IMF Country Reports 23/272

Norway: 2023 Article IV Consultation-Press Release; and Staff Report

INTERNATIONAL MONETARY FUND

IMF Country Report No. 23/272

NORWAY

July 2023

2023 ARTICLE IV CONSULTATION—PRESS RELEASE; AND STAFF REPORT

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2023 Article IV consultation with Norway, the following documents have been released and are included in this package:

- A **Press Release**
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on lapse-of-time basis following discussions that ended on June 8, 2023, with the officials of Norway on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on July 7, 2023.
- An **Informational Annex** prepared by the IMF staff.

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
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IMF Executive Board Concludes 2023 Article IV Consultation with Norway

FOR IMMEDIATE RELEASE

Washington, DC – **July 26, 2023:** On July 24, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Norway and endorsed the staff appraisal without a meeting.[2]

Norway grew strongly in 2022 but the pace of output growth receded somewhat this year. Record-high energy and food prices together with much higher interest rates put pressure on households' purchasing power. Nonetheless, mainland GDP growth is still expected to be positive, supported by strong business investment and exports. The fiscal position has remained solid underpinned by very low public debt and high financial assets. Norges Bank continued to tackle stubborn inflation with 9 policy rate hikes over 2022–23, raising policy rate to 3.75 percent by June 2023. Inflation has been stubborn, not least due to the weak krona and tight labor markets.

Executive Board Assessment

In concluding the 2023 Article IV consultation with Norway, Executive Directors endorsed staff's appraisal, as follows:

Norway experienced one of the highest growth rates among advanced economies last year, and risks remain balanced. Growth is continuing but at a more modest pace. The country has experienced windfall gains from high petroleum and natural gas prices that have so far countered global headwinds. Growth prospects remain favorable, and imminent risks are balanced, not least due to Norway's solid fundamentals and policy management. The external position in 2022 was moderately stronger than the level implied by medium-term fundamentals and desirable policies.

The fiscal position is strong but should attend to both short- and long-term pressures. In the near term, the fiscal stance should be more supportive of disinflation efforts. The structural non-oil deficit in the revised budget results in a mildly expansionary fiscal stance, contributing to higher aggregate demand, which in the context of persistent inflationary pressures should be avoided. While spending on energy subsidies is projected to decline this year due to lower electricity prices, potential savings could be realized by narrowing their coverage and calibrating them to help only vulnerable households. While public debt is sustainable, over the

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

medium term, given aging-related spending pressures, additional measures are needed to make room for new investment and promoting climate initiatives. Proposals by the Expert Committee on Tax Reform could help make the tax system simpler and more efficient, while suggestions by the Pension Commission to link retirement age limits to life expectancy will have beneficial effects on both the sustainability of the system and labor force participation. However, the changes should be preceded by a comprehensive reform of Norway's disability benefits.

Further monetary policy tightening is needed as inflation risks are to the upside. GDP growth and the output gap are projected to be positive this year, the labor market is still tight, and consumption, backed by savings accumulated during the pandemic, is still resilient. Against this background, elevated inflation expectations, currency weakness, and broad-based inflation pose upside risks. Accordingly, tighter monetary policy is needed to contain demand and durably bring down inflation to the 2 percent target, which will contribute to high and stable output and employment. Given the uncertainties about the transmission of monetary policy and its impact on the economy, it is important to continue to clearly communicate how economic developments affect the current and future policy stance.

The banking system is strong but tightening global conditions pose risks. Risks to financial stability appear to be broadly manageable, but continued vigilance is needed given the heightened uncertainty. While more data on the CRE sector are now available for surveillance, and several macroprudential measures have been put in place, further broadening of the toolkit remains appropriate, such as gradually introducing a sectoral systemic risk or countercyclical buffer for CRE. Given high household debt and elevated house prices, there is merit in making the limits on the size of mortgage loans relative to value permanent. As cyber risks are becoming a more prominent threat to financial stability, further strengthening of resilience to cyber-attacks is needed. An important step taken by Norges Bank together with the FSA is the roll out of the TIBER (Threat Intelligence-Based Ethical Red-teaming) framework. Improvements to the AML/CFT framework are ongoing, and the recommendations from a recently concluded IMF assessment of regional cross-border threats and vulnerabilities could be usefully implemented to further enhance supervision.

Progress on structural reforms has been piecemeal. Some steps have been taken in further upskilling the workforce, including increased vocational training and the planned introduction of a youth guarantee scheme. However, while spending on retraining has been increased, this has not led to a decline in benefit recipients and their effectiveness should continue to be assessed. Participation in the generous disability benefit system is still very high, draining public finances and depriving the labor market of the much-needed workforce. Also, the issue of housing affordability has become more prominent under high inflation and rising interest rates.

Norway continues make important efforts in climate mitigation and adaptation. Among several initiatives, Norway has introduced a schedule of carbon-price increases and has recently launched large-scale publicly supported projects for carbon-capture and storage. Further efforts are needed to fulfil Norway's 2030 ambition under the Paris Agreement.

Norway: Selected Economic Indicators, 2020–28

Population (2022): 5.4 million	Quota (3754.7 mil. SDR/0.78 percent of total)
Per capita GDP (2022): US$ 106,328.4	Literacy: 100 percent
Main products and exports: Oil, natural gas, fish (primarily	

				Projections					
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Real Economy									
Real GDP (change in percent)1/	-1.3	3.9	3.3	2.1	2.5	1.8	1.5	1.4	1.4
Real mainland GDP (change in percent)	-2.8	4.2	3.8	1.4	1.9	2.0	1.8	1.8	1.8
Final Domestic demand	-3.9	4.0	4.8	0.9	1.6	1.9	1.9	1.9	1.9
Private consumption	-6.2	4.4	6.9	0.6	1.1	1.9	2.0	2.0	2.0
Public consumption	-0.5	5.0	0.1	1.6	1.7	1.6	1.6	1.6	1.6
Gross fixed capital formation	-3.1	1.7	6.7	0.5	2.4	2.4	2.2	2.2	2.1
Exports	-9.9	5.9	11.0	3.2	3.0	2.9	2.5	2.5	2.5
Imports	-10.5	2.7	11.5	1.5	1.7	2.1	2.2	2.3	2.3
Unemployment rate (percent of labor force)	4.6	4.4	3.3	3.6	3.8	3.8	3.8	3.8	3.8
Output gap (mainland economy, - implies output below	-0.7	1.4	2.1	0.5	-0.5	-0.2	0.0	0.0	0.0
CPI (average)	1.3	3.5	5.8	5.8	3.5	2.6	2.2	2.0	2.0
Core Inflation (average)	3.0	1.7	3.9	5.9	4.4	3.0	2.4	2.0	2.0
Real economy	-1.3	3.9	3.3	2.1	2.5	1.8	1.5	1.4	1.4
Public Finance									
Structural non-oil balance (percent of mainland trend GDP)	-11.7	-10.8	-9.8	-10.3	-10.1	-9.9	-9.8	-9.8	-9.8
Fiscal impulse	3.8	-0.9	-1.0	0.5	-0.2	-0.2	-0.1	0.0	0.0
in percent of Pension Fund Global Capital 3/	-3.7	-3.3	-2.8	-3.0	-2.7	-2.5	-2.4	-2.4	-2.3
Gross Public Debt (percent of GDP)	46.1	42.8	37.2	38.8	38.7	38.4	38.3	37.8	37.3
Money and credit (end of period, 12-month percent change)									
Broad money, M2	12.1	10.4	5.6	...	...	...	...	...	...
Domestic credit, C2	4.9	4.9	5.6	...	...	...	...	...	...
Interest Rates (year average, in percent)									
Three-month interbank rate	0.4	0.8	0.8	...	...	...	...	...	...
Ten-year government bond yield	0.8	1.1	1.3	...	...	...	...	...	...
Balance of Payments (Percent of total GDP)									
Current account balance	1.1	13.6	30.4	23.5	21.3	19.7	17.9	16.5	14.9
Balance of goods and services (percent of mainland GDP)	-1.1	16.6	44.2	33.1	29.7	27.0	24.2	21.9	19.4
Terms of trade (change in percent)	-16.1	43.3	45.1	-10.4	-5.2	-4.2	-5.4	-4.8	-5.0
International reserves (end of period, in billions of US	73.6	83.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1
Gross national saving	32.5	39.2	51.0	46.0	44.7	43.6	42.1	41.0	39.7
Gross domestic investment	31.4	25.6	20.6	22.4	23.4	23.9	24.3	24.5	24.8
Balance of payments (percent of total GDP)	1.1	13.6	30.4	23.5	21.3	19.7	17.9	16.5	14.9
Exchange Rates (end of period)									
Bilateral rate (NOK/USD), end-of-period	9.4	8.6	9.6	...	...	...	...	...	...
Nominal effective rate (2010=100)	76.2	80.5	79.9	...	...	...	...	...	...
Real effective rate (2010=100)	78.1	83.1	80.8	...	...	...	...	...	...
Memo:									
Nominal GDP (in Billions of US Dollars)	367.6	490.3	579.4	524.9	527.6	534.2	536.6	549.5	561.0

Sources: Norwegian Authorities; International Financial Statistics; United Nations Development Programme; and IMF staff calculations.

1/ Based on market prices which include "taxes on products, including VAT, less subsidies on products."

2/ Authorities' key fiscal policy variable; excludes oil-related revenue and expenditure, GPFG income, as well as cyclical effects. Non-oil GDP trend

3/ Over-the-cycle deficit target: 3 percent of Government Pension Fund Global.

INTERNATIONAL MONETARY FUND

NORWAY

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION

July 7, 2023

KEY ISSUES

After strong performance in 2022, some deceleration in growth is expected, given geopolitical headwinds and tightening of financial conditions, including globally. Risks are balanced, and there is ample policy space in the short term to accommodate downside surprises. However, leveraging its strong fundamentals, Norway is encouraged to focus on the longer-term structural agenda, given soon-to-be-pressing issues with demographics.

The revised budget implies a positive fiscal impulse at a time when fiscal policy should be more supportive of Norges Bank's disinflationary effort. Over the medium-term, multi-year spending commitments and population ageing are expected to squeeze room for public spending on new policy measures. Tax system changes will be necessary, including housing taxation, to generate more revenue. On the expenditure side, pension system reform should be accompanied by changes to the generous disability system.

Monetary policy should be tightened further to rein in inflation. So far, households and businesses have been able to adjust to higher interest rates. Continued vigilance will be important to ensure that banks' exposure to commercial real estate (CRE) remains contained. High bank capital and provisioning should help cushion against potential fallouts, including from high household debt. Progress made in strengthening the stability of the financial system is welcome. Further steps to buttress stability should include preserving tighter mortgage regulation limits for Oslo, phasing out mortgage interest deductibility, and higher risk buffers for CRE exposures.

Progress on structural reforms has been uneven. Some steps have been taken in further upskilling and integrating workers but addressing long-standing structural challenges that impede growth potential has been slow. High participation in the generous disability benefit system deprives the labor market of the needed participants. To improve affordability of rental and for-sale housing, targeted support to the most vulnerable, easing restrictions on the supply of new housing, and altering regulations to boost construction efficiency should be considered. Norway's continuing efforts in tackling climate change challenges are commendable.

Approved By
M. Horton (EUR) and
N. Tamirisa (SPR)

The Article IV Consultation discussions took place in Oslo during May 30–June 8, 2023. The staff team comprised E. Stavrev (head), S. Dell'Erba, A. Fotiou, and S. Vtyurina (all EUR). B. Slettvag (OED) joined the discussions. H. Jung and R. Srinivas (both EUR) provided administrative and data assistance. The mission met with Norges Bank Governor Ida Wolden Bache, other senior officials from the Ministry of Finance, Norges Bank, Finanstilsynet, Ministry of Labor and Social Inclusion, Ministry of Petroleum and Energy, Ministry of Climate and Environment, and Statistics Norway. The mission also met with representatives of the banking sector, labor unions, real estate sector, and academics.

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TABLES

ANNEXES

RECENT DEVELOPMENTS

1. **The pace of output growth was strong in 2022 but receded somewhat this year.** Mainland real GDP (excluding the offshore oil and gas sector) grew by 3.8 percent in 2022, supported by still-high household consumption, business investment, and commodity prices, with firms running into capacity constraints amid a tight labor market (Figure 1). At the same time, record-high energy and food prices, in conjunction with continuing policy interest rate hikes, put pressure on households' purchasing power, and financial conditions tightened. Housing investment fell somewhat in 2022, reflecting a decline in house prices, high material costs, and labor shortages. Providing evidence of the fallout from higher prices and credit costs, 2023Q1 GDP data showed that consumption was indeed slowing down. Nonetheless, overall growth was still positive and slightly above projections, supported by strong business investment and exports.

2. **The fiscal position has remained very strong.** A large overall fiscal surplus was achieved in 2022, and there was some consolidation in structural terms (Figure 2). On the back of high oil and gas prices, the general government budget surplus was close to 26.1 percent of overall GDP. The structural fiscal deficit (non-oil balance) declined to 9.5 percent in 2022, from 10.6 percent of mainland GDP in 2021, due to an extraordinary revenue windfall from high electricity prices. The deficit was somewhat below the long-term guideline set by the fiscal rule (2.7 percent versus 3 percent of the Government Pension Fund Global value), and debt remained at a low level (Annex I).

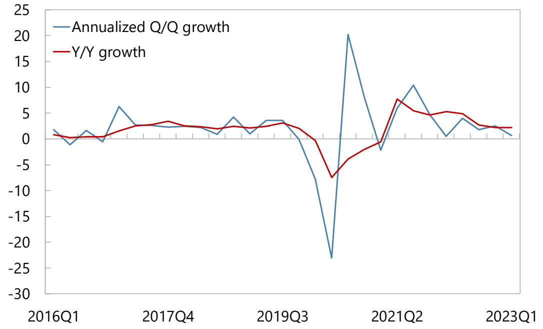
3. **Norges Bank continued to tackle stubborn inflation with policy rate hikes.** By end-2022, core inflation was significantly higher than its 2 percent target, at 5.8 percent, YoY, while headline inflation was 5.9 percent, reflecting high energy and food prices inflation (Figure 2). Norges Bank raised the policy rate six times in 2022 to 2.75 percent, and 3 times in 2023 to 3.75 by June. Wage increases have been guided by industry agreements, with annual growth of around 4.3 percent. Average unemployment declined gradually to 3.3 percent, while variations by sector persisted in 2022 (Figure 1). In May 2023, the seasonally adjusted registered unemployment was 1.8 percent, and the registered jobless rate was 2.1 percent. House prices spiked at the beginning of 2022 in response to a new regulation that requires more elaborate and time-consuming disclosure on the dwellings for sale. Overall, Norway's housing market so far has been more resilient to interest rate increases than in neighboring countries; in June 2023 prices remained about 17 percent above pre-pandemic levels (February 2020).

4. **Norway's external position in 2022 is assessed as moderately stronger than the level implied by medium-term fundamentals and desirable policies.** The current account surplus increased to 30.3 percent of total GDP in 2022 from 13.6 percent in 2021 due to high oil prices and increases in services exports and in the primary income balance. Staff assesses the current account gap in 2022 to have been 5.5 percent of total GDP, which is moderately stronger than the level implied by fundamentals and desirable policies. The real effective exchange rate (REER) in 2022 was undervalued by 26 percent relative to the REER norm (Annex II). The large terms of trade improvement provided a short-lived appreciation after the pandemic but narrowing interest rate differentials vis-a-vis advanced economies and a lack of deep and liquid security markets have contributed to the krone weakness over 2022–23 (Annex III).

Figure 1. Selected Economic Indicators

Real GDP Growth: Norway Mainland

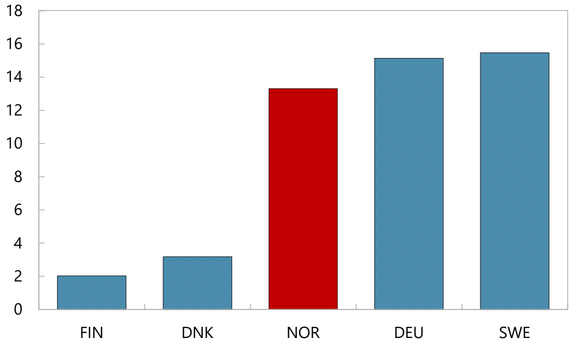
(Percent)



Sources: Statistics Norway; Haver Analytics.

Household Savings, 2021

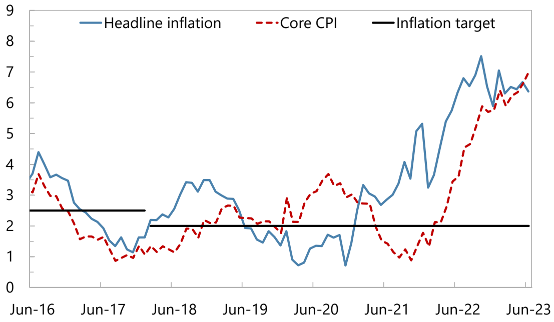
(Percent of disposable income)



Source: OECD.

Annual Inflation

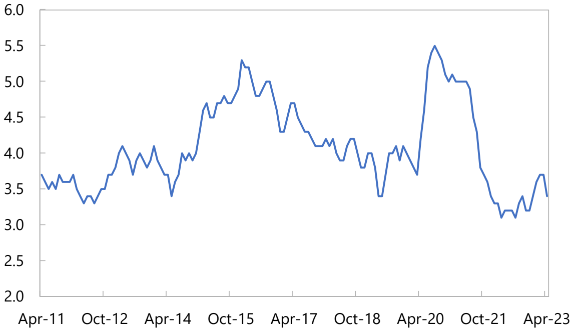
(Percent)



Sources: Statistics Norway; and IMF staff calculations.

Unemployment Rate

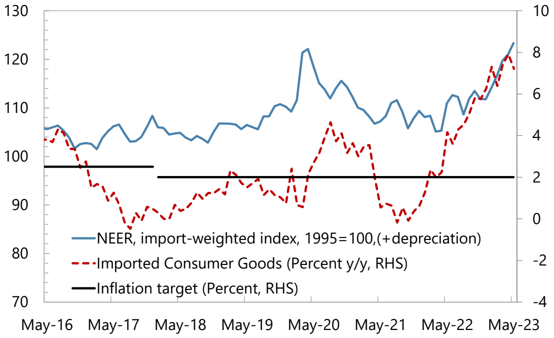
(Percent, 3-month centered moving average, seasonally adjusted**)**



Sources: Statistics Norway; and Haver Analytics.

Exchange Rate and Import Price

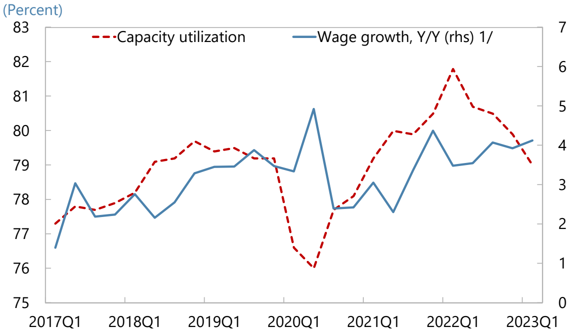
(Index)



Sources: Norges Bank; Haver Analytics; and IMF staff calculations.

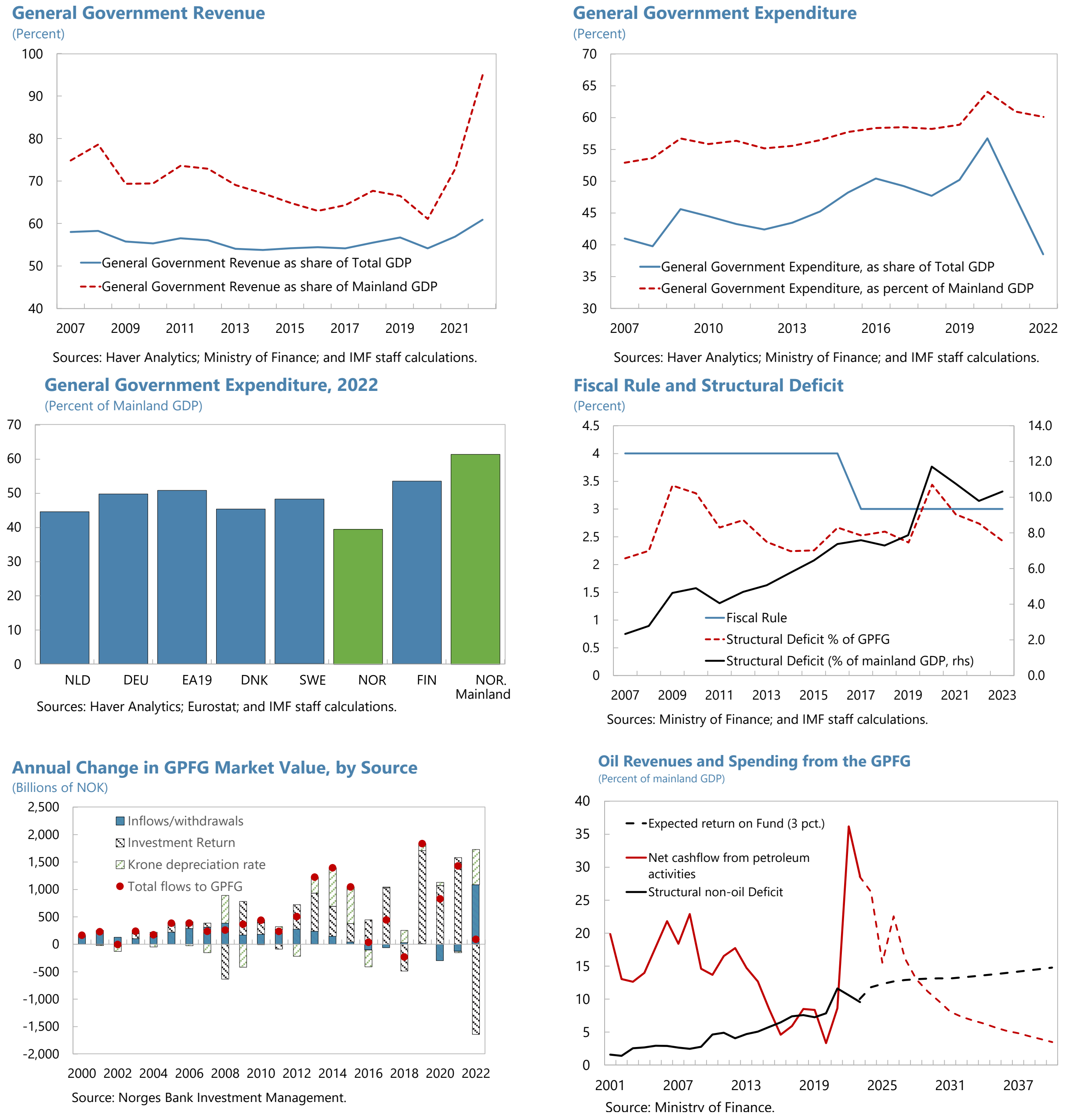
Capacity Utilization Rate and Wage Growth

(Percent)



Sources: Statistics Norway; and IMF staff calculations.
1/ Wage growth is calculated from new index starting 2017.

Figure 2. Selected Fiscal Indicators



General Government Revenue

(Percent)

Sources: Haver Analytics; Ministry of Finance; and IMF staff calculations.

General Government Expenditure

(Percent)

Sources: Haver Analytics; Ministry of Finance; and IMF staff calculations.

General Government Expenditure, 2022

(Percent of Mainland GDP)

Sources: Haver Analytics; Eurostat; and IMF staff calculations.

Fiscal Rule and Structural Deficit

(Percent)

Sources: Ministry of Finance; and IMF staff calculations.

Annual Change in GPFG Market Value, by Source

(Billions of NOK)

Source: Norges Bank Investment Management.

Oil Revenues and Spending from the GPFG

(Percent of mainland GDP)

Source: Ministry of Finance.

OUTLOOK AND RISKS

5. While high inflation and interest rates weigh on activity, Norway has been benefiting from very favorable terms of trade, which should continue to support GDP growth. Employment growth is softening but demand for labor should remain strong. Capacity utilization has started to approach more normal levels; however, there are large differences among sectors. While household consumption will continue to be affected by a higher cost of living, compensatory electricity subsidies and excess savings accumulated during the pandemic should keep supporting real incomes and spending (Figure 1, Annex IV). Tax advantages for petroleum investment has spurred development plans. Hence, some investment will continue, including into projects related to the reduction of emissions and strengthening of the power supply, despite the moderation in oil and gas futures prices. The current account is projected to remain in a high surplus, with net exports contributing strongly to growth. Public spending is expected to add to demand pressures. Overall, mainland GDP is expected to grow by 1.4 percent in 2023. Headline inflation is likely to recede somewhat because of the slowdown in domestic demand and expected lower global inflation.

