global inflationary impulses, measured in NOK, to be passed through into higher consumer prices; see Box 2. Higher wage growth is contributing to maintaining inflation at a high level. In the absence of a further weakening of the krone, and given relatively rapidly falling global inflation, underlying inflation will gradually ease. Annual CPI-ATE inflation is expected to fall to around 3 per cent by the beginning of 2025.

The policy rate has been raised from 0 to 4.25 per cent in less than two years. Norges Bank sets the interest rate primarily to stabilise inflation at around 2 per cent and to ensure financial stability. The central bank also takes into account that a higher interest rate affects activity in the Norwegian economy. An abrupt halt to residential construction, weaker growth prospects both global and domestic, coupled with falling interest rates and inflation among our trading partners mean that the interest rate is unlikely to be raised further. We expect the key policy rate to remain at 4.25 per cent until mid-2024 before being gradually reduced in pace with a fall in underlying inflation. The policy rate is expected to come down to 2.75 per cent in 2026.

Projections in National Budget 2024 (NB 24) show that the proposed fiscal policy for next year will have an almost neutral effect on economic activity. According to the same projections, however, the ripple effects of the preceding expansionary fiscal policy will push up mainland activity by around 0.5 per cent. In the Government's budget proposal for 2024, spending of petroleum revenue is projected to be 2.7 per cent of the value of the Government Pension Fund Global (the petroleum fund) at the beginning of the year. The weak krone exchange rate, high income attributable to extensive petroleum revenue and a high return on the petroleum

**Table 2. Growth in GDP Mainland Norway and contributions from demand components<sup>1</sup>. Percentage points. Annual rate**

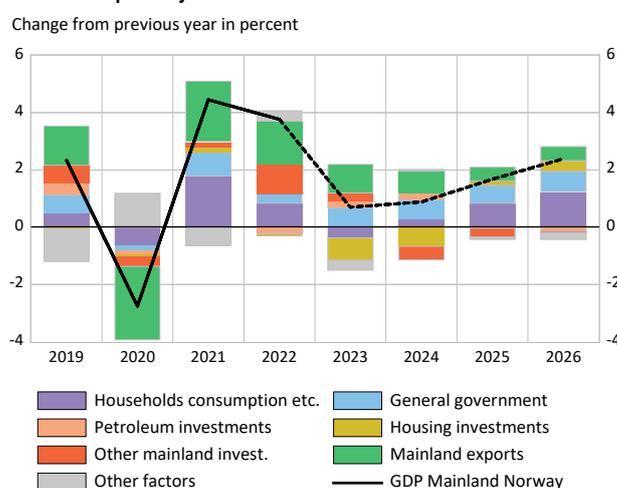
	QNA				Projection			
	2019	2020	2021	2022	2023	2024	2025	2026
GDP Mainland Norway	2.3	-2.8	4.5	3.8	0.7	0.9	1.7	2.4
with contributions from:								
Consumption by households and non-profit organisations	0.5	-0.7	1.8	0.8	-0.4	0.3	0.8	1.2
General government consumption and investment	0.6	-0.2	0.8	0.3	0.7	0.7	0.6	0.7
Petroleum investment	0.4	-0.1	0.0	-0.2	0.3	0.3	0.0	-0.1
Housing investment	-0.1	-0.1	0.2	-0.1	-0.8	-0.7	0.2	0.4
Other mainland investment	0.6	-0.3	0.2	1.0	0.3	-0.5	-0.3	-0.1
Exports from mainland Norway <sup>1</sup>	1.4	-2.6	2.1	1.5	1.0	0.8	0.5	0.5
Other factors etc. <sup>1</sup>	-1.1	1.2	-0.6	0.4	-0.3	0.1	-0.1	-0.2

<sup>1</sup> See explanation under Figure 3.

Source: Statistics Norway.

fund's investments, have resulted in a substantial increase in value, which gives latitude, through the fiscal rule, for increased spending of petroleum revenue in the years ahead. At the beginning of December the petroleum fund was worth approximately NOK 16 000 billion, about NOK 3 600 billion more than at the beginning of the year. As the petroleum fund accounts for a steadily increasing share of the funding of the fiscal budget, fiscal policy and the Norwegian economy have become more vulnerable to a fall in the value of the fund; see Box 1. We have assumed that use of petroleum revenue will be maintained at below the 3 per cent target because of the uncertainty associated with share prices and exchange rates, coupled with a growing funding requirement in the slightly longer term. Real growth in public consumption, investment and transfers is nonetheless expected to be higher than trend growth in the economy in the years ahead. It is assumed that public investment will continue to rise from a high level as a consequence of countercyclical policy focused on the construction industry and increased investment, in defence, amongst other things.

Household consumption, which accounts for around half of mainland GDP, rose by as much as 6.2 per cent last year, despite a high rise in prices for a number of goods and services. Total consumption excluding car purchases fell slightly through the first half of 2023. Consumption rose again in Q3, with particularly large contributions from Norwegians' consumption abroad and travel and tourism services. According to our projections, total consumption in 2023 will fall by around 1 per cent, about half a percentage point more than published in our last report. In the next few years, consumption growth will gradually pick up,

**Figure 3. Contributions to growth in GDP Mainland Norway, import adjusted**

Source: Statistics Norway

The demand contributions are calculated by finding the change in each variable, extracting the direct and indirect import shares, and then dividing by the mainland GDP level for the previous period. The import shares used are documented in 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.

to around 4 per cent in 2026. Developments in consumption during this period will be driven by increasing growth in real disposable income but constrained by weak developments in real house prices and higher real interest rates.

There has been a sharp fall in housing investment so far this year. Investment plunged by as much as 18.8 per cent from 2022 Q4 to 2023 Q3. Such a sharp fall over such a short period has not previously been recorded in the quarterly national accounts, which go back to 1978. The sharp fall in housing investment, which accounts for about 20 per cent of mainland investment, is depressing activity in the Norwegian economy. Figures from

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

	Acco- unts 2022	Forecasts										
		2023			2024			2025			2026	
		SN	NB	MoF	SN	NB	MoF	SN	NB	MoF	SN	NB
<b>Demand and output</b>												
Consumption in households etc.	6.2	-1.1	-0.6	-1.0	0.1	0.1	0.5	2.4	1.9	2.2	3.8	2.5
General government consumption	1.1	2.6	1.6	2.1	2.1	1.3	1.4	1.8	1.2	..	2.1	1.0
Gross fixed investment	5.2	-1.0	..	-0.5	-3.4	..	-1.5	-0.6	..	0.4	1.4	..
Extraction and transport via pipelines	-7.2	9.0	6.0	9.1	8.0	6.0	2.3	-1.0	2.0	-6.2	-4.0	-1.0
Industries	17.1	3.9	2.3	2.3	-6.7	-3.0	-1.9	-4.8	1.9	-2.4	-1.0	1.5
Housing	-1.4	-16.0	-14.5	-15.0	-16.2	-4.7	-4.0	4.7	4.4	15.6	10.7	6.6
General government	1.3	0.2	..	0.4	2.8	..	-0.5	3.8	..	..	3.5	..
Demand from Mainland Norway <sup>1</sup>	5.1	-0.3	-0.3	-0.5	-0.8	-0.1	0.1	1.6	1.8	1.8	3.1	2.1
Exports	4.7	1.5	..	4.8	5.7	..	3.8	2.4	..	3.0	0.8	..
Traditional goods <sup>2</sup>	-1.7	5.0	8.0	5.3	2.3	1.1	3.4	3.3	3.0	3.7	2.9	3.2
Crude oil and natural gas	1.3	-1.9	..	3.9	7.7	..	4.1	1.8	..	1.6	-1.6	..
Imports	12.3	1.9	2.3	1.9	0.2	-0.2	1.3	1.7	3.9	1.7	3.2	2.2
Gross domestic product	3.0	0.2	1.4	1.0	2.2	0.4	1.1	1.8	1.0	1.9	1.6	1.1
Mainland Norway	3.8	0.7	1.3	0.6	0.9	0.3	0.8	1.7	0.8	1.9	2.4	1.4
<b>Labour market</b>												
Employed persons	3.9	1.3	1.5	1.3	0.1	-0.1	0.1	0.0	0.1	0.5	0.3	0.6
Unemployment rate (level)	3.2	3.6	..	3.5	3.9	..	3.7	4.1	..	3.7	4.2	..
<b>Prices and wages</b>												
Annual earnings	4.3	5.6	5.5	5.5	5.4	5.2	4.9	4.3	4.6	..	4.0	3.9
Consumer price index (CPI)	5.8	5.6	5.8	6.0	4.5	4.8	3.8	2.5	3.1	2.5	2.0	2.5
CPI-ATE <sup>3</sup>	3.9	6.3	6.3	6.4	4.5	4.7	4.1	2.9	3.4	2.7	2.3	2.6
Housing prices <sup>4</sup>	5.2	-0.6	-0.8	..	-2.2	0.2	..	-0.6	4.3	..	3.4	6.0
<b>Balance of payment</b>												
Current balance (bill. NOK) <sup>5</sup>	1 680	888	..	829	1 014	..	997	1 060	..	..	941	..
Current account (per cent of GDP)	29.5	17.5	..	16.6	19.1	..	18.8	19.3	..	..	16.8	..
<b>Memorandum items:</b>												
Money market rate (level)	2.1	4.2	..	4.2	4.6	..	4.8	3.7	..	4.3	3.3	..
Crude oil price NOK (level) <sup>6</sup>	951	868	..	912	833	..	845	802	..	..	774	..
Import weighted krone exchange rate (44 countries) <sup>7</sup>	1.2	8.7	7.9	6.5	1.6	-1.1	-1.8	0.0	-0.8	0.0	0.0	-0.1

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

<sup>2</sup> 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.

<sup>3</sup> CPI adjusted for tax changes and excluding energy products (CPI-ATE).

<sup>4</sup> Norges Bank forecasts the housing price index published by Eiendom Norge.

<sup>5</sup> Current account not adjusted for saving in pension funds.

<sup>6</sup> Average spot price. Brent Blend.

<sup>7</sup> Increasing index implies depreciation.

Source: Statistics Norway (SN). Ministry of Finance. Nasjonalbudsjettet 2024 (MoF). Norges Bank. Pengepolitisk rapport 3/2023 (NB).

Statistics Norway's building statistics additionally show that the number of housing start permits is the lowest since 2010. The reduction in residential construction will gradually bring the fall in house prices to a halt. However, there is great uncertainty concerning further developments in the housing market, and in particular the extent to which interest rate increases affect prices. According to our calculations, resale home prices are falling appreciably in real terms, i.e. adjusted for inflation. Rising real interest rates and weak developments in

household real disposable income will push down real house prices by about 15 per cent by 2025, from a historically high level in 2022.

Business investment is falling, after growing substantially for the past two years. Overall, business investment accounts for about 13 per cent of mainland GDP, but because it is relatively volatile, it normally contributes more to economic developments than this share would suggest. According to Norges Bank's Regional Network, in September service

businesses reported somewhat lower investment next year, due in part to lower activity and reduced profitability. According to Statistics Norway's investment intentions survey, manufacturing companies also report reduced investment next year. Lower investment is expected in computer and electrical equipment and in rubber, plastic and mineral products in particular. Conversely, a pronounced upturn is expected in power supply, mainly in electricity transmission and distribution. Rising real interest rates in Norway and weaker global demand will place a damper on investment in the years ahead, but during the projection period the investment level will nonetheless probably remain higher than prior to the pandemic.

Petroleum investment is projected to increase both this year and next. Activity growth is being driven by the many ongoing field developments. Growth now appears likely to be even higher than previously assumed, partly because completion of a number of development projects are demanding more extensive investment than previously supposed. We have also raised our growth projections for exploration and for decommissioning and removals in 2024. Although almost half of the deliveries of capital goods for the petroleum industry are imported from abroad, the deliveries also involve considerable demand directed at mainland Norway. Some field developments are expected to be completed in 2025 and 2026. Although investment is likely to be moderately reduced in these years, investment in 2026 will remain at roughly the same level as in 2019.

Nominal wage growth last year was 4.3 per cent, a full 1.5 percentage points lower than consumer price inflation. In this year's wage settlement, the norm for wage growth in overall manufacturing under the Confederation of Norwegian Enterprise (NHO) was 5.2 per cent. In 2023 Q3, the average monthly basic wage increased by 6.4 per cent compared with the same quarter last year, which was considerably higher than growth in the first two quarters of this year. The labour market is still tight. In addition, the profitability of some wage-leader segments is good, and the share of overall manufacturing income that accrues to employees has been falling for the past three years (see Box 3 in Økonomiske analyser 4/2023 - Norwegian text). In isolation, this could exert upward pressure on pay. We forecast that annual wage growth in the

economy as a whole will be 5.6 per cent this year, which is equivalent to roughly no change in real wages. We expect inflation to slow towards 2026, and that real wage growth will pick up to about 2 per cent in 2026.

A year ago, unemployment measured by the Labour Force Survey (LFS) was around 3.2 per cent, while it has been around 3.6 per cent so far this year. This is slightly lower than the average post-2000 rate of 3.9 per cent. The number of vacancies remains high and stable. Although unemployment has increased slightly for persons aged 15-24, the level is almost the lowest observed since the boom prior to the financial crisis. We also have to go back to this period to find an overall employment rate as high as that observed so far this year. The knock-on effects of interest rate hikes, coupled with weaker global growth prospects and lower demand in many industries, will alleviate labour market pressures. Construction activity is expected to be particularly low in the years ahead. Employment is therefore not expected to increase as much as growth in the working age population. According to our projections, unemployment will increase slightly in the years ahead, to just over 4 per cent in 2025.

The strong increase in gas prices and depreciation of the krone contributed to a record high trade surplus of NOK 1 570 billion last year. The gas price has fallen substantially in 2023, and there are prospects of a sharp reduction in the trade surplus this year. However, since the fall is from a record-high level, it may still be the next highest trade surplus in history. The current account balance as a share of GDP is expected to fall from 30 per cent last year to approximately 17 per cent this year.

At present, the Norwegian economy is approximately cyclically neutral, measured by both mainland GDP and labour market developments; see Figure 2. However, the picture is now a mixed one. Higher interest rates and construction costs have contributed to throttling housing investment, and this will depress mainland GDP going forward. In addition, household purchasing power has been reduced by high prices and higher interest rates. Inflation is falling, but the depreciation of the krone means that it will take a little longer for inflation to fall to a more normal level in Norway than among many of our trading partners.

### Box 1: What happens to the Norwegian economy if the petroleum fund loses 30 per cent of its value?

At the beginning of December 2023, the Government Pension Fund Global (the petroleum fund), was valued at around NOK 16 000 billion. This is equivalent to more than four times mainland value added in the course of a year. Next year, more than 1 in 5 kroner over the fiscal budget will be financed by the petroleum fund. As a large and steadily increasing portion of the funding of the fiscal budget comes from the petroleum fund, fiscal policy and the Norwegian economy have become more vulnerable to a fall in the value of the fund.

The petroleum fund could fall suddenly and by a large amount. According to stress tests by Norges Bank, a stepping up of geopolitical conflict could result in a fall in value of as much as 40 per cent, while a scenario with persistently high inflation could reduce the fund by 30 per cent.<sup>1</sup> Calculations carried out for the Advisory Panel on Fiscal Policy Analysis in 2022 show that the probability of the real value of the petroleum fund being halved in the course of 30 years is about 3 per cent.<sup>2</sup> The calculations also show that over the same period there is about a 35 per cent probability of the fund shrinking 25 per cent or more from one 5-year period to the next.

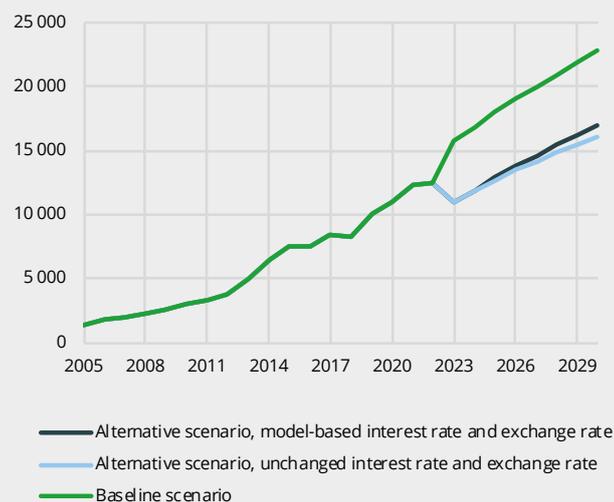
In this box we analyse how a persistent 30 per cent fall in the value of the petroleum fund in Q4 this year spreads to the rest of the Norwegian economy through lower public sector demand.<sup>3</sup> Continued supplementation with revenue from the petroleum industry and reduced use of this revenue leads to the value of the petroleum fund then recovering a little; see Figure 1. As mentioned, several scenarios could give rise to a fall in the fund's value, and they could impact the Norwegian

economy in various ways. We limit ourselves to looking at the effects on the Norwegian economy of reduced public sector demand, through the Government having to adhere to the fiscal rule when confronted with a fall in the value of the petroleum fund. We use the KVARTS macroeconomic model in our projections.<sup>4</sup>

The fiscal rule for use of petroleum fund resources over the fiscal budget is based on the use of petroleum revenue over time shadowing the expected real return on the petroleum fund, and on the smoothing of economic fluctuations to ensure good capacity utilisation and low unemployment.<sup>5</sup> In our projections we assume that the fiscal rule is adhered to through smoothing of the use of petroleum revenue. This means that the Government takes some time to reduce the spending of petroleum revenue when the value of the fund falls. The fiscal rule is operationalised in KVARTS in that the withdrawal of resources, measured by the structural non-oil budget deficit, is a weighted average of the previous year's withdrawals adjusted for inflation and the long-term withdrawal level.<sup>6</sup> This rule is often referred to as a Tobin or MIT rule; see for example Kashif et al. (2020). Our calculations are also based on the assumption that spending of petroleum revenue is adjusted by changing consumption, investment and the use of intermediate inputs in general government (central and local government). Thus the cuts in public service production are broad-based. Transfers to households and the tax level remain unchanged in real terms, however.<sup>7</sup>

We first perform calculations in a scenario in which interest and exchange rate remain unchanged before analysing how monetary policy can counteract some of the negative impacts on the economy. Tables 1 and 2 show deviations in main macroeconomic aggregates from the baseline scenario in the cases, respectively, where the interest rate and the exchange rate are kept unchanged, and where the interest and exchange rate are determined by the model. Figures 2 to 5 show the effects on the withdrawal percentage, money market rate, unemployment and inflation measured by the consumer price index (CPI). The withdrawal percentage is measured as the structural, non-oil budget deficit (SNOBD) as a share of the petroleum fund.