6. Overall risks are balanced (Annex V). On the downside, an abrupt global slowdown or recession will generate adverse spillovers through trade and financial channels. Domestically, strong labor markets and excess savings accumulated during the pandemic pose upside risks to inflation. At the same time, a decline in energy prices and moderation in supply chain constraints will help reduce headline inflation. However, short-term inflation risks are skewed significantly to the upside. While a significant property price decline is a risk, house prices are expected to fall moderately and eventually stabilize in 2023. Systemic risks have not materially increased and, so far, there are no signs of liquidity problems for Norwegian banks because of recent turbulence in international banking markets and pressures on CRE sector in some European countries. Cyber risks, in general, are becoming a more prominent threat to financial stability.

7. The focus over the longer term should be on sustainable and inclusive growth. Worsening demographics create spending pressures over the longer term, which need to be compensated by long-standing reforms to boost labor force participation and productivity, while increasing savings and improving spending efficiency. Labor force participation depends on implementing crucial reforms to reduce disability benefits and disincentivize early retirement, as well as better integration of immigrants. Advancing the green transition will also be key for sustaining growth.

Authorities' Views

8. The authorities broadly share the assessment of the outlook and risks. They highlighted the economy's resilience thus far, despite higher policy rates. They noted that despite some slowdown, consumption has been resilient, given the tight labor market and savings buffers. They noted that while constraints on finding workers have started to ease and new vacancies are moderating, the stock of vacancies was at historical highs, and registered unemployment close to historical lows. In this context, they saw risks to growth as broadly balanced, and on the upside to inflation.

POLICY DISCUSSIONS

Despite global headwinds, Norway's economy is on a strong footing. Fiscal and monetary policies should be operating cohesively with the aim to contain inflation. A tighter fiscal stance over the near term would help achieve this goal, with added benefits to financial stability. Over the medium term, fiscal policies should concentrate on lowering the non-oil balance through expenditure reduction while ensuring intergenerational fairness. The longer-term agenda should remain focused on making the *labor and housing markets more inclusive, upskilling, and advancing with climate commitments. Progress made in implementing the 2020 FSAP recommendations should be continued to help reinforce the financial system's resilience.*

A. Fiscal Policies

9. Fiscal policy should be more supportive of the disinflationary effort. The initial 2023 budget targeted a contractionary fiscal impulse (0.6 percent of mainland trend-GDP), mostly by increasing net taxes and by the unwinding of COVID-related measures. The bulk of the revenue increase in the initial budget was related to higher taxation of natural resources, namely, the introduction of a resource rent tax on aquaculture and onshore wind power, [1] an increase in the resource rent tax rate on hydropower, and windfall revenue from wind and hydropower. The government allocated further support to curb the impact of high electricity prices (Box 1), and humanitarian and security assistance for Ukraine. [2] In the revised budget, however, spending was increased to reflect, among other things, higher-than-projected inflation and spending on foreign aid and refugees. The non-oil structural deficit is now projected at 10 percent of mainland GDP and 3 percent of the GPFG (Text Table 1). The resulting fiscal stance is expansionary (0.4 percent of mainland trend-GDP), compared to tightening in the initial budget. A tighter fiscal stance, achieved by finding offsetting cuts for these additional expenditures in other discretionary areas, would have supported monetary policy to help contain upside risks to inflation. While estimates remain highly uncertain at this stage, spending on electricity support may turn out to be lower than in the initial budget allocation due to lower prices (by about 0.4 percent of GDP). Nonetheless, redesigning the electricity support package, which was extended to 2024, to better target lower-income households would have been more equitable and less costly overall (Box 1).

Text Table 1. Budget Figures

	Budget	Rev. Budget
NOK Billion	**2023**	**2023**
Non-oil Revenues	1462	1462
Non-oil Expenditures	1719	1762
Non-oil Deficit	257	300
Structural Non-Oil Deficit	317	373
Memo items		
Structural Non-Oil Deficit (percent of Mainland GDP)	8.8	10.0
Fiscal Impulse	-0.6	0.4
Structural Non-Oil Deficit (percent of GPFG)	2.5	3.0

Sources: Norwegian Authorities; and IMF staff calculations.

10. Additional revenue or expenditure measures are needed to make room for multi-year spending commitments, population ageing, and for other new initiatives. There will be limited scope available within the fiscal rule for new spending initiatives over the medium term unless these are accompanied by revenue-raising or cost-saving measures (Figure 2). In this regard, the recent proposals put forward by the Expert Committee on Tax Reform, could contribute to making the tax system more efficient (Box 2; IMF, 2019 and 2020). With respect to pension reforms, proposals to link retirement age limits to life expectancy will have beneficial effects on both the sustainability of the system and labor force participation (Annex VI). However, other elements of the reform, which

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[1] The measure was initially supposed to take effect in 2023 but has been postponed to 2024 in the revised budget.

[2] Norway has imposed sanctions against Russia that mirror the 10 packages of sanctions by the European Union.

are meant to increase social cohesion, particularly regarding disability pensions, will instead increase costs, while possibly jeopardizing work incentives. It would be important that the envisaged changes to the pension system are undertaken within the context of a comprehensive reform of disability benefits (IMF, 2019). More broadly, reducing incentives for early retirement should remain an important policy objective.

Box 1. The Impact of High Energy Prices and Compensating Measures for Households[1]

High energy prices have dented households' real incomes. Following the methodology in Arregui et al. (2022),[2] staff estimated the total burden on household annual consumption, all things equal, to be around 3 percent in 2022, with slightly higher incidence for low-income households. The burden is lower than the European average (6 percent) due to the low share of energy in the consumption basket of Norwegian households.

Norway: Temporary Energy Support Measures[1]

Billions NOK	2022
Subsidies and Direct Assistance	37.0
Electricity subsidy scheme for households	33.2
Increased housing assistance	1.7
Electricity subsidy scheme for agriculture and greenhouses	1.0
Electricity subsidy scheme for the voluntary sector	0.6
Additional support for students and sports teams	0.6
Grants and Guarantees	2.1
Support for energy efficiency measures for households	0.1
Grant scheme for businesses in Norway particularly affected by increases in energy prices (expired)	1.6
Increased grants to municipalities for increased payments of welfare grants	0.3
Grant for energy efficiency measures in rental housing, care homes and nursing homes (administrated by the Norwegian State Housing Bank)	
Guarantee scheme for businesses affected by increase in electricity prices (expired March 2023)	0.2
Other Grants	0.1
Total	39.1
Total (percent of GDP)	0.7

1/ Estimates are based on Parliament's resolutions for 2022.
Source: Ministry of Finance.

To ease the impact of the energy shock, fiscal support of about 0.7 percent of GDP was allocated in 2022. Most of the allocated amount was for the subsidy on the electricity bill, with actual outlays estimated at about 0.5 percent of GDP. The scheme, while maintaining the price signal to a certain degree, is not targeted. It is estimated that targeting the support to fully compensate for the higher price of electricity for only the most vulnerable households (defined as those in the bottom two quintiles), would have cost much less, roughly around 0.25 percent of GDP, and would have been more equitable.[3]

1/ With contributions from Victor Mylonas (FAD external expert).

2/ Arregui et al. (2022), IMF Working Paper, 2022/262.

3/ Estimates are based on price increases since 2021-Q1 observed in 2022.

Box 2. Proposals for Tax Reform

Staff broadly supports the "Torvik Committee" proposals to reform the tax system, intended to tackle future challenges posed by aging, digitalization, and globalization. The proposals are quantified to be revenue-neutral in the short term, as the tax reductions on labor income are financed by the value-added tax, increased taxation on housing and high pensions, rent taxes, and taxes on environmentally harmful activities. In the longer term, the Committee suggested to use the projected increase in revenue to reduce tax pressure. The main proposals include:

- Strengthening work incentives by introducing a new deduction on income earned and lowering contributions on salary, social security, and business income.
- Expanding the resource rent tax to onshore wind power, hydropower, and fisheries.
- Introducing a single Value-Added Tax (VAT) rate at 25 percent (consolidating multiple reduced rates and exemptions) and a compensatory scheme for the VAT reform for lower-income households.
- Introducing an imputed-rent tax and extending capital gains tax to include primary residences.

Authorities' Views

11. The authorities agreed that in a context of elevated inflation and tight labor markets fiscal policy should not add to aggregate demand. However, they emphasized that measures to preserve the real level of spending in the budget were necessary. Furthermore, they noted that part of the increase of the deficit in the revised budget was due to lower energy prices, which had a larger impact on revenues than on expenditures. Also, they reasoned that other spending increases, related to foreign aid–mainly to Ukraine–but also humanitarian assistance to other countries severely hit by higher food and energy prices, were a priority in the current context and would to a little degree affect domestic demand. They believed that energy measures were well designed and easy to discontinue once electricity prices durably fall. The proposals from the tax commission have been discussed in public hearings and will be considered in subsequent budgets. Strengthening work incentives and reforming disability benefits remain important for long-term sustainability but is politically difficult.

B. Monetary Policy

12. Current price and macroeconomic developments and the outlook suggest that there are upside risks to inflation. Electricity price futures indicate receding price pressures ahead, and headline CPI inflation should abate due to base effects. However, staff sees upside risks to underlying inflation from a weak krone (Annex III), as well as the tight labor market and elevated inflation expectations, which could lead to higher-than-expected wage increases. Other risks stem from still robust consumption, backed by savings (Annex IV), strong corporate credit demand, a fairly resilient housing market, and a fiscal stance that is looser than warranted.

13. To bring inflation towards the medium-term target and given the upside risks, further tightening this year may be needed. With core inflation coming in above expectations in May at 6.7 percent, Norges Bank raised the policy rate by 50 basis points to 3.75 percent in June. The rate path was revised upwards and indicates a rise in the policy rate slightly above 4 percent later this year. Given upside risks to inflation, positive growth and output gap (around 0.5 percent) projections, and the need to keep long-term expectations anchored, tighter policy is needed in the near term to durably arrest inflation by restraining demand and by some compression of profit margins. The latter is more likely in the energy sector rather than in services where the margins have been tight and wage pressures are higher due to labor shortages (Figures 3 and 4).[3] Staff analysis suggests that the elasticity of consumption to interest rates is relatively low, thus only moderately affecting output (Annex IV). However, there are important uncertainties both in the transmission of monetary policy and its impact on the real economy. Accordingly, this suggests further policy rate increases are needed, accompanied by continued clear communication on how economic developments affect the current and future policy stance. Inflation in June was 6.4 percent, easing

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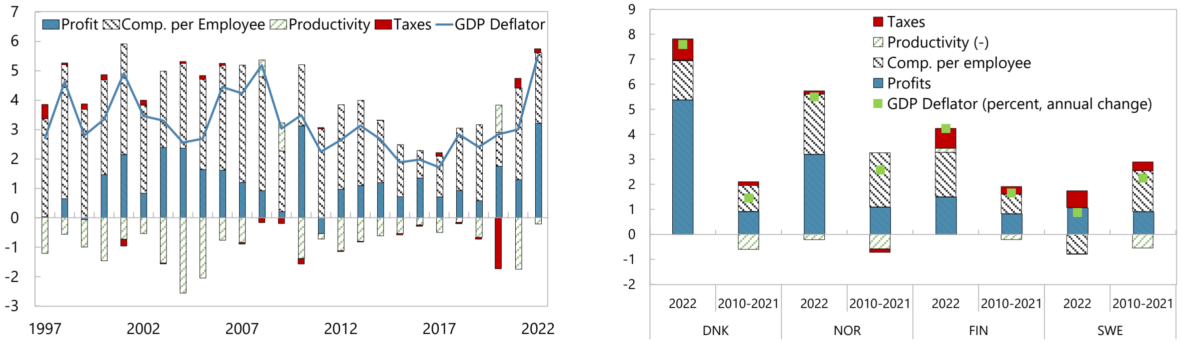
[3] Norges Bank's simulations of policy rates using a simple Taylor rule indicate a higher-than-currently expected policy rate path in 2023.

from May but still slightly above market expectations, while core inflation accelerated to a record-high 7 percent, well-above expectations.

Figure 3. Profit Margins, Labor Costs and Domestic Inflation[1]

Contributions to Change in GDP Deflator
(Percentage points and percent, annual change)

Contribution to Change in GDP Deflator
(Percentage points, annual change)

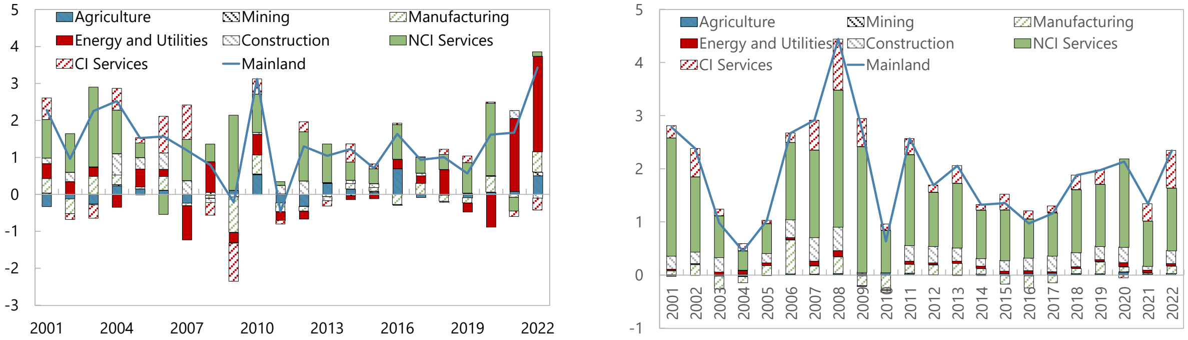


Sources: Statistics Norway; and IMF staff calculations.

Sources: Haver Analytics; Statistics Norway; and IMF staff calculations.

Contributions of Unit Profits
(Percentage points, annual change)

Contributions from Unit Labor Costs
(Percentage Points, annual change)



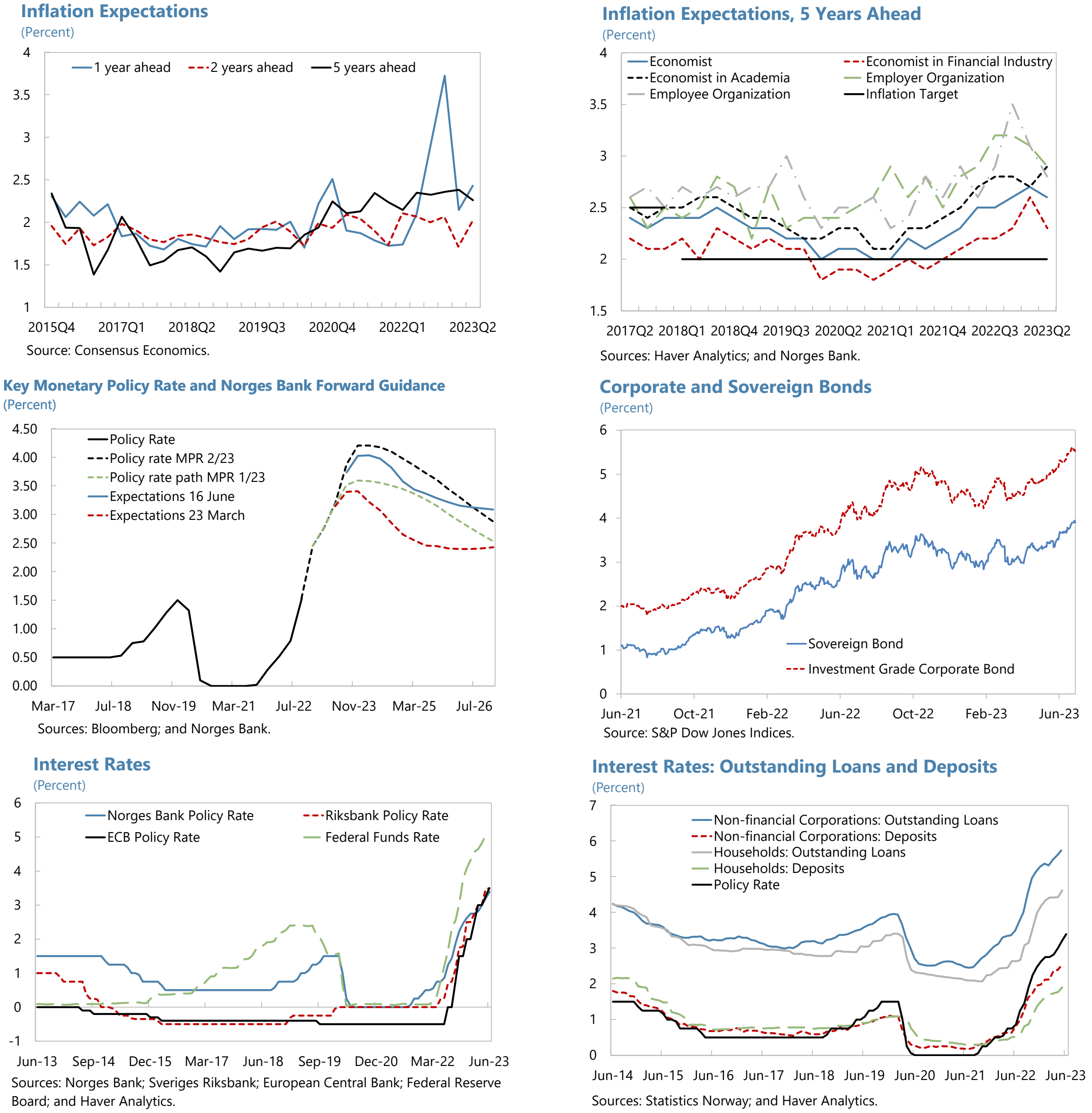
Sources: Statistics Norway; and IMF staff calculations.

Sources: Statistics Norway; and IMF staff calculations.

1/ Contact Intensive (CI) Services include: wholesale and retail trade, transport, accommodation, and food, and arts, entertainment, and other service activities. See Arce et al. (2023).

14. **Work on exploring the use of digital currency has been progressing.** Norges Bank's central bank digital currency (CBDC) project, initiated in 2016, is in its fourth phase, which covers the required legislative amendments linked to CBDC introduction as a generally accessible means of payment for the public ("retail CBDC," "general purpose CBDC," or "digital cash"). Currently, the only legislative amendments being considered are for introduction of digital cash to help make it a well-functioning means of payment for general use by the public. The introduction of a CBDC would constitute a significant change to the payments system, with a major impact on, for example, bank deposit funding and Norges Bank's liquidity policy. This will need regulatory adjustments outside of Norges Bank's purview. Also, legislative amendments needed to make CBDC payments anonymous or to give CBDC automatic payment functionality would also have to be considered separately. Ultimately the decision on introduction of a CBDC will be up to parliament. Norges Bank will advise on technical solutions and lay out considerations on whether it should be introduced or not.

Figure 4. Monetary Policy and Interest Rates



Inflation Expectations (Percent)

Source: Consensus Economics.

Inflation Expectations, 5 Years Ahead (Percent)

Sources: Haver Analytics; and Norges Bank.

Key Monetary Policy Rate and Norges Bank Forward Guidance (Percent)

Sources: Bloomberg; and Norges Bank.

Corporate and Sovereign Bonds (Percent)

Source: S&P Dow Jones Indices.

Interest Rates (Percent)

Sources: Norges Bank; Sveriges Riksbank; European Central Bank; Federal Reserve Board; and Haver Analytics.

Interest Rates: Outstanding Loans and Deposits (Percent)

Sources: Statistics Norway; and Haver Analytics.

Authorities' Views

15. **The authorities agreed that policy rates should be flexibly adjusted to respond to economic developments and that a higher policy rate may be required if inflation pressures persist.** In this regard, they recognized that, while the impact of currency depreciation is different across the economy, it is an upward risk to inflation, which might require more tightening. Also, the authorities noted that there was uncertainty over how much savings could cushion the impact of higher inflation and over the cash flow effects from higher interest rates on consumption. They pointed out that private consumption has been resilient and has surprised on the upside.

C. Financial Sector Policies

16. While Norwegian banks remain robust, and there has been no substantial increase in systemic vulnerabilities over the last year, tighter global financial conditions pose risks. Banks remain highly capitalized, with high earnings and low credit losses (Figure 5). The stress test in the Financial Stability Report (2022) indicates that banks are resilient and that capital buffers would help banks absorb losses and maintain lending even in a severe downturn. The countercyclical capital buffer requirement of 2.5 percent and the systemic risk buffer of 4.5 percent help banks maintain ample loss-absorbing capacity. Banks satisfy the capital and liquidity requirements by an ample margin and have a diversified funding structure with a large share of guaranteed deposits. Bank profitability is expected to remain solid, despite expected increase in credit losses, as deposit and interest rates have risen with the increase of policy rates (Figure 5). Risks to financial stability appear to be broadly manageable. However, continued vigilance is needed given the elevated uncertainty about how households and firms will respond to higher interest rates and funding costs.

17. There is ample access to credit, but there are indications that households are borrowing less, while bank standards are tightening for CRE. Credit growth has declined gradually over the past 1½ years, mostly of households, reflecting tightening of financial conditions, large share of variable mortgages (Annex IV), moderation of house prices, and lower market turnover (Figure 5). While household debt service ratios are expected to keep rising, depending on the loan-to-value amount and the financial situation, households have the option of deferring principal repayments. High corporate credit growth, on the other hand, is attributed to an increase in bank lending, particularly to manufacturing and services, which likely reflects higher investment, and generally high profitability and debt servicing capacity of firms. Some banks, however, have reported stricter equity and debt-servicing requirements for new CRE loans. Most banks have also reported increased margins on new CRE loans. Risk premiums on new corporate bond issues have risen markedly over the past year, particularly for CRE firms, reducing bond issuance. While banks' exposure to CRE is about 50 percent of corporate portfolios, banks have limited exposure to financially weak CRE firms with substantial upcoming bond debt amortization (Norges Bank, 2023). The fast rise in rents over the past few years and CPI-indexing of office leases make many CRE firms robust against higher interest rates and credit premiums (Norges Bank, 2022 and 2023). Nevertheless, an economic downturn accompanied by a sharp fall in selling prices and rental income may result in considerable bank losses.[4] Thus far there have not been any adverse developments in the sector in comparison to neighboring countries, nonetheless it is important to monitor any potential spillovers.

18. Most households should be able to service their debt, and credit standards have been eased somewhat, which is warranted given rising interest rates. Financial Stability Report 2022 analysis estimated that households holding a relatively small share (2–3 percent) of overall household debt may be affected by higher interest rates and may experience severe pressures in

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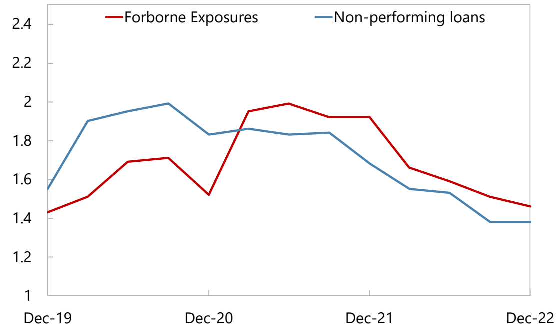
[4] In large cities like Oslo, the attenuating factor is that public sector is a large tenant of office space bringing more stability to revenue streams.

covering expenses with available income and assets. At the end-2022, the Ministry of Finance changed the Lending Regulation (effective January 1, 2023–December 31, 2024) to lower the maximum rise in interest rates borrowers must be able to tolerate. As interest rates rise, the stressed interest rate level is adjusted to avoid being overly aggressive on the rates that borrowers need to be able to withstand. This may increase the number of people granted a mortgage without breaching the regulatory requirements. At the same time, the overall mortgage rules are still likely to be effective in reducing the amount of excessive borrowing by households most vulnerable to further tightening of financial conditions.

Figure 5. Selected Financial Indicators

Non-Performing Loans

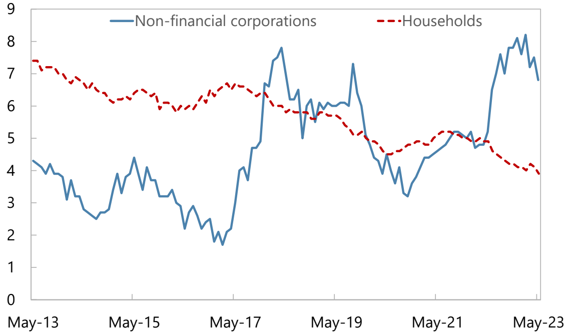
(All banks; percent of loans)



Source: Finanstilsynet.

Growth in Domestic Credit

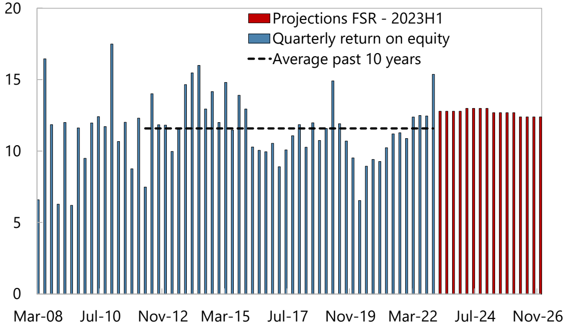
(Percent, y/y seasonally adjusted)



Source: Statistics Norway.

Bank Profitability

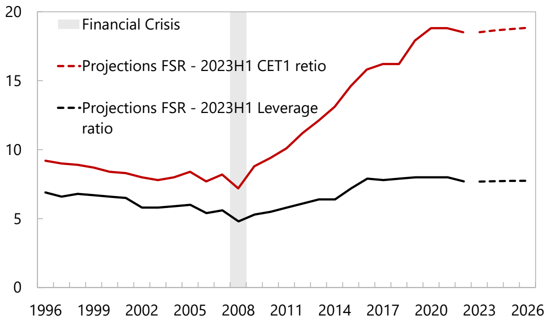
(Percent, Return on equity after tax)



Sources: S&P Capital IQ; and Norges Bank.

CET1 Ratio and Leverage Ratio

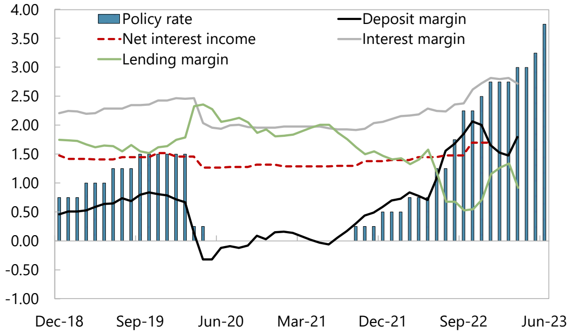
(Percent)



Sources: Finanstilsynet; and Norges Bank.

Deposit, Lending and Interest Rate Margins

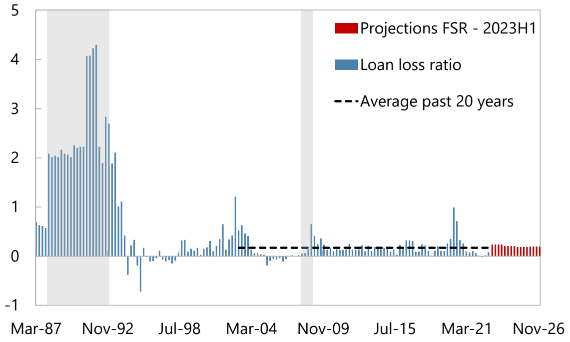
(Percent)



Sources: S&P Capital IQ; and Norges Bank.

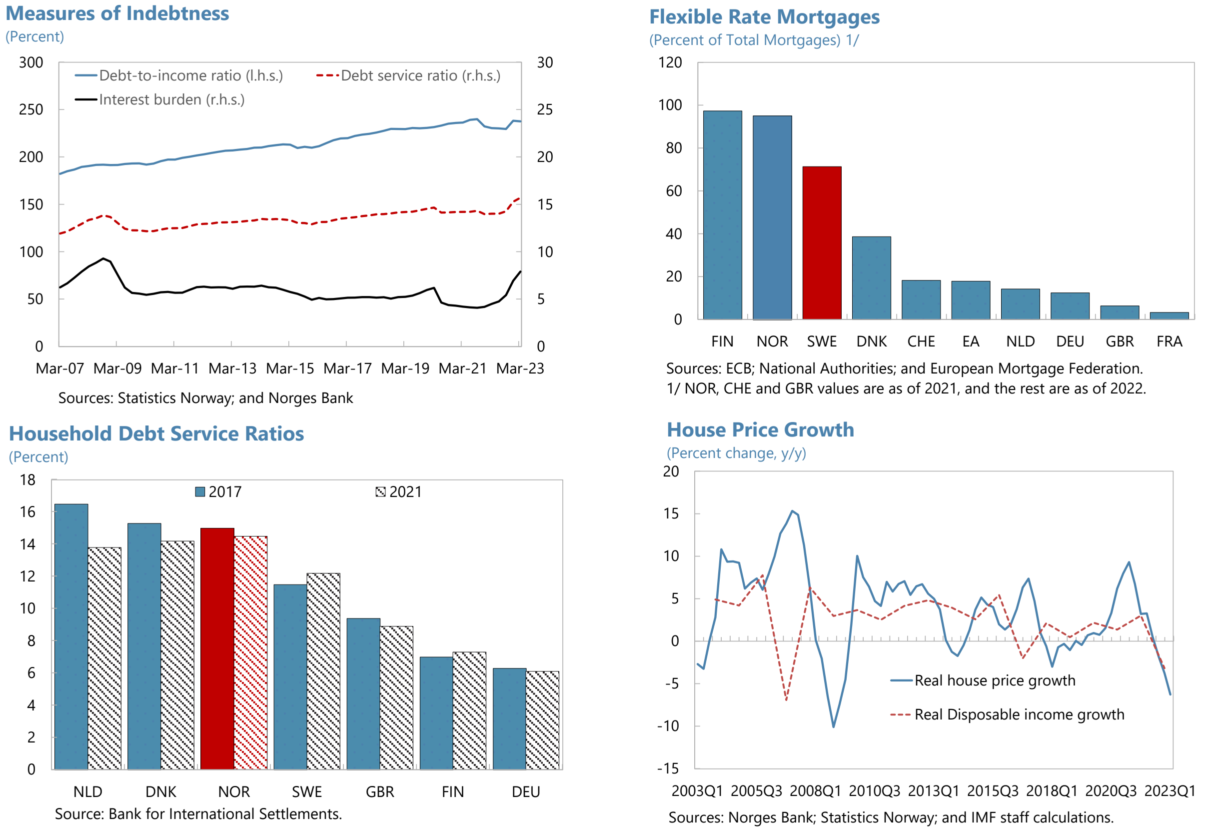
Credit Losses

(Percent, Share of lending)



Source: Norges Bank.

Figure 5. Selected Financial Indicators (Concluded)



Sources: Statistics Norway; and Norges Bank

Sources: ECB; National Authorities; and European Mortgage Federation.
1/ NOR, CHE and GBR values are as of 2021, and the rest are as of 2022.

Source: Bank for International Settlements.

Sources: Norges Bank; Statistics Norway; and IMF staff calculations.

19. There has been progress in addressing some of the recommendations of the 2020 Financial Sector Assessment Program (FSAP) (Annex VII). A special commission investigated strengthening the FSA's prudential powers, proposing more independence in decision making (now under a public review). Per the FSAP advice, the FSA has been monitoring closely banks' collateral eligible for central bank liquidity operations. Norges Bank initiated a project with the larger banks and Finance Norway to implement a mechanism for acceptance of mortgage loan collateral for emergency liquidity support to solvent banks. The government has started the legislative process of expanding the coverage of the mandatory credit registries, currently of consumer debt, to include collateralized debt (including housing loans). CRE data has started to be monitored also through a private sector database on renters and owners. Average risk weight floors of 20 percent for retail exposures and of 35 percent for corporate exposures collateralized by real estate were extended until end-2024. Given vulnerabilities stemming from CRE sector, there is merit in eventually introducing a sectoral systemic risk buffer (SSRB). Other recommendations are in progress or have been only partially implemented, for instance, making key household sector measures permanent features of the framework (Annex VII).

20. Cyber risks are becoming a more prominent threat to financial stability and the authorities are appropriately strengthening defenses. While the financial infrastructure is secure and efficient, the number of cyber-attacks has risen, suggesting the need for constant upgrading of systems. Strengthening resilience to cyber-attacks requires an intensive effort to identify risks, regulation, and extensive cooperation between various authorities and financial-system participants, including globally. In line with FSAP recommendations, Norges Bank has established a more structured process for oversight and supervision in cyber security. Important elements are annual risk-based planning, more active use of reports from third parties, and self-assessments from participants. In collaboration with the FSA, Norges Bank has introduced the TIBER framework for tests of cyber resilience in the financial system.

21. Norway's AML/CFT regime and anti-corruption measures should be further reinforced. The supervisory sanctioning power has been used as appropriate in cases of serious breaches. Since 2019, the FSA has imposed monetary penalties on nine banks, five investment firms, nineteen real estate agents, and thirty-five audit or accounting firms. The statute of limitations for pecuniary sanctions in the AML Act has been increased to five years from when a reporting entity is no longer in breach of an AML provision. Progress has been made in addressing risks from cross-border financial flows (Annex VIII). The ongoing IMF regional technical assistance (TA) will provide recommendations on how to guard against cross-border money laundering (ML) threats and vulnerabilities, which should also be addressed. Based on the results of the ongoing assessment with respect to transnational aspects of corruption (i.e., supply and facilitation), for which Norway has volunteered, the authorities are encouraged to further strengthen the framework to combat foreign bribery and to address deficiencies that may undermine enforcement (Box 3).

Box 3. Actions to Combat Foreign Bribery[1]

While Norway is an active enforcer of the OECD Anti-Bribery Convention and has a strong overall legal framework to combat foreign bribery, further improvements are needed. In response to recommendations in the OECD Phase 4 report, the authorities introduced an amendment to Norway's Penal Code to ensure that the authorities could prosecute foreign bribery *offences* committed by Norwegian nationals in foreign jurisdictions, regardless of whether that act was unlawful or punishable in those jurisdictions. Norway has also made progress in increasing resources available to ØKOKRIM to investigate and prosecute foreign bribery and in development of comprehensive guidelines to assist with implementation of new public procurement legislation. In October 2022 the authorities released a report that detailed the state's expectations for state-owned enterprises, including how companies should work systematically to prevent financial crimes such as corruption and money laundering in their own activities and supply chains.

Progress has been slow on several key recommendations intended to address deficiencies that may result in weak enforcement and fail to sufficiently discourage foreign bribery of public officials. Norway has not yet amended its Penal Code to remove the provision limiting a *possible sanction* for foreign bribery offences committed in a foreign jurisdiction to those that would be available in the jurisdiction where the bribery occurred. This provision may limit bribery in countries where there are no sanctions in place or where they are limited. There has also been limited progress in clarifying whether the supervisory authorities should inform state-owned enterprises when they were subject to foreign bribery allegations and in raising awareness of embassy staff roles in detecting and reporting foreign bribery allegations to the relevant Norwegian authorities.

1/ Information relating to supply-side corruption draws on the OECD Phase 4 Report of Norway (2018) and the Phase 4 Written Follow-Up Report of Norway (2020).

Authorities' Views

22. The authorities saw systemic vulnerabilities in the banking sector as broadly unchanged. However, they are cognizant that downside risks remain as further turmoil in global markets could lead to higher funding costs. Also, there was uncertainty about the response of firms and households to further rate hikes, which could possibly increase losses. In this context, borrower-based measures have helped to contain vulnerabilities. The authorities reiterated their assessment of CRE risks as broadly manageable. Norges Bank assesses that the Systemic Risk Buffer (SRB) rather than a SSRB should serve as a main rule that applies to all exposures in Norway especially as the effect of structural vulnerabilities on banks in a downturn is uncertain. They noted further that risks were also attenuated by a strong rental market and adjustment of leases to inflation. Preparedness and contingency planning for cyber risks remain priorities on the agenda. The authorities expressed appreciation for the regional TA and recommendations.

D. Structural Policies

23. Progress on vital structural reforms has been uneven. Some steps have been taken in further upskilling the workforce, with increased vocational training contributing the most. However, addressing long-standing structural challenges that impede Norway's growth potential has not seen much progress due to lack of political support (Annex IX). One area that particularly stands out is high participation (11 percent of working age population, and especially young people) in the generous disability benefit system, which is a drain on public finances and deprives the labor market of the much-needed workforce, as discussed in the 2021 White Paper. Since there has been spending on retraining without a meaningful decline in benefit recipients, it would be useful to evaluate the quality of such expenditures. The Norwegian Inclusive Workplace Agreement initiative launched in January 2019–December 2022 had as an objective to achieve high employment and mobilize the workforce. However, it mainly focused on preventing transitions from employment to disability benefits, which has little relevance for young disability pensioners who are early school leavers and have weak labor market attachment, with little or no previous work participation. To prevent early dropouts from upper secondary education, a pilot project was recently launched from the Labor and Welfare Service in collaboration with other institutions. Regarding the Integration Act, which has been in effect since January 2021, two evaluation reports are expected to be released in 2023, as well as a system that will allow measurement of implementation, efforts, and results of the Act.

24. The issue of housing affordability has become more prominent under high inflation and rising interest rates. Although the authorities are fully cognizant of structural supply shortfall, policy proposals, mostly in the Housing Strategy, are insufficient to alleviate pressures in the short to medium terms. In the short term, increasing portable allowances and reducing the income tax for the most vulnerable would be the most powerful immediate tools. In the medium term, easing restrictions on supply of new housing and altering regulations to boost construction efficiency are needed to increase the supply of both rental and for sale housing (Annex X).

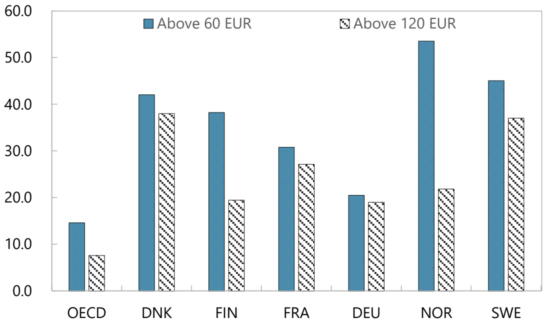
Box 4. Impact of a Higher Carbon Price on the Economy[1]

Norway is a leading country globally in terms of carbon pricing. The main instruments of the Norwegian climate policy are taxes on greenhouse gas (GHG) emissions and trading through participation in the EU Emissions Trading System (ETS). The share of GHG emissions subject to taxation is one of the highest among OECD countries. In Norway's Climate Action Plan 2021–30, the government has proposed to raise the carbon tax rate on non-ETS emissions from $87 per ton of CO_2-equivalent in 2023 to about $200/T by 2030. By itself, this will not be sufficient to meet the ambitious Nationally Determined Contribution target by 2030, but this is a step in the right direction. Other policies to help meet the target include participation in the EU ETS, where the price is currently around €100/T and phasing-out fossil-fuel vehicles by 2025.

The impact of higher carbon pricing on industry and households should be relatively modest. Analysis by Statistics Norway shows a marginal decrease in GDP compared to a baseline scenario. While emissions decrease by 34 percent from 2022 to 2035 due to already adopted policies, the proposed increase in the tax would decrease emissions slightly further (by 36 percent). Estimates generated through the Fund's Climate Policy Assessment Tool (CPAT), which assesses the overall impact of policy changes on the economy,[2] suggest that for the most carbon intensive sectors (accounting for 95 percent of emissions and 30 percent of Gross Value Added), assuming full pass-through, output prices could increase up to 2–3 percent (e.g., aviation), indicating that the impact on inflation would be modest. For households, the regressive impact could be mitigated by targeted redistribution. Fully recycling the estimated revenue increase (0.5 percent of GDP by 2030) by reducing the allowance for the Personal Income Tax and increasing targeted transfers could compensate the negative impact on consumption for more than half of the income distribution.

Net Effective Carbon Rate

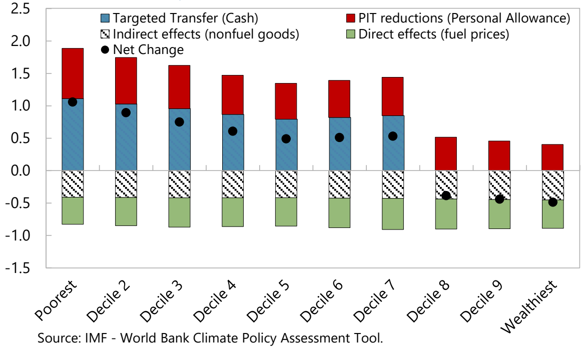
(Share of GHG emission subject to a positive price)



Source: OECD.

Consumption Impact on Households in 2030

(Percent of total consumption)



Source: IMF - World Bank Climate Policy Assessment Tool.
Note: Excludes impact from co-benefits.

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[1] With contributions from Victor Mylonas (FAD external expert).

[2] See Black, S., Mylonas, V., Parry, I., Vernon, N., and Zhunussova, K. (2023). The IMF-World Bank Climate Policy Assessment Tool (CPAT): A Model to Help Countries Mitigate Climate Change. IMF Working Papers, forthcoming.

25. Norway continues to lead efforts in climate mitigation and adaptation.[5] The authorities have started publishing a "Climate Status and Plan" as part of the budget presented to parliament. The plan provides an overview of the measures needed to achieve climate targets and their implementation status. As part of the 2023 plan, besides the scheduled increase in the carbon tax (Box 4), the government introduced a higher use of biofuels, a tax on waste incineration, increased funding to ENOVA to support projects aimed at cutting emissions, and established BIONOVA to support climate initiatives in the agricultural sector, and launched large-scale publicly supported projects for carbon-capture and storage. However, further efforts are needed to fulfil Norway's 2030

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[5] See Staff Report for the 2022 Article IV Consultation for climate objectives.

ambition under the Paris Agreement. Measures for more efficient use and re-use of CO_2-intensive building materials (steel, concrete) could significantly reduce emissions associated with the construction and replacement of dwellings. It will be important to remove regulatory impediments to increase the use of second-hand building materials.

Authorities' Views

26. The authorities agreed with the thrust of recommendations. They agreed that there were too many people outside of the labor force. The New Youth Guarantee program, to take effect in July 2023, is aimed at shortening passive periods outside education and work and enabling more young people to get a permanent foothold in the market. The authorities also expect some positive outcomes once the amendments to the Education Act come into force in 2024. The training under the Integration Act will take some time, as it requires, at the least, an achievement of the minimum level of language and gaining formal education for a certain career path. Regarding housing allowance schemes, the authorities agreed that they were an important policy instrument, which had been used since the pandemic and during the energy crisis and could help achieve both social and housing goals. The authorities agreed that further efforts were needed to fulfil the 2030 Paris Agreement goals.

STAFF APPRAISAL[6]

27. Norway experienced one of the highest growth rates among advanced economies last year, and risks remain balanced. Growth is continuing but at a more modest pace. The country has experienced windfall gains from high petroleum and natural gas prices that have so far countered global headwinds. Growth prospects remain favorable, and imminent risks are balanced, not least due to Norway's solid fundamentals and policy management. The external position in 2022 was moderately stronger than the level implied by medium-term fundamentals and desirable policies.

28. The fiscal position is strong but should attend to both short- and long-term pressures. In the near term, the fiscal stance should be more supportive of disinflation efforts. The structural non-oil deficit in the revised budget results in a mildly expansionary fiscal stance, contributing to higher aggregate demand, which in the context of persistent inflationary pressures should be avoided. While spending on electricity subsidies is projected to decline this year due to lower prices, potential savings could be realized by narrowing their coverage and calibrating them to help only vulnerable households. While public debt is sustainable, over the medium term, given aging-related spending pressures, additional measures are needed to make room for new investment and promoting climate initiatives. Proposals by the Expert Committee on Tax Reform could help make the tax system simpler and more efficient, while suggestions by the Pension Commission to link retirement age limits to life expectancy will have beneficial effects on both the sustainability of the system and labor force participation. However, the changes should be preceded by a comprehensive reform of Norway's disability benefits.

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[6] Data remains adequate for surveillance (see Informational Annex).

29. Further monetary policy tightening is needed as inflation risks are to the upside. GDP growth and the output gap are projected to be positive this year, the labor market is still tight, and consumption, backed by savings accumulated during the pandemic, is still resilient. Against this background, elevated inflation expectations, currency weakness, and broad-based inflation pose upside risks. Accordingly, tighter monetary policy is needed to contain demand and durably bring down inflation to the 2 percent target, which will contribute to high and stable output and employment. Given the uncertainties about the transmission of monetary policy and its impact on the economy, it is important to continue to clearly communicate how economic developments affect the current and future policy stance.

30. The banking system is strong but tightening global conditions pose risks. Risks to financial stability appear to be broadly manageable, but continued vigilance is needed given the heightened uncertainty. While more data on the CRE sector are now available for surveillance and several macroprudential measures have been put in place, further broadening of the toolkit remains appropriate, such as gradually introducing a sectoral systemic risk or countercyclical buffer for CRE. Given high household debt and elevated house prices, there is merit in making the limits on the size of mortgage loans relative to value permanent. As cyber risks are becoming a more prominent threat to financial stability, further strengthening of resilience to cyber-attacks is needed. An important step taken by Norges Bank together with the FSA is the roll out of the TIBER (Threat Intelligence-Based Ethical Red-teaming) framework. Improvements to the AML/CFT framework are ongoing, and the recommendations from a recently concluded IMF assessment of regional cross-border threats and vulnerabilities could be usefully implemented to further enhance supervision.

31. Progress on structural reforms has been piecemeal. Some steps have been taken in further upskilling the workforce, including increased vocational training and the planned introduction of a youth guarantee scheme. However, while spending on retraining has been increased, this has not led to a decline in benefit recipients and their effectiveness should continue to be assessed. Participation in the generous disability benefit system is still very high, draining public finances and depriving the labor market of the much-needed workforce. Also, the issue of housing affordability has become more prominent under high inflation and rising interest rates.

32. Norway continues make important efforts in climate mitigation and adaptation. Among several initiatives, Norway has introduced a schedule of carbon-price increases and has recently launched large-scale publicly supported projects for carbon-capture and storage. Further efforts are needed to fulfil Norway’s 2030 ambition under the Paris Agreement.

33. It is proposed that the next Article IV consultation with Norway be held on the standard 12-month cycle.

Table 1. Norway: Selected Economic and Social Indicators, 2020–28

Population (2022): 5.4 million
Per capita GDP (2022): US$ 106,328.4
Main products and exports: Oil, natural gas, fish (primarily salmon)

Quota (3754.7 mil. SDR/0.78 percent of total)
Literacy: 100 percent

				Projections					
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Real economy									
Real GDP (change in percent)1/	-1.3	3.9	3.3	2.1	2.5	1.8	1.5	1.4	1.4
Real mainland GDP (change in percent)	-2.8	4.2	3.8	1.4	1.9	2.0	1.8	1.8	1.8
Final Domestic demand	-3.9	4.0	4.8	0.9	1.6	1.9	1.9	1.9	1.9
Private consumption	-6.2	4.4	6.9	0.6	1.1	1.9	2.0	2.0	2.0
Public consumption	-0.5	5.0	0.1	1.6	1.7	1.6	1.6	1.6	1.6
Gross fixed capital formation	-3.1	1.7	6.7	0.5	2.4	2.4	2.2	2.2	2.1
Exports	-9.9	5.9	11.0	3.2	3.0	2.9	2.5	2.5	2.5
Imports	-10.5	2.7	11.5	1.5	1.7	2.1	2.2	2.3	2.3
Unemployment rate (percent of labor force)	4.6	4.4	3.3	3.6	3.8	3.8	3.8	3.8	3.8
Output gap (mainland economy, - implies output below potential)	-0.7	1.4	2.1	0.5	-0.5	-0.2	0.0	0.0	0.0
CPI (average)	1.3	3.5	5.8	5.8	3.5	2.6	2.2	2.0	2.0
Core Inflation (average)	3.0	1.7	3.9	5.9	4.4	3.0	2.4	2.0	2.0
Public finance									
Structural non-oil balance (percent of mainland trend GDP) 2/	-11.7	-10.8	-9.8	-10.3	-10.1	-9.9	-9.8	-9.8	-9.8
Fiscal impulse	3.8	-0.9	-1.0	0.5	-0.2	-0.2	-0.1	0.0	0.0
in percent of Pension Fund Global Capital 3/	-3.7	-3.3	-2.8	-3.0	-2.7	-2.5	-2.4	-2.4	-2.3
Gross Public Debt (percent of GDP)	46.1	42.8	37.2	38.8	38.7	38.4	38.3	37.8	37.3
Money and credit (end of period, 12-month percent change)									
Broad money, M2	12.1	10.4	5.6	...	...	...	...	...	...
Domestic credit, C2	4.9	4.9	5.6	...	...	...	...	...	...
Interest rates (year average, in percent)									
Three-month interbank rate	0.4	0.8	0.8	...	...	...	...	...	...
Ten-year government bond yield	0.8	1.1	1.3	...	...	...	...	...	...
Balance of payments (percent of total GDP)									
Current account balance	1.1	13.6	30.3	23.5	21.3	19.7	17.9	16.5	14.9
Balance of goods and services (percent of mainland GDP)	-1.1	16.6	44.2	33.1	29.7	27.0	24.2	21.9	19.4
Terms of trade (change in percent)	-16.1	43.3	45.1	-10.4	-5.2	-4.2	-5.4	-4.8	-5.0
International reserves (end of period, in billions of US dollars)	73.6	83.0	72.1	72.1	72.1	72.1	72.1	72.1	72.1
Gross national saving	32.5	39.2	51.0	46.0	44.7	43.6	42.1	41.0	39.7
Gross domestic investment	31.4	25.6	20.6	22.4	23.4	23.9	24.3	24.5	24.8
Exchange rates (end of period)									
Bilateral rate (NOK/USD), end-of-period	9.4	8.6	9.6	...	...	...	...	...	...
Nominal effective rate (2010=100)	76.2	80.5	79.9	...	...	...	...	...	...
Real effective rate (2010=100)	78.1	83.1	80.8	...	...	...	...	...	...
Memo:									
Nominal GDP (in Billions of US Dollars)	367.6	490.3	579.4	524.9	527.6	534.2	536.6	549.5	561.0

Sources: Norwegian Authorities; International Financial Statistics; United Nations Development Programme; and IMF staff calculations.