**Figure 1. The Government Pension Fund Global (petroleum fund)**  
In billions of NOK



Source: KVARTS calculations, Statistics Norway

<sup>1</sup> See the submission of the [Government Petroleum Fund Global, Half-year report 2023 \(nbim.no\)](#).

<sup>2</sup> See the Fiscal Policy Panel's statement in 2022 and background text 4: "[Uttalelse om langsiktig bærekraft i statsfinansene 6. februar 2023](#)" [Statement regarding long-term sustainability in central government finances] 6 February 2023] ([finanspolitikkutvalget.no](#)).

<sup>3</sup> Kjelsrud (2017) analyses how fiscal scope for manoeuvre is affected by changes in the oil price and global share prices, but does not analyse the significance of a change in fiscal policy.

<sup>4</sup> See Boug et al. (2023) for a more detailed description of KVARTS.

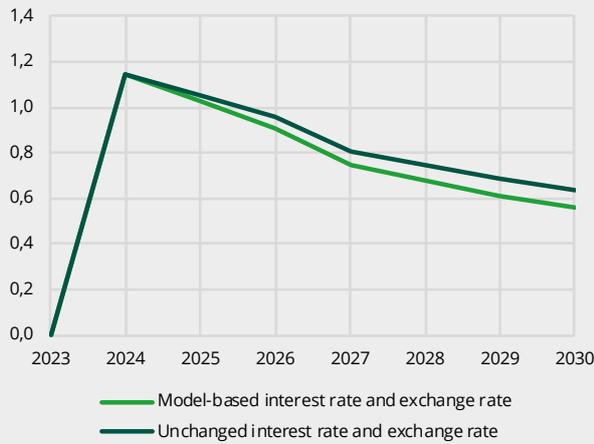
<sup>5</sup> See Samfunnsøkonomen no. 4 2022 for articles that review various technical assessments that formed the basis for the fiscal rule and that analyse features of the current rule and alternative rules.

<sup>6</sup> The fiscal rule is defined as follows:  $U_t = wU_{t-4}P_{G,t}/P_{G,t-4} + (1-w)r^*F_{t-4}$ , where  $U_t$  is the structural non-oil budget deficit in the period  $t$ ,  $P_G$  is the price index for public expenses,  $F$  is the Government Pension Fund Global (petroleum fund),  $w$  is the weight of real spending (deficit) at  $t-4$  ("smoothing weight") and  $r^*$  is the long-term percentage of withdrawals from the petroleum fund, which reflects the real return on the fund. This is currently estimated to be about an annualised 3 per cent, and the smoothing weight is set at 0.95 per cent. This equation is implemented in KVARTS such that the use of petroleum revenue over time is adjusted toward the level in the baseline scenario, which is not necessarily identical with the 3 per cent path.

<sup>7</sup> Changes in intermediate inputs and general capital are assumed to shadow the change in hours worked over time. Households adjust their consumption to developments in real disposable income, wealth and interest rates. We have analysed changes in the composition of household consumption, and the extent to which households will compensate for the loss of public welfare benefits by obtaining similar services from private operators.

**Figure 2. Percentage withdrawal. SNOBD as a share of the petroleum fund<sup>1</sup>**

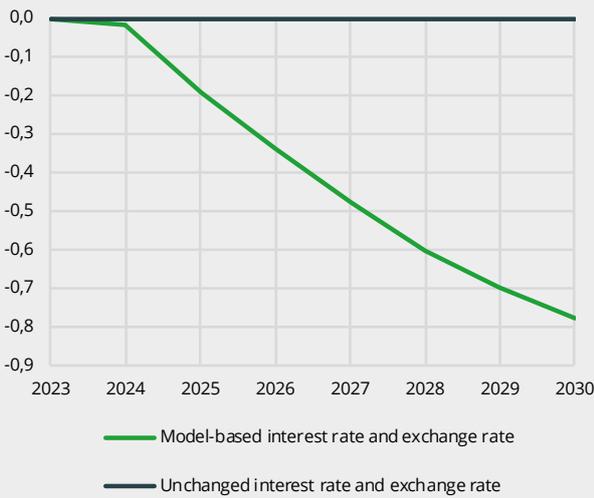
Deviation from baseline scenario. Percentage points



<sup>1</sup> NOBD and GPFG are abbreviations for non-oil budget deficit and the Government Pension Fund Global (petroleum fund)  
Source: KVARTS calculations, Statistics Norway

**Figure 3. Money market rate**

Deviation from baseline scenario. Percentage points

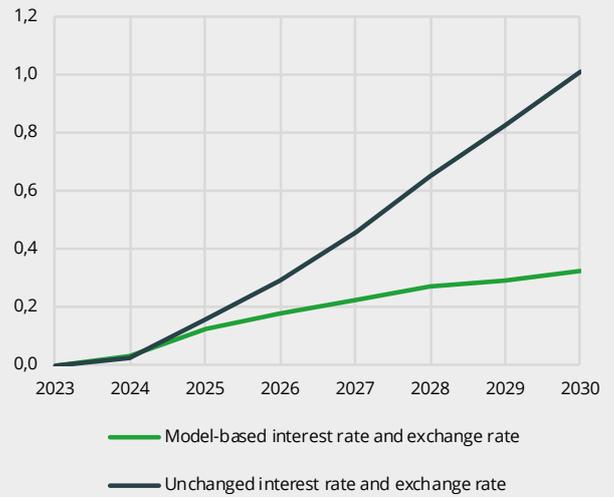


Source: KVARTS calculations, Statistics Norway

In the case with unchanged interest and exchange rates, the withdrawal percentage will increase markedly because it takes time for the spending level according to the Tobin rule to be reduced in response to the fall in the petroleum fund. In 2024 the withdrawal percentage is 1.1 percentage points higher than in the baseline scenario and in 2030 the percentage is still around 0.6 percentage point higher. After three to four years, public consumption has been reduced by around 1 per cent, and in 2030 by about a further 3 per cent. With steadily lower public sector demand, including lower public employment, unemployment also increases gradually until it is around 1 percentage point higher than in the baseline scenario in 2030. Employment has by then been reduced by around 2 per cent in relation to the baseline scenario, which is equivalent to about 60 000 people. Lower employment reduces household real disposable income and depresses consumption. With lower general demand in the economy, the

**Figure 4. Unemployment (LFS)**

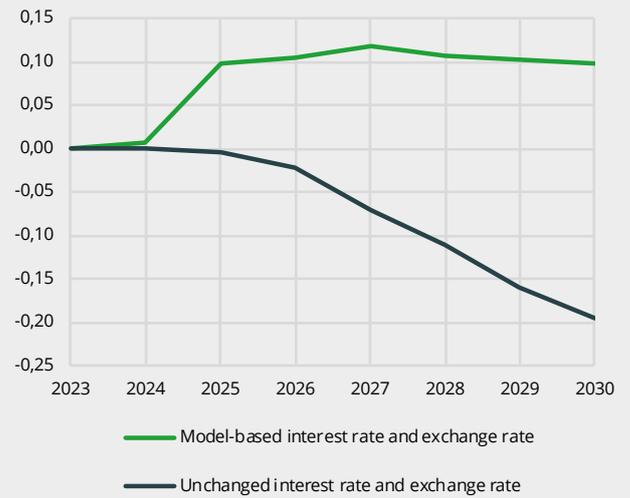
Deviation from baseline scenario. Percentage points



Source: KVARTS calculations, Statistics Norway

**Figure 5. Inflation (CPI)**

Deviation from baseline scenario. Percentage points



Source: KVARTS calculations, Statistics Norway

income and profitability of the wage leader sector decreases, bringing down wages, which depresses consumption further. Lower wages also reduce businesses' costs, which brings down prices for their products and services. The overall effect is a reduction in mainland GDP, mainly as a consequence of lower consumption and investment in both the public and the private sector.

In the case with interest and exchange rates determined by the model, the central bank will reduce the income rate to counter the negative impacts on the Norwegian economy of the fall in value of the petroleum fund.<sup>8</sup> According to the interest rate rule in KVARTS, the central bank responds to changes

<sup>8</sup> The policy rate does not affect the return on the petroleum fund in international currencies. Nor does the policy rate affect the government's net non-oil interest income in the projections

**Table 1. The petroleum fund falls in value by 30 per cent. Unchanged interest rate and exchange rate**

Deviation from baseline scenario in per cent unless otherwise indicated

	2024	2025	2026	2027	2028	2029	2030
GDP	0.0	-0.2	-0.4	-0.7	-0.9	-1.2	-1.5
Mainland Norway (market value)	0.0	-0.3	-0.6	-0.9	-1.1	-1.5	-1.8
Consumption, households etc.	0.0	-0.1	-0.2	-0.5	-0.8	-1.1	-1.5
Consumption, general government	-0.1	-0.4	-0.8	-1.3	-1.8	-2.4	-3.0
Investment, business	0.0	-0.3	-0.6	-1.1	-1.9	-2.6	-3.2
Investment, general government	0.2	-2.7	-4.6	-6.3	-6.9	-8.1	-8.9
Exports excl. oil and gas	0.0	0.0	0.0	0.1	0.1	0.1	0.2
Imports	0.0	-0.2	-0.5	-0.8	-1.1	-1.6	-2.0
Unemployment (p.p.)	0.0	0.2	0.3	0.5	0.6	0.8	1.0
Number employed	0.0	-0.2	-0.5	-0.8	-1.2	-1.6	-1.9
Labour cost share, manufacturing (p.p.)	0.0	0.0	0.0	-0.2	-0.4	-0.7	-0.9
Annual wages	0.0	-0.1	-0.2	-0.4	-0.7	-1.0	-1.4
Real wages	0.0	-0.1	-0.2	-0.3	-0.5	-0.6	-0.8
Household real disposable income	0.0	-0.2	-0.5	-0.8	-1.2	-1.6	-2.0
Household saving ratio	0.0	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5
House prices	0.0	-0.1	-0.4	-1.0	-1.8	-2.7	-3.9
Consumer price index (CPI)	0.0	0.0	0.0	-0.1	-0.2	-0.4	-0.6
Inflation (CPI, p.p. )	0.0	0.0	0.0	-0.1	-0.1	-0.2	-0.2
Money market rate (p.p.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NOK per euro <sup>1</sup>	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NOBD (NOK billions) <sup>2</sup>	-1.5	-5.2	-9.4	-14.0	-18.4	-24.0	-30.3
SNOBD / mainland GDP c.p (p.p.) <sup>2</sup>	0.0	-0.2	-0.3	-0.4	-0.6	-0.7	-0.8
SNOBD / GPFG (p.p.) <sup>2</sup>	1.1	1.1	1.0	0.8	0.7	0.7	0.6
Petroleum fund (GPFG) <sup>2</sup>	-29.9	-29.4	-29.2	-29.1	-29.1	-29.1	-29.2

<sup>1</sup> A positive sign means depreciation.<sup>2</sup> NOBD, SNOBD, mainland GDP c.p. and GPFG are abbreviations for non-oil budget deficit, structural non-oil budget deficit, mainland GDP in current prices and Government Pension Fund Global.

Source: Statistics Norway

in inflation, annual wages and the unemployment rate.<sup>9</sup> Our calculations show that the interest rate is reduced steadily through the analysis period, and in 2030 is at a level 0.8 percentage point lower than in the baseline scenario. A lower interest rate stabilises the economy through several channels. Household real disposable income is not reduced as much with a lower interest rate as in the case with an unchanged interest rate, and so household consumption hardly falls. When the interest rate is reduced, the exchange rate is also weakened.<sup>10</sup> This boosts exports and the profitability of the wage leader sector. Nominal wages therefore do not fall, in contrast to in the case with unchanged interest and exchange

rates. As a weaker exchange rate pushes up inflation slightly, real wages fall, but only half as much as in the case with unchanged interest and exchange rates. Unemployment rises, but by no means as much as in the case with unchanged interest and exchange rates. That the impact on the Norwegian economy is not greater when the petroleum fund loses value is attributable to a lower interest rate and smoothing of the use of petroleum revenue. However, the fiscal adjustment of spending of petroleum revenue is not complete in 2030, since only about half of the necessary spending cuts have been made; see Figure 1. Nor will the negative effects of a fall in the petroleum fund this year have been exhausted by then.

Our calculations show that a 30 per cent fall in the value of the petroleum fund would be challenging for both fiscal and monetary policy to manage. In monetary policy, the consideration of stabilising inflation has to be balanced against the considerations of stabilising unemployment and economic activity. Although monetary policy cannot affect the trend unemployment rate, it can still influence the average unemployment level in the event of an economic shock (Holden, 2017). In our calculations, the interest rate is set such that unemployment gradually increases a little, while inflation rises to around 0.1 percentage point higher than in the baseline scenario. How much unemployment and inflation will increase on average over such a long period of time will depend on how the central bank balances the interests of these two variables.

<sup>9</sup> The reaction function for the money market rate  $i_t$  is specified as the deviation from the baseline scenario  $i_t - \bar{i}_t = \omega_i(i_{t-1} - \bar{i}_{t-1}) + \omega_u(u_t - \bar{u}_t) + \omega_\pi(\pi_t - \bar{\pi}_t) + \omega_w(w_t - \bar{w}_t)$ , where  $(i_{t-1} - \bar{i}_{t-1})$ ,  $(u_t - \bar{u}_t)$ ,  $(\pi_t - \bar{\pi}_t)$  and  $(w_t - \bar{w}_t)$  expresses the difference between the levels from the shift calculation and the baseline scenario in the money market rate in the period  $t - 1$  and the unemployment rate, inflation (measured as the change in the CPI) and annual wages in the period  $t$ . The associated weights are  $\omega_i = 0,67$ ,  $\omega_u = -0,26$ ,  $\omega_\pi = 0,10$  and  $\omega_w = 0,29$ . The interest rate rule was inspired by the reaction function in Norges Bank's main NEMO model; see Kravik and Mimir (2019), page 34.

<sup>10</sup> A 30 per cent fall in the petroleum fund would probably be accompanied by increased uncertainty in the foreign exchange market and a weakened krone exchange rate. As we have restricted ourselves to looking only at the effects of reduced public sector demand due to the government having to adhere to the fiscal rule, the exchange rate is changed in our calculations only as a consequence of changes in the interest rate differential against other countries.

**Table 2. The petroleum fund falls in value by 30 per cent. Model-based interest rate and exchange rate.**

Deviation from baseline scenario in per cent unless otherwise indicated

	2024	2025	2026	2027	2028	2029	2030
BNP	0.0	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2
Fastlands-Norge (markedsverdi)	0.0	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
Konsum, husholdninger mv.	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Konsum, offentlig forvaltning	-0.1	-0.4	-0.8	-1.1	-1.4	-1.8	-2.2
Investeringer, næringer	0.0	0.0	0.4	0.9	1.2	1.6	1.9
Investeringer, offentlig forvaltning	0.1	-2.6	-3.8	-4.7	-4.8	-5.4	-5.6
Eksport ekskl. olje og gass	0.0	0.2	0.4	0.6	0.9	1.1	1.3
Import	0.0	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1
Arbeidsledighet (pp.)	0.0	0.1	0.2	0.2	0.3	0.3	0.3
Sysselsatte personer	0.0	-0.2	-0.3	-0.4	-0.5	-0.6	-0.7
Lønnskostnadsandel, industri (pp.)	0.0	-0.3	-0.6	-0.8	-1.0	-1.1	-1.1
Årslønn	0.0	0.0	0.0	0.0	0.1	0.2	0.2
Reallønn	0.0	-0.1	-0.2	-0.3	-0.3	-0.4	-0.4
Husholdningenes disp. realinntekt	0.0	-0.2	-0.2	-0.3	-0.3	-0.3	-0.4
Husholdningenes sparerate	0.0	-0.2	-0.3	-0.4	-0.5	-0.7	-0.8
Boligpris	0.0	0.2	0.6	1.1	1.9	2.7	3.5
Konsumprisindeksen (KPI)	0.0	0.1	0.2	0.3	0.4	0.5	0.6
Inflasjon (KPI, pp.)	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Pengemarkedsrente (pp.)	0.0	-0.2	-0.3	-0.5	-0.6	-0.7	-0.8
NOK per euro <sup>1</sup>	0.1	0.9	1.5	2.1	2.7	3.0	3.3
OBU (mrd. kr.) <sup>2</sup>	-1.4	-5.8	-11.7	-18.4	-25.0	-32.3	-39.9
SOBU / BNP F-N (pp.) <sup>2</sup>	0.0	-0.2	-0.3	-0.5	-0.6	-0.7	-0.9
SOBU / SPU (pp.) <sup>2</sup>	1.1	1.0	0.9	0.7	0.7	0.6	0.6
Oljefondet (SPU) <sup>2</sup>	-29.3	-28.3	-27.4	-27.0	-26.4	-26.1	-25.6

<sup>1</sup> A positive sign means depreciation.<sup>2</sup> NOBD, SNOBD, mainland GDP c.p. and GPFG are abbreviations for non-oil budget deficit, structural non-oil budget deficit, mainland GDP in current prices and Government Pension Fund Global.

Source: Statistics Norway

When fiscal policy has to be tightened, it creates substantial knock-on effects in the rest of the economy. A key question is therefore how extensive the smoothing of petroleum revenue spending should be. Less smoothing takes one more rapidly down to the 3 per cent path, but the negative consequences for the economy in the next few years will be greater. This makes stabilisation policy even more challenging for the central bank. More smoothing of the use of petroleum revenue will mean less impact on the economy, but at the expense of using more petroleum revenue and being further away from the fiscal rule's 3 per cent limit. The fiscal rule could lose its fundamental importance if the deviation from the long-term guideline becomes too large and lasts too long. Another key question is how the spending of petroleum revenue should be adjusted to a lower fund value. We have assumed that all adjustment takes the form of reduced public consumption, investment and intermediate inputs, while taxes and transfers to households in reality are kept unchanged. Other adjustments, such as tax increases and reduced transfers, may also be relevant if the petroleum fund loses a lot of value.

Our calculations are uncertain. KVARTS represents a simplified description of reality and does not necessarily capture all mechanisms in the Norwegian economy. Moreover, there is a big difference between whether a fall in the value of the petroleum fund is temporary or permanent, which may be difficult to determine when the fall initially occurs. A fall in the inter-

national value of the petroleum fund makes Norway poorer. Although our calculations are shrouded in uncertainty, a large, permanent fall in the value of the petroleum fund would very probably create a difficult economic situation for Norway.

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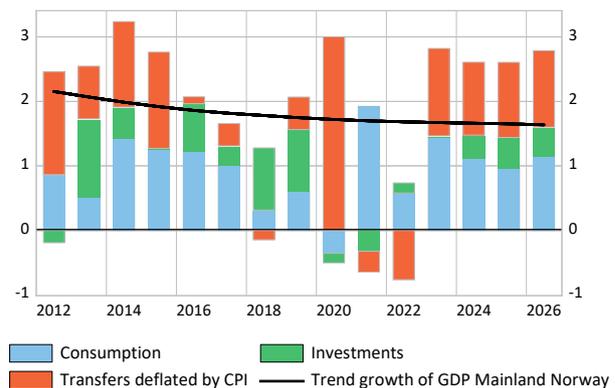
## Fiscal policy characterised by wide scope for manoeuvre and high inflation

General government consumption increased by 0.9 per cent in 2023 Q3. The rise in central government consumption was due to growth in collective services such as administrative and management services, the police force and transport. In the case of local government, consumption increased as a result of growth in collective services, which at municipal level consist of administrative and management services and transport, while consumption of cultural and entertainment services dipped. General government payroll costs increased by 1.9 per cent in Q3 while gross general government investment fell back by 2.8 per cent. Gross investment in both central and local government fell, but the decline was most pronounced for central government, and almost entirely due to reduced defence investment. The majority of the decline in local government investment is attributable to reduced investment in water supply, waste water and sanitation. The level of general government investment is nonetheless high in a historical perspective.

According to NB 24, periods of high inflation and a tight labour market are not appropriate times for a fiscal policy that stimulates the economy. NB 24 forecasts consumption of petroleum revenue in 2024, measured by the structural, non-oil budget deficit, at NOK 409.8 billion in 2024 money. In this budget proposal, withdrawals from the fund are projected to be 2.7 per cent of the value of the Government Pension Fund Global (the petroleum fund) at the beginning of 2024, i.e. well within the fiscal rule's limit. This withdrawal is equivalent to 3.3 per cent of the value of the petroleum fund at the beginning of 2023. Had the value of the fund not increased in 2023, the withdrawal would thus have been far higher than is sanctioned by the fiscal rule. The calculations presented in NB 24 carried out with the KVARTS and NORA macroeconomic models indicate that, in isolation, the budget proposal for 2024 will have a virtually neutral effect on mainland economic activity next year. If the budgets for the years 2022–2024 are viewed in combination, the effect on activity in the Norwegian economy next year will be moderately expansionary, according to the projections. Measured as a percentage of trend mainland GDP, spending of fund resources has moreover increased in recent years, and is forecast to be 10.3 per cent in 2024.

Figure 4. Contributions to growth in general government

Change from previous year in percent



Source: Statistics Norway

According to NB 24, the full year effect of the overall direct and indirect taxation scheme for 2024 implies tax relief of approximately NOK 6 billion. The lifting or phasing out of the temporary tax increases in the adopted 2023 budget account for NOK 5.1 billion of this amount. The Government proposes taxing economic rent from land-based windpower at an effective rate of 35 per cent, with effect from 2024. The Government also proposes discontinuing the high-price contribution on power with effect from 1 October 2023. In addition, the Government proposes that the threshold for the extra payroll tax be increased to NOK 850 000 in 2024. According to the Government, this is the first step in the phasing out of this tax. Taxes on non-ETS emissions of greenhouse gases are being increased by 19 per cent.

Through a settlement agreement with the Socialist Left, the Government is increasing fiscal budget appropriations for 2024 for the environment and manufacturing by about NOK 5.3 billion, while appropriations for welfare, redistribution, culture etc. increase by about NOK 5.6 billion. NOK 9 billion will be funded by drawing on a loss provision fund for export financing, direct and indirect taxes will be increased by about NOK 1.3 billion, while other expenses will be reduced by about NOK 0.8 billion. These changes are incorporated in our projection.

According to NB 24, the value of the petroleum fund at the beginning of 2023 was NOK 12 413 billion. The projection for the Norwegian State's net cash flow from petroleum activities in 2023 has been revised down to NOK 903.1 billion, from NOK 1 015.5 billion in the Revised National Budget for 2023 and from NOK 1 384 billion in NB 23.

The downward revision is mainly due to lower gas prices. NB 24 assumes a value of NOK 15 300 billion for the fund at the beginning of 2024. By way of comparison, the value of the fund at the beginning of December was roughly NOK 16 000 billion. Net cash flow from petroleum activities in 2024 is forecast to be NOK 832 billion. The value of the fund at the beginning of 2025 is forecast to be NOK 16 581 billion. We assume that the real return on the fund will be 3 per cent, and that the inflows will be based on oil and gas prices that reflect forward prices. The result will be developments in the fund further along the projection path that create greater fiscal scope for manoeuvre. We have assumed that the use of petroleum revenue will be maintained at below the 3 per cent limit because of the uncertainty associated with share prices and exchange rates, coupled with a growing funding requirement in the longer term.

In our previous report we forecast increases in general government consumption and gross investment in 2023 of 2.7 and 1.2 per cent, respectively. In NB 24, increases in general government consumption and gross investment of 2.1 and 0.4 per cent, respectively, are forecast for 2023. In this report, we forecast increases in general government consumption and gross investment in 2023 of 2.6 and 0.2 per cent, respectively. Growth in gross investment has been revised down in light of updated data on investment in defence and public administration, among other things, and postponed deliveries of F-35 fighter aircraft. NB 24 projects growth in general government consumption and gross investment of 1.4 and -0.5 per cent, respectively, for 2024. In this report we forecast growth of 2.1 and 2.8 per cent, respectively. Public consumption will then increase by about 2 per cent in subsequent years. In our previous report we forecast growth in general government consumption and gross investment in 2024 of 1.4 and 4.5 per cent, respectively. Growth in public consumption has been revised upward, as we now expect an economic downturn that will be buffered by countercyclical policy. Growth in gross investment has been revised down for 2024, partly as a result of postponed deliveries of F-35 fighter aircraft. However, countercyclical policy focusing on the construction industry pushes up projections for gross investment along the entire projection path. Imports of fighter aircraft will have little impact on activity in the Norwegian economy.

The Government has signalled increased defence investment in the time ahead in order to meet the NATO target in 2026. We expect deliveries of F-35 fighter aircraft to extend well into 2025, and that army, navy and air force programmes will entail extensive investment. The real value of transfers is expected to increase by 4.1 per cent in 2023, and they are projected to grow by about 3.5 per cent in the following years. An increasing need for health and care workers is also expected in the time ahead.

### **Interest rate cuts will begin in 2024**

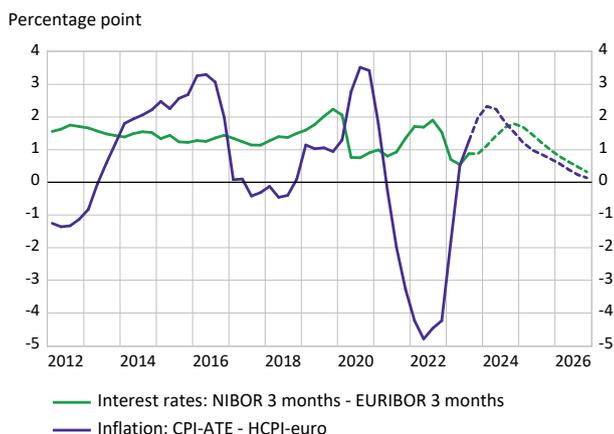
In September, Norges Bank raised the key policy rate to 4.25 per cent. Two years previously, it had been 0 per cent. Such a sharp interest rate increase in such a short time had not been seen since 1998, when a similar increase in the policy rate took place in the course of just over 3 months. In connection with the interest rate increase in September this year, Norges Bank signalled a probable further interest rate hike in December. This signal was maintained at the November monetary policy meeting.

The money market rate often shadows the key rate with a premium. In summer 2021, the 3-month money market rate was 0.2 per cent. Since August this year it has been close to 4.7 per cent, as also at the beginning of December.

Deposit and lending rates have also increased from record low levels in 2021 Q2 and Q3. In the course of 8 quarters, the average interest rate on loans secured on dwellings has risen by 3.5 percentage points, to 5.5 per cent at the end of Q3 this year. During the same period, the average deposit rate increased by 2.6 percentage points, to 2.9 per cent. The interest rate differential between lending and deposit rates is thus 2.6 percentage points, the highest since Statistics Norway began publishing separate rates for loans secured on dwellings in 2006. If we measure the differential between banks' and mortgage companies' average lending and deposit rates of all types, the interest rate differential is the highest since 2004.

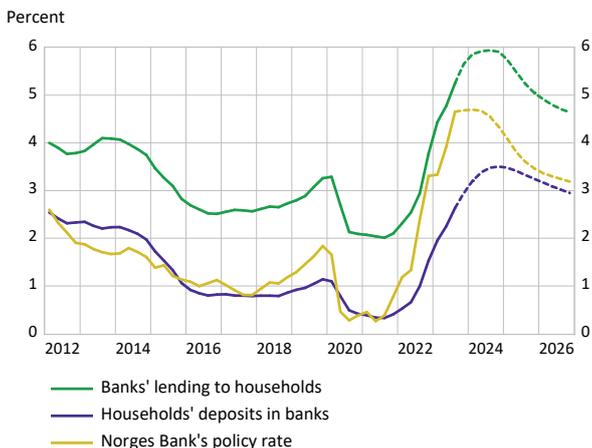
At the end of November, Norges Bank published some of the figures in the December Regional Networks report. These figures, described as "preliminary figures", indicate zero growth in activity in Q4 this year and a slight fall in 2024 Q1. As a result,

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



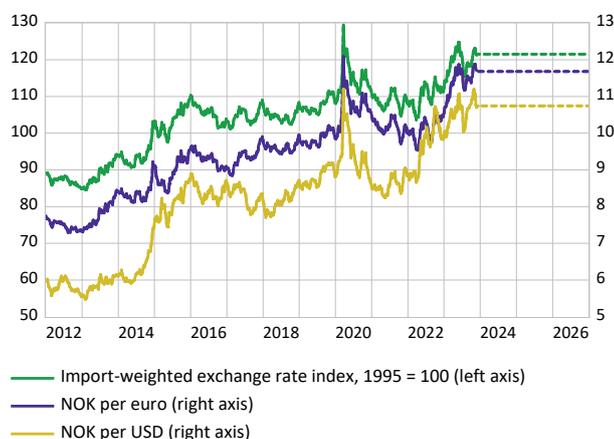
Source: Norges Bank and Statistics Norway

**Figure 6. Norwegian interest rates**



Source: Norges Bank and Statistics Norway

**Figure 7. Exchange rates**



Source: Norges Bank

the market revised down its expectations, implying that there is now more likely not to be an interest rate increase in December than there is to be one.

Norges Bank sets the interest rate primarily to stabilise inflation at around 2 per cent and to ensure financial stability. The central bank also takes into account that a higher interest rate influences activity in the Norwegian economy. Inflation measured by the 12-month rise in the consumer price index (CPI) was 4.0 per cent in October this year, i.e. well over the 2 per cent target. The 12-month rise in the CPI adjusted for tax changes and excluding energy products (CPI-ATE) was 6.0 per cent. The high inflation now points in isolation to an interest rate hike in December. However, our projections indicate that inflation will fall appreciably through 2024, even without a further hike this year. We additionally forecast that activity growth will be low next year, and that interest rates abroad are falling. The housing market is expected to be weak, a further reason for there being no more interest rate hikes this time around. We have assumed that the policy rate will not be raised in December, and that it will remain at 4.25 per cent until mid-2024 before being gradually reduced to 2.75 per cent in 2026. These projections bring the average interest rate on loans secured on dwellings up to nearly 6 per cent for the whole of 2024, before it falls to just under 5 per cent in 2026.

The krone depreciated sharply through the first 5 months of 2023. Whereas one euro cost NOK 10.50 at the beginning of 2023, the price had risen to NOK 12.00 by the end of May. Approaching the summer, the krone strengthened again to a rate of NOK 11.20 for 1 euro before weakening again up to mid-November, when 1 euro cost NOK 11.90. In recent weeks the krone has edged up again, and at the beginning of December one euro cost about NOK 11.70. We assume that exchange rates will remain unchanged in the near term. The currencies in the import-weighted krone exchange rate will then be an annualised 8.7 per cent more expensive in 2023. As the krone is currently somewhat weaker than the average so far this year, an unchanged krone exchange rate going forward still means a depreciation of just over 1.5 per cent on an annual basis from this year to next. The weak movements of the krone have been an important cause of inflation; see Box 2.

## The saving ratio is picking up from a low level

According to the non-financial sector accounts, the real disposable income of households and non-profit organisations fell 3.4 per cent in 2022. In our last report the fall was estimated to be 2.4 per cent. The revised estimate is largely due to an upward revision of the increase in the private consumption deflator of just over 0.5 percentage point, and the direct taxes on households of around NOK 8.5 billion. The upward revision of the deflator is due to a change in the composition of consumption following the change in the national accounts base year and the incorporation of final figures for 2021. The result is that consumption groups with higher price inflation now than previously make up a larger share of aggregate consumption.<sup>1</sup> Direct taxes have been revised up in the light of new assessment data for the 2022 tax year.

If we exclude share dividend disbursements, which were record high in 2021 because of adjustment to higher dividend tax from 2022, growth in real disposable income was 1.8 per cent last year.<sup>2</sup> Real disposable income excluding dividends increased sharply in Q1 last year, but then fell for the next three quarters. This income variable rose fairly moderately through the first three quarters of 2023. Developments last year and so far this year have been driven by higher wage income as a consequence of employment growth, higher net interest expenses due to higher lending rates, and price increases for a number of goods and services.

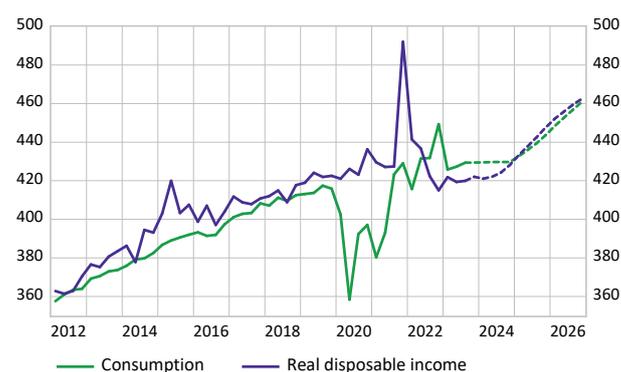
According to the national accounts, total consumption by households and non-profit organisations increased by as much as 6.2 per cent in 2022. Annual growth last year has been revised down by 0.7 percentage point compared with our previous report. The level of overall consumption was nonetheless around 4.5 per cent higher in 2022 than in 2019, the year before the Covid pandemic. In particular, consumption of services, mainly hotel and leisure services and passenger transport, made a large contribution to consumption growth through

<sup>1</sup> For further information about revisions of household consumption, see section 3.10 in Økonomiske analyser 4/23 (Norwegian text).

<sup>2</sup> In the non-financial sector accounts, only share dividends, and not the tax expenses associated with them, are deducted in the item 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.

**Figure 8. Income and consumption in households**

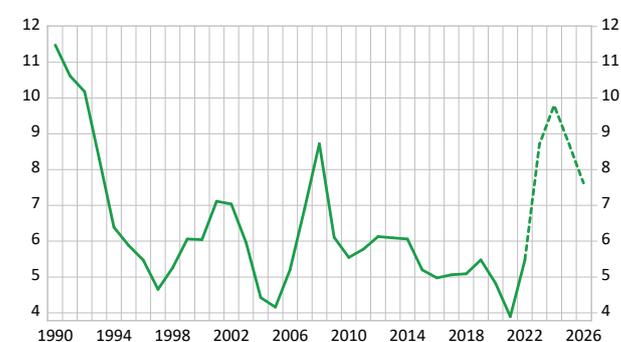
Seasonally adjusted, billion 2021 NOK, quarter



Source: Statistics Norway

**Figure 9. Household interest burden**

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



Source: Statistics Norway

2022. Goods consumption also increased sharply in Q4 last year as a consequence of record high car purchases prior to the introduction of taxes on electric cars from 1 January 2023. Towards the end of 2022, the ratio between consumption of goods (excluding car purchases) and services reverted to the pre-pandemic level.