1/ Based on market prices which include "taxes on products, including VAT, less subsidies on products."

2/ Authorities' key fiscal policy variable; excludes oil-related revenue and expenditure, GPFG income, as well as cyclical effects. Non-oil GDP trend estimated by staff.

3/ Over-the-cycle deficit target: 3 percent of Government Pension Fund Global.

Table 2. Norway: Medium-Term Indicators, 2020–28

				Projections					
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Real GDP (change in percent)	-1.3	3.9	3.3	2.1	2.5	1.8	1.5	1.4	1.4
Real mainland GDP	-2.8	4.2	3.8	1.4	1.9	2.0	1.8	1.8	1.8
Real Domestic Demand (change in percent)	-3.8	2.6	4.4	1.4	2.1	1.9	1.6	1.5	1.5
Public consumption	-0.5	5.0	0.1	1.6	1.7	1.6	1.6	1.6	1.6
Private consumption	-6.2	4.4	6.9	0.6	1.1	1.9	2.0	2.0	2.0
Gross fixed investment	-4.1	-0.8	4.3	2.1	4.2	2.3	1.4	0.9	0.9
Trade balance of goods and services (contribution to growth)	2.8	1.3	-1.1	0.9	0.4	0.0	-0.2	-0.2	-0.2
Exports of goods and services	-2.3	5.8	5.9	3.7	2.7	1.8	1.7	1.7	1.7
Mainland good exports	-0.8	4.6	-0.3	3.6	3.0	2.7	2.4	2.4	2.4
Imports of goods and services	-9.9	1.7	9.2	1.0	1.5	2.0	2.2	2.2	2.2
Potential GDP (change in percent)	-0.4	1.8	2.5	3.8	3.6	1.5	1.3	1.4	1.4
Potential mainland GDP	-1.9	2.0	3.1	3.1	3.0	1.7	1.6	1.8	1.8
Output gap (percent of potential mainland GDP)	-0.7	1.4	2.1	0.5	-0.5	-0.2	0.0	0.0	0.0
Labor Market (percent)									
Employment	-0.5	2.4	2.7	0.4	0.6	0.8	0.8	0.8	0.8
Unemployment rate LFS	4.6	4.4	3.3	3.6	3.8	3.8	3.8	3.8	3.8
Prices									
GDP deflator	-2.5	17.1	28.1	-3.3	0.0	0.7	0.1	0.5	0.3
Consumer prices (average)	1.3	3.5	5.8	5.8	3.5	2.6	2.2	2.0	2.0
Core inflation (average)	3.0	1.7	3.9	5.9	4.4	3.0	2.4	2.0	2.0
Fiscal Indicators (percent of mainland GDP)									
Central government non-oil balance	-12.1	-11.2	-7.9	-7.9	-7.6	-7.5	-7.5	-7.4	-7.5
General government fiscal balance 1/	-2.9	13.4	40.7	24.3	22.7	20.9	19.6	18.2	16.6
of which: overall revenue	62.1	75.2	101.8	85.5	83.5	81.6	80.2	78.7	77.2
of which: overall expenditure	65.0	62.4	61.2	60.5	60.0	59.6	59.3	59.0	58.7
External Sector									
Current account balance (percent of mainland GDP)	1.2	17.5	47.3	34.1	30.2	27.4	24.3	22.0	19.5
Current account balance (percent of GDP)	1.1	13.6	30.3	23.5	21.3	19.7	17.9	16.5	14.9
Balance of goods and services (percent of mainland GDP)	-1.1	16.6	44.2	33.1	29.7	27.0	24.2	21.9	19.4
Mainland balance of goods	-11.9	-11.0	-11.1	-10.3	-10.2	-9.9	-10.3	-9.7	-9.6
Crude Oil Price	41.8	69.2	96.4	76.4	71.7	68.9	66.7	64.9	63.4

Sources: Norwegian Authorities; and IMF staff calculations.

1/ The data are reported in GFSM 2014 format.

Table 3. Norway: External Indicators, 2020–28

				Projections					
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Current account balance (percent of GDP)	1.1	13.6	30.3	23.5	21.3	19.7	17.9	16.5	14.9
Balance of goods and services	-0.9	12.9	28.3	22.8	21.0	19.4	17.8	16.4	14.8
Balance of goods	-0.3	12.3	28.2	23.9	22.5	21.3	20.0	19.0	17.9
Balance of services	-0.7	0.6	0.2	-1.1	-1.6	-1.8	-2.3	-2.6	-3.1
Exports	32.2	41.7	55.7	50.7	49.1	47.8	46.9	46.4	46.1
Goods	22.8	33.1	46.7	42.6	41.2	40.0	39.3	38.7	38.4
of which oil and natural gas	10.7	21.1	35.4	31.1	29.8	28.5	27.7	26.4	25.3
Services	9.4	8.6	8.9	8.0	7.8	7.7	7.7	7.7	7.7
Imports	33.1	28.8	27.3	27.9	28.1	28.3	29.2	30.0	31.3
Goods	23.1	20.8	18.6	18.7	18.7	18.8	19.3	19.7	20.5
Services	10.1	8.0	8.8	9.2	9.4	9.6	9.9	10.3	10.8
Balance on income	2.0	0.7	2.0	0.7	0.3	0.3	0.1	0.1	0.1
Capital account balance (percent of GDP)	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0
Financial account balance (excluding change in reserves) (percent of GDP)	-1.3	12.9	26.2	23.5	21.3	19.7	17.9	16.5	14.9
Net direct investment	-1.9	2.8	1.8	2.6	2.8	2.0	2.1	2.1	2.1
Net portfolio investment	1.4	8.4	25.9	7.8	7.2	6.7	7.1	7.7	7.7
Net other investment	-0.8	1.7	-1.4	13.1	11.3	11.0	8.7	6.7	5.1
Net errors and omissions (percent of GDP)	1.2	-0.3	4.5	0.0	0.0	0.0	0.0	0.0	0.0
Change in reserves (percent of GDP)	1.1	2.1	-0.5	0.0	0.0	0.0	0.0	0.0	0.0
Stock of net foreign assets (IIP) (percent of GDP)	281.0	276.8	209.3	...	...	...	...	...	...
Direct investment, net	8.2	7.9	9.5	...	...	...	...	...	...
Portolio investment, net	278.5	270.6	202.5	...	...	...	...	...	...
Other investment, net	-24.3	-19.3	-15.5	...	...	...	...	...	...
Official reserves, assets	18.6	17.7	12.8	...	...	...	...	...	...
Government Pension Fund Global (percent of mainland GDP)	355.6	375.3	348.1	...	...	...	...	...	...

Sources: Statistics Norway, Ministry of Finance, and IMF staff calculations.

Table 4. Norway: General Government Accounts, 2020–28

(NOK, and percent of mainland GDP)

				Projections					
	2020	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
General Government					*Percent of Mainland GDP*				
Revenue	62.1	75.2	101.8	85.5	83.5	81.6	80.2	78.7	77.2
Oil Related Revenue	10.3	21.6	48.4	32.2	30.1	28.2	26.8	25.1	23.6
Non-oil Related Revenue	51.8	53.6	53.4	53.4	53.4	53.4	53.4	53.6	53.6
Social Security	12.6	12.4	12.3	12.3	12.3	12.3	12.3	12.3	12.3
Interest	3.0	2.2	2.8	3.9	3.8	4.1	4.3	4.2	4.1
Expenditure	65.0	61.9	61.1	61.3	60.9	60.7	60.6	60.6	60.6
Non-oil Expenditure	65.0	61.9	61.1	61.3	60.9	60.7	60.6	60.6	60.6
Social Security	18.9	18.1	17.2	17.2	17.1	17.1	17.0	17.0	17.0
Interest	0.8	0.6	0.9	1.2	1.2	1.3	1.4	1.3	1.3
Overall Balance	-2.9	13.4	40.7	24.3	22.7	20.9	19.6	18.2	16.6
Non-Oil Balance	-13.3	-8.2	-7.7	-7.9	-7.5	-7.3	-7.2	-7.0	-7.0
General Government					*Bil. NOK*				
Revenue	1904.4	2473.6	3634.0	3246.7	3318.9	3391.4	3459.9	3525.4	3588.3
Oil Related Revenue	316.8	709.5	1728.5	1221.2	1198.2	1173.1	1157.3	1126.3	1098.0
Non-oil Related Revenue	1587.6	1764.1	1905.5	2025.6	2120.8	2218.3	2302.6	2399.1	2490.2
Social Security	386.8	408.7	438.1	465.7	487.5	510.0	529.3	551.5	572.5
Interest	92.7	71.8	100.8	149.0	150.4	169.2	187.6	187.9	188.7
Expenditure	1994.4	2033.9	2180.4	2325.5	2418.7	2521.7	2613.2	2712.5	2815.5
Non-oil Expenditure	1994.4	2033.9	2180.4	2325.5	2418.7	2521.7	2613.2	2712.5	2815.5
Social Security	579.3	593.9	612.9	653.7	679.9	708.8	734.5	762.4	791.4
Interest	23.1	18.7	31.4	46.4	46.9	52.7	58.4	58.5	58.8
Overall Balance	-90.0	439.7	1453.6	921.2	900.2	869.7	846.8	812.9	772.7
Non-Oil Balance	-406.8	-269.8	-274.8	-300.0	-297.9	-303.3	-310.5	-313.4	-325.3
Central Government									
Structural Non-Oil Balance as % of GPFG	-3.7	-3.3	-2.8	-3.0	-2.7	-2.5	-2.4	-2.4	-2.3

Sources: Norwegian Authorities: and IMF staff calculations.

The data are reported in GFSM 2014 format.

Table 5. Norway: Financial Soundness Indicators, 2018–22

(Percent)

	2018	2019	2020	2021	2022
Capital Adequacy					
Regulatory Capital to Risk-Weighted Assets	22.3	24.2	24.8	25.0	23.7
Regulatory Tier 1 Capital to Risk-Weighted Assets	19.6	21.4	22.0	22.2	21.3
Total Capital to Total Assets	11.3	11.3	11.2	11.3	9.8
Asset Quality and Exposure					
Non-performing Loans to Total Gross Loans	0.7	0.8	0.7	0.5	0.5
Non-performing Loans Net of Provisions to Capital	0.1	0.7	0.3	0.3	0.5
Earnings and Profitability					
Return on Assets	1.3	1.6	1.1	1.3	1.1
Return on Equity	11.9	14.0	9.9	11.7	11.8
Non-interest Expenses to Gross Income, percent	46.3	42.1	44.0	45.6	46.8
Liquidity					
Liquid Assets to Total Assets (Liquid Asset Ratio)	8.2	10.0	9.8	10.3	12.7
Liquid Assets to Short Term Liabilities	15.8	20.0	18.9	19.0	24.7
Memorandum Items:					
Change in Housing Price Index (in percent, year average)	1.4	2.5	4.3	10.5	5.2
Total Household Debt (in percent of GDP)	104.0	109.1	120.2	104.8	91.6
Total Household Debt (in percent of disposable income)	242.2	243.7	250.0	254.0	244.4
Gross Debt of Non-financial Corporations (in percent of GDP)	130.8	145.2	170.3	151.5	111.7

Sources: ECB; IMF Financial Soundness Indicators; and OECD.

Table 6. Norway: Monetary Survey, 2018–22

(Billion NOK)

	2018	2019	2020	2021	2022
Central Bank balance sheet					
Assets	8851	10727	11679	13172	13200
Liabilities	8612	10464	11403	12883	12930
M3, Monetary aggregates (outstanding ammounts)					
Households	1294	1348	1467	1575	1640
Municipal government	105	107	115	133	141
Nonfinancial corporations	728	755	897	1037	1126
Other financial corporations	133	142	155	167	167
Broad Money (M3)	2259	2351	2635	2912	3073
M2	2253	2348	2633	2908	3069
M1	2097	2162	2465	2724	2811
Currency in circulation	42	39	38	37	38
Transaction Deposits	2055	2123	2427	2686	2774
Other Deposits	156	186	168	184	258
Certificates and bonds	7	3	0	2	3
Repurchase agreements	0	0	2	2	1
Memorandum item:					
M3 growth, percent	3.5	4.1	9.0	10.9	7.7

Source: Norges Bank and Statistics Norway.

Annex I. Public Debt Sustainability Assessment

Annex I. Figure 1. Norway: Risk of Sovereign Stress

Horizon	Mechanical signal	Final assessment	Comments
Overall	...	Low	The overall risk of sovereign stres is low, reflecting a low level of public debt and high buffers..
Near term 1/			
Medium term	Moderate	Low	Medium-term risks are assessed as low against a mechanical moderate (in the fan chart only) on the basis of the high buffers, strength of institutions.
Fanchart	High	...	
GFN	Low	...	
Stress test	...	...	
Long term	...	Moderate	Long-term risks are moderate as aging-related expenditures on health and social security feed into debt dynamics.
Debt stabilization in the baseline			No

DSA Summary Assessment

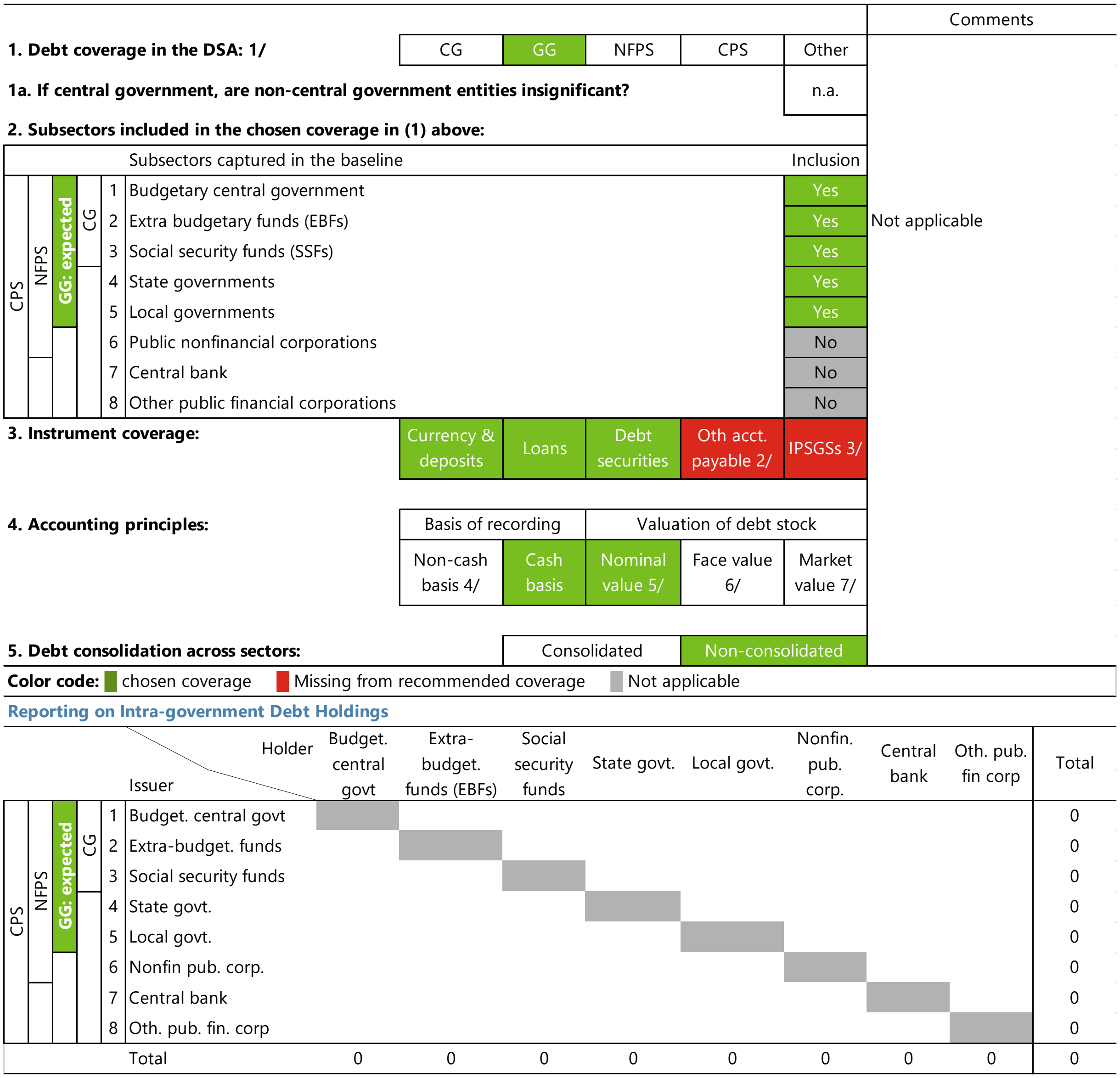
Commentary: Norway is at a low overall risk of sovereign stress and debt is sustainable. Debt is expected to stabilize and decline over the medium term. Medium-term liquidity risks as analyzed by the GFN Financeability Module are low. Over the longer run, Norway should continue with reforms to tackle population aging and its impact on public spending. However, the large buffers will keep the risks low.

Source: IMF staff calculations.

Note: The risk of sovereign stress is a broader concept than debt sustainability. Unsustainable debt can only be resolved through exceptional measures (such as debt restructuring). In contrast, a sovereign can face stress without its debt necessarily being unsustainable, and there can be various measures—that do not involve a debt restructuring—to remedy such a situation, such as fiscal adjustment and new financing.

1/ The near-term assessment is not applicable in cases where there is a disbursing IMF arrangement. In surveillance-only cases or in cases with precautionary IMF arrangements, the near-term assessment is performed but not published.

Annex I. Figure 2. Norway: Debt Coverage and Disclosures



						Comments
1. Debt coverage in the DSA: 1/	CG	🟩 GG	NFPS	CPS	Other	
1a. If central government, are non-central government entities insignificant?					n.a.	

2. Subsectors included in the chosen coverage in (1) above:

					Subsectors captured in the baseline	Inclusion	Comments
CPS	NFPS	🟩 GG: expected	CG	1	Budgetary central government	🟩 Yes	
				2	Extra budgetary funds (EBFs)	🟩 Yes	Not applicable
				3	Social security funds (SSFs)	🟩 Yes	
				4	State governments	🟩 Yes	
				5	Local governments	🟩 Yes	
				6	Public nonfinancial corporations	▨ No	
				7	Central bank	▨ No	
				8	Other public financial corporations	▨ No	

3. Instrument coverage:	🟩 Currency & deposits	🟩 Loans	🟩 Debt securities	🟥 Oth acct. payable 2/	🟥 IPSGSs 3/

4. Accounting principles:	Basis of recording		Valuation of debt stock		
	Non-cash basis 4/	🟩 Cash basis	🟩 Nominal value 5/	Face value 6/	Market value 7/

5. Debt consolidation across sectors:	Consolidated	🟩 Non-consolidated

Color code: 🟩 chosen coverage 🟥 Missing from recommended coverage ▨ Not applicable

Reporting on Intra-government Debt Holdings

				Holder / Issuer	Budget. central govt	Extra-budget. funds (EBFs)	Social security funds	State govt.	Local govt.	Nonfin. pub. corp.	Central bank	Oth. pub. fin corp	Total
CPS	NFPS	🟩 GG: expected	CG	1 Budget. central govt	▨								0
				2 Extra-budget. funds		▨							0
				3 Social security funds			▨						0
				4 State govt.				▨					0
				5 Local govt.					▨				0
				6 Nonfin pub. corp.						▨			0
				7 Central bank							▨		0
				8 Oth. pub. fin. corp								▨	0
				Total	0	0	0	0	0	0	0	0	0

Source: IMF staff calculations.

1/ CG=Central government; GG=General government; NFPS=Nonfinancial public sector; PS=Public sector.

2/ Stock of arrears could be used as a proxy in the absence of accrual data on other accounts payable.

3/ Insurance, Pension, and Standardized Guarantee Schemes, typically including government employee pension liabilities.

4/ Includes accrual recording, commitment basis, due for payment, etc.

5/ Nominal value at any moment in time is the amount the debtor owes to the creditor. It reflects the value of the instrument at creation and subsequent economic flows (such as transactions, exchange rate, and other valuation changes other than market price changes, and other volume changes).

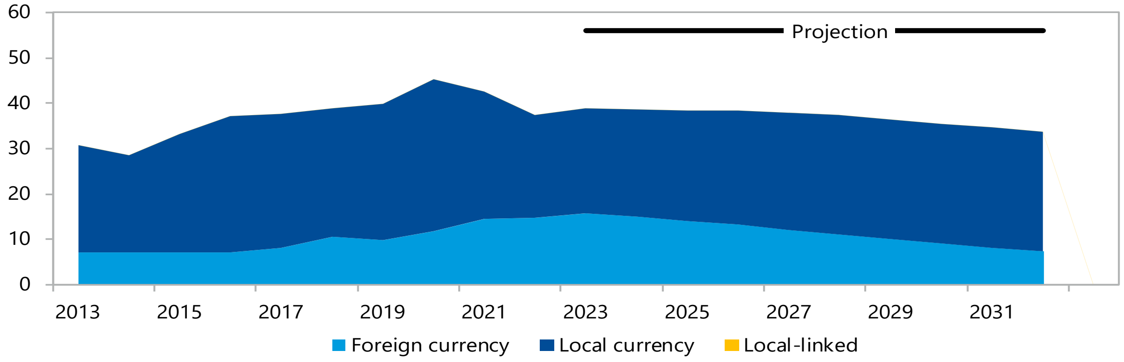
6/ The face value of a debt instrument is the undiscounted amount of principal to be paid at (or before) maturity.

7/ Market value of debt instruments is the value as if they were acquired in market transactions on the balance sheet reporting date (reference date). Only traded debt securities have observed market values.

Commentary: N/A

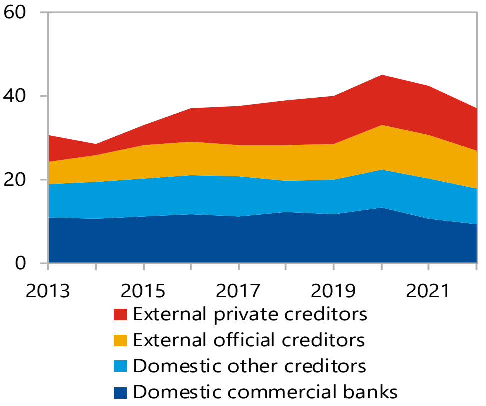
Annex I. Figure 3. Norway: Public Debt Structure Indicators

Debt by Currency (Percent of GDP)



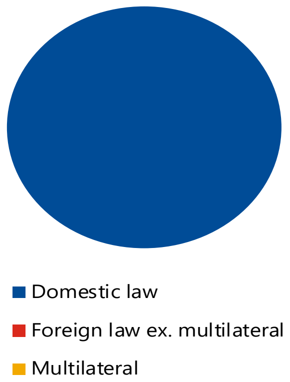
Note: The perimeter shown is general government.

Public Debt by Holder (Percent of GDP)



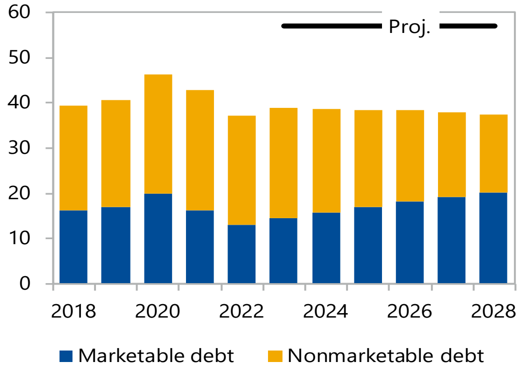
Note: The perimeter shown is general government.

Public Debt by Governing Law, 2022 (Percent)



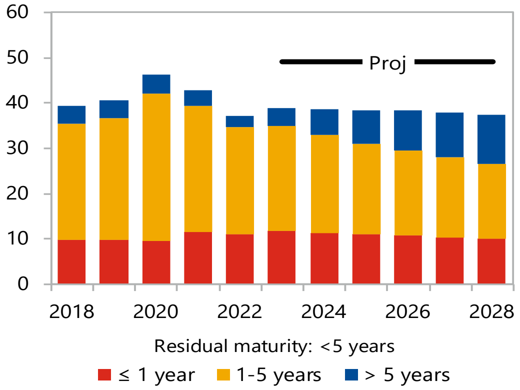
Note: The perimeter shown is general government.

Debt by Instruments (Percent of GDP)



Note: The perimeter shown is general government.

Public Debt by Maturity (Percent of GDP)



Note: The perimeter shown is general government.

Commentary: Public debt is predominantly in domestic currency, with a larger incidence of loans vs securities (less than 50 percent).

Source: IMF staff calculations.

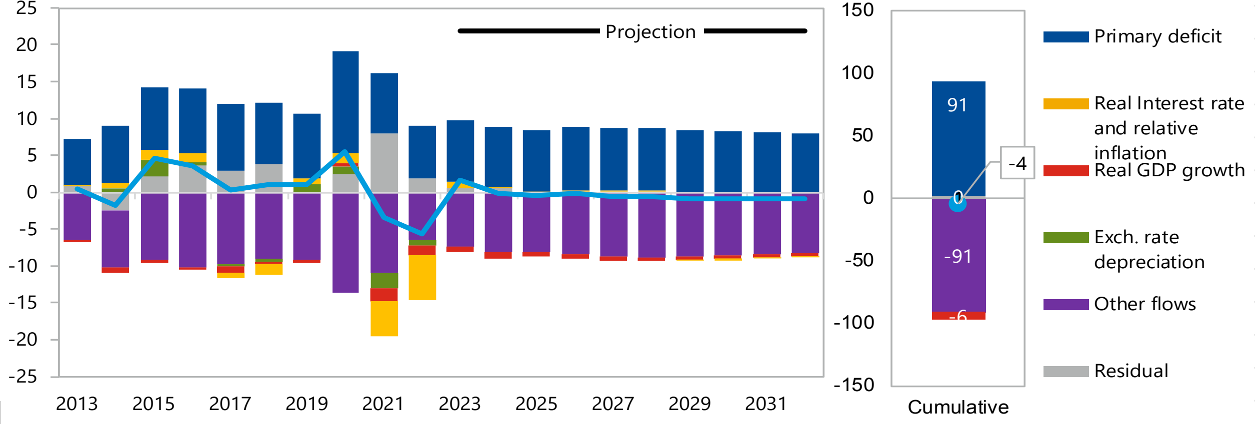
Annex I. Figure 4. Norway: Baseline Scenario

(Percent of GDP unless indicated otherwise)

	Actual	Medium-term projection						Extended projection			
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Public Debt	37.2	38.8	38.7	38.4	38.3	37.8	37.3	36.4	35.5	34.6	33.7
Change in Public Debt	-5.6	1.7	-0.1	-0.3	-0.1	-0.5	-0.5	-0.9	-0.9	-0.9	-0.9
Contribution of identified flows	-7.5	1.1	-0.8	-0.4	-0.2	-0.6	-0.6	-0.9	-0.9	-0.8	-0.8
Primary deficit	7.1	8.3	8.1	8.3	8.6	8.5	8.5	8.4	8.3	8.1	8.0
Noninterest revenues	31.0	32.9	33.7	34.2	34.8	35.7	36.6	36.1	35.5	35.0	34.4
Noninterest expenditures	38.2	41.2	41.8	42.5	43.4	44.2	45.1	44.5	43.8	43.1	42.5
Automatic debt dynamics	-8.3	0.0	-0.8	-0.7	-0.4	-0.4	-0.3	-0.6	-0.6	-0.6	-0.6
Real interest rate and relative inflatio	-6.0	0.8	0.1	0.0	0.2	0.1	0.2	-0.2	-0.2	-0.2	-0.2
Real interest rate	-8.7	1.6	0.5	0.2	0.4	0.3	0.4	-0.2	-0.2	-0.2	-0.2
Relative inflation	2.7	-0.8	-0.3	-0.2	-0.3	-0.2	-0.2	0.0	0.0	0.0	0.0
Real growth rate	-1.4	-0.8	-1.0	-0.7	-0.6	-0.5	-0.5	-0.4	-0.4	-0.4	-0.4
Real exchange rate	-0.9	…	…	…	…	…	…	…	…	…	…
Other identified flows	-6.4	-7.3	-8.0	-8.0	-8.4	-8.7	-8.8	-8.6	-8.5	-8.4	-8.2
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other transactions	-6.4	-7.3	-8.0	-8.0	-8.4	-8.7	-8.8	-8.6	-8.5	-8.4	-8.2
Contribution of residual	1.9	0.6	0.6	0.1	0.1	0.1	0.1	0.0	-0.1	-0.1	0.0
Gross Financing Needs	0.0	8.3	8.5	8.8	9.1	9.1	9.3	9.1	8.9	8.7	8.6
of which: debt service	-5.4	2.7	3.1	3.4	3.7	3.8	3.9	3.8	3.7	3.6	3.5
Local currency	-3.3	1.7	1.7	2.0	2.4	2.5	2.6	2.5	2.4	2.4	2.3
Foreign currency	-2.1	1.0	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.1
Memo:											
Real GDP growth (percent)	3.3	2.1	2.5	1.8	1.5	1.4	1.4	1.2	1.2	1.2	1.2
Inflation (GDP deflator; percent)	28.1	-3.3	0.0	0.7	0.1	0.5	0.3	1.8	2.0	2.0	2.0
Nominal GDP growth (percent)	32.3	-1.2	2.5	2.5	1.6	1.9	1.7	3.0	3.2	3.2	3.2
Effective interest rate (percent)	1.1	1.0	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4

Contribution to Change in Public Debt

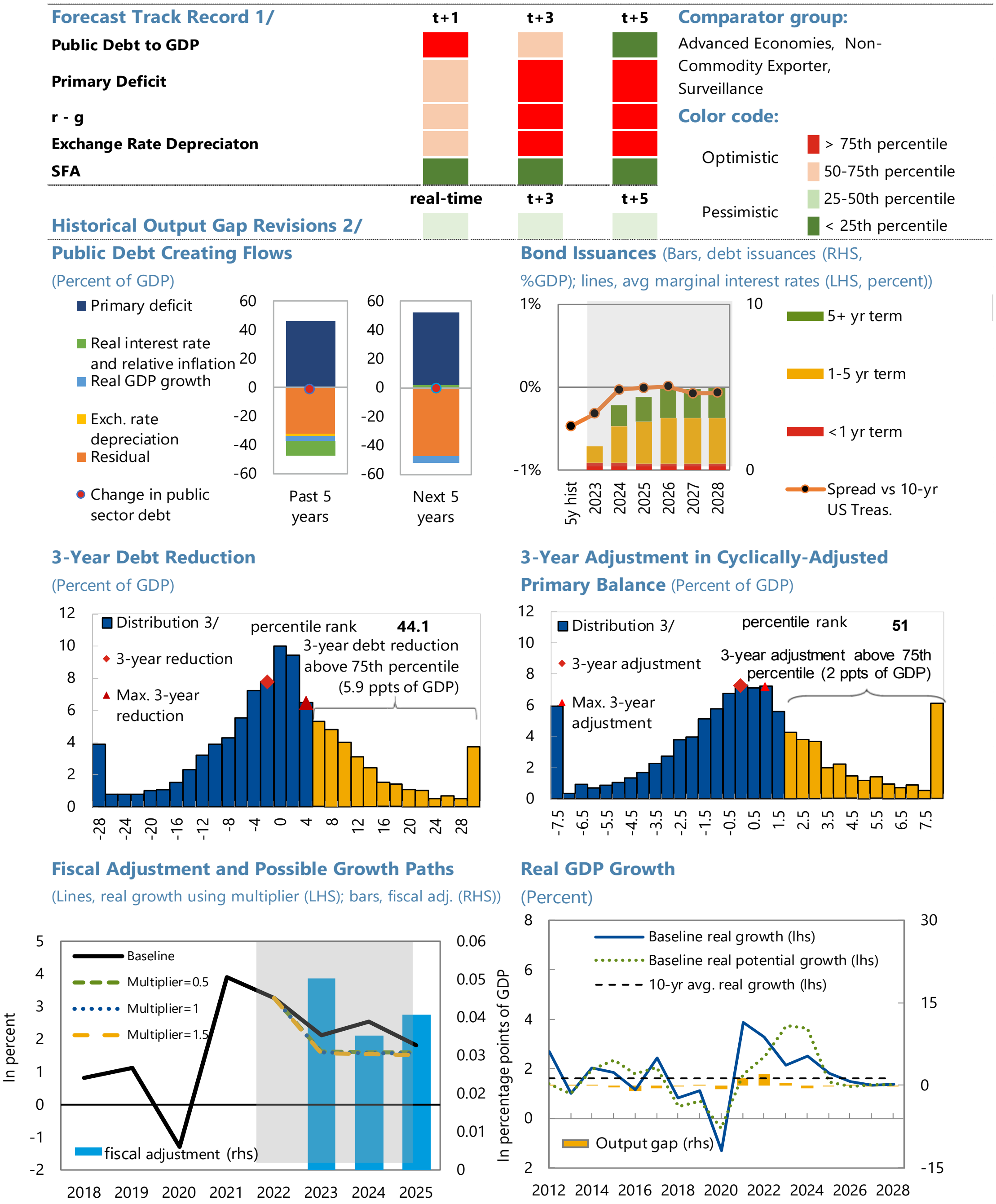
(percent of GDP)



Staff commentary: Public debt will stablize and decline over time, reflecting GDP growth, and low borrowing needs.

Source: IMF staff calculations.

Annex I. Figure 5. Norway: Realism of Baseline Assumptions



Forecast Track Record 1/

Public Debt Creating Flows (Percent of GDP)

Bond Issuances (Bars, debt issuances (RHS, %GDP); lines, avg marginal interest rates (LHS, percent))

3-Year Debt Reduction (Percent of GDP)

3-Year Adjustment in Cyclically-Adjusted Primary Balance (Percent of GDP)

Fiscal Adjustment and Possible Growth Paths (Lines, real growth using multiplier (LHS); bars, fiscal adj. (RHS))

Real GDP Growth (Percent)

Commentary: Realism analysis reflect large fluctuations due to oil price volatility and past forecast errors reveal some optimistic bias.

Source : IMF staff calculations.

1/ Projections made in the October and April WEO vintage.

2/ Calculated as the percentile rank of the country's output gap revisions (defined as the difference between real time/period ahead estimates and final estimates in the latest October WEO) in the total distribution of revisions across the data sample.

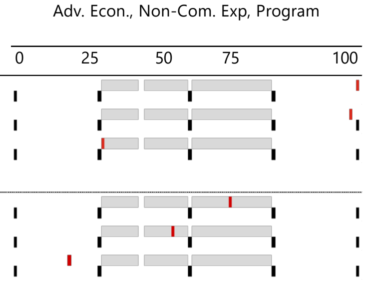
3/ Data cover annual observations from 1990 to 2019 for MAC advanced and emerging economies. Percent of sample on vertical axis.

Annex I. Figure 6. Norway: Medium-Term Risk Analysis

Debt Fanchart and GFN Financeability Indexes

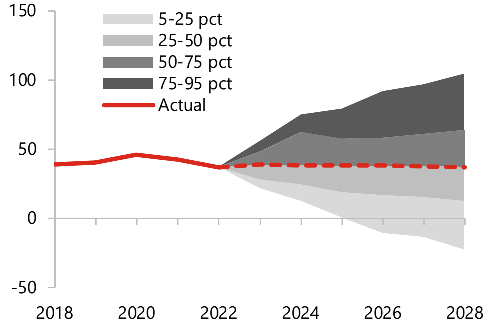
(percent of GDP unless otherwise indicated)

Module	Indicator	Value	Risk index	Risk signal
Debt fanchart module	Fanchart width	127.4	1.9	...
	Probability of debt not stabilizing (pct)	99.7	0.8	...
	Terminal debt level x institutions index	5.0	0.1	...
	Debt fanchart index	**...**	**2.8**	**High**
GFN finance-ability module	Average GFN in baseline	8.8	3.0	...
	Bank claims on government (pct bank assets)	4.9	1.6	...
	Chg. in claims on govt. in stress (pct bank assets)	1.0	0.3	...
	GFN financeability index	**...**	**4.9**	**Low**

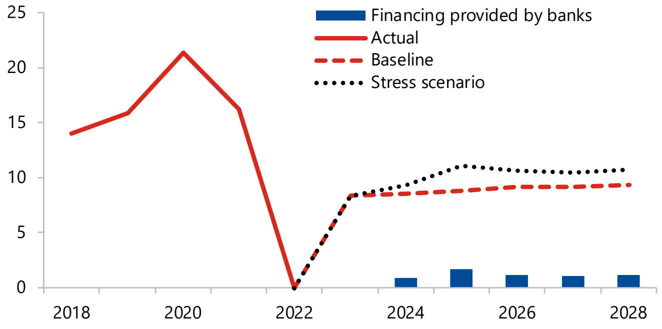


Legend: ▯ Interquartile range 🟥 Norway

Final Fanchart (Pct of GDP)



Gross Financing Needs (Pct of GDP)

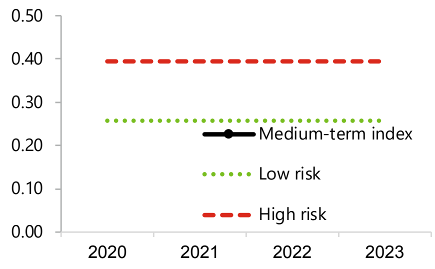


Triggered stress tests (stress tests not activated in gray)

Banking crisis Commodity prices Exchange rate Contingent liab. Natural disaster

Medium-term Index

(index number)



Medium-term Risk Analysis

	Low risk threshold	High risk threhsold	Weight in MTI	Normalized level
Debt fanchart index	1.1	2.1	0.5	0.6
GFN finaceability index	7.6	17.9	0.5	0.1
Medium-term index (MTI)	0.3	0.4	...	0.4, Moderate

Prob. of missed crisis, 2023-2028 (if stress not predicted): 27.3 pct.

Prob. of false alarm, 2023-2028 (if stress predicted): 20.5 pct.

Commentary: Of the two medium-term tools, the Debt Fanchart Module is pointing to a high level of risk, due to high width of bands, but the debt will remain relatively low even in the more extreme scenarios, while the GFN Financeability Module suggests low level of risk.

Source: IMF staff calculations.

Annex II. External Sector Assessment

***Overall Assessment*:** The external position of Norway in 2022 was moderately stronger than the level implied by medium-term fundamentals and desirable policies, based on both the current account and REER assessments. The projected slowdown in growth in 2023 and subsequent recovery are expected to bring the external balance further down before stabilizing at its long-term average.

Potential Policy Responses: Norway has sizable external buffers with a positive NIIP of more than 3.5 times mainland GDP. External buffers provide significant time to address competitiveness issues as Norway gradually shifts away from its offshore activities. Fiscal and structural policies should aim to foster productivity growth, higher labor market participation, and wage moderation to enhance non-oil sector competitiveness. As inflation decelerates, there is scope for greener and growth-enhancing private and public investments to facilitate structural transformation of the economy.

Foreign Assets and Liabilities: Position and Trajectory

Background. Norway's net international investment and reserve position remain strong. NIIP decreased to 326.7 percent of mainland GDP at end-2022, from 354.5 percent in 2021. The general government is the main external creditor with net external assets of 327 percent of mainland GDP, notably the Government Pension Fund Global (GPFG), with assets under management reaching 3.5 times mainland GDP by end-2022.[1] The financial sector remains the largest net external debtor, given reliance on wholesale funding, at about 35 percent of GDP. International reserves have remained broadly stable at a comfortable 19.9 percent of mainland GDP.

Assessment. The NIIP position is expected to remain strong and stable due to the sound management of GPFG's assets. Negative revaluation risks are mitigated by asset diversification.

2022 (percent mainland GDP)	NIIP: 326.7	Gross Assets: 614.2	Res. Assets: 19.9	Gross Liab.: 287.5	Gross External Debt: 212

Current Account

Background. Driven by large oil exports, the CA has been persistently strong, averaging 9 percent of total GDP over 2010–21. The mainland trade balance, on the other hand, remains dominated by imports, averaging near -9.5 percent of mainland GDP over 2010–21, despite the positive real growth of non-oil exports (near 2 percent average) over the same period. In 2022, due to slightly lower net exports of goods and high recovery-driven-imports of services, net real mainland exports decreased by -12.9 percent; the total nominal trade balance increased to 44.2 percent of mainland GDP, compared to 16.6 percent in 2021. Overall, the current account increased to 30.3 percent of total GDP in 2022, from 13.6 percent of total GDP in 2021, driven by high oil prices, services exports, and primary income balance. It remains uncertain how persistent the impact of the pandemic and the war in Ukraine will be, particularly on the tourism and oil balances. Staff's current assessment is that the larger share of these dynamics is only temporary, and a return to lower oil prices and full resumption of travel activities is likely to bring the trade balance closer to its historical pattern.

Assessment. The current account is assessed to be moderately stronger than what is implied by fundamentals and desirable policies. The cyclically adjusted 2022 CA per EBA calculations was 21.5 percent of GDP, while the EBA regression-estimated norm is 16 percent of GDP, suggesting a gap of 5.5 percent. After correcting for short-term COVID-19 effects,, the estimated gap is 4.8 percent.[2] However, staff assesses that estimation of the EBA norm in Norway is prone to a significant bias due to Norway-specific characteristics.[3] The estimated bias is about -3 percent of GDP, bringing the overall CA gap to 1.8 percent.

Norway: Model Estimates for 2022
(In percent of GDP)

	CA model	REER model	ES model
CA-Actual	**30.4**		
Cyclical Contributions (from model)	8.9		
Additional temporary/statistical factors			
Adjusted CA	**21.5**		
Adjusted CA Norm	**16**		
CA gap	**5.5**	**7.4**	**12.1**
o/w Policy gap	4.7		
Staff Gap 1/	**1.8**		
Adjustors	-3.7		
Elasticity	0.28		
REER Gap 2/	**-6.4**	**-26.3**	**-43.3**

1/ Includes Covid-19 and measurement bias adjustors.
2/ Calculated using the inverse elasticity on the CA gap, without including any adjustors.

Real Exchange Rate

Background. Norway's real effective exchange rate (REER) index depreciated by around 2¼ ppts in 2022 relative to 2021. The depreciation was due to likely several factors, such as the faster rise in the interest rates in trading partners, higher uncertainty, and risks related to the war, which affect risk premia and thus weaken the krone.

Assessment. The staff CA gap implies a REER gap of -6.4 percent (applying an estimated elasticity of 0.28). The estimates from the REER index and level models suggest a gap of -26.3 percent (i.e., undervalued relative to real exchange rate index norm) and -35 percent, respectively, for 2022. Overall, the IMF assesses the krone to be undervalued, although there are considerable uncertainties around these estimates. In particular, the real exchange rate level approach is not considered to be adequate for commodity exporters like Norway.

Capital and Financial Accounts: Flows and Policy Measures

Background. Flows, both outflows and inflows, mainly span Nordic and EU countries. With banks' heavy reliance on wholesale funding—accounting for about half of total banks' funding—and about half of wholesale funding from foreign sources, banks are vulnerable to turbulence in foreign financial markets.

Assessment. Financial account vulnerability is low, but the banking sector's reliance on external wholesale funding remains a source of vulnerability. The increase of duration in part of the funding structure is a positive development.

FX Intervention and Reserves Level

Background. The krone floats freely against other currencies. Norges Bank has not intervened in FX markets since 1999, with a brief exception in March 2020, owing to the extraordinary market turbulence spurred by the pandemic. At the end of 2022, Norges Bank reserves were at 19.9 percent of mainland GDP.

Assessment. Reserves are ample, even considering the exposure of banks to wholesale funding, and risks of macro-financial shocks (imports are less than 35 percent of total GDP and there is no general government short-term financing risk due to the large pension fund).[4]

1/ In line with global stock markets, the fund saw the work performance in 14 years with negative double-digit returns on equities and fixed income portfolios.

2/ Particularly mainly due to travel (-0.8) and transport (0.1); the corresponding COVID-19 adjustments to the norm are estimated at -0.7 percent.

3/ There are several sources of bias: (i) the large size and particular composition of Norway's foreign assets (tilted towards portfolio equity) makes the country's CA balance particularly prone to the portfolio equity retained earnings bias, which is estimated to be around -3.9 percent of GDP for Norway. In addition, estimated IIP valuation changes averaged around 8 percent of GDP over the past decade, which inflate the amount of dividend yields estimated as part of the CA norm and lead to a sizable overstatement of the CA norm; (ii) productivity of the non-oil sector is lower than implied by average productivity; and (iii) oil affects the norm considerably, but the adequacy of the econometric specification is doubtful.

4/ Standard reserves adequacy metrics are not adequate for the case of Norway given its large pension fund which is mostly invested in foreign markets and is fully diversified away from oil markets.

Annex III. Krone Developments and Implications for Monetary Policy[1]

The exchange rate has been more depreciated than its estimated trend since the pandemic. Possible explanatory factors include a higher convenience yield, a potentially lower impact of oil prices, and the narrowing of positive interest rate differentials vis-à-vis trading partners. Also, the exchange rate passthrough to inflation is found to be higher during depreciation episodes. Accordingly, from a risk management perspective, further policy tightening to mitigate the impact on inflation appears warranted.

1. **Exchange rate dynamics in Norway are largely influenced by global factors.** An equilibrium model of the nominal exchange rate based on interest rate differentials between Norway and its main trading partners and the level of the (real) oil price has generally explained well movements of the exchange rates (Alstad, 2010). However, since the beginning of the pandemic, the nominal exchange rate has been more depreciated than implied by its longer-term trend.

2. **Several factors are likely contributing to the current krone weakness.** According to Norges Bank (2023), the currently observed undervaluation could be explained by narrowing interest rate differentials and increased global economic uncertainty.[2] When global uncertainty increases, investors tend to rebalance their portfolio toward more liquid assets. Traditionally, this is ascribed to the special role of the US dollar. However, recent literature shows that relative liquidity of domestic currency assets can impact exchange rates more generally. Engel and Wu (2022) find a strong correlation between exchange rate movements and the convenience yield.[3] A trade-weighted measure of the convenience yield for Norway's one-year government bond yield vis-à-vis other advanced economies, calculated by staff, shows a downward trend since the beginning of the pandemic (Figure 1).[4] While it is possible that other causes are leading investors to shift away from krone, the relatively low liquidity of the Norwegian currency and bond markets appear to be contributing factors to its current weakness. In this context, the unprecedented increase in oil revenues and the net sale of krone needed to manage these large inflows within the Petroleum Fund Mechanism, may have also influenced the currency.

3. **A weaker krone tends to lead to higher inflation; thus, prolonged currency weakness points to upside inflation risks, supporting further policy tightening.** Studies for Norway have found that a 1 percent depreciation of the currency results in a 0.65 percent increase in imported

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[1] Prepared by Salvatore Dell'Erba.

[2] The increased role of the United States as an energy exporter implies that higher economic activity will strengthen both oil price and the dollar, which will limit the extent of appreciation in oil producing countries (Rees, 2023).

[3] The convenience yield is defined as the forward premium plus the difference between foreign and domestic one year government bond yields. See also Bacchetta and Chikani (2021) for a discussion on the role of the convenience yield related to the developments of the Swedish krona over the past years.

[4] The sample used to construct the convenience yield is the same as in Engel and Wu (2022) and is composed of: Australia, Canada, Euro Area, Japan, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and United States.

prices and 0.1 percent increase in core inflation after a year (Bergset et al., 2016). Past depreciation episodes in Norway have kept inflation temporarily above target. Several studies suggest that exchange rate passthrough may be asymmetric, e.g., it is higher during episodes of large depreciation.[5] Furthermore, there is evidence that the passthrough is asymmetric during period of high inflation and elevated uncertainty (Carriere-Swallow et al., 2023). Accordingly, from a risk management perspective, further tightening by Norges Bank appears necessary to ensure durable disinflation towards its 2 percent target.

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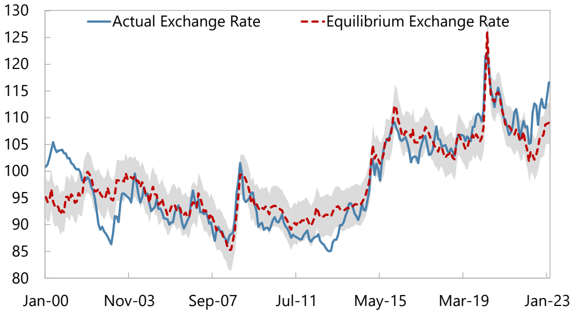
[5] See Caselli and Roitman (2019) and Holm (2014) for Norway.

Annex III. Figure 1. Krone Developments

The exchange rate has deviated from its long-run equilibrium since the pandemic.