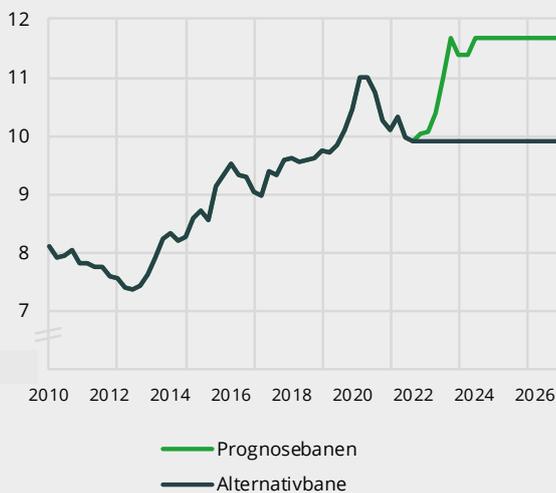
Large fluctuations in car purchases have characterised consumption this year too. In 2023 Q1, overall consumption fell by 5.2 per cent, substantially depressed by low car purchases in response to tax changes. As car purchases reverted to more normal levels in Q2, overall consumption increased fairly moderately by around 0.5 per cent in the same period. Total consumption excluding car purchases fell by about 0.5 per cent through the first half of 2023. Overall consumption in Q3 was approximately 0.5 per cent higher than the previous quarter, with particularly substantial contributions from Norwegians' consumption abroad and travel

### Box 2: Effects of depreciation of the krone on price and wage inflation

The Norwegian krone has weakened markedly since the beginning of 2022. In a small, open economy like Norway, the exchange rate plays an important part in economic developments. Changes in the exchange rate will primarily affect import and export prices measured in NOK, which in turn will affect domestic inflation. The krone exchange rate will also have an effect on other economic variables through changes in relative prices; see Boug et al. (2005, 2013).

In this analysis we study how the depreciation of the krone since the beginning of 2022 has affected key macroeconomic variables through effects on import and export prices. The analysis also shows how the effects change over time. In order to shed light on the significance of the depreciation of the krone for the Norwegian economy, we compare the projection scenario up to the end of 2026 with an alternative scenario in which the exchange rate is kept constant at the level in 2022 Q1, when a euro cost NOK 9.90; see Figure 1. The overall depreciation of the krone from 2022 Q1 to the beginning of December this year is then 15 per cent. The analysis was performed with the aid of the KVARTS macroeconomic model, and the contributions from export and import prices take account of the composition effects in the model.<sup>1, 2</sup> In order to isolate the effects on the Norwegian economy of interest rate increases, we assume that monetary and fiscal policy, as well as global economic developments, are the same as in

Figur 1. Kronekursen (NOK per euro) i prognose- og alternativbanen

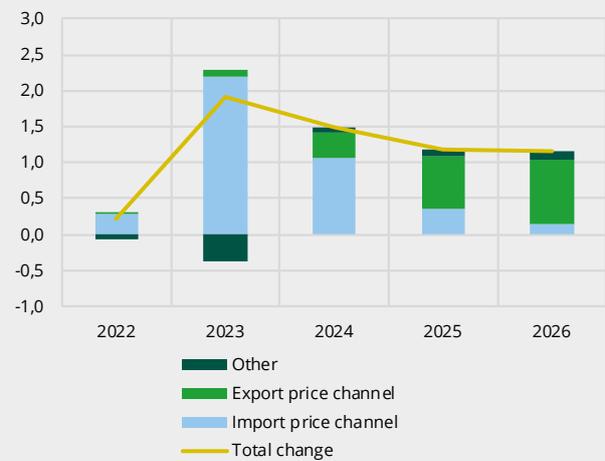


Kilde: Statistisk sentralbyrå

<sup>1</sup> See Boug et al. (2023) for a more detailed description of KVARTS.

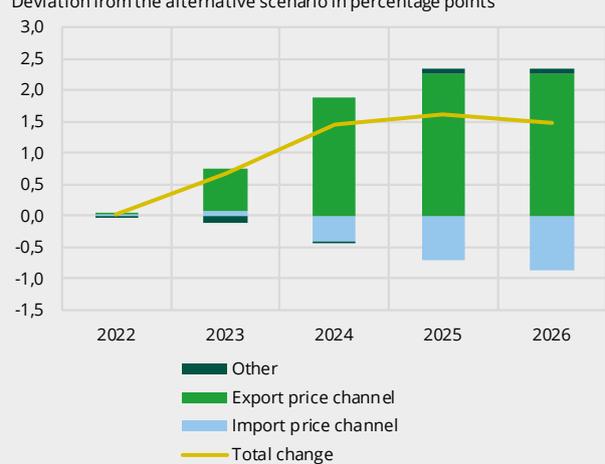
<sup>2</sup> In order to estimate the effects of the individual import and export channels, we first identified all channels through which the krone exchange rate acts on the relevant variables. We then calculated different combinations of these channels and the contributions from each combination by letting the level of variables associated with each channel be the same in the alternative scenario as in the projection scenario. With a total of 24 combinations based on four channels (import prices, export prices, domestic market prices and annual wages), we determined the magnitudes of the composition effects and the unique contributions from each channel. We have assumed that the composition effects between import/export prices and other variables accrue to import/export prices, and that the composition effects between export and import prices can be distributed equally

Figure 2a. Depreciation of the krone and importance of import and export prices for inflation. Unchanged interest rate and fiscal policy. Deviation from the alternative scenario in percentage points



Source: Statistics Norway

Figure 2b. Depreciation of the krone and importance of import and export prices for annual wages. Unchanged interest rate and fiscal policy. Deviation from the alternative scenario in percentage points



Source: Statistics Norway

Figure 2c. Depreciation of the krone and importance of import and export prices for growth in real wages. Unchanged interest rate and fiscal policy. Deviation from the alternative scenario in percentage points



Source: Statistics Norway

the projection scenario.<sup>3</sup> Import and export prices affect the Norwegian economy through a number of different channels. Figure 2 shows the impact of the weak krone exchange rate and the significance of import and export prices for inflation, annual wages and real wages.

Higher import prices as a result of a weaker krone imply higher prices for final goods consumed by households. The consumer price index (CPI) therefore rises. Imported intermediates also become more expensive for businesses, which in isolation reduces their profitability. Higher costs lead to Norwegian producers raising their prices, particularly in the non-traded sector, and thereby adding further pressure to inflation. In 2023, the increase in import prices raises inflation by 2.2 percentage points, but the effect is almost exhausted in 2026. In the traded sector, however, it is more difficult for businesses to raise their prices. Higher costs are reflected in weakened competitiveness and lower wage growth. This effect is partly offset by the fact that some manufacturing segments also compete in the domestic market, and their goods therefore become relatively cheaper than imports. On balance, wage growth is depressed by 0.9 percentage point in 2026 as a result of higher import prices.

The increase in export prices as a consequence of the depreciation of the krone means greater profitability for Norwegian exporters, and makes Norwegian products more competitive on the international market. The operating profit increases, the labour share in manufacturing falls and improved profitability pushes up wage growth. In isolation, higher export prices push up annual wages by more than 2 per cent from 2024 to 2026.<sup>4</sup> Higher export prices have no direct effect on the CPI, but affect domestic price inflation through rising costs for businesses as a result of higher wage growth.

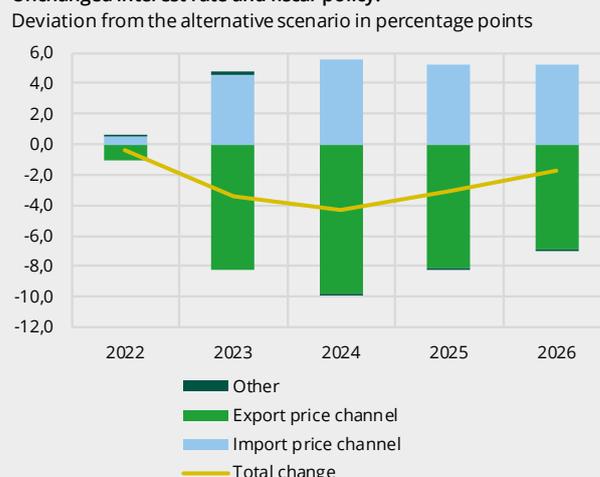
Overall, the depreciation of the krone has increased the rise in the CPI by 1.9 percentage points and annual wage growth by 0.7 percentage point in 2023. Conversely, growth in real wages slowed for the first three years of the projection scenario as a consequence of the weaker krone. The import price channel dominates developments in real wages up to 2024, but from 2025 onwards the export price channel begins to dominate through the effect of increased annual wage growth. However, real wages remain at a lower level than they would have been if the krone had not weakened throughout the analysis period.

Figure 3 shows the effects of the weak krone on labour shares in the traded and the non-traded sectors. Export prices are the most important channel for how a weakened krone exchange rate affects the labour share in manufacturing. This has fallen substantially in the past two years and is now well under the post-2000 average so far; see Box 3.1 in Økonomiske analyser 4/2023 (Norwegian text). A weaker exchange rate explains much of this fall, and according to our analysis, the labour share in manufacturing has fallen by 3.4 percentage points this year as a result of the weaker krone. High export prices

<sup>3</sup> In Box 1 in Economic Survey 2/2023 we discuss the consequences of a weakened krone exchange rate for monetary policy if wage adjustment had been faster than has been experienced so far. In Box 1 in Economic Survey 3/2023 we consider how the interest rate should respond to higher global inflation and a weaker krone exchange rate.

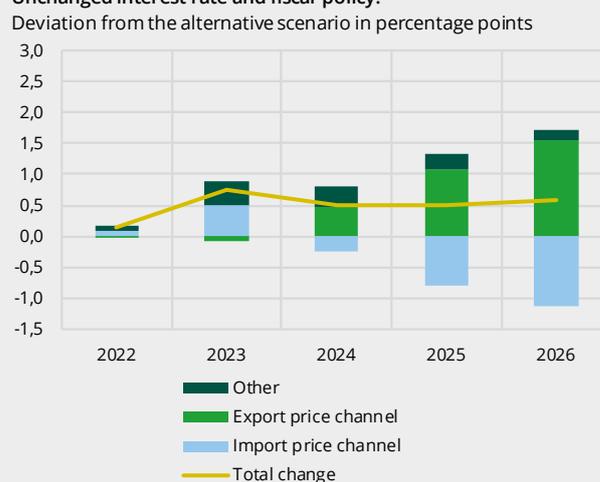
<sup>4</sup> See for example Gjelsvik et al. (2020), who show that a feature of wage formation in Norway is that it normally takes time before increased profitability in the wage leader sector fully feeds through into higher pay for employees.

**Figure 3a. Depreciation of the krone and importance of import and export prices for the labour share in the traded sector. Unchanged interest rate and fiscal policy.**



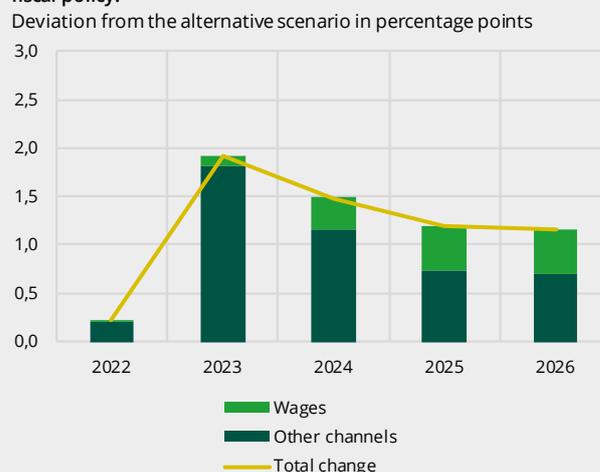
Source: Statistics Norway

**Figure 3b. Depreciation of the krone and importance of import and export prices for the labour share in the non-traded sector. Unchanged interest rate and fiscal policy.**



Source: Statistics Norway

**Figure 4. Depreciation of the krone and importance of wage growth for inflation measured by the CPI. Unchanged interest rate and fiscal policy.**



Source: Statistics Norway



and increased wage-leader profitability thus lead to a fall in the labour share in manufacturing, even if annual wages rise. However, the fall is reversed towards the end of the projection scenario as a result of rising pay.

The picture for the non-traded sector is different. Whereas prices for intermediate inputs and labour costs have been rising for the non-traded businesses, production prices do not seem to have been rising at the same high rate (see Box 2 in Economic Survey 3/2023). In addition, the labour share in the non-traded sector has been rising; see Box 3.1 in Økonomiske analyser 4/2023 (Norwegian text). According to our analysis, the labour share in the non-traded sector will be pushed up by almost 0.8 percentage point this year as a result of the weak krone. In 2023, this is mainly attributable to the import price channel. As time goes on, however, wage growth via the export price channel will be the main reason for the labour share in the non-traded sector being higher than in the alternative scenario.

The depreciation of the krone will lead to an increase in nominal wages, which towards the end of the analysis period is 5.2 per cent higher than it would have been without the depreciation. Figure 4 shows how much of the inflation can be attributed directly to wage growth. The direct contribution of wages largely captures effects through the export price channel due to the weakening of the krone. Our analysis shows that in 2023 the import price channel is the primary force driving inflation. However, if the krone remains weak and the wage-leader sector maintains its profitability, wage growth will play a steadily more important part. Without an increase in the interest rate in the face of a weaker krone, inflation up to and including 2026 will be on average around 1.5 percentage points higher than it would have been without the depreciation.

Thus the depreciation of the krone affects the Norwegian economy through several channels. A weaker exchange rate works through higher import prices and pushes up consumer price inflation. At the same time, higher export prices are reflected in greater wage-leader profitability. This is gradually passed through into higher wages, which places further pressure on inflation. Non-traded sector businesses have to live with higher prices for intermediates and higher labour costs. Households' financial situation is exacerbated by growth in real wages falling for several years.

Our analysis is based on a model that represents a simplified description of the mechanisms in the economy. Our starting point is an exogenous fiscal policy. When the krone depreciates, the value of the Government Pension Fund Global (petroleum fund) measured in NOK increases, which in isolation leads to a strengthening of public finances.<sup>5</sup> Depending on fiscal policy, this may imply an increase in public spending or a reduction in the tax level, which will stimulate the Norwegian economy; see Boug et al. (2023). Our analysis additionally assumes an unchanged interest rate, and that the krone exchange rate is exogenous. However, according to Røisland (2022) the monetary policy response will be decisive for movements in the krone exchange rate in the short and medium term, which in turn will have consequences for wage growth and domestic inflation. Our analysis is partial, and its only objective is to illustrate how the depreciation of the krone affects price and wage inflation in the absence of stabilising fiscal and monetary policy.

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<sup>5</sup>According to Dyvi (2022), the depreciation of the krone will contribute to a strengthening of public finances through a redistribution of purchasing power from the private sector to general government, as long as it is not passed fully through into domestic prices and wages.

and tourism services. Consumption of services as a whole, however, have been almost flat so far this year.

In the second half of 2022, consumption in current prices was higher than disposable income. Consequently the saving ratio, measured by saving as a share of disposable income, fell from around 14 per cent in 2021 to around 5 per cent in 2022. The saving ratio excluding share dividends fell from

around 5.5 per cent to close to zero in the same period. Non-financial sector accounts figures show that the saving ratio fell by around 7.5 percentage points from 2021 Q4 to 2022 Q1, while the ratio excluding dividend payments increased by roughly the same amount. These large changes in the saving ratio over two quarters must be viewed in conjunction with major changes in disbursements of share dividend that are due to adaptation to the increased tax on dividends. The saving ratio both

including and excluding share dividends fell for the next three quarters of 2022 before picking up from low levels through the first three quarters of 2023.

We now forecast that real disposable income excluding share dividends will fall by around 1.5 per cent this year as against around 0.5 per cent in our previous report. The downward revision is mainly due to the fact that household capital income in the first half of the year is now estimated to be somewhat lower in the non-financial sector accounts. Next year real disposable income will grow by around 1 per cent, and further to around 4 per cent in 2025 and 2026. 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. A fall in net interest expenses will also contribute to income growth as mortgage rates are reduced due to cuts in the policy rate. The level of the household interest burden, measured as interest expenses after tax as a share of disposable income, is forecast to be between 7.5 and 10 per cent in the projection period. By way of comparison, the average annual interest burden was 5.5 per cent in the 10-year period 2010–2019. The interest burden assumed for 2024 is the highest since the early 1990s.

We assume that total consumption in 2023 will fall by around 1 per cent, about half a percentage point more than in our last report. This growth projection implies fairly flat developments through the last quarter of this year. In the course of the next few years, consumption growth will gradually pick up, to around 4 per cent in 2026. Developments in overall consumption during this period will be driven by increasing growth in real disposable income, but constrained by weak developments in real house prices and higher real interest rates.

Given our projections for income and consumption, coupled with forecasts for saving in collective pension funds, the saving ratio including and excluding share dividends will gradually rise from around 4 and 0 per cent, respectively, this year, to around 6.5 and 3 per cent, respectively, in 2025 and 2026. Our projections imply that the saving ratio, both including and excluding share dividends, will then be close to its average annual level in the ten-year period 2010–2019.

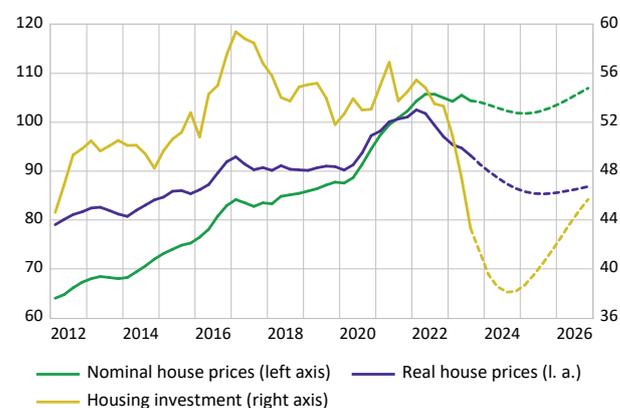
## Low level of housing investment also in 2024

[Statistics Norway's resale home price index shows](#) that house prices fell 1.1 per cent from Q2 to Q3 this year. This is probably attributable to the waning effects of the relaxation of the mortgage lending regulations and to increases in lending rates. Through the year, the level of house prices for Norway as a whole has been the same as through 2022, but the Q3 level is substantially lower. Although the industry reports a large supply of resale homes, so far this has not been reflected in a major fall in house prices. This is probably because when faced with low offers, sellers will rather wait than sell. We assume that nothing will happen in the housing market going forward to induce a higher turnover rate and subsequent sharp fall in house prices such as a pronounced increase in enforced sales due to defaulting on mortgages.