Actual and Equilibrium Exchange Rate

(Index, + = depreciation)

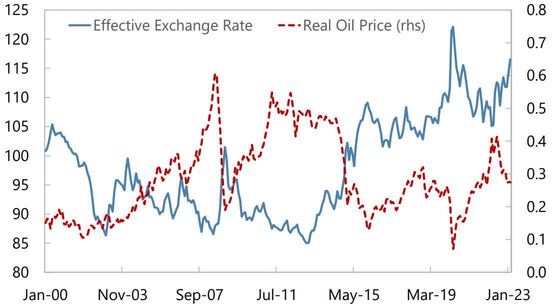


Sources: Haver Analytics; Refinitiv; Bloomberg; Norges Bank; and IMF staff calculations.

The currency has depreciated since oil prices started to fall in the summer of 2022.

Effective Exchange Rate and Oil Price

(Index (+= depreciation) and Brent $/US CPI)

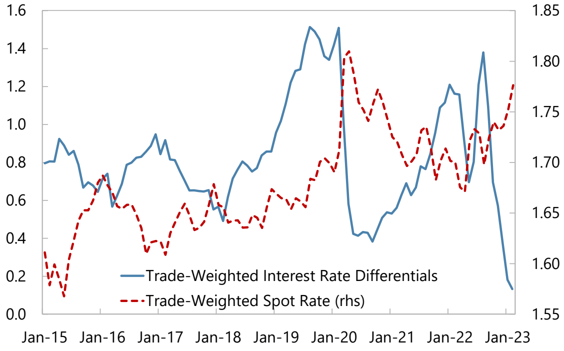


Sources: Haver Analytics; Refinitiv; Bloomberg; Norges Bank; and IMF staff calculations.

Norway has enjoyed high interest rate differentials but those have narrowed…

Trade-Weighted Interest Rate Differential and Spot Rate

(Percent; weighted average)

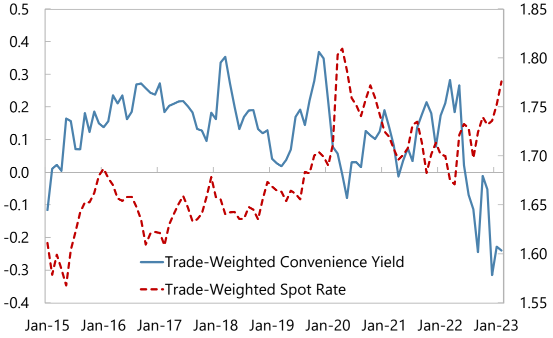


Sources: Haver Analytics; Refinitiv; Bloomberg; and IMF staff calculations.

…with a decline in convenience yield of NOK denominated bonds…

Trade-Weighted Convenience Yield and Spot Rate

(Percent; weighted average)

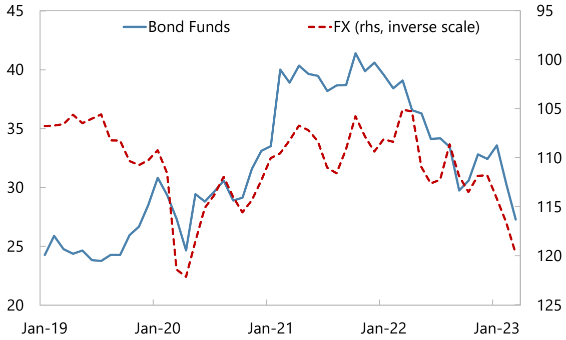


Sources: Haver Analytics; Refinitiv; Bloomberg; and IMF staff calculations.

… with outflows of investors from Funds investing in Norwegian bonds.

Bond Funds and Exchange Rate

(Estimated Ending Allocations, US Dollar Billions and Index)

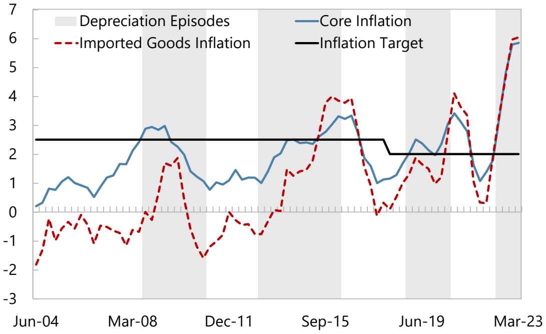


Sources: Haver Analytics; and EPFR.

Past depreciation episodes have resulted in inflation being temporarily above target.

Inflation and Depreciation Episodes

(Percent, y/y)



Sources: Haver Analytics; Refinitiv; Bloomberg; and IMF staff calculations.

Note: The Trade-Weighted Spot rate, the Trade-Weighted Interest Rate and the Trade-Weighted Convenience Yield are respectively: the average log nominal bilateral exchange rate, the average one-year government bond differentials, and the average of the convenience yield between Norway and countries in footnote 2.

Annex IV. Effect of Interest Rate Increases on Consumption in Norway[1]

Estimates of the impact of interest rates on consumption vary in the literature. Staff analysis suggests that the elasticity of consumption to interest rates has increased since early 2000s, possibly reflecting higher household indebtedness. Staff estimates are broadly in line with estimates in the literature, but somewhat lower than Norges Bank's estimates. Accordingly, staff forecasts weaker private consumption, among other factors, due to higher mortgage payments reflecting higher policy rates and uncertainty. However, still strong labor market and savings, depending on age and wealth distribution, could mitigate the impact on consumption and hence output.

1. **Consumption is an important driver of GDP growth.** Historically, pre-pandemic consumption growth (1996–2019) in Norway has averaged about 2¾ percent, accounting, overall, for about ½ of mainland GDP growth. Private consumption share in GDP has averaged about 48 percent over 1980–2022.

2. **Norway households, on average, have high levels of savings as well as debt and thus are highly exposed to effects of monetary policy.** The level of savings to net disposable income was around 13 percent in 2021, and savings grew dramatically during the pandemic. Debt represented around 245 percent of net disposable income, and a high fraction of households hold variable rate mortgages. This could amplify the transmission of monetary policy tightening since it automatically implies higher mortgage payments, which reduce net disposable income. At the same time, higher interest rates incentivize more saving.

3. **Consumption patterns and response to monetary policy also depend on distribution of net wealth and/or by age group** (Kozlov, 2023). Holm et al. (JPE, 2021) study the impact of monetary policy at the Norwegian household level, exploring the liquid asset positions of households, as well as their interest rate exposure. They show that the responses to a monetary policy shock (1 percentage point interest rate increase) differ according to the level of liquid asset holdings, with the bottom 10 percent of the households keeping consumption nearly unchanged for the first year, before starting to fall after 3 years. Consumption for households in the median of the distribution is less responsive. At the top of the distribution, where households hold more liquid assets, additional savings increase consumption (by about 0.8 percent). Conditional on the net interest rate exposure distribution (measured as deposits net of debt), with net debtors at the bottom of the distribution and net creditors at the top, consumption responses are negative (-0.82 percent) for the bottom of the distribution, and positive (0.7 percent) for the top.

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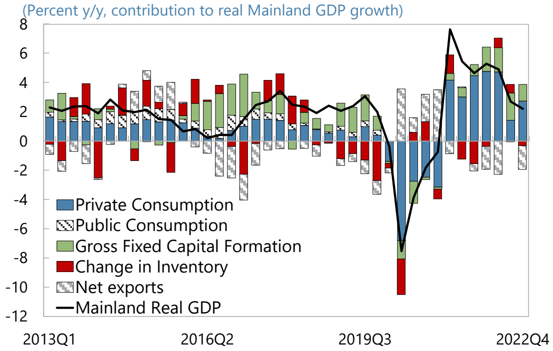
[1] Prepared by Alexandra Fotiou.

Annex IV. Figure 1. Consumption and Savings

Growth Decomposition

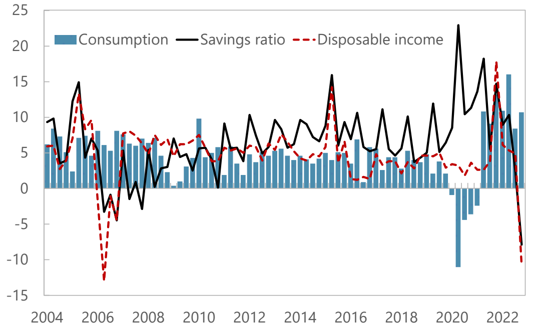
(Percent y/y, contribution to real Mainland GDP growth)



Sources: Statistics Norway; and IMF staff calculations.

Real Disposable Income, Consumption and Savings Ratio

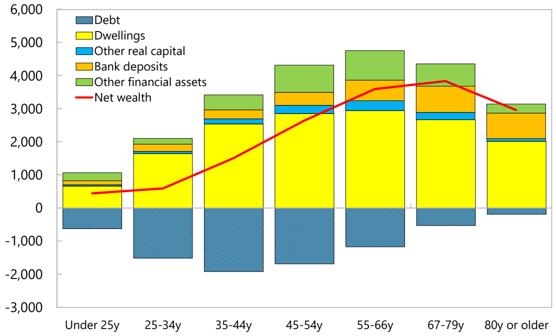
(Percent, y/y)



Source: Statistics Norway.

Balance Sheet by Age of Main Income Earner, 2015

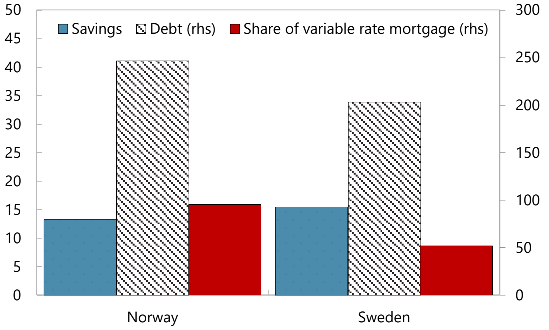
(Thousands of NOK)



Sources: Norges Bank and IMF staff calculations.

Household Savings, Debt and Mortgage Type

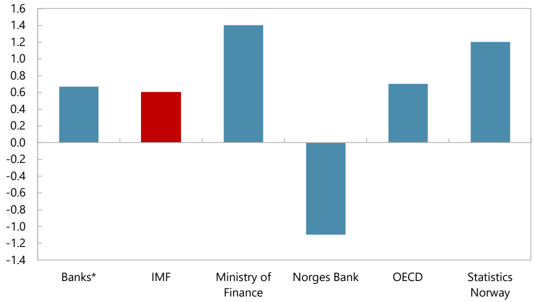
(Percent of disposable income)



Sources: Haver Analytics; OECD; Statistics Norway; and Statistics Sweden.

Norway: Real Consumption Growth Projections, 2023

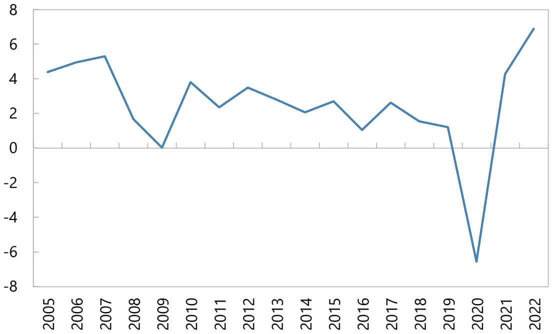
(Percent)



Note: *Average of forecasts of Nordea, SEB, Danske. Forecasts as of May 1, 2023.
Sources: Ministry of Finance, Norges Bank, Nordea, SEB, Danske, OECD, Statistics Norway.

Consumption Growth

(Percent)



Source: Statistics Norway.

4. Estimates of the effect of monetary policy on consumption and the real economy vary. The estimates depend, among others, on the methodology, the variables included in the model, the frequency of the data, and the method of identification. For example, with a VAR structural identification approach, effects tend to be smaller compared to a narrative approach.[2] Using Norwegian data, Holm et al. (JPE, 2021), based on a narrative approach and local projections, find larger effects in an annual frequency, while in a quarterly frequency the effect on consumption is not

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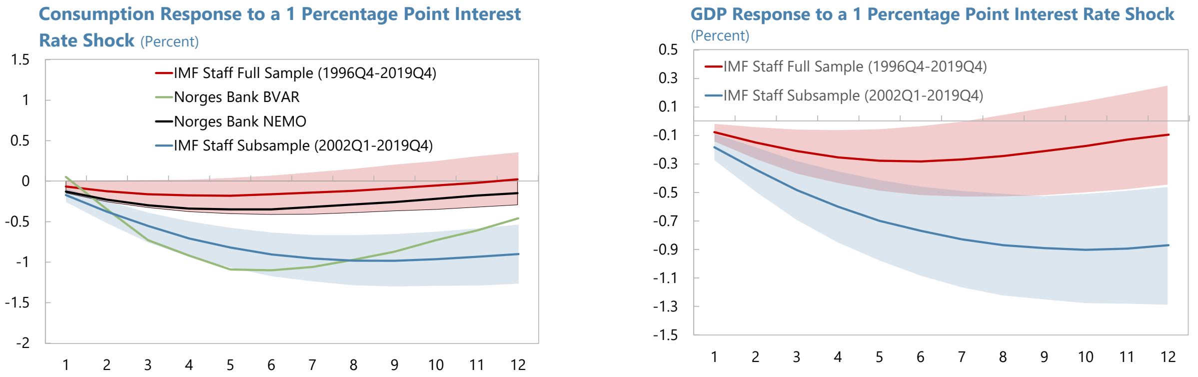
[2] See Ramey (2016) for a thorough review of the literature.

significant. Norges Bank's analysis (MPR 2/22, Box Section 3.3) shows stronger interest rate effect on consumption in empirical models compared to its main New-Keynesian model (NEMO).

5. Staff estimates are broadly in line with those in the literature, and further interest rate increases should affect consumption moderately. Using a Bayesian Vector Autoregression (BVAR) model, staff assessed the effect of an interest increase in Norway during the period 1996Q4–2019Q4.[3] Barring the high uncertainty with econometric estimates, in terms of quantification of the empirical effects on the main variables, a 100-basis point interest rate increase in four quarters results in about 0.15, 1, and about 0.20 percent decline in real consumption, investment, and GDP, respectively. When the same model is estimated for the shorter subsample 2002Q1–2019Q4, the effects are larger, with consumption and GDP declining by about ½ and over ½ percent respectively in four quarters.[4] Despite the 3 percentage points increase in policy rates, households have so far maintained their consumption, as labor markets remained strong, and households have used excess savings accumulated during the pandemic to support consumption. Accordingly, staff forecasts that consumption growth in 2023 will be lower than its historical pre-pandemic average (around 2.7 percent, YoY) but still in a positive territory at the aggregate level (Figure 1). The consumption response will also depend on the income distribution and net wealth (as discussed above), with a strong labor market being an attenuation factor as well.

Annex IV. Figure 2. Response of Consumption to Rate Increase



Consumption Response to a 1 Percentage Point Interest Rate Shock (Percent)

Source: IMF staff calculations; Norges Bank MP 2/22.

GDP Response to a 1 Percentage Point Interest Rate Shock (Percent)

Source: IMF staff calculations.

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[3] Variables in the model include unemployment, real consumption, real investment, real mainland GDP, real salaries and wages (mainland), the policy rate, real house prices and the exchange rate. They are in logarithms (apart from the policy rate). A Cholesky structural identification approach is used. Exogenous variables such as oil prices are included.

[4] The subsample period is chosen following the literature, which is based on the presence of a structural break in industrial production and productivity.

Annex V. Risk Assessment Matrix [1]

Source of Risks and Relative Likelihood (High, medium, or low)	**Impact if Risk is Realized** (High, medium, or low)	**Policy Response**
	Global	
High **Intensification of regional conflict(s).** Escalation of Russia's war in Ukraine or other regional conflicts and resulting economic sanctions disrupt trade (e.g., energy, food, tourism, and/or critical supply chain components), remittances, refugee flows, FDI and financial flows, and payment systems.	**Low** Norway is one of the largest oil producers and it will benefit from oil price increases, although higher disruptions would dampen exports and investment and weaken growth.	Provide monetary and fiscal support as needed. Given ample fiscal space and the possibility for better targeting, the policy mix should rely primarily on fiscal policy—aiming to support households and businesses to overcome liquidity needs and limit scarring, while encouraging necessary reallocation of resources. Norway's fiscal risks remain fundamentally low due to the world's largest SWF, low government debt levels (around 40 percent of GDP), and a AAA sovereign rating.
High **Abrupt global slowdown or recession.** Global and idiosyncratic risk factors combine to cause a synchronized sharp growth downturn, with recessions in some countries, adverse spillovers through trade and financial channels, and markets fragmentation. **Europe.** Intensifying fallout from the war in Ukraine, worsening energy crisis and supply disruptions, and monetary tightening exacerbate economic downturns and housing market corrections.	**Medium/Low** Norway is one of the largest oil producers so it will benefit from oil price increases. Higher disruptions would dampen exports and investment and weaken growth. Layoffs lead to a considerable increase in unemployment, which will weigh on productivity growth. Firms' liquidity problems translate into insolvencies while highly leveraged corporates may experience significant stress, leading to higher credit spreads, potential downgrades, inability to refinance debt, and defaults. Banks' asset quality deteriorates, resulting in capital shortfalls, thus impairing the lending channel with further adverse implications to growth. Attendant supply-side disruptions would weigh on domestic industrial activity.	Provide monetary and fiscal support as needed.

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[1] As of February 13, 2023. The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Source of Risks and Relative Likelihood (High, medium, or low)	**Impact if Risk is Realized** (High, medium, or low)	**Policy Response**
Medium **Monetary policy miscalibration.** Amid high economic uncertainty and volatility, major central banks slow monetary policy tightening or pivot to loosen monetary policy stance prematurely, de-anchoring inflation expectations and triggering a wage-price spiral in tight labor markets.	**Low** Norges Bank already started monetary policy normalization. Bank capital adequacy is high. A need for additional tightening may have some adverse spillovers to corporate and household sectors through higher debt service and reduced demand.	Keep monetary policy tight. Stand ready to implement further policy support. Maintain flow of credit by making sure financial policies are adequately targeted and effectively deployed. The guaranteed scheme for bank loans to businesses could be extended as needed. Norway's extremely large Pension Fund, low government debt levels, and AAA rating suggest limited fiscal risks in response to a rise in global risk premia, and fiscal space can be used to assist the most vulnerable.
Medium **Cyberthreats.** Cyberattacks on critical domestic and/or international physical or digital infrastructure (including digital currency and crypto ecosystems) trigger financial and economic instability.	**Medium** Norway is one of the most digitalized economies, cyberattacks could significantly impair the functioning of the financial system and economy, in general.	Immediate response should be to make sure the financial system's liquidity is not impaired. As a preventative measure, per FSAP recommendations, make processes for cybersecurity risk supervision and oversight more structured and comprehensive. Establish incident reporting and crisis management frameworks for systemic cyber incidents (Annex VII).
Domestic		
Medium **Significant property price decline in Norway due to structural changes.** Price declines could possibly affect commercial property markets and/or residential property.	**Medium** Investment and collateral values for lending could be undermined by sizable falls in commercial property prices. Loan quality impacted, primarily of firms serving domestic market. Lending could be curtailed if doubts about the quality of covered bonds rise elevating bank funding costs. Given the banks' high exposure to CRE, NPLs could increase significantly.	Monitor recent developments through better data collections and supervise banks commercial real estate lending closely; consider broadening the toolkit for mitigating CRE vulnerabilities. In the event, provide funding support to banks.

Annex VI. Macroeconomic Impact of Pension Reform Proposals[1]

An independent Commission proposed three main options to improve the current system which was last reformed in 2011: (i) an increase in age limits in line with life expectancy; (ii) an indexation of minimum-wage earner pension in line with old age pensions; and (iii) compensating old-age pensions of previously disabled people in line with longer life expectancy. The reforms can support a stronger and more equitable pension system in the longer term, if preceded by a reform of the disability benefits.

1. **A Pension Commission was established in 2020 to evaluate the pension system in Norway and propose possible reforms.** The Commission recently presented important reform proposals concerning the retirement age, minimum benefits, and disability pensions. While the pension system is on a strong financial footing, the Commission's recommendations, supported by a majority of its members, addresses potential issues with the system's equity and incentives for increasing labor supply.

2. **The retirement age is proposed to change automatically in line with life expectancy.** The current notional retirement age is 67 years, which can be brought forward or deferred to 62 or 75 years, respectively, with the early retirement conditional on the individual's pension benefit meeting a welfare minimum criterion. The proposal is to adjust the retirement age automatically by 2/3 of the marginal life expectancy change and to do so in an actuarially neutral manner. It is also recommended to increase early and deferred retirement ages in parallel with the change in the normal retirement age.[2] The proposal is in line with best practice and will improve the system's equity, while maintaining its sustainability and adequacy.

3. **It is proposed to index the starting level of the minimum pensions to wages, same as for old age pensions.** This would maintain the relationship between average wages and the starting level of the minimum pension constant. However, the proposal would index the starting benefit to wages, while it would index paid minimum pensions and other pensions to a composite index of prices and wages. While in line with good practice, the difference between the minimum pension based on sufficiently long contribution histories but low earned wages (full career minimum) and a lower minimum designed for people with short working careers should be made more pronounced. In the latter case, indexing starting pensions and further pension payments only with prices may strengthen incentives for labor supply and compliance.

4. **In terms of disability pensions, the proposal is that pensioners are guaranteed a reasonable pension when they transition from disability to an old age benefit.** The pension system awards a permanent disability pension based on earnings prior to the onset of disability. When reaching retirement age, the disability pension is replaced by a newly calculated old age pension. While the old age pension is based on a full notional career, the calculation is based on

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[1] Prepared by Csaba Feher (FAD), Keiko Honjo (RES), and Salvatore Dell'Erba.

[2] As old age pension is calculated considering life expectancy at retirement, the automatic retirement age increase does not affect the value of starting pensions relative to career earnings and in comparisons other cohorts' benefits.

earnings observed before disability. This regime—by assuming a full career—provides preferential treatment to disability pensioners. This is problematic, especially in case of people becoming disabled at younger ages. The proposal to partially adjust the age at which disability pensions are replaced by old-age pensions represents a worthy compromise between welfare and fiscal considerations. At the same time, there is a clear need for reforming Norway's long-term disability pension system. The new rules will have no impact on disability pensioners' likelihood of returning to the labor force. The Commission's primary concern is to ensure that when disability pensioners switch into old age pension, they do not take a loss relative to standard old age pensioners. However, Norway's permanent disability pensioner population is among the highest in the world, and benefits are also generous, thus increasing the benefits as of retirement creates further disincentives.

5. The macroeconomic impact of the proposals is examined using a four-region version of the IMF's GIMF model. The model includes the United States, the euro area, Norway, and rest of the world, and is adapted to analyze the impact of ageing population (Carton et al, 2021). In a baseline, "Current Policy" scenario, which analyzes the impact of the demographics trends, real GDP per capita is projected to decline by 12 percent, while working age population would decline by 10 percent by 2100.

Annex VI. Box 1. Norway: Model Calibration

The calibration of the households' utility function and elasticities and markups are assumed equal across countries. The share of liquidity-constrained agents in the population is 25 percent for the US, euro area, and Norway, while for the rest of the world it is set at 50 percent. Country specific data are used based on the most recent year or average of recent years (all in percent of nominal GDP).

Key variables and their calibration values for Norway are shown in Table 1. In addition, bilateral trade flows between regions and each region's share of the world population are essential in calibrating the spillover effects.

Annex VI. Box 1. Table 1. Key Calibration Parameters

(In percent of GDP unless otherwise indicated)

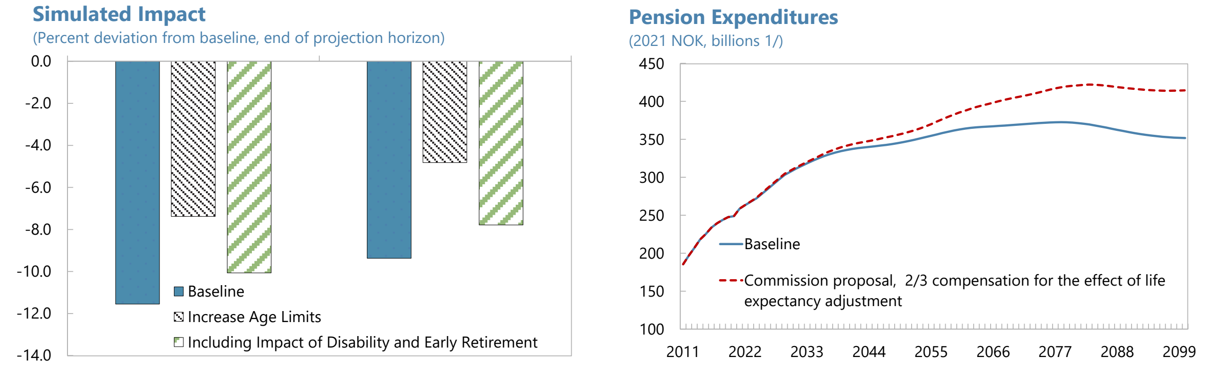
Inflation (percent)	2
Share of working age population (Percent)	59
Government consumption	24.3
Government investment	5
Tax revenue	44.5
Labor tax revenue (incl. social sec.)	21.1
Corporate tax revenue	5.5
Consumption tax revenue	12.2
Pension expenditures (net)	8.5
Government debt (net)	-65
Private investment	19.5

Sources: SSB; Norway Ministry of Finance; WEO; and IMF staff calculations.

6. Reforms of age limits sustain higher real growth and labor supply in the long term. In a first scenario, the proposed increase in age limits as envisaged in the pension reform proposal is applied, calculated as roughly one year every fifteen years. Compared to the baseline scenario, the decline in real GDP per capita is reduced by half in this scenario. This effect can be attributed to the positive impact on labor supply, which declines by less than 5 percent compared to the baseline scenario.

7. Without the disability reforms, the impact on labor supply is more muted. To analyze the interaction with the (lack of) disability reform, a scenario assumes that the share of the population on disability benefits and early retirement increases, from the current level, by 2.5 percent through the simulation period, which is approximately the growth observed over the past decade. This scenario is merely illustrative, as it is difficult to predict exactly how the disability benefits interact with higher longevity. Nevertheless, for the reasons described above, the pension reform proposals are more likely to keep the status quo with respect to the intake of the disability benefits. The simulation shows that the decline in real GDP per capita is about -10 percent by the end of the simulation period, which *de facto* almost reverses the positive effect of age limits increases. The increase in labor supply is also similarly reversed.

Annex VI. Figure 1. Norway: Macroeconomic and Fiscal Impact of the Reform Proposals



The increase in age limits can support higher GDP per capita growth through high labor force participation, but complementary disability reforms are needed.

Simulated Impact

(Percent deviation from baseline, end of projection horizon)

Sources: IMF staff calculations.

Pensions expenditures are projected to increase by 20 percent under the reform proposals compared to the current policies.

Pension Expenditures

(2021 NOK, billions 1/)

Source: Ministry of Finance.
1/ Measures in Fixed Wages.

8. Simulations suggest that proper sequencing of the reforms could have better macroeconomic outcomes. Overall, the Commission recommendations about protecting the relative value of the disabled old-age pensions is commendable as it achieves better long-term social sustainability and equity within the pension system. However, to avoid the undoing of the beneficial long-term effect of age limits reform, it is important to initiate first a broader disability reform that curtails inflows, encourages outflows, and provides stronger disincentives against disability pensions being used as an alternative to late-career unemployment (IMF 2019, Annex V).

Annex VII. Status of 2020 FSAP Recommendations

Recommendations and Authority Responsible for Implementation	Time[1]	Status
Systemic Risk Oversight and Macroprudential Policy		
Develop and publish a macroprudential policy strategy. (MoF, Norges Bank, FSA)	ST	The authorities have expanded on key aspects of macroprudential policy in the Ministry's annual Financial Markets Reports. Norges Bank has published a framework for the systemic risk buffer, in addition to the framework for the CCyB.
Use existing triparty meetings more effectively to discuss risks and policy actions needed to address them. (MoF, Norges Bank, FSA)	I	The authorities have implemented some adjustments to facilitate candid and targeted exchanges on risks, and to better align the meeting schedule with planned policy decisions.
Give Norges Bank recommendation powers over macroprudential policy tools that can be relaxed under stress, with a comply-or-explain mechanism. (MoF)	I	The Government in September 2021 tasked Norges Bank to advise the MoF on the systemic risk buffer rate at least every other year. In 2022, Norges Bank gave its first advice on the systemic risk buffer, and the MoF followed the advice.
Make key household sector measures permanent features of the framework. (MoF)	ST	While the lending regulation is still temporary, it will be in force for a period of 4 years (from January 2021 until year-end 2024), up from 1.5 years previously. The regulation was evaluated in 2022 and amended from January 2023.
Consider broadening the toolkit for mitigating CRE vulnerabilities, including sectoral capital tools. (MoF)	MT	The MoF in December 2020 adopted a temporary floor for average risk weights for CRE exposures at 35 percent. The floor was renewed in 2022. In the Norges Bank's framework for the systemic risk buffer, it is assessed that the buffer should serve as a main rule applying to all exposures in Norway, because the effect of structural vulnerabilities on banks in a downturn is uncertain.
Banking and Insurance Supervision		
Strengthen the FSA's prudential powers, operational independence, and budgetary autonomy. (MoF)	ST	In September 2021, the Government tasked a Commission to propose a new law to replace the existing Financial Supervision Act. The Commission was, according to the mandate, to discuss topics such as the FSAs organization, tasks, and tools, and the constitutional and administrative legal framework for the FSA, including the relationship between the Ministry and the FSA. The Commission was given the opportunity to consider whether the Ministry's access to instruction in certain areas should be cut off or limited. The Commission was asked to consider whether, in light of EEA-law, restrictions should be placed on the Ministry's access to instruction in certain areas. The Commission's assessment should also include whether there are differences between supervisory tasks and the preparation and administration of regulations. The Commission submitted its report on 2 March 2023. The proposed act grants the FSA more independence, by stating that the FSA can no longer (as a main rule) be instructed by the Ministry in the processing of individual cases. There are some exemptions, for example the granting of licenses for banks, insurance and infrastructure companies. The Commission has also proposed that complaints (over the FSA's decisions) should be dealt with by an independent complaints board. The report is now subject to a public consultation until 2 June 2023.

1\ I Immediate (within 1 year); ST Short term (1–3 years); MT Medium Term (3–5 years).

Recommendations and Authority Responsible for Implementation	Time	Status
Expand review of banks' risks in supervisory activities to strengthen oversight over systemic foreign bank branches and domestic medium and small sized banks. (FSA)	ST	FSA has strengthened internal guidelines for monitoring and supervising foreign branches and subsidiaries, and the supervisory teams responsible for foreign branches have been provided additional resources. FSA has developed a new automatic tool which provides a risk dashboard for each institution on a quarterly basis, facilitating risk-based supervision of medium and small sized banks.
Further enhance the oversight of banks' IRB models, in view of the implementation of CRD IV. (FSA)	I	FSA has published a circular clarifying supervisory practice and expectations regarding IRB models and is following up on the circular.
Intensify oversight of banks' risk management of real estate loans and funding/liquidity conditions. (FSA)	ST	The FSA has improved the supervisory framework and will continue to intensify supervisory activities related to bank's risk management of real estate loans. The FSA has introduced new supervisory modules based on EBA Guidelines for loan origination and monitoring (EBA/GL/202/06) and supervisory experience. The guidelines from EBA aim to ensure that institutions have robust and prudent standards for credit risk taking, management and monitoring, and the update of the FSA's credit risk module in December 2021 has enhanced the supervisory toolbox for on sight inspections related to risk management of real estate loans. Further, the FSA has strengthened the requirements to the bank's reporting of exposures to non-financial firms ("ENG database"), i.e., more granular segmentation of CRE exposures in the largest banks. A thematic inspection of risk related CRE exposures, specifically loans secured by office premises, will be arranged in a selection of banks in second half of 2022. With regards to requirements for valuation of immovable properties the FSA published a Circular in September 2021 (Circular 5/2021), mainly focusing on valuation of residential mortgages.
Strengthen risk-monitoring of individual insurers. (FSA)	ST	A project has been established to further develop the Early Warning Risk Dashboard.
Complement EIOPA efforts with Norway-specific in-house stress tests of the whole insurance sector. (FSA)	MT	An EIOPA stress test was conducted in 2021. FSA will consider if this stress test can be modified and applied to a larger share of the Norwegian market.
Cybersecurity Supervision		
Make processes for cybersecurity risk supervision and oversight more structured and comprehensive. (FSA, Norges Bank)	I	FSA will consider how to strengthen the approach for cybersecurity risk supervision and consider if it is appropriate to provide further guidance on IT/ cybersecurity risk. FSAs work is still ongoing. Norges Bank has established a more structured process for oversight and supervision. Important elements are annual risk-based planning, more active use of reports from third parties and self-assessments from FMIs. The TIBER framework has been implemented in Norway and tests are ongoing. This will contribute to the oversight of cyber risk in the payment system.
Establish incident reporting and crisis management frameworks for systemic cyber incidents. (FSA, Norges Bank)	ST	Norges Bank and FSA have updated routines for reporting of incidents from FMIs to The Financial Infrastructure Crisis Preparedness Committee (BFI) in 2020. FSA works closely with Nordic Financial CERT (NFCERT) on cyber-attacks/incidents with "open line" and monthly status meetings. FSA and BFI are looking to further enhance incident reporting and crisis management by leveraging the EBA Guidelines, the European Commission's Digital Operational Resilience Act, and the ESRB's work on systemic cyber risk. FSA is revising the incident reporting framework, based on the revised EBA Guidelines. The crisis management handling by FSA and BFI has been improved.

Recommendations and Authority Responsible for Implementation	Time	Status
Anti-Money Laundering / Countering Financing of Terrorism (AML / CFT) Supervision		
Enhance AML/CFT supervision by increasing the frequency of targeted and thematic inspections and improving the risk-based approach and tools for AML/CFT risk assessments. (FSA)	I	Full scope on-site inspections dedicated to AML/CFT, and off-site inspections are increasing. The risk-based approach has been adjusted and the risk classification model has been further developed.
Ensure appropriate use of sanctions, including monetary penalties, for AML/CFT violations. (FSA)	I	The sanctioning power has been used as appropriate in cases of serious breaches. Since 2019 FSA has imposed monetary penalties on nine banks, five investment firms, nineteen estate agents, and 35 audit or accounting firms. The supervisory manual sets out principles for FSAs sanctioning practice, which is based on the EBA risk-based supervision guideline and principles for sanctioning set out by the Board of FSA.
Financial Crisis Management and Safety Nets		
Make the new resolution tools operational and strengthen the crisis preparedness framework. (FSA, MoF)	ST	FSA is continuously working to enhance the crisis preparedness framework. In 2021 a new project, focused on developing a bail-in playbook, will be initiated. FSA has initiated a new project, focused on preparing banks for deliverables required by the EBA guidelines on resolvability. This includes for banks to develop bail-in playbooks.
Ensure BGF's integration into the broader resolution framework. (BGF, FSA).	ST	Discussions on draft MoUs between Norges Bank and BGF and FSA are ongoing. Certain clarifications are being sought from the MoF. BGF also took part in a crisis simulation exercise together with Norges Bank, MoF and FSA in April 2021.
Systemic Liquidity		
Monitor banks' collateral eligible for central bank liquidity. (Norges Bank)	ST	Norges Bank has access to databases containing information on banks' assets. Through Norges Bank's system for collateral management, detailed information is available on pledged securities. FSA obtains information regarding an institution's holding of securities (in all currencies) in relation to an inspection. Furthermore, FSA has information on banks assets registered in the Norwegian CSD. Norges Bank follows up potential mortgages by examining the liquidity in the Norwegian bond market both through a semi-annual survey and through issue and price data from commercial databases that are updated daily. Information about foreign mortgage bonds is retrieved through general market insight, including information from Norges Bank's own management of foreign exchange reserves. Norges Bank has also established a model for analysis of cash flows in the banks.
Develop, test, and implement a mechanism for acceptance of mortgage loan collateral for emergency liquidity support to solvent banks. (Norges Bank)	ST	Norges Bank initiated a project with the larger Norwegian Banks and Finance Norway to implement such a mechanism. The mechanism has been tested with five of the larger banks. We are now done with testing and have started the implementation phase.
Financial Stability Analysis		
Upgrade data collection for risk monitoring to include more granular data on bank lending (including for commercial real estate), group mappings, and liquidity positions of foreign branches. (FSA, Norges Bank)	ST	More data on banks' CRE exposures will now be included in FSAs enquiry on banks' exposures to non-financial firms ("ENGA database"). Norges Bank has since 2021 subscribed to a private sector database on CRE buildings including information on owners and renters. Norges Bank now collects on a permanent basis payment remarks data for non-financial companies. FSA has developed new sector specific bankruptcy models (10 sectors), which as a by-product has expanded non-financial company coverage. The government has started the legislative process of expanding the coverage of the mandatory credit registries, currently on consumer debt, to include collateralized debt (including housing loans).

Recommendations and Authority Responsible for Implementation	Time	Status
Improve collection and analysis of derivatives exposure data and analyze banks' margin arrangements. (FSA, Norges Bank)	ST	Norges Bank and FSA are working on making more data on agents' derivatives contracts accessible and usable (EMIR data) and are collaborating to develop analysis and dashboards suitable for monitoring. Norges Bank is analyzing the effects of margining agreements; see Norges Bank Staff Memo 2/2021 for part of the analysis. Norges Bank is exploring the possibility of collecting derivatives data from mutual funds to measure exposure to margining in times of stress. FSA has analyzed banks and insurance companies' derivatives exposures using EMIR-data.
Cybersecurity Risk Supervision (Finanstilsynet)		
Establish clear qualitative and/or quantitative thresholds, as well as clearer processes and formats, on the reporting of cybersecurity incidents.	I	FSA has established clear processes for reporting cybersecurity incidents and has clear requirements for reporting incidents. Since one of central parts of DORA is related to incident reporting where new templates, thresholds and reporting procedures will be developed and that DORA will cover a wider range of financial institutions than only payment service providers (PSD2), FSA has decided to postpone the revising of the incident reporting framework based on the revised EBA Guidelines. Since Norway essentially has a well-functioning incident reporting, FSA will wait until DORA enter in to force before implementing a new incident reporting framework. FSA will then follow the reporting requirements that will come in connection with implementation of DORA in Norwegian law.
Supplement the 2003 regulation on the use of information and communication technology with more detailed guidelines, enacted by the FSA, that provide detail on the implementation of principles and set out minimum requirements.	ST	FSA uses e.g., EBA's and EIOPA's guidelines for ICT security, outsourcing and governance in supervisory activities, as published on the FSAs website. The implementation of DORA will place more specific requirements on the institutions than the current Norwegian ICT regulation. It is assumed that existing guidelines from the ESAs will be revised in accordance with DORA or be included in level two regulations under DORA. It is assumed that DORA will set out sufficient minimum requirements for the companies' compliance.
Follow a more structured approach for cybersecurity risk supervision. This should include a clear description of how off-site supervision on cybersecurity should be conducted, and how assessments influence the overall risk assessments of institutions by the general supervisors.	ST	FSA is in the process of establishing a supervisory framework for ICT supervision where ICT security and risk, including cyber security and risk, will be one of the modules. The module will be based on the NIST framework. For the time being, existing frameworks will still be used together with those parts of the new module that are finalized. A couple of the sub-modules have been tested during inspection. FSAs work is not yet fully completed.
Increase the intrusiveness of on-site cybersecurity risk inspections.	MT	See above.

Recommendations and Authority Responsible for Implementation	Time	Status
Cybersecurity Risk Oversight (Norges Bank)		
Supplement the CPMI-IOSCO guidance with more detailed expectations of Norges Bank regarding cybersecurity risk oversight of FMIs.	I	Operators are now expected to conduct self-assessments of cybersecurity-maturity using internationally recognized standards. This expectation has been stated in Norges Banks annual reports on financial infrastructure in 2021 and 2022. The assessed maturity level is expected to be mapped against the FMIs defined objectives, and necessary actions to close gaps planned and performed. The oversight function regularly follows up on whether such assessments are performed as part of the oversight process for FMIs. Further, Norges Bank expects that FMIs responsible for critical functions in the Norwegian financial system run security-tests according to the TIBER-framework.
Follow a more structured and comprehensive process for cybersecurity risk oversight. This includes utilizing a portfolio of tools and techniques to assess cybersecurity risk against set expectations, reaching clear conclusions and identifying specific remedial measures or thematic findings to inform future action.	I	Norges Bank has improved its process for planning of oversight and supervision of FMIs. Important elements in the updated process are annual risk-based planning. Improved competence in IT and cybersecurity enables the oversight function to, at this point, perform more thorough assessments than before. Testing based on the TIBER-framework is an important part of Norges Banks oversight of the financial sector and infrastructure. To ensure the right incentives for the FMIs and other entities' willingness to undergo TIBER-testing, TIBER-NO stresses that oversight and supervisory functions shall not take part in TIBER-NO-testing on an operational level neither have access to test-results.
Establish, operationalize and exercise an incident reporting and a crisis management framework to maintain financial stability against potential systemic cybersecurity incidents.	ST	Norges Bank and the FSA have updated routines for reporting of incidents from FMIs to The Financial Infrastructure Crisis Preparedness Committee (BFI) in 2020. The crisis management handling by and BFI has been improved. The FSA and BFI are looking to further enhance incident reporting and crisis management by leveraging the EBA Guidelines, the European Commission's Digital Operational Resilience Act, and the ESRB's work on systemic cyber risk. Measures to maintain financial stability against potential systemic cybersecurity incidents require Norges Bank to collaborate with other authorities and entities in the financial sector. The European Systemic Risk Board (ESRB) has recommended to implement a "pan-European systemic cyber incident coordination framework (EU-SCICF)". Norges Bank follows the development of EU-SCIF and expects to implement a national framework in collaboration with other national authorities based on EU-SCIF.

Recommendations and Authority Responsible for Implementation	Time	Status
Train Norges Bank overseers in cybersecurity, to strengthen the oversight function's capabilities to conduct effective cybersecurity risk oversight.	ST	Competence in the cyber-area for the oversight function has been further improved by hiring a cybersecurity expert and a person with IT and cybersecurity as part of a larger skill set. A third person with IT/cyber-competence was recently hired and will start working for the oversight function in June 2023. Two cybersecurity experts have been hired to the TIBER Cyber Team (TCT-NO), responsible for TIBER-testing in Norway. TCT-NO is organized as part of the oversight function and may work on assignments for the oversight function that are not specifically oversight or supervision of FMIs, hence contributing to the total cyber-competence in the oversight function. All in all, the oversight function's competence in IT and cybersecurity has been improved.
The oversight function should be given enough independence to conduct thorough oversight of the Norwegian RTGS system (NBO).	ST	The reporting lines for the oversight function have been changed in 2023. According to the revised procedures, the head of Financial Infrastructure will have the option to meet with the Deputy Governor for the central banking operations in Norges Bank, when needed. Norges Bank's internal guidelines for oversight of the settlement function are currently being revised. Key objectives for the revision are to ensure that future oversight cover all areas as required by PFMI and that the oversight function has the necessary authority to fulfill its duties.
Finalize the financial sector risk map, in collaboration with the FSA and Ministry of Finance.	ST	A project to complete the mapping of the financial sector is currently ongoing, initiated by the Financial Ministry. The mapping is expected to be finalized in 2023.
Use the existing legal power of the oversight function to seek greater assurance and transparency from critical service providers for interbank payment systems.	ST	The oversight function has improved its supervision of the FMI responsible for clearing transactions from banks in the Norwegian financial sector, by direct meeting with key vendors to the FMI. For other FMIs, the oversight function does not maintain a direct dialogue with the FMIs' suppliers, due to resource constraints. Still, however, for all FMIs, supplier management including service-quality is a key subject in oversight, and highly prioritized.
Strengthen intrusiveness of the interactions of Norges Bank's risk management and internal audit functions with NBO's external service providers to seek greater assurance and transparency.	MT	A process has been established whereby Norges Bank's risk management is involved in meetings with our critical external service providers and they participate in the quarterly Risk Committee for the settlement system (NBO).

Annex VIII. Progress in Strengthening the AML/CFT Framework[1]

1. **Norway's AML/CFT regime should be further reinforced to address ML/TF risks from cross-border and non-resident financial activity.** Progress has been made in addressing the country's cross-border financial flows risks. In January 2023 the Financial Action Taskforce (FATF) re-rated Norway as compliant with Recommendation 16 on wire transfers. Norway was previously rated as partially compliant as financial institutions and intermediaries were not required to maintain beneficiary information as part of cross-border and domestic wire transfers. This deficiency was rectified through Norway's adoption of the EU regulation on information accompanying transfers of funds (TFR).

2. **Risk-based supervision of banks should be strengthened.** Norway has built strong domestic cooperation between the financial intelligence unit and financial supervisory authority for AML supervision and development of financial intelligence. However, authorities could further enhance the supervisory ML/TF risk assessment and continue to strengthen the risk-based supervision of banks. Norway should also continue addressing effectiveness issues raised in the most recent Mutual Evaluation Report, notably related to ML investigation and prosecution and confiscation.

3. **The launch of the Norwegian register of beneficial owners, which has been delayed, is a key transparency instrument to prevent money laundering and terrorist financing.** The authorities are examining the possible implications of the judgement by the European Court of Justice regarding public access to information on beneficial ownership. In response to the ruling, the authorities stated that Norwegian law stipulates that the registered information shall be open for public access. The authorities should also ensure the country's legal framework for beneficial ownership transparency is in line with the revised FATF standards for transparency of beneficial ownership of legal persons and legal arrangements (Recommendations 24 and 25).

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[1] Prepared by Alexander Malden (LEG).

Annex IX. Authorities' Responses to Past IMF Article IV Consultation Recommendations

Fund Policy Advice	**Authorities' Actions**
Fiscal Policy	
Simplify the VAT system	**Partially implemented.** Some of the concessionary rates of VAT have been raised, thus narrowing the differences in rates across goods and services. However, Norway's standard ('ordinary') VAT rate of 25 percent is among the highest in the OECD, and multiple reduced rates and exemptions add complexity.
Consider an expenditure review with the aim of improving the cost-effectiveness of government spending.	**Partially implemented.** The business R&D and innovation support was recently the subject of a public spending review (2020–21), and the incoming government has signaled a new review.
Financial Stability	
Consider tightening mortgage regulations in line with FSA recommendations. Make mortgage regulations permanent to contain risky mortgages.	**Partially implemented.** While the lending regulation is still temporary, it will be in force for a period of 4 years (from January 2021 until year-end 2024) up from 1.5 years previously. The regulation was evaluated in 2022 and amended from January 2023. The regulation will be evaluated before it expires in 2024.
Step up effort to collect and disseminate CRE data for better monitoring of risks.	**Implemented.** More data on banks' CRE exposures will now be included in Finanstilsynet's enquire on banks' exposures to non-financial firms ("ENGA database"). Norges Bank has since 2021 subscribed to a private sector database on CRE buildings including information on owners and renters. Norges Bank now collects on a permanent basis payment remarks data for non-financial companies. Finanstilsynet has developed new sector specific bankruptcy models (10 sectors), which as a by-product has expanded non-financial company coverage.
Structural Reforms	
Reforms of disability schemes are needed to sustain high labor participation amid growing demographic pressures.	**Not implemented.** The Employment Commission evaluating (among other issues) the disability system delivered a second (and final) report in 2021. Only some proposals are aligned with long-standing staff recommendations.
Relaxing restrictions on land-use.	**Not implemented.**
Facilitating technological change, including a more developed open government data ecosystem.	**Partially implemented.**
Enhancing bankruptcy procedures, including the entity being discharged from the indebtedness	**Not implemented.** A proposal for permanent rules on restructuring was in public hearing from January to April 2023. A bankrupt entity will not be discharged from the pre-bankruptcy indebtedness, according to Norwegian law.

Annex X. Fostering Affordable Housing Reforms[1]

An affordable rental market contributes to economic inclusion and stability. Importantly, affordable rental housing across locations can support labor mobility by promoting the transition from education to employment and from job to job. A concerted effort is thus needed to arrest affordability pressures in Norway. Reforms areas include increasing housing allowances and net incomes for most vulnerable, adjusting tax incentives, and boosting supply, including for municipal housing and through public-private sector collaboration. The government's housing strategy aims to address several important issues, but further action is needed to bring immediate and tangible results.

1. **Norway exhibits significant housing inequalities, not least due to large tax advantages to homeowners.** Historically, house ownership has been encouraged by granting substantial tax advantages, which inflate prices and contribute to wealth inequality (Figure 1). Like in several other countries, helped by low interest rates and increased preference for teleworking, house prices increased steeply during the pandemic from already high levels. The ratio of house prices to net disposable income has climbed significantly over the past two years (Figure 1). By the same token, the inequality created by individual accumulation of capital gains in the housing market has increased over time and varies substantially along spatial and age dimensions (Eggum and Røed Larsen, 2021). Given the political aim of limiting the increases of inequality and leveling the playing field, a renewed look at housing taxation, including capital gains is needed. Currently, the government plans to prioritize start-up loans and facilitate more help-to-buy savings schemes for young people as tools to help more people move from tenancy to ownership.

2. **Norway's pro-homeownership policies have resulted in a small, concentrated, and to some extent, informal rental market.** The existing formal rental market is working well as it is a flexible market where available dwellings can be quickly added or removed (see 2021–24 National strategy). However, there are serious shortages of affordable rental properties, which is eroding options for many geographically, especially outside larger cities. Even in Oslo and Trondheim—the two cities with the most renters—tenants comprise a relatively small share of all households (under a third), compared to European cities with thicker rental markets (more than half of households rent in Vienna, Berlin, inner London, and Brussels). There is also evidence that a large share of tenancies is informal (Oslo Economics, 2021). Data from the *Survey of Living Conditions* show that in 2018 up to a quarter of renters lived in dwellings owned by friends or family. Two main reasons behind this phenomenon are: (i) tax concessions for landlords leasing out parts of their primary dwellings encourage informal leases; and (ii) long minimum lease durations discourage the development of deep rental markets that would improve options for renters, spurring undocumented leases. The long minimum leases serve the purpose of giving tenants, especially the vulnerable groups, more stability in living arrangements (KMD, 2021).