Figures published by Real Estate Norway also show a larger supply and lower turnover than usual. The number of dwellings advertised for sale so far this autumn is the highest since 2019 and approached 20 000 at the end of October. The turnover of around 8 000 resale homes during this period was the lowest compared with the same period in previous years. The turnover time also rose somewhat during the autumn. The decline in prices observed in August and September of 0.6 and 0.2 per cent, respectively, was followed by a rise of 0.2 per cent in October. This rise is largely due to activity in Oslo, where house prices rose by 0.5 per cent. The November figures show a price rise of 0.1 per cent.

**Figure 10. Housing market**

Seasonally adjusted. Left axis: index, 2021 = 100  
Right axis: billion 2021 NOK, quarter



Source: Statistics Norway

**Box 3: Seasonally adjusted figures for resale home prices are now more uncertain**

Real Estate Norway and Statistics Norway publish both unadjusted and seasonally adjusted series of resale home prices in Norway. In the seasonally adjusted series, house prices are adjusted for a normal seasonal pattern. The method used takes into account that the seasonal pattern may change over time. More weight is therefore attached to new observations of the seasonal pattern than to earlier observations.

In 2022, there were major movements in resale home prices through the year. This has therefore contributed to changing the seasonal factors for both Real Estate Norway's monthly index and Statistics Norway's quarterly statistics. In this box, we use seasonal factors for the years 2010–2019 to illustrate the effect of altered seasonal factors on the house price indices of both Real Estate Norway and Statistics Norway.<sup>1</sup>

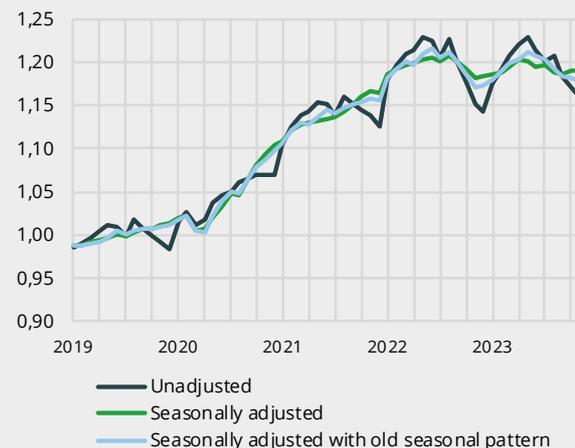
The seasonal factors we use for Real Estate Norway's index are based on the percentage difference between the seasonally adjusted and the unadjusted series for each month of this period. When calculating the seasonal factors, equal weight is attached to all years. We calculate seasonal factors for Statistics Norway's quarterly house price index in the same way. We describe these patterns as "old seasonal patterns".

In Figure 1 we show developments in Real Estate Norway's unadjusted house price index, together with the official seasonally adjusted index from 2019 onwards. In addition, we have included our calculation of a seasonally adjusted index based on an old seasonal pattern. We see that there are relatively small differences between the two seasonally adjusted series in 2019 and 2020. From the end of 2021, there are large fluctuations in the unadjusted house price series. As a result the seasonal factors in the official seasonally adjusted statistics are adjusted to make the course of the seasonally adjusted series smoother. Consequently, the official seasonally adjusted series show smaller movements through 2022 and 2023 than are obtained by using an old seasonal pattern to adjust the series. The series based on an old seasonal pattern shows that house prices have fallen every month since May 2023, and that the overall fall in house prices from May to November is 2.9 per cent. The official seasonally adjusted house price index shows a fall of only 0.9 per cent in this period. Real Estate Norway's unadjusted house price index fell by as much as 5.9 per cent from May to November 2023.

In Figure 2, we have carried out the same exercise with Statistics Norway's quarterly house price index. The differences between the two seasonally adjusted series are much smaller here. Part of the reason may be that we are now looking at series with a lower time resolution (quarterly rather than monthly series). The seasonally adjusted series based on an old seasonal pattern nonetheless shows a larger fall in resale home prices in the last quarter. Whereas the official seasonally adjusted series indicates that the fall from Q2 to Q3 this year was 1.1 per cent, our calculations, based on the old seasonal pattern, show that resale home prices fell by 1.3 per cent.

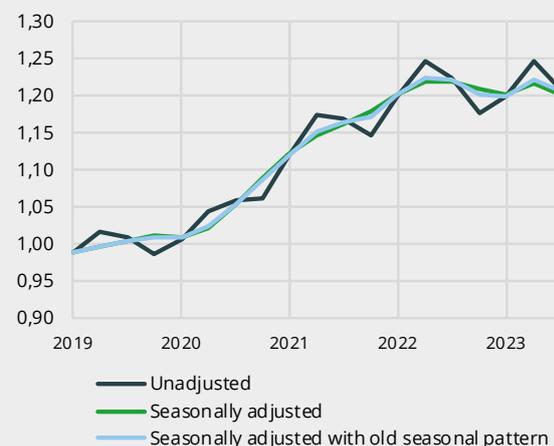
If we assume that the old seasonal pattern is correct and use unchanged seasonally adjusted house prices going forward, we can calculate a so-called carry-over. If the seasonally adjusted index based on an old seasonal pattern has the same value in December as it had in November this year, house prices will fall by an annualised 0.3 per cent from 2022 to 2023, measured by Real Estate Norway's index. If this price is also kept unchanged through 2024, we will get a house price fall of 1.3 per cent from this year to next. If we assume that Statistics Norway's house price index increases percentage-wise as much as Real Estate Norway's house price index from Q3 to Q4 this year, and we use the old seasonal pattern for both series, the fall in house prices will be 0.6 per cent this year and a further 1.2 per cent next year. Our projections show an even more pronounced annualised house price fall next year, which means that according to our projections, house prices will fall further from their current level.

**Figure 1. Real Estate Norway's unadjusted and seasonally adjusted monthly house price index and Statistics Norway's seasonally adjusted monthly house price index using the old seasonal pattern. 2019=1**



Source: Statistics Norway

**Figure 2. Statistics Norway's unadjusted and seasonally adjusted quarterly house price index and seasonally adjusted monthly house price index using the old seasonal pattern. 2019=1**



Source: Statistics Norway

<sup>1</sup> Similar calculations have also been carried out by Real Estate Norway, see "[Nye boligpristall kan være misvisende](https://nrk.no/nyheter/nyboligpristall-kan-vaere-misvisende)" [New house price figures may be misleading] (nrk.no).

However, it is important to bear in mind that house price movements were weak in the second half of last year, and that this has influenced the seasonal adjustment appreciably. For a more detailed account of the seasonal adjustment of the house price indices of Real Estate Norway and Statistics Norway, see Box 3.

There has been a sharp fall in residential construction through 2022 and 2023. Because of the downward revision of historical national accounts figures, the fall in housing investment has been even more pronounced than foreseen in our previous report. According to preliminary quarterly national accounts figures, investment fell by almost 20 per cent from 2022 Q3 to 2023 Q3. Figures from the Norwegian Homebuilder Association show sales of new dwellings up to and including October this year to be 45 per cent lower than in the same period in 2022. As a result, housing project starts so far this year are 42 per cent lower than observed over the same period in 2022. Housing starts for flats in particular have been very weak, and so far this year the level is 55 per cent lower than last year. The general uncertainty concerning the economic situation, resale home prices, the interest rate level and the increase in consumer prices are all possible drivers of this downturn, which has brought us down to the same level as during the financial crisis. The nominal rise in prices for new dwellings has been high up to now but has fallen according to [Statistics Norway's price index for new dwellings](#). The annual rise in Q3 was 0.5 per cent, down from 5.7 per cent in Q2. This implies a moderate fall in real prices for new dwellings. The annual rise in prices for building materials remains stable for the moment at 3.6 per cent in October, according to [Statistics Norway's construction cost index for residential buildings](#), after falling from almost 10 per cent at the beginning of the year. The weak housing starts, and sales of new homes in particular, point to a low level of housing investment in the time ahead. These factors, coupled with the downward revision of the national accounts figures have led us to revise the investment projection for 2023 down further, and we anticipate a fall of around 16 per cent. We foresee continued weak developments in the next few years, with a slight improvement towards the end of the projection period.

The real interest rate level is particularly important for house prices, as is growth in household

credit and real disposable income. In our projections we anticipate a continued increase in household debt, and that the real interest rate after tax (based on the CPI-ATE) will not be positive until 2025 and 2026. All else being equal, this pushes up house price projections. At the same time, we expect growth in household real disposable income to be weak next year, which will slow the rise in house prices. We also see signs that there may be a shortage of housing in the years ahead, and this may gradually result in upward pressure on prices, particularly in central areas. The most recent measurement of the Consumer Confidence Indicator published by Finance Norway shows signs that Norwegian households have a positive view of their own financial situation next year, while still holding a sombre view of the Norwegian economy as a whole. On the basis of these premises, we are revising down our projection and forecast that house prices will fall by 0.6 per cent in 2023. We foresee continued weak developments next year as well before house prices again begin to rise towards the end of the projection period. Rising real interest rates and weak developments in household real disposable income will push down real house prices by about 15 per cent by 2025, from a historically high level in 2022. A sharper fall in real house prices has not been seen since the banking crisis in the late 1980s and early 1990s. The fall in real house prices during the financial crisis was less than half as large as we foresee now.

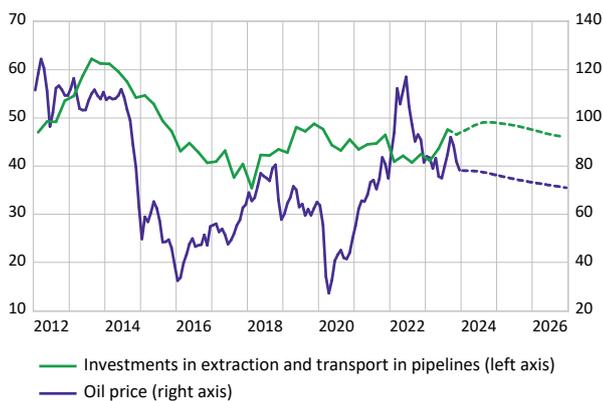
### **Upwardly revised petroleum investment projections**

After falling by 3.3 per cent in Q1 this year, petroleum investment increased by 6.1 per cent in Q2 and 9.1 per cent in Q3. The Q3 growth was driven by higher activity in oil production platforms, drilling rigs and modules. Investment activity associated with the many developments that started up a year ago picked up sharply through Q2 and Q3. There has also been a high level of activity on some developments that are nearing completion. Petroleum investment in the first three quarters of this year was 7 per cent higher than in the same period last year.

While investment prices increased by 6.5 per cent in 2022, the rise in prices in the first three quarters of 2023 was a whole 10.5 per cent higher than in the same period last year. The higher rise in prices this year is attributable to appreciably higher global

**Figure 11. Petroleum investments and oil price**

Seasonally adjusted. Left axis: billion 2021 NOK, quarter  
Right axis: USD per barrel



Source: Statistics Norway

prices for key capital goods, coupled with a further weakening of the Norwegian krone against the US dollar. As the oil companies pay for much of their capital goods in USD, investment prices measured in NOK rise when the krone depreciates against the dollar.

The petroleum companies' investment plans for the current year and next year are catalogued in [Statistics Norway's quarterly investment intentions survey \(KIS\)](#). The projection for nominal growth in 2023 in the last investment intentions survey from November is about NOK 217 billion. This is an increase of 1.4 per cent on the projection in the previous report in August and indicates nominal growth of 23.4 per cent compared with 2022. We assume that operators will not be able to complete all the investments they have planned for Q4 and forecast nominal growth of just under 20 per cent this year. Given a 10 per cent rise in investments prices, this will result in volume growth of 9 per cent this year, which implies a small upward revision of the figure published in our last economic report. The upward revision is a result of a somewhat stronger than expected projection in the last investment intentions survey for 2023.

In the survey's projection for 2024, investment is now forecast to be about NOK 232 billion, a full 12 per cent higher than the previous survey. The increase for 2024 is being driven by higher field development figures, but there are also higher projections for all the other main categories apart from pipeline transport. The higher field development figure is mainly due to the reporting of substantially higher costs for individual development

projects than previously forecast by operators. This is additional investment which will probably not boost future production capacity significantly more than previously planned. A plan for development and operation (PDO) of a new development project has also been submitted to the authorities, and this is therefore now included in the survey.

We assume that there will be relatively moderate investment in 2024 in projects for which PDOs have not yet been delivered. Experience of previous developments indicates that there is also a risk of some of the new developments incurring higher costs than those in the initial investment plans. These may be due both to higher than expected investment prices and to the raising of the real capital requiring more investment activity than previously envisaged. Investment in 2024 in some of the other categories, particularly fields in operation, is assumed to be somewhat higher than the figures in the last survey. We are raising the investment growth projection to 8 per cent, from 5 per cent in our previous report, largely because of the strong investment forecast for 2024 in the last survey.

When the smallest of the ongoing field developments decided on last year are completed in 2025 and early 2026, we assume that the investment in them will not be fully compensated for by upcoming developments, which will mean lower development activity in 2025 and 2026. This decline will only be partially curbed by more activity in decommissioning and removals during this period. We forecast that petroleum investment will fall by 1 per cent in 2025 and 4 per cent in 2026. This will make the investment level in 2026 a little lower than forecast in our previous report, but total investment in the period 2023–2026 has been raised by 1.3 per cent compared with the last report.

In the first three quarters of this year, oil and gas extraction was 1.1 per cent lower than in the same period last year. Production of liquid increased by a full 7.1 per cent during this period, while gas production was 8.1 per cent lower than in the same period last year. Earlier this autumn, the Norwegian Petroleum Directorate forecast that petroleum production would increase by 1.1 per cent this year and 4.3 per cent in 2024. Gas production in September has subsequently proved to be considerably lower than estimated by the Directorate. We accordingly now forecast a 1.5 per cent fall in

production this year followed by growth of around 7 per cent in 2024. Petroleum production is then expected to increase by 1.5 per cent in 2025 before falling 2.2 per cent in 2026.

### Increased focus on investment in power supply

Preliminary quarterly national accounts figures show that business investment grew up to and including Q2 and then fell 2 per cent in Q3. The investment growth rate has exhibited a negative trend. Investment in manufacturing and mining and quarrying rose weakly in Q3 after negative growth in Q2. In 2023, the strong developments in investment in manufacturing and in mining and quarrying came in Q1, with growth of over 10 per cent. Investment in service industries has remained virtually unchanged since the beginning of 2022, which is placing strong downward pressure on growth in overall business investment.

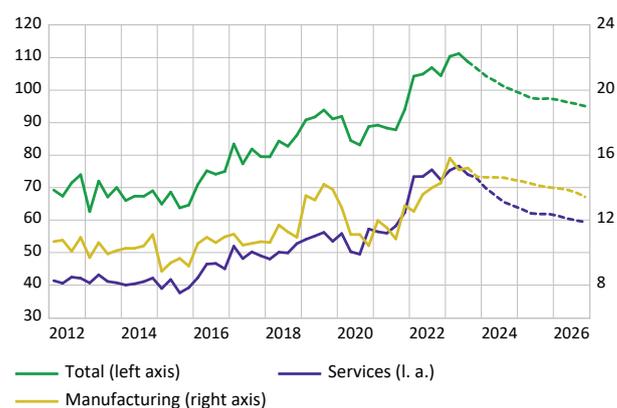
Businesses in manufacturing, mining and quarrying, power supply and oil and gas report regularly to [Statistics Norway's investment intentions survey](#) on planned and completed investment. The November report shows that investment in manufacturing and in mining and quarrying will contribute positively to growth in business investment through 2023. Companies' forecasts for 2024 show a further upturn in power supply, but a decline for manufacturing, mining and quarrying. The level of investment in manufacturing, mining and quarrying in 2024 will nonetheless be very high in a historical perspective.

Large individual products in basic metals, ship-building, oil platforms and rubber, plastic and mineral products are pushing up manufacturing investment in 2023. The anticipated decline in 2024 is due to a number of projects being completed in 2023 or expected to be completed in 2024, without new ones appearing yet. Because the decline is attributable to large individual projects, there is uncertainty associated with the projection for next year.

Growth in investment in power supply is being maintained at a high level by investment in transmission and distribution, but is being countered by lower investment in production. The new investment projects that businesses have reported for 2024 are associated with both distribution and

**Figure 12. Investments Mainland Norway**

Seasonally adjusted, billion 2021 NOK, quarter



Source: Statistics Norway

production, but the overall investment level is depressed by district heating and other power supply. Like investment in manufacturing, mining and quarrying, investment in power supply is concentrated on some large individual projects. This creates uncertainty in the investment projections. New windpower projects, including offshore wind power, and a higher rate of investment designed to reinforce the main grid could contribute to stronger growth in the years ahead.

Norges Bank's survey of companies' outlook on the future, Regional Network for 2023 Q3, shows that companies believe their investment volume will not change much from last year to this year, and that investment will fall next year. In view of weak developments in investment in service industries, overall investment growth is forecast to be flat or slightly negative next year. Businesses explain the decline as due to high inflation, higher interest rates and uncertainty regarding economic developments going forward.

According to our projections, business investment will increase slightly on balance in 2023. The increase this year is broad-based and particularly large in manufacturing and in mining and quarrying. Business investment is expected to fall next year. High levels of domestic interest rates, a global downturn and weak growth prospects ahead are placing a particular damper on investment growth. The investment level will nonetheless be very high through the projection period and will still be higher than the pre-pandemic level.

## Weakened, but still strong external account

Norway has had a trade surplus consistently since 1989, with the exception of in the pandemic year of 2020. Both 2021 and 2022 saw a record trade surplus as a consequence of high oil and gas prices. Although gas prices and production have both fallen since 2022, 2023 appears likely to see the second highest trade surplus in history for Norway.

The trade balance (excluding oil and gas exports) has been negative, and with negative trend growth, since 1979. The growing non-oil trade deficit may have levelled off somewhat in the past 2–3 years. Prices for goods and services exported from mainland Norway rose more than prices for imported goods and services in 2021 and 2022. These terms of trade gains contributed to curbing the trade deficit. Changes in export and import volumes of goods and services also contributed to reducing the trade deficit in 2021, and then to increasing it in 2022. There are prospects of a terms of trade loss and reduced export deficit for 2023.

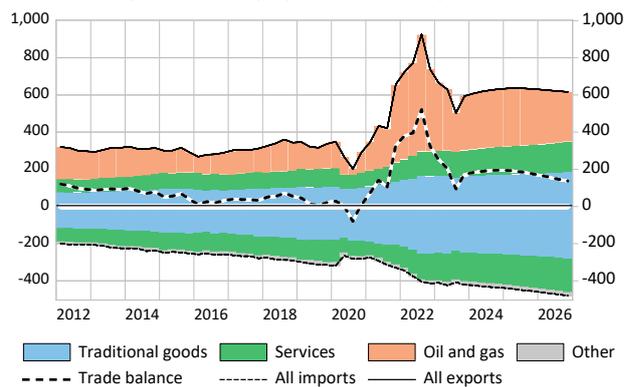
Q3 this year saw a fall in both the volume and the prices of seasonally adjusted exports of traditional goods. Exports of manufacturing products contributed most to the decline in volume and prices. Service exports increased minimally in volume and more in price, with positive contributions to both volume and price attributable to foreigners' consumption in Norway and exports of financial and business services.

Seasonally adjusted imports of traditional goods also fell in volume and price in Q3 this year. Reduced car imports contributed most to the decline in volume, while refined petroleum products contributed most to the decline in prices. Service imports increased in volume, and minimally in price. Service imports excluding Norwegians' consumption abroad showed a decline. Imports of services associated with aviation showed a strong rise in prices in Q3, as in Q2 this year.

Growth in exports of traditional goods and services appears likely to be high this year, but oil and gas exports to be somewhat reduced. Two years of strongly rising prices for mainland exports did not continue this year. Oil and gas prices are sharply down on last year. Broad-based growth in service imports coupled with Norwegians' high consumption abroad are ensuring growth in aggregate im-

**Figure 13. Foreign trade**

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



ports this year. The depreciation of the krone has probably contributed to the escalation of import prices.

For the next three years, we forecast moderate growth in mainland exports and high exports of oil and gas. A weak krone will contribute to subdued growth in imports. Prices for imports are expected to rise more than prices for mainland exports. Oil and gas prices are expected to fall globally.

Last year's record-high trade surplus will be more than halved this year, but after that we expect no major changes for the next three years of the projection period. When a growing 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 about 17 per cent this year, and then to remain under 20 per cent for the next few years.

## Weak outlook for the Norwegian economy

The most recently published quarterly national accounts showed mainland GDP growth of 0.1 per cent from 2023 Q2 to Q3. Last year mainland GDP grew moderately and the economy was still recovering after the coronavirus pandemic, but so far in 2023 the activity level in the mainland economy has been virtually unchanged.

Activity in the Norwegian economy presents a mixed picture. On the one hand, high prices and interest rates have dampened household demand, and household housing investment is falling. This has particularly impacted activity in construction and in wholesale and retail trade. On the other

hand, increased offshore investment has boosted activity among manufacturing segments that deliver goods to the oil and gas sector. However, owing to maintenance of gas infrastructure these past two quarters, less petroleum has been produced on the Norwegian continental shelf than last year. Growth among service industries has levelled off through the year, but corporate services are performing more strongly than household services.

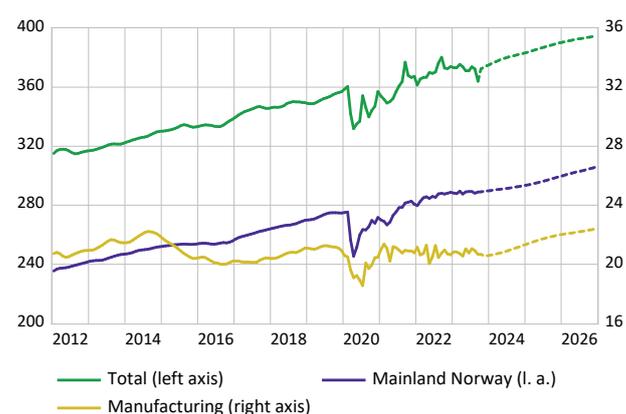
Third quarter developments were coloured by high precipitation and in particular Storm Hans. The total impact of the storm is difficult to determine, but the strongest impacts were on farming and the electricity industry. The storm hit crops, while leading to high hydropower production. If these two unusual, non-cyclical effects are excluded, there would have been a 0.1 per cent decline in the mainland economy in Q3.

National accounts figures show that value added in construction has fallen each quarter in 2023. The Q3 decline was 0.6 per cent. In Norges Bank's [Regional Network reports](#) for Q3, construction companies report that residential construction is falling most, but that activity in conversions and refurbishing is also being dampened by low household demand. The decline in construction has been relatively moderate so far this year, however, and value added is 1.7 per cent lower in Q3 than in Q1. By way of comparison, household housing investment fell by more than 17 per cent in the same period. Figures from [Statistics Norway's building statistics](#) additionally show that the number of housing start permits is the lowest since 2010. This suggests that the decline in the construction industry will gather pace going forward.

Value added in wholesale and retail trade, which includes car sales, fell 1.6 per cent in Q3. Figures from [Statistics Norway's index of wholesale and retail sales](#) show that retail trade has declined fairly steadily since mid-2021. Two years ago, domestic demand for goods was unusually high because of low cross-border trading during the pandemic, but now high living costs have led to a fall in household real disposable income. Enterprises in the Regional Network report that households are choosing less expensive options than previously. There are also reports of shops closed due to flooding and stocks spoiled by the Q3 precipitation.

**Figure 14. Gross domestic product**

Seasonally adjusted, billion 2021 NOK, month



Source: Statistics Norway

Administrative and support services have also shown weak developments this past year, largely owing to subdued activity in recruitment agencies. New rules that tightened up on the use of contract labour were introduced on 1 April this year and came fully into force on 1 July. This has given the industry substantially less to do.

Developments among other service industries have been more positive. The Regional Network reports that businesses are buying more services, particularly consulting services associated with energy transition and increased sustainability in the business sector. National accounts figures show that financial, ICT and in particular technical services, including technical consulting, grew in Q3. Service industries associated with travel and tourism, such as transport and accommodation and food services, were boosted a little in Q3 by the many holidaymakers in Norway, with the effect enhanced by the weak krone.

Aggregate manufacturing activity has exhibited weak, but positive developments so far in 2023. In [Statistics Norway's business tendency survey for manufacturing, mining and quarrying](#), industrial leaders report a fall in new orders from both the domestic and the export market, but there are wide differences across industries. Because of the high selling prices for export-oriented manufactured goods after the coronavirus pandemic and the outbreak of war in Ukraine, the industry has seen solid profitability. In Q3, however, many industrial leaders reported a higher rise in prices for intermediate inputs than in selling prices, and reduced profitability.

National accounts figures for export-oriented manufacturing segments show that activity fell back in Q3. This is partly attributable to periods of planned shutdowns in important enterprises in petroleum refinement and chemical and pharmaceutical products. If these enterprises resume full operations, some growth can be expected in this industry in Q4. According to the business tendency survey, however, the general outlook for Q4 is negative amongst export-oriented manufacturing segments. The volume of orders from both the domestic and the export market are expected to decline.

Activity among manufacturing segments that produce goods for oil and gas activities, including building oil platforms and modules, has increased every quarter so far in 2023. Following the delivery of PDOs for many field development projects on the Norwegian continental shelf late last year, suppliers to the petroleum industry have received many new orders. According to the business tendency survey, supplier activity is expected to increase in Q4.

In our projections, mainland GDP growth is forecast to be an annualised 0.7 per cent in 2023, 0.3 percentage point lower than published in our last report. The downward revision is due both to weaker than expected developments in the Q3 national accounts figures and to our expectation that the slowdown in the economy will continue in Q4. Developments in mainland GDP now seem likely to be virtually flat through the whole of 2023.

The growth projection for next year has also been revised substantially down, to 0.9 per cent. This is a whole 0.8 percentage point lower than in our previous forecast. The downward revision is largely attributable to the sharp fall in household housing investment this year, which was intensified in Q3. We expect the weak housing demand we are now seeing to lead to a more pronounced decline in the construction industry next year than we have seen so far. Labour productivity has developed abnormally weakly recently. We assume that growth in labour productivity will gradually pick up, and that mainland GDP will then revert to trend in 2026.

## Weakly rising unemployment

Unemployment is still low and labour force participation high, but in the near term we expect low economic growth to result in weakly rising unemployment.

According to the Labour Force Survey (LFS), seasonally adjusted unemployment rose from 3.4 per cent in 2023 Q2 to 3.6 per cent in Q3, after lying at between 3.2 and 3.3 per cent through the whole of 2022. This is nonetheless lower than the average post-2000 unemployment rate so far of 3.9 per cent. Monthly figures for October show slightly rising unemployment. According to trend LFS figures, unemployment rose from 3.4 per cent at the beginning of the year to 3.6 per cent in September and October, while the seasonally adjusted 3-month moving average for September showed a corresponding increase of 3.6 per cent, from 3.4 per cent in the previous 3-month period. The trend figures represent the long-term tendency of the monthly figures.

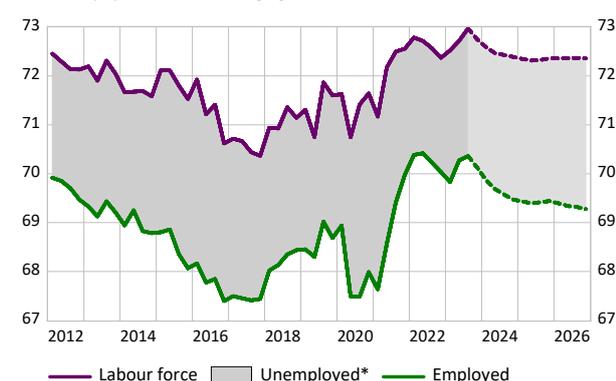
LFS unemployment among persons aged 15–24 rose from 9.6 per cent in 2023 Q2 to 11.1 per cent in Q3. Unemployment in this age group is still the lowest observed since the financial crisis, while the labour force participation and employment rates are historically high according to quarterly figures.

According to the Norwegian Labour and Welfare Organisation (NAV), seasonally adjusted registered unemployment bottomed out at 1.6 per cent in the period July–September 2022. Since then it has risen steadily to 1.9 per cent in August 2023, and has remained at this level up to and including November. The number of fully unemployed laid off persons is still low, and in March 2023 accounted for only 0.1 per cent of the labour force.

According to the LFS, seasonally adjusted employment increased by 0.3 per cent from 2023 Q2 to Q3, while growth compared with the same quarter the previous year was 1.3 per cent. In 2023 Q3, 70.7 per cent of the adult population was employed, up from 70.6 per cent in Q2. This is markedly higher than the average of 68.8 per cent in the 10-year period 2010–2019, and an appreciably higher employment rate has not been recorded since before the financial crisis. In 2008 Q1, for example, it was 71.3 per cent (adjusted for breaks).

**Figure 15. Labour market status**

Percent of population in working age, LFS



\* Unemployment is measured as share of population in working age

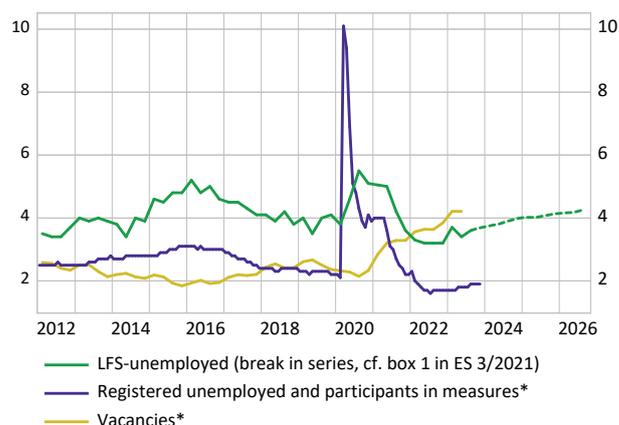
Source: Statistics Norway

The monthly employment rate among persons aged 15–24, measured as a 3-month moving average, was 58.4 per cent in September after peaking in May 2023 at 59.2 per cent. By way of comparison, the average in the period 2010–2019 was 52.3 per cent.

Another group in which employment has increased in recent years consists of immigrants, i.e. residents born abroad with foreign parents and grandparents. In 2023 Q3, the number of wage-earners classified as immigrants was higher than ever, with growth of 1.4 per cent on Q2 and of 4.2 per cent compared with the same quarter the previous year. In 2022, 32 500 Ukrainian citizens immigrated to Norway, and according to [Forecast number of applications for protection \(asylum\) 2023–2024 as per October 2023 \(udi.no\)](#), about 36 000 are expected in 2023 and 30 000 in 2024. There is great uncertainty associated with the projections for 2024. From 2022 and up to 8 August 2023, a total of 56 300 persons from Ukraine had applied for asylum. Roughly a third of them were less than 20 years old. [According to Rapid action group for increasing labour market integration of Ukrainian refugees \(regjeringen.no - Norwegian text\)](#), in August 3 400 persons with jobs had been recorded among Ukrainian citizens who have immigrated since 2021. This was a relatively low employment rate compared with other European countries. Now labour force participation is increasing, however, and in November 2023 the number of registered job-seekers from Ukraine had increased by 3 600 over the past year according to NAV. At the end of November, 4 300 Ukrainians were regis-

**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

tered as fully unemployed or on labour market programmes.

The national accounts show subdued growth in both employment and hours worked. Employment rose 0.1 per cent from 2023 Q2 to Q3, while hours worked increased by 0.2 per cent. Employment growth in the past two quarters is the weakest since the end of 2021. Employment in 2023 Q3 was 1.0 per cent higher than in 2022 Q3, and hours worked were 1.1 per cent higher. It is estimated that the strike this spring resulted in the loss of 0.05 per cent of potential hours worked in Q2; see Box 3.2 in Økonomiske analyser 3/2023 (Norwegian text).

According to the LFS, employment in 2023 Q2 was, as mentioned, 0.3 per cent higher than one year previously, whereas the national accounts report growth of 0.1 per cent. The populations covered by the two statistics differ somewhat. 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 that the national accounts differ from the LFS in including non-residents who work in activities located in Norway.

Hours worked in wholesale and retail trade, construction and administrative and support services declined from 2023 Q2 to Q3. The activity level in construction is still appreciably higher than in

2019. Whereas residential construction has fallen, other types of construction have remained buoyant. Administrative and support services include recruitment of labour for other industries, such as construction. The labour recruitment rules were tightened in April this year, but it is uncertain how much effect this has had. It is clear, however, that it has affected recruitment in clerical and blue collar occupations. This may have resulted in workers moving from administrative and support service activities to construction work.

The number of foreign commuters (non-resident wage-earners) increased by 13.3 per cent from 2023 Q2 to Q3, to a total of 96 000 persons. This is higher than the average for Q3 in the period 2016–2019 and an increase of 1.6 per cent on 2022 Q3.

The labour force continued to grow and in 2023 Q3 was at the highest level ever measured, 1.7 per cent higher than in the same quarter the previous year. The participation rate, i.e. the labour force as a share of the population, was 72.9 per cent in September 2023, calculated as a seasonally adjusted 3-month moving average. This is approximately the same as the highest observed level since 2010.

Demand for labour was high in 2021 and 2022. According to NAV, 71 000 new jobs were added in March 2022, the highest level observed in the past five years. However the supply of new jobs has fallen through 2023. The average number of new jobs in the 3-month period August to October was 9 per cent lower in 2023 than in the same period in 2022.

Statistics Norway publishes figures for the ratio between the stock of vacancies and 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 was then 4.3 per cent. In 2023 Q2 it edged down to 4.0 per cent and in Q3 further to 3.5 per cent, which still represents a relatively high number of vacancies.

The labour market has been tight through 2022 and so far in 2023. We expect 1.3 per cent employment growth in 2023 and then low growth for the remainder of the projection period. Employment will not keep pace with the increase in the working age population, with the result that the employment rate will dip somewhat and unemployment will rise. We foresee 3.6 per cent unemployment in 2023, and then a gradual rise through the projection period to 4.2 per cent in 2026, slightly higher than forecast in our previous report. The sudden halt in residential construction will put more construction workers out of work. The rise in unemployment is also expected to increase when more Ukrainians register in the labour market. By way of comparison, average unemployment in the period from 2000 up to the present is 3.9 per cent. The labour force will increase by 1.3 per cent in 2023 then show weak growth through the remainder of the projection period.

### High wage growth

Growth in average monthly basic earnings in 2023 Q3 was 6.4 per cent compared with the same quarter last year. The growth rate was thus considerably higher than in the two previous quarters, when figures were 4.4 and 5.2 per cent. Manufacturing and construction, with wage growth of 6.1 and 5.5 per cent, respectively, pushed down average wage growth somewhat in Q3. Conversely, Q3 growth was pushed up by administrative and support service activities and education, with growth rates of 7.0 and 7.2 per cent, respectively. The strong growth in education must be viewed bearing in mind that last year's income settlement was not paid out to many wage-earners in this industry until May this year, because the settlement went to the National Wages Board.<sup>3</sup>

Despite differences across industries, growth in average monthly basic earnings in 2023 Q3, as in the previous quarter, was broad-based across industries. The Q3 wage growth appears to be persisting, and preliminary monthly figures for average cash earnings showed seasonally adjusted growth of 0.5 per cent from September to October. Public sector administration and health and social services helped to push up growth, while manufacturing

<sup>3</sup> See Bakke, S. and Røv, V. (2023): [Solid lønnsvekst i 3. Kvartal. \[Solid wage growth in Q3\]](#)

and construction pushed down the average growth rate.