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[1] Prepared by Svetlana Vtyurina.

Annex X. Figure 1. Tax Incentives, Support of Homeownership and House Price Growth

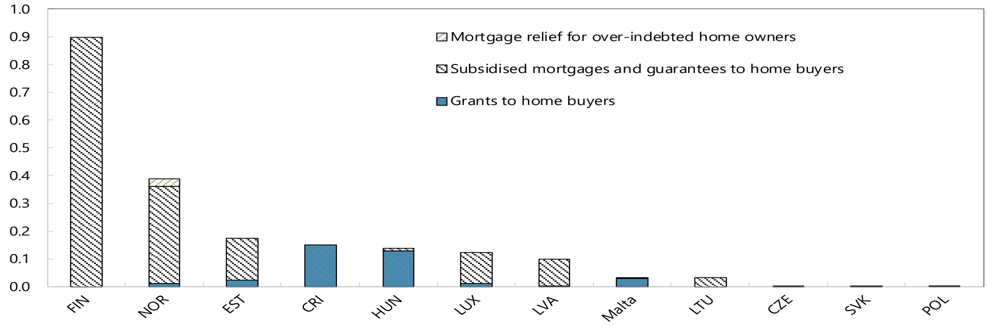
	Tax relief for mortgage payments	Imputed rent tax	Capital gains tax
Australia	No	No	No
Canada	No	No	No
Germany	No	No	No
Iceland	Yes	Yes	Yes (limited)
Netherlands	Yes	Yes	No
Norway	**Yes**	**No**	**No**
Sweden	Yes	No	Yes
United Kingdom	No	No	No
United States	Yes (limited)	No	Yes (limited)

Sources: OECD Affordable Housing Database, and Thomas (2021).

Note: Entries in red indicate policies that push up demand for homebuying and housing prices; those in green have the opposite effect. Local property taxes are not included. These can operate in a similar way to a tax on actual and imputed rents, but may be better viewed as a user charge for local public services.

Public Spending on Grants and Financial Support to Home Buyers and Homeowners

As percent of GDP, 2020 or latest available year

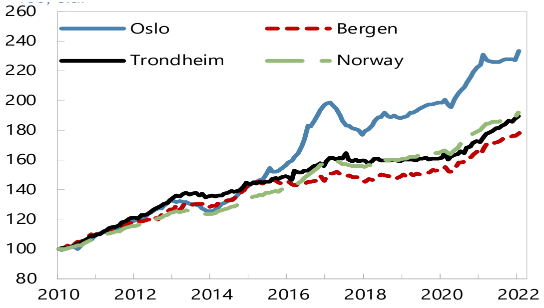


Source: OECD Questionnaire on Affordable and Social Housing (2019; 2021).

Notes: Year of reference: 2020, except for France 2021, Austrai and Lithuania 2019, and Luxembourg 2018. Data for Finalnd and Malta refer to the 2019 QuASH.

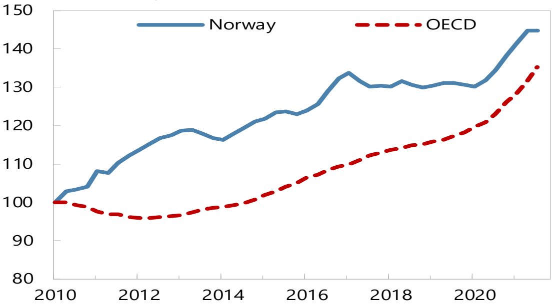
Nominal House Prices

(Index Jan. 2010= 100, s.a.)



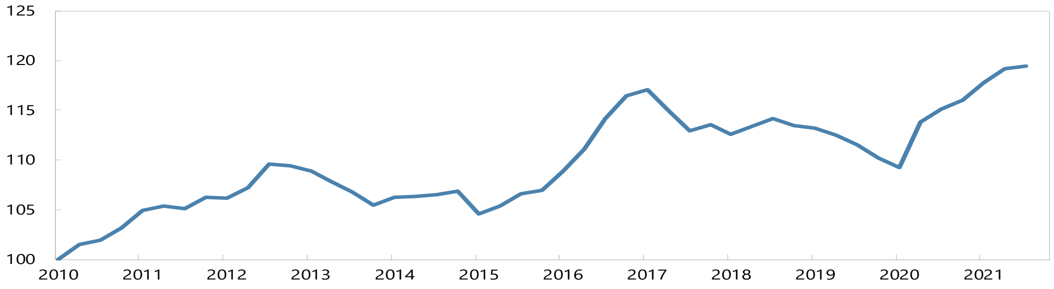
Real House Prices

Index 2010, Q1=100



Ratio of House Prices to Net Household Disposable Income[1]

Index 2010Q1=100



Sources: Real Estate Norway (Eindom Norge), and OECD Analytical house prices database (2021).

1\ Nominal house prices divided by nominal disposable income per person. Population data are from the OECD National Accounts database.

3. Appropriately balancing the rental regulation is key to improve the working of the rental market. There are proposals to make leases even longer, but some argue that this could have unintended consequences, further stunting the development of the rental market. A longer minimum term may have the effect of making landlords more selective in their choice of tenants. If so, this may adversely affect families that already struggle to find suitable rented accommodation. There is also a risk that landlords will stop offering tenancies if they find the rules to be too strict. In fact, there are alternate proposals for shorter minimum lease terms and more clearly defined termination rights (OECD, 2022). Norway's current minimum fixed-term lease duration of 3 years is long compared with equivalent rules in other OECD countries. Responses from the recent consultation suggest an increase of the current minimum term (period of rental), or the introduction of a standard non-fixed term tenancy contract. A public committee that will assess the Tenancy Act is currently starting up and hopes to offer recommendations next year.

4. Given the high demand, rental housing is also quite costly, while housing allowances are small. About a ¼ of disposable income is spent on rent in many advanced European economies. However, in some countries, including Nordic ones, the share is close to or above 30 percent and has increased after the global financial crisis (Figure 2). The burden of rental payments disproportionately affects low-income households. On average, households in the bottom quintile of the income distribution who rent at market prices spend more than 40 percent of their disposable income on rents (Finland, Greece, Norway, Spain, UK). Rental affordability pressures are particularly widespread among young renters and in cities. The incidence of overburdened tenants has increased after the global financial crisis in half of the countries, particularly among low-income earners (such as in Norway). In addition, during 2010–18, the stock of social housing declined in some advanced European economies, including Norway (OECD, 2020). In Norway, while growth in the housing allowance matched or exceeded the growth of rents, rents have been increasing faster than wages and social security payments, and the housing-allowance as a share of GDP is much lower than in most advanced European economies (Figure 3). [2]

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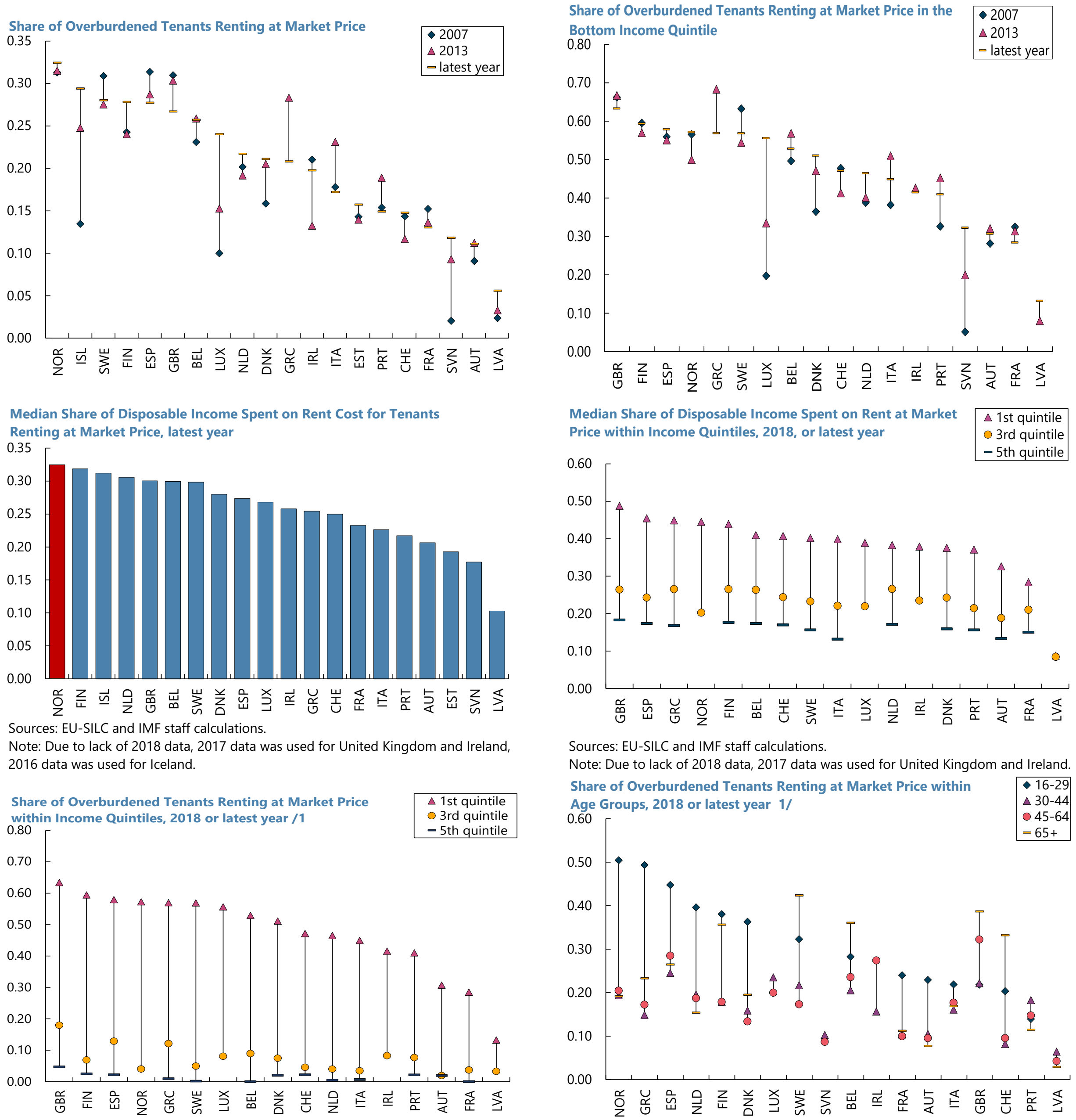
[2] To assist low-income households that had high housing costs, the Storting (the Norwegian Parliament) decided to increase the housing allowance allocation by NOK 500 million for the period from April to October 2020.

Annex X. Figure 2. Rental Housing Affordability



Share of Overburdened Tenants Renting at Market Price

Share of Overburdened Tenants Renting at Market Price in the Bottom Income Quintile

Median Share of Disposable Income Spent on Rent Cost for Tenants Renting at Market Price, latest year

Sources: EU-SILC and IMF staff calculations.
Note: Due to lack of 2018 data, 2017 data was used for United Kingdom and Ireland, 2016 data was used for Iceland.

Median Share of Disposable Income Spent on Rent at Market Price within Income Quintiles, 2018, or latest year

Sources: EU-SILC and IMF staff calculations.
Note: Due to lack of 2018 data, 2017 data was used for United Kingdom and Ireland.

Share of Overburdened Tenants Renting at Market Price within Income Quintiles, 2018 or latest year /1

Share of Overburdened Tenants Renting at Market Price within Age Groups, 2018 or latest year 1/

Sources: EU-SILC; and IMF staff calculations from “Affordable Rental Housing Making It Part of Europe’s Recovery” (European Department Paper No. 21/13).

1/ Due to data gaps, 2015 data are used for Sweden, 2016 data are used for Iceland, 2017 data are used for Ireland and the United Kingdom.

Policy Options

- **Increase housing allowances and net incomes for most vulnerable.** In the short term, this appears to be the most powerful immediate policy tool that lends itself to deployment and effective targeting. Providing sufficient coverage and benefits to renters via housing allowances is critical to protect low-income renters. The Norwegian government recently increased the housing allowance payable to families with children and other low-income earners with high housing costs and set up a panel of experts to propose how to improve and simplify the housing allowance benefit scheme. Limiting rent increases to general inflation could also help the most vulnerable (Irish case). Reducing the labor income tax on low-income earners could improve housing affordability and, in parallel, lighter labor taxes may also strengthen labor supply. The Ministry of Local Government is following up on the recommendations of the expert committee report submitted in May 2022.

- **Adjust tax incentives.** To improve the supply of rental housing, taxing vacant properties and shifting some housing subsidies that favor high-income homeowners toward private investment in rental housing development could be considered. As to reducing incentives favoring homeownership, these could be somewhat offset by the following measures: (i) increasing and strengthening recurrent property taxes (updating values and revisiting rates), which are relatively low in Norway; (ii) applying capital gains taxes to primary residences (possibly above a certain threshold of gains); and (iii) introducing inheritance taxes or an imputed rent tax, while gradually phasing out mortgage interest deductions.

- **Boost residential construction, including through changes in regulation.** While regulatory restrictiveness, including zoning regulation and tenant-landlord relations, is difficult to measure, it affects rental prices and shapes consumption and investment incentives. Whereas national land-use laws restrict residential construction beyond developed areas, Norway’s municipal rules limit the supply of housing within them. For example, there are restrictions on where homes can be built, rules on density, height, minimum dwelling size, and number of units. More efficient and less restrictive zoning and building application processes could thus facilitate residential property development. The average planning time for private zoning plan proposals has been increasing (from 577 to 708 days over 2016–21). OECD (2022) makes number of comprehensive proposals with respect to regulation. Some work is on-going in increasing the digitization of planning and building processes, introducing user-friendly and easily understood building requirements, and improving overall efficiency in building application processes.

- **Increase public-private collaboration.** The government is planning to increase lending from the Norwegian State Housing Bank to private developers of housing for the rental market, especially in the rural areas. [3] An increase in the provision of rental properties under the management of commercial landlords may help improve the functioning of the rental market.

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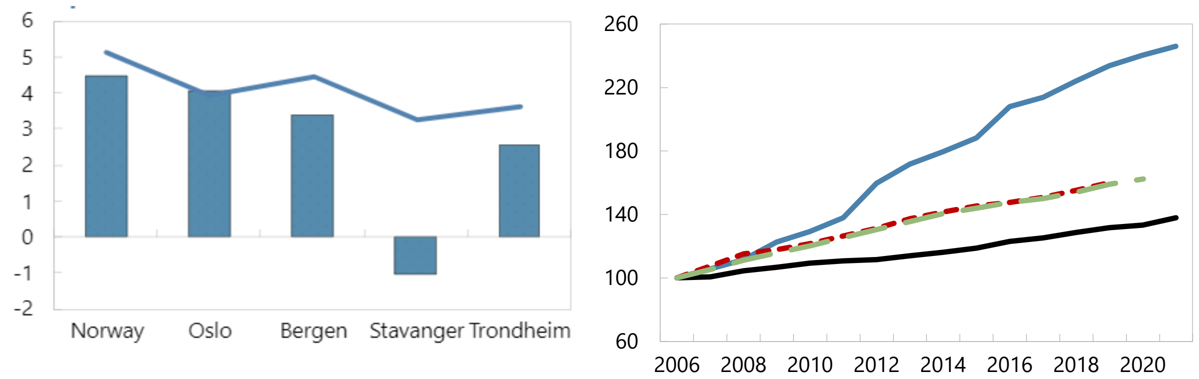
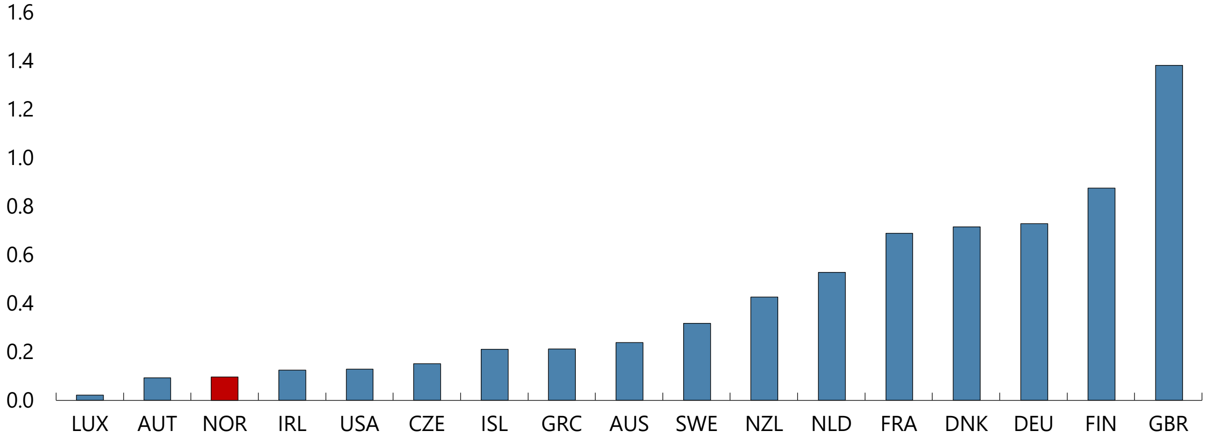
[3] The Norwegian State Housing Bank can waive the loan-to-asset value ratio requirement in areas where private banks only finance a limited number of the new-builds.

Annex X. Figure 3. Housing Allowances



Growth in Housing Allowances Has Matched or Exceeded Growth in Rents/15-year Average Annual Growth, 2020[1]
(Percent)

Rents Are Increasing Faster than Wages and Social Security Benefits[2]
(Index, 2006 = 100)



Government Spending on Housing Allowances, 2020 or Last Available Year
(Percent of GDP)[3]

Sources: Statistics Norway, Norwegian Tax Administration, OECD Affordable Housing Database, and OECD calculations.

Note: Basic amount "G" is the reference payment in Norway's social security scheme, to which multiple benefits and eligibility thresholds for benefits, are indexed. Average after-tax income in shown for households in the second income decile, many of whom will not be eligible of r housing allowances.

1\ Average rent is for a 2-bedroom apartment. Rent data for Oslo includes Baerum municipality.

2\ Rent is average monthly rent for tenancles starting in the current and previous year.

3\ Data for 2020 refer to the responses to the 2021 OECD Questionnaire on Affordable and Social Housing, except for Denmark, Germany, Greece, Iceland where they refer to 2019 QuASH, i.e., around year 2018.

- **Find new options to expand social rental housing availability.** The government sees a municipality's role as a planning and zoning authority as crucial for maintaining socially sustainable urban development. The input from municipalities, private developers, and researchers shows that municipalities want a larger set of tools to safeguard the social dimensions of housing construction and area development. The government plans to analyze whether allowing municipalities to regulate the allocation of new housing might be a good option. At the same time, the government is cautious when permitting more regulation of the housing market as there is a danger that government regulations may supplant private investment. A new act regarding the municipalities' responsibilities for supporting disadvantaged on the housing market will come into force in July 2023. The law regulates both planning and support to individuals in the affordable housing but does not give any rights to housing. The Ministry of Local Government and Regional Development is working on a White Paper regarding a housing policy strategy, to be launched in 2024.

- **Close data gaps on rental markets.** The government recognizes that more knowledge is needed about the rental market to help devise better policies. This applies to rent development, living conditions for tenants, and other aspects. Statistics Norway is the only source of statistics on nationwide rent levels in Norway and these are published in the Rental Market Survey. This survey is carried out annually and examines different segments of the rental market. The data material does not distinguish between new and older tenancy agreements. The average figures are not directly comparable year on year, and figures for the development in rents are therefore not precise.

INTERNATIONAL MONETARY FUND

NORWAY

STAFF REPORT FOR THE 2023 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

July 7, 2023

Prepared By	European Department (in consultation with other departments)

CONTENTS

FUND RELATIONS

(As of May 31, 2023)

Membership Status: Joined: December 27, 1945; Article VIII

General Resources Account:	**SDR Million**	**Percent of Quota**
Quota	3,754.70	100.00
Fund holdings of currency	2,661.53	70.89
Reserve tranche position	1,093.18	29.11
Lending to the Fund		
New Arrangements to Borrow	16.86	

SDR Department:	**SDR Million**	**Percent of Allocation**
Net cumulative allocation	5,161.78	100.00
Holdings	5,314.81	102.96

Outstanding Purchases and Loans: None

Latest Financial Arrangements: None

Projected Payments to the Fund
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2023	2024	2025	2026	2027
Principal					
Charges/Interest		0.07	0.07	0.07	0.07
Total		0.07	0.07	0.07	0.07

Exchange Rate Arrangements: The *de jure* and *de facto* exchange rate arrangements in Norway are classified as freely floating. Norway accepted the obligations under Article VIII Section 2(a), 3, and 4 of the IMF's Articles of Agreement, and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions other than restrictions notified to the Fund in accordance with Executive Board Decision No. 144-(52/51).

Article IV Consultation: 12-month cycle.

Financial Sector Assessment Program (FSAP) Participation: 2020.

STATISTICAL ISSUES

I. Assessment of Data Adequacy for Surveillance
General. Data provision is adequate for surveillance. Data is generally of high quality, timely, and comprehensive. **Monetary and Financial Statistics.** Monetary statistics compiled by the authorities are consistent with the methodology of the *2016 Monetary and Financial Statistics Manual and Compilation Guide*. Norway reports regular and good-quality monetary statistics for publication in IFS, although there is room for improving the timeliness of the data on other financial corporations. Norway reports data on several series and indicators in the Financial Access Survey (FAS), including two indicators of the United Nations Sustainable Development Goals. **Financial Sector Surveillance.** Norway reports Financial Soundness Indicators (FSIs) to the Fund, which are published on the IMF's FSI website. All core FSIs for deposit takers are reported on a quarterly basis. Only one of the encouraged FSIs for deposit takers is reported but many of the encouraged FSIs for other sectors are provided.

II. Data Standards and Quality	
Subscriber to the *IMF's Special Data Dissemination Standard (SDDS)* since 1996. Uses SDDS flexibility option on the timeliness of the general government operations-financing. SDSS metadata is posted on the Dissemination Standards Bulletin Board (DSBB).	Data ROSC (*Report on the Observance of Standards and Codes)* completed in 2003 is publicly available.

Norway: Table of Common Indicators Required for Surveillance

(As of June 30, 2023)

	Date of latest observation (For all dates in table, please use format dd/mm/yy)	Date received	Frequency of Data[7]	Frequency of Reporting[7]	Frequency of Publication[7]	Memo Items:[8]	
						Data Quality – Methodological soundness[9]	Data Quality – Accuracy and reliability[10]
Exchange Rates	22/06/23	22/06/23	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	05/23	06/23	M	M	M		
Reserve/Base Money	05/23	06/23	M	M	M	O, O, O, LO	O, O, O, O, O
Broad Money	05/23	06/23	M	M	M		
Central Bank Balance Sheet	0/23	06/23	M	M	M		
Consolidated Balance Sheet of the Banking System	04/23	06/23	M	M	M		
Interest Rates[2]	05/23	06/23	M	M	M		
Consumer Price Index	05/23	06/23	M	M	M	O, O, O, O	O, O, O, O, O
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2022	2023	A	A	A	LO, LNO, O, O	LO, O, O, O, LO
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	04/23	05/23	M	M	M		
Stocks of Central Government and Central Government-Guaranteed Debt[5]	Q1 2023	04/23	Q	Q	Q		
External Current Account Balance	Q1 2023	06/23	Q	Q	Q	O, O, O, O	LO, O, O, O, LO
Exports and Imports of Goods and Services	Q1 2023	06/23	Q	Q	Q		
GDP/GNP	M4 2023	06/23	M	M	M	O, O, O, O	O, O, O, O, LO
Gross External Debt	Q1 2023	04/23	Q	Q	Q		
International Investment Position[6]	Q1 2023	04/23	Q	Q	Q		

[1] Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

[2] Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

[3] Foreign, domestic bank, and domestic nonbank financing.

[4] The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

[5] Including currency and maturity composition.

[6] Includes external gross financial asset and liability positions vis-à-vis nonresidents.

[7] Daily (D); weekly (W); monthly (M); quarterly (Q); annually (A); irregular (I); and not available (NA).

[8] These columns should only be included for countries for which Data ROSC (or a Substantive Update) has been published.

[9] This reflects the assessment provided in the data ROSC or the Substantive Update (published on July 15, 2003, and based on the findings of the mission that took place during November 11–26, 2002) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).

[10] Same as footnote 7, except referring to international standards concerning (respectively) source data, assessment of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.