According to the LFS, seasonally adjusted unemployment (measured as a trend figure) increased from 3.4 per cent in January to 3.6 per cent in October, but the increase is mainly due to some persons who used to be outside the labour force now beginning to look for jobs.<sup>4</sup> This, coupled with a stable high vacancy level, points to the labour market remaining tight, which in turn may exert upward pressure on wage growth.<sup>5</sup> The average monthly basic wages of new employees in 2023 Q2 and Q3 were 6.6 and 7.1 per cent, respectively, higher than new employees' wages in the same quarters the previous year. This may indicate that wage growth has also gathered pace for a group that in the past has depressed average monthly basic earnings.<sup>6</sup>

In light of the wage growth figures for 2023 Q3 and a seemingly persistently tight labour market, the projection for annual wage growth in 2023 has been revised up from 5.5 per cent in our previous report to 5.6 per cent. Despite this upward revision, the projection for the rise in the consumer price index (CPI) of 5.6 for the current year indicates unchanged real wages. Going forward to 2026 we expect CPI inflation to ease while nominal wage growth remains at a high level, and that real wage growth will thus pick up.

### The weak krone is lifting the inflation path<sup>6</sup>

The annual rise in the consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) has first risen appreciably and then fallen appreciably in the course of the past six months. The year-on-year rise increased from 6.3 per cent in April to 6.7 per cent in May and 7.0 per cent in June before gradually falling to 5.7 per cent in September. Since our previous economic report, inflation has reflected low electricity prices together with a fall in prices for food and non-alcoholic beverages following a peak in the index in July. Owing to special offer campaigns, prices for fish and seafood were low in September. The end of these price campaigns contributed to the

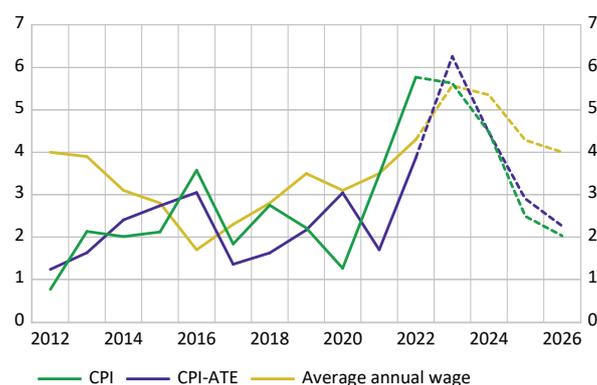
<sup>4</sup> See Lien, H. H. and Røv, V. (2023): [Svak økning i arbeidsledighet gjennom året \[Weak increase in unemployment through the year\]](#)

<sup>5</sup> See Rothe, J. S. and Gading, R. (2023): [Stabilt tal på ledige stillinger \[Stable vacancy figures\]](#)

<sup>6</sup> See Bye, K. S. (2023): [Lønnsveksten påvirkes av at mange jobber skiftes ut \[Wage growth influenced by many job changes\]](#).

**Figure 17. Consumer price indices and annual wage**

Change from previous year in percent



Source: Statistics Norway

CPI-ATE rising again, to 6.0 per cent in October. The depreciation of the krone in Q2 contributed to the peaks in the CPI-ATE in May and June, when the regular pattern of movements in prices for food and non-alcoholic beverages was also disrupted and added to the rise. The norm has been for food prices to show a particularly marked rise in two months of the year, February and July, after the supermarket chains have finished negotiations with their subcontractors. During the rest of the year there has normally been a moderate rise or even fall in prices for food and non-alcoholic beverages. After an unusually strong rise in food prices in May and June, there was great uncertainty associated with further developments in food prices in the autumn. According to the CPI-ATE, the price index for food and non-alcoholic beverages was lower in the period August to October than in July. This led to the 12-month rise for this consumption group falling from a peak of 13.6 in June to 8.8 per cent in October. Although the rate of price inflation has been falling, food and non-alcoholic beverages are still one of the consumption groups that contribute most to the rise in the CPI-ATE.

Energy price movements have led to the annual rise in the consumer price index (CPI) being appreciably lower than CPI-ATE inflation since June. Fuel prices made the principal contribution to the fall in the CPI, as fuel prices this summer were far lower than the high prices observed in summer 2022. In the period August to October, low electricity prices accelerated the fall. According to the CPI, the fall in household electricity prices including grid charges was particularly steep in September, when the annual price change was a negative 44

per cent. In the 3-month period August–October, the average fall was 34 per cent compared with the same period the previous year. Annual CPI inflation fell from 6.7 per cent in May to 3.3 per cent in September but climbed to 4.0 per cent in October. The last rise in October was due both to a rise in CPI-ATE inflation and to higher electricity prices. The difference between CPI-ATE and CPI inflation was at its widest in September, at 2.4 percentage points, while it narrowed to 2.0 percentage points in October. After a period of high reservoir levels and high production of unregulated power, reservoir levels in early December were below normal in all price areas. This means that it is producers of regulatable hydropower who mainly set prices on the basis of an evaluation of the value of the water. The rise in electricity spot prices observed in November and early December indicates that the difference between the measures of inflation will decrease further. Given the transition to energy support based on hour-by-hour prices, which were favourable for Central and Northern Norway in November, and the high prices recorded in December last year, we nonetheless assume that CPI inflation will be somewhat lower than CPI-ATE inflation for the remainder of the year. The fall in electricity spot prices from May has resulted in cost savings for the business sector and helped to restrain underlying inflation, while wage growth has become a little higher than previously forecast and had a countering effect.

Inflationary developments in recent months have been generally consistent with the projections in our previous economic report. According to the CPI-ATE sub-indices for imported and Norwegian goods by supplier sector, the 12-month rise for both product groups has been very stable and high since July, with the rate of increase slowing somewhat after the first half of 2023. The year-on-year rise in prices for charter trips and air travel has been high, as expected. The rise in prices for rental accommodation has been stable since June, at rates of just over 4 per cent. We assume that the recent weakening of the exchange rate will not be fully reflected in consumer prices until the New Year. In this economic report, we forecast that CPI and CPI-ATE inflation will be 5.6 and 6.3 per cent, respectively, for 2023. This means that the annualised projection for the CPI-ATE is kept unchanged since the previous report. Household electricity prices have been lower than forecast for a period,

bringing about a reduction in our last published projection for CPI inflation, which was 5.8 per cent. This time, too, the new projections imply a substantial upward revision of the consumer price projections published early this year.

There is still great uncertainty associated with further developments in the conflict in Ukraine, and whether this will have consequences for global food prices. This summer in Norway was characterised by drought and floods and resulted in an almost historically poor grain harvest. The latest projection from market regulator Felleskjøpet Agri forecasts a fall in this year's grain crops of 43 per cent compared with last year, which means that crops are 30 per cent lower than the 5-year average. The poor harvest increases the need for grain imports. According to the Norwegian Agriculture Agency, large parts of Europe have also had weather-related challenges this season. Russia and the US, two of the world's largest wheat exporters, have had a good season, however. The grain agreement between Russia and Ukraine, which expired on 17 July, has not been renewed. This does not appear to have affected prices for European and North American wheat for consumption which, according to the Agency, has exhibited a downward trend in recent months and is now lower than the Norwegian target price. Market regulator Nortura has taken several steps to reduce production and stocks of cattle and pigs. Wholesale prices were reduced in August, and the reduction will be continued into 2024 to promote sales. According to the Norwegian Institute of Bioeconomy Research, Norwegian food self-sufficiency is less than 50 per cent, which implies substantial food imports. Following the most recent depreciation of the krone, we expect the rise in prices for food and non-alcoholic beverages to be high also into 2024. A large price carry-over at the beginning of this year points in this direction.

The 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. Existing rents are largely regulated by means of the consumer price index, while price adjustments in connection with entry into new rental contracts must be captured. Municipal

water supply and waste water charges are likely to rise substantially once again next year because of higher interest and capital costs. Given higher interest rates, a large population increase and a high demand for rental homes, we assume that the rise in rental prices will be relatively high in 2024 as well.

Prices for Nordic forward electricity contracts for the coming year rose through November, as did spot prices. At the beginning of December, a contract for 2024 Q1 was sold for about EUR 85/MWh in the financial market. We still have very much a two-track power market in Norway, with high prices in Southern Norway and lower prices in Central and Northern Norway. Forward prices in the power market indicate that the average spot price for Norway next year may be roughly the same as this year's. It will then decline somewhat in the years up to 2026. The Norwegian Energy Regulatory Authority (RME) only establishes final income limits for the distribution companies for 2024 just before Christmas. The distribution companies had substantial costs associated with network transmission losses with high spot prices in 2022. To avoid substantial increases in grid charges, the companies were awarded extraordinary bottleneck income by the operator of the Norwegian power system, Statnett, this year. The RME has extended the distribution companies' dispensation to reduce the energy portion of the grid charges until the end of 2024. The grid charges are intended to cover the costs associated with power transmission and can therefore increase with higher interest rates since the companies' capital costs will then rise. We have initially assumed a moderate increase in grid charges next year. The Storting has decided to increase the threshold for household energy support next year to 73 øre/kWh. Households will receive energy support with a 90 per cent deduction on spot prices of over 73 øre/kWh, with a monthly consumption ceiling of 5 000 kWh. Support is calculated on the basis of the hourly spot price. Next year it is again proposed reducing excise on electricity in the period January– March, and it will be increased by an annualised 3.8 per cent. In our projection we have assumed for technical reasons that these schemes will be continued through the projection period. Given these assumptions, the average household electricity price will rise slightly next year, but then fall in 2025 and 2026, given an expected fall in the spot price.

In the approved fiscal budget for 2024, most of the special taxes are adjusted by about 3.8 per cent. Higher carbon taxes on fuel will be offset to some extent by reduced road use taxes. The biofuel quota obligation for road transport is being increased from 17 to 19 per cent in 2024. On balance, the policy measures will lead to a rise in fuel costs in 2024. To assist in keeping down households' living costs, the Storting has decided that households' increased fuel costs must be countered by a reduction in the road traffic insurance tax for vehicles with combustion motors. It has also been decided to discontinue the tax advantage of plug-in hybrid cars in the one-off registration tax.

In our model, fuel prices largely shadow the oil price in NOK with a premium consisting of excise duties. A decline in the oil price next year will be eased by policy measures, so that prices at the pump are still expected to rise a little as an annual average. After that, a fall in the oil price going forward to 2026 will cause some reduction in fuel prices. On balance, we assume that the annual rise in energy prices will increase slightly more than underlying inflation next year and fall moderately in the years 2024–2026. In our projections, CPI inflation will increase more next year than the tax adjustments adopted in the fiscal budget. We therefore assume that tax changes will lead to a 0.1 percentage point decline in consumer prices, measured as the difference between the CPI-ATE and the consumer price index excluding energy products (CPI-AE) in 2024. For the years 2025 and 2026 we have adjusted special tax rates for inflation and assume that these will have a neutral effect on CPI inflation.

Since the previous economic report, a further weakening of the krone in particular has contributed to a substantial upward revision of the projection for underlying inflation, but wage growth and electricity prices for the business sector are also higher this time than previously forecast. As usual, the exchange rates in our projections are maintained at their levels at the time of making forecasts. In isolation, an expected decline in global inflation is expected to contribute to lower import prices in the coming years. In the medium term to 2026, we assume that the rise in import prices will gradually fall to more normal levels of around 2 per cent when the exchange rate effects of a weakened krone are exhausted.

A high price carry-over means that underlying inflation will remain at a high level into 2024. CPI-ATE inflation is forecast to be 4.5 per cent from 2023 to 2024, significantly down from this year's projection of 6.3 per cent. It will then slow gradually to 2.3 per cent in 2026. We forecast that, on balance, energy prices will rise a little more than underlying inflation next year. This will be offset by a small decline in the contribution from taxes, with the result that CPI inflation in 2024, like CPI-ATE inflation, is forecast to be 4.5 per cent. An expected moderate fall in household energy prices in the years ahead will lead to CPI inflation being slightly lower than CPI-ATE inflation in the years 2025–2026.

**Table 4. National accounts: Final expenditure and gross domestic product. At constant 2021 prices. NOK million**

	Unadjusted		Seasonally adjusted								
	2021	2022	21:4	22:1	22:2	22:3	22:4	23:1	23:2	23:3	
Final consumption expenditure of households and NPISHs	1 626 348	1 727 681	429 062	415 689	431 457	431 767	449 345	425 755	427 294	429 378	
Household final consumption expenditure	1 534 999	1 625 472	403 461	391 268	405 993	405 991	423 517	400 158	401 616	403 445	
Goods	812 106	781 326	206 640	194 163	193 512	191 385	208 388	184 178	185 853	185 528	
Services	708 673	781 189	187 836	187 366	195 853	197 082	197 963	197 534	196 729	197 411	
Direct purchases abroad by resident households	31 015	113 245	17 818	19 686	29 608	30 656	30 507	32 004	32 552	34 719	
Direct purchases by non-residents	-16 795	-50 288	-8 834	-9 946	-12 979	-13 132	-13 341	-13 558	-13 518	-14 213	
Final consumption expenditure of NPISHs	91 349	102 208	25 601	24 421	25 464	25 776	25 828	25 598	25 678	25 933	
Final consumption expenditure of general government	970 694	981 009	245 157	243 249	244 243	245 597	247 754	248 723	251 080	253 427	
Final consumption expenditure of central government	481 575	494 527	122 400	121 070	123 037	124 245	126 015	125 270	126 322	127 510	
Central government, civilian	425 130	435 823	108 100	106 526	108 396	109 599	111 144	110 271	111 103	111 974	
Central government, defence	56 445	58 703	14 300	14 544	14 641	14 646	14 871	15 000	15 218	15 536	
Final consumption expenditure of local government	489 119	486 482	122 757	122 179	121 206	121 352	121 739	123 453	124 758	125 917	
Gross fixed capital formation	992 163	1 043 917	255 728	260 445	259 703	260 975	262 836	260 163	261 862	256 363	
Extraction and transport via pipelines	179 065	166 236	46 468	40 914	42 147	40 731	42 487	41 106	43 633	47 592	
Ocean transport	13 316	16 822	4 670	6 383	3 123	1 564	5 753	2 340	3 008	1 783	
Mainland Norway	799 782	860 859	204 590	213 148	214 433	218 680	214 596	216 718	215 221	206 988	
Industries	359 225	420 563	94 035	104 297	104 975	106 950	104 476	110 426	111 258	108 738	
Service activities incidental to extraction	1 941	4 790	648	1 022	1 371	1 028	1 363	1 169	1 258	1 366	
Other services	232 878	294 693	62 355	73 378	73 431	75 488	72 394	75 332	76 651	74 023	
Manufacturing and mining	47 161	54 320	12 885	12 540	13 582	13 981	14 280	15 817	15 100	15 205	
Production of other goods	77 245	66 760	18 146	17 357	16 590	16 454	16 439	18 108	18 249	18 144	
Dwellings (households)	220 100	217 072	54 499	55 459	54 823	53 513	53 320	50 888	47 432	43 303	
General government	220 457	223 225	56 056	53 392	54 635	58 217	56 799	55 404	56 531	54 947	
Acquisitions less disposals of valuables	129	226	44	55	61	59	52	67	62	60	
Changes in stocks and statistical discrepancies	92 498	122 496	11 655	25 836	30 212	31 493	21 683	41 433	35 504	25 966	
Gross capital formation	1 084 790	1 166 639	267 235	286 336	289 975	292 527	284 570	301 664	297 428	282 389	
Final domestic use of goods and services	3 681 832	3 875 328	941 488	945 275	965 675	969 890	981 669	976 142	975 802	965 194	
Final demand from Mainland Norway	3 396 824	3 569 549	878 809	872 086	890 132	896 043	911 695	891 196	893 595	889 793	
Final demand from general government	1 191 151	1 204 233	301 213	296 641	298 878	303 813	304 553	304 127	307 611	308 374	
Total exports	1 860 860	1 947 850	481 860	467 769	478 381	507 492	492 581	491 735	493 851	489 906	
Traditional goods	493 205	484 662	121 438	117 372	114 611	125 707	124 962	126 121	129 862	128 571	
Crude oil and natural gas	981 348	994 142	248 501	242 934	248 419	256 366	247 739	245 150	243 888	240 428	
Ships, oil platforms and planes	20 085	11 048	7 961	1 642	2 394	5 294	1 719	857	1 437	2 109	
Services	366 222	457 997	103 960	105 821	112 957	120 126	118 161	119 607	118 664	118 798	
Total use of goods and services	5 542 692	5 823 178	1 423 376	1 413 044	1 444 055	1 477 383	1 474 250	1 467 877	1 469 653	1 455 100	
Total imports	1 218 761	1 368 841	318 794	319 451	338 108	350 419	354 827	346 051	353 588	344 874	
Traditional goods	815 435	841 048	197 729	200 477	206 498	214 629	216 346	206 263	209 313	202 550	
Crude oil and natural gas	19 638	14 483	3 750	2 386	4 441	3 454	4 385	4 429	3 788	4 406	
Ships, oil platforms and planes	37 465	24 707	11 747	8 458	4 950	5 112	6 187	3 629	8 436	4 305	
Services	346 223	488 603	105 568	108 130	122 219	127 224	127 909	131 731	132 052	133 612	
Gross domestic product (market prices)	4 323 931	4 454 337	1 101 798	1 093 592	1 105 947	1 126 964	1 119 423	1 121 825	1 116 065	1 110 226	
Gross domestic product Mainland Norway (market prices)	3 315 319	3 440 117	845 413	847 329	856 237	861 153	864 525	865 524	865 867	866 347	
Petroleum activities and ocean transport	1 008 612	1 014 220	256 385	246 263	249 710	265 810	254 898	256 302	250 198	243 880	
Mainland Norway (basic prices)	2 885 868	3 002 620	736 050	738 571	746 722	752 422	755 211	756 333	758 931	760 347	
Mainland Norway excluding general government	2 150 588	2 245 292	549 349	552 138	558 056	561 871	563 625	564 764	566 771	568 507	
Manufacturing and mining	249 265	247 931	62 572	62 503	61 840	62 477	62 305	62 405	62 366	62 645	
Production of other goods	416 304	419 388	104 194	105 130	104 703	104 228	103 136	104 103	104 819	105 833	
Services incl. dwellings (households)	1 485 019	1 577 973	382 583	384 506	391 513	395 166	398 184	398 256	399 587	400 028	
General government	735 280	757 328	186 701	186 433	188 666	190 551	191 586	191 569	192 160	191 840	
Taxes and subsidies products	429 451	437 497	109 363	108 758	109 515	108 731	109 315	109 191	106 936	106 000	

Source: Statistics Norway.

**Table 5. National accounts: Final expenditure and gross domestic product. At constant 2021 prices. Percentage change from previous period**

	Unadjusted		Seasonally adjusted							
	2021	2022	21:4	22:1	22:2	22:3	22:4	23:1	23:2	23:3
Final consumption expenditure of households and NPISHs	5.1	6.2	1.4	-3.1	3.8	0.1	4.1	-5.2	0.4	0.5
Household final consumption expenditure	5.1	5.9	1.3	-3.0	3.8	0.0	4.3	-5.5	0.4	0.5
Goods	6.6	-3.8	-0.9	-6.0	-0.3	-1.1	8.9	-11.6	0.9	-0.2
Services	3.8	10.2	1.4	-0.3	4.5	0.6	0.4	-0.2	-0.4	0.3
Direct purchases abroad by resident households	-5.3	265.1	88.0	10.5	50.4	3.5	-0.5	4.9	1.7	6.7
Direct purchases by non-residents	-4.4	199.4	85.4	12.6	30.5	1.2	1.6	1.6	-0.3	5.1
Final consumption expenditure of NPISHs	4.6	11.9	2.7	-4.6	4.3	1.2	0.2	-0.9	0.3	1.0
Final consumption expenditure of general government	3.6	1.1	-0.4	-0.8	0.4	0.6	0.9	0.4	0.9	0.9
Final consumption expenditure of central government	3.7	2.7	0.5	-1.1	1.6	1.0	1.4	-0.6	0.8	0.9
Central government, civilian	4.3	2.5	0.4	-1.5	1.8	1.1	1.4	-0.8	0.8	0.8
Central government, defence	-0.6	4.0	1.6	1.7	0.7	0.0	1.5	0.9	1.5	2.1
Final consumption expenditure of local government	3.5	-0.5	-1.3	-0.5	-0.8	0.1	0.3	1.4	1.1	0.9
Gross fixed capital formation	0.7	5.2	5.3	1.8	-0.3	0.5	0.7	-1.0	0.7	-2.1
Extraction and transport via pipelines	-0.9	-7.2	4.0	-12.0	3.0	-3.4	4.3	-3.3	6.1	9.1
Ocean transport	-20.9	26.3	..	36.7	-51.1	-49.9	267.7	-59.3	28.5	-40.7
Mainland Norway	1.6	7.6	3.4	4.2	0.6	2.0	-1.9	1.0	-0.7	-3.8
Industries	3.2	17.1	7.1	10.9	0.7	1.9	-2.3	5.7	0.8	-2.3
Service activities incidental to extraction	-70.4	146.8	36.0	57.7	34.2	-25.1	32.6	-14.3	7.6	8.6
Other services	9.5	26.5	7.2	17.7	0.1	2.8	-4.1	4.1	1.8	-3.4
Manufacturing and mining	4.0	15.2	18.9	-2.7	8.3	2.9	2.1	10.8	-4.5	0.7
Production of other goods	-7.6	-13.6	-0.7	-4.3	-4.4	-0.8	-0.1	10.1	0.8	-0.6
Dwellings (households)	3.5	-1.4	1.4	1.8	-1.1	-2.4	-0.4	-4.6	-6.8	-8.7
General government	-2.5	1.3	-0.4	-4.8	2.3	6.6	-2.4	-2.5	2.0	-2.8
Acquisitions less disposals of valuables	-46.4	74.9	-12.4	24.4	11.0	-3.5	-11.9	29.2	-7.2	-3.5
Changes in stocks and statistical discrepancies	-20.4	32.4	-67.3	121.7	16.9	4.2	-31.1	91.1	-14.3	-26.9
Gross capital formation	-1.9	7.5	-3.6	7.1	1.3	0.9	-2.7	6.0	-1.4	-5.1
Final domestic use of goods and services	2.5	5.3	-0.6	0.4	2.2	0.4	1.2	-0.6	0.0	-1.1
Final demand from Mainland Norway	3.9	5.1	1.3	-0.8	2.1	0.7	1.7	-2.2	0.3	-0.4
Final demand from general government	2.4	1.1	-0.4	-1.5	0.8	1.7	0.2	-0.1	1.1	0.2
Total exports	6.1	4.7	3.7	-2.9	2.3	6.1	-2.9	-0.2	0.4	-0.8
Traditional goods	6.7	-1.7	-0.6	-3.3	-2.4	9.7	-0.6	0.9	3.0	-1.0
Crude oil and natural gas	0.2	1.3	2.1	-2.2	2.3	3.2	-3.4	-1.0	-0.5	-1.4
Ships, oil platforms and planes	134.8	-45.0	1.1	-79.4	45.8	121.1	-67.5	-50.2	67.7	46.8
Services	8.2	25.1	13.9	1.8	6.7	6.3	-1.6	1.2	-0.8	0.1
Total use of goods and services	3.4	5.1	0.8	-0.7	2.2	2.3	-0.2	-0.4	0.1	-1.0
Total imports	1.8	12.3	2.0	0.2	5.8	3.6	1.3	-2.5	2.2	-2.5
Traditional goods	5.4	3.1	-4.9	1.4	3.0	3.9	0.8	-4.7	1.5	-3.2
Crude oil and natural gas	-11.8	-26.3	7.6	-36.4	86.2	-22.2	26.9	1.0	-14.5	16.3
Ships, oil platforms and planes	-15.3	-34.1	2.0	-28.0	-41.5	3.3	21.0	-41.3	132.4	-49.0
Services	-2.8	41.1	17.6	2.4	13.0	4.1	0.5	3.0	0.2	1.2
Gross domestic product (market prices)	3.9	3.0	0.0	-0.7	1.1	1.9	-0.7	0.2	-0.5	-0.5
Gross domestic product Mainland Norway (market prices)	4.5	3.8	0.8	0.2	1.1	0.6	0.4	0.1	0.0	0.1
Petroleum activities and ocean transport Mainland Norway (basic prices)	-0.3	0.6	-2.5	-3.9	1.4	6.4	-4.1	0.6	-2.4	-2.5
Mainland Norway (basic prices)	4.4	4.0	1.0	0.3	1.1	0.8	0.4	0.1	0.3	0.2
Mainland Norway excluding general government	5.0	4.4	1.2	0.5	1.1	0.7	0.3	0.2	0.4	0.3
Manufacturing and mining	5.6	-0.5	-0.1	-0.1	-1.1	1.0	-0.3	0.2	-0.1	0.4
Production of other goods	4.5	0.7	0.6	0.9	-0.4	-0.5	-1.0	0.9	0.7	1.0
Services incl. dwellings (households)	5.0	6.3	1.5	0.5	1.8	0.9	0.8	0.0	0.3	0.1
General government	2.9	3.0	0.5	-0.1	1.2	1.0	0.5	0.0	0.3	-0.2
Taxes and subsidies products	4.6	1.9	-0.2	-0.6	0.7	-0.7	0.5	-0.1	-2.1	-0.9

Source: Statistics Norway.

**Table 6. National accounts: Final expenditure and gross domestic product. Price indices. 2021=100**

	Unadjusted		Seasonally adjusted							
	2021	2022	21:4	22:1	22:2	22:3	22:4	23:1	23:2	23:3
Final consumption expenditure of households and NPISHs	100.0	105.1	101.1	101.7	103.9	106.4	108.2	109.2	111.4	112.0
Final consumption expenditure of general government	100.0	105.8	101.8	104.8	105.6	105.9	106.7	107.3	108.3	109.5
Gross fixed capital formation	100.0	107.7	102.6	104.3	106.8	108.5	110.9	112.2	114.4	114.2
Mainland Norway	100.0	107.8	103.0	104.4	107.0	108.9	110.9	111.9	113.6	113.5
Final domestic use of goods and services	100.0	105.4	98.8	102.7	106.8	105.8	105.9	109.8	110.8	115.2
Final demand from Mainland Norway	100.0	105.9	101.8	103.3	105.1	106.8	108.4	109.3	111.1	111.6
Total exports	100.0	162.5	136.5	154.4	161.5	182.4	149.8	135.1	127.5	102.6
Traditional goods	100.0	129.3	110.8	123.2	130.4	132.2	131.6	132.5	129.3	123.8
Total use of goods and services	100.0	124.5	111.6	119.8	124.9	132.1	120.5	118.3	116.4	111.0
Total imports	100.0	113.0	103.6	107.9	111.2	115.7	116.8	118.9	120.2	118.3
Traditional goods	100.0	115.6	104.6	109.8	114.5	119.4	118.8	122.1	122.1	119.1
Gross domestic product (market prices)	100.0	128.1	114.2	123.3	129.1	137.2	121.7	118.1	115.2	108.7
Gross domestic product Mainland Norway (market prices)	100.0	105.9	101.7	103.8	105.6	107.0	107.2	108.9	110.1	111.4

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	21:4	22:1	22:2	22:3	22:4	23:1	23:2	23:3
Final consumption expenditure of households and NPISHs	2.9	5.1	0.9	0.6	2.1	2.4	1.7	1.0	2.0	0.6
Final consumption expenditure of general government	3.6	5.8	3.1	3.0	0.8	0.2	0.8	0.5	0.9	1.1
Gross fixed capital formation	3.7	7.7	1.3	1.6	2.4	1.6	2.2	1.2	2.0	-0.2
Mainland Norway	4.5	7.8	1.4	1.4	2.4	1.8	1.8	0.9	1.6	-0.1
Final domestic use of goods and services	2.8	5.4	-4.2	3.9	4.1	-1.0	0.1	3.7	0.9	4.0
Final demand from Mainland Norway	3.5	5.9	1.6	1.5	1.8	1.7	1.5	0.8	1.6	0.5
Total exports	57.3	62.5	50.7	13.1	4.6	13.0	-17.9	-9.8	-5.6	-19.6
Traditional goods	12.6	29.3	9.9	11.2	5.9	1.4	-0.4	0.6	-2.4	-4.3
Total use of goods and services	16.3	24.5	12.7	7.4	4.3	5.8	-8.8	-1.9	-1.6	-4.7
Total imports	4.3	13.0	2.7	4.2	3.0	4.1	1.0	1.8	1.1	-1.6
Traditional goods	5.0	15.6	3.7	4.9	4.3	4.3	-0.5	2.8	0.0	-2.4
Gross domestic product (market prices)	20.2	28.1	16.1	8.0	4.8	6.3	-11.3	-3.0	-2.4	-5.7
Gross domestic product Mainland Norway (market prices)	3.5	5.9	1.5	2.1	1.8	1.3	0.2	1.6	1.1	1.1

Source: Statistics Norway.

**Table 8. Main economic indicators 2014-2026. Accounts and forecasts<sup>1,2</sup>**

	2014	2015	2016	2017	2018	2019	2020	2021	2022	Forecasts			
										2023	2024	2025	2026
<b>Demand and output</b>													
Consumption in households etc.	2.1	2.7	1.1	2.2	1.4	1.0	-6.2	5.1	6.2	-1.1	0.1	2.4	3.8
General government consumption	2.7	2.4	2.3	1.9	0.6	1.1	-0.5	3.6	1.1	2.6	2.1	1.8	2.1
Gross fixed investment	-0.3	-4.0	3.9	2.6	2.2	9.5	-4.1	0.7	5.2	-1.0	-3.4	-0.6	1.4
Extraction and transport via pipelines	-1.8	-12.2	-16.0	-5.4	0.7	14.3	-3.3	-0.9	-7.2	9.0	8.0	-1.0	-4.0
Mainland Norway	0.4	-0.2	9.0	6.8	1.5	6.3	-3.1	1.6	7.6	-2.1	-6.3	-0.5	2.7
Industries	-0.7	-2.8	12.6	9.2	3.1	10.3	-5.3	3.2	17.1	3.9	-6.7	-4.8	-1.0
Housing	-1.4	3.2	6.6	7.3	-6.5	-1.1	-1.6	3.5	-1.4	-16.0	-16.2	4.7	10.7
General government	4.5	0.2	6.4	2.6	8.1	7.5	-1.1	-2.5	1.3	0.2	2.8	3.8	3.5
Demand from Mainland Norway <sup>3</sup>	1.9	2.0	3.1	3.1	1.2	2.3	-3.9	3.9	5.1	-0.3	-0.8	1.6	3.1
Exports	3.8	3.9	0.4	1.6	-1.5	2.1	-2.3	6.1	4.7	1.5	5.7	2.4	0.8
Traditional goods	4.2	6.5	-11.2	0.9	2.0	5.1	-0.8	6.7	-1.7	5.0	2.3	3.3	2.9
Crude oil and natural gas	3.0	1.3	5.4	5.2	-4.6	-2.9	10.5	0.2	1.3	-1.9	7.7	1.8	-1.6
Imports	2.2	1.9	1.9	1.8	1.4	5.3	-9.9	1.8	12.3	1.9	0.2	1.7	3.2
Traditional goods	2.1	2.7	-1.4	3.5	2.8	6.2	-2.7	5.4	3.1	-2.3	-0.4	1.9	3.8
Gross domestic product	2.0	1.9	1.2	2.5	0.8	1.1	-1.3	3.9	3.0	0.2	2.2	1.8	1.6
Mainland Norway	2.2	1.4	0.9	2.2	1.9	2.3	-2.8	4.5	3.8	0.7	0.9	1.7	2.4
Manufacturing	2.7	-4.4	-4.1	-0.1	1.6	2.1	-5.7	5.6	-0.5	0.5	0.6	4.0	2.1
GDP in current prices (NOK billion)	3 162	3 130	3 116	3 323	3 577	3 597	3 462	4 324	5 705	5 076	5 297	5 493	5 591
<b>Labour market</b>													
Total hours worked. Mainland Norway	1.4	0.6	0.6	0.5	1.6	1.5	-2.1	2.4	3.9	0.8	0.3	0.5	0.9
Employed persons	1.0	0.4	0.3	1.1	1.6	1.6	-1.5	1.1	3.9	1.3	0.1	0.0	0.3
Labor force <sup>4</sup>	0.7	1.5	0.2	-0.2	1.4	1.0	0.4	1.2	1.4	1.3	0.1	0.2	0.5
Participation rate (level) <sup>4</sup>	70.7	71.0	70.4	69.7	70.2	70.5	70.4	72.1	72.6	72.8	72.4	72.3	72.4
Unemployment rate (level) <sup>4</sup>	3.6	4.5	4.7	4.2	3.8	3.7	4.6	4.4	3.2	3.6	3.9	4.1	4.2
<b>Prices and wages</b>													
Wages per standard man-year	3.1	2.8	1.7	2.3	2.8	3.5	3.1	3.5	4.3	5.6	5.4	4.3	4.0
Consumer price index (CPI)	2.0	2.1	3.6	1.8	2.7	2.2	1.3	3.5	5.8	5.6	4.5	2.5	2.0
CPI-ATE <sup>5</sup>	2.4	2.7	3.0	1.4	1.6	2.2	3.0	1.7	3.9	6.3	4.5	2.9	2.3
Export prices, traditional goods	2.7	2.6	4.5	4.7	5.1	0.1	-3.5	12.6	29.3	-0.8	0.5	0.3	0.7
Import prices, traditional goods	4.1	5.0	2.5	3.2	4.1	2.5	4.3	5.0	15.6	5.4	2.5	1.4	1.0
House prices	2.7	6.1	7.0	5.0	1.4	2.5	4.3	10.5	5.2	-0.6	-2.2	-0.6	3.4
<b>Income, interest rates and exchange rate</b>													
Household real disposable income	2.4	5.3	-1.6	2.0	0.9	2.0	1.1	4.1	-3.4	-2.0	0.8	4.0	3.8
Household saving ratio (level)	7.8	9.8	6.9	6.6	5.9	7.1	12.9	13.8	4.8	4.1	5.4	6.7	6.5
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	4.2	4.6	3.7	3.3
Lending rate, credit loans (level) <sup>6</sup>	3.9	3.2	2.6	2.6	2.7	3.0	2.6	2.1	2.9	5.0	5.9	5.4	4.8
Real after-tax lending rate, banks (level)	0.8	0.1	-1.6	0.1	-0.7	0.2	0.7	-1.8	-3.3	-1.9	-0.2	1.1	1.7
Importweighted krone exchange rate (44 countries) <sup>7</sup>	5.3	10.5	1.8	-0.8	0.1	2.9	6.7	-5.3	1.2	8.7	1.6	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	11.44	11.68	11.68	11.68
<b>Current account</b>													
Current balance (bill. NOK) <sup>8</sup>	374	282	163	210	320	136	38	574	1 680	888	1 014	1 060	941
Current account (per cent of GDP)	11.8	9.0	5.2	6.3	9.0	3.8	1.1	13.3	29.5	17.5	19.1	19.3	16.8
<b>International indicators</b>													
Exports markets indicator	4.7	5.3	3.8	5.6	4.2	3.4	-7.5	10.0	8.1	1.3	1.1	2.7	3.2
Consumer price index, euro-area	0.4	0.2	0.2	1.5	1.8	1.2	0.3	2.6	8.4	5.5	2.5	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	3.4	3.1	2.3	2.7
Crude oil price US dollar (level) <sup>9</sup>	100	53	45	55	72	64	43	71	99	82	78	75	72
Crude oil price NOK (level) <sup>9</sup>	627	431	379	452	583	564	407	609	951	868	833	802	774

<sup>1</sup> Percentage change from previous year unless otherwise noted.

<sup>2</sup> Some time series may have been revised after the publication of the Economic Survey.

<sup>3</sup> Consumption in households and non-profit organizations + general government consumption + gross fixed capital formation in mainland Norway.

<sup>4</sup> Labour force survey: Break adjusted figures.

<sup>5</sup> CPI adjusted for tax changes and excluding energy products.

<sup>6</sup> Yearly average. Credit lines. secured on dwellings.

<sup>7</sup> Increasing index implies depreciation.

<sup>8</sup> Current account not adjusted for saving in pension funds.

<sup>9</sup> Average spot price Brent Blend.

Source: Statistics Norway. The cut-off date for information was 6 December 2023.