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13 June 2023

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RATINGS

Norway

	Foreign Currency	Local Currency
Gov. Bond Rating	Aaa/STA	Aaa/STA
Country Ceiling	Aaa	Aaa

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Government of Norway — Aaa stable

Annual credit analysis

OVERVIEW AND OUTLOOK

The credit profile of Norway reflects the country's ample fiscal space, very large external buffers, one of the strongest institutional setups globally, very high per-capita income, a highly profitable petroleum sector, and a very flexible and highly competitive mainland economy.

The economic and fiscal importance of the hydrocarbon sector reached a record high in 2022, and will remain elevated in 2023-24 because of Russia's invasion of Ukraine (Ca stable) and the shift in energy demand from European countries to alternative suppliers away from Russia. Most of the Norwegian gas is exported via the gas pipeline network to the European market. Norway is the most important gas supplier for European Union (EU, Aaa stable) countries, with gas deliveries accounting for 30% of total EU gas imports in year-to-date 2023, compared with 26% in 2022 and 23% in 2021.

The government's prudent planning ahead of the expected gradual decline in Norway's petroleum production and its contribution to the economy and government revenue, starting in the middle of this decade, supports the country's creditworthiness. Norway has long insulated the domestic economy as much as possible from the volatility in oil revenue by using several tools. The most important of these is its sovereign wealth fund, the Government Pension Fund Global (GPFG), which accumulates petroleum revenue and ring-fences it from government spending.

The stable outlook on Norway's rating reflects the resilience of its credit metrics as large fiscal buffers and very strong institutions allow for an effective fiscal response that significantly softens the economic impact of shocks. Moreover, we expect Norway's authorities to successfully address the country's key challenges related to vulnerabilities in the housing market, adverse demographic trends, and the petroleum sector's reduced contribution to economic growth and government revenue over the medium to long term.

Norway's Aaa rating would come under pressure if the prudent macroeconomic and fiscal framework that underpins the country's strong credit profile were to weaken significantly, leading to a substantial, multi-year erosion of Norway's accumulated, very sizable fiscal buffers and a lasting negative impact on the country's economic and fiscal strength. In addition, a further escalation in geopolitical risks leading to a significant increase in Norway's susceptibility to event risk, would trigger downward rating pressure.

This credit analysis elaborates on Norway's credit profile in terms of economic strength, institutions and governance strength, fiscal strength, and susceptibility to event risk, which are the four main analytic factors in our Rating Methodology: Sovereigns.

CREDIT PROFILE

Our determination of a sovereign's government bond rating is based on the consideration of four rating factors: Economic strength, institutions and governance strength, fiscal strength, and susceptibility to event risk. When a direct and imminent threat becomes a constraint, that can only lower the scorecard-indicated outcome. For more information, please see our Rating Methodology: Sovereigns.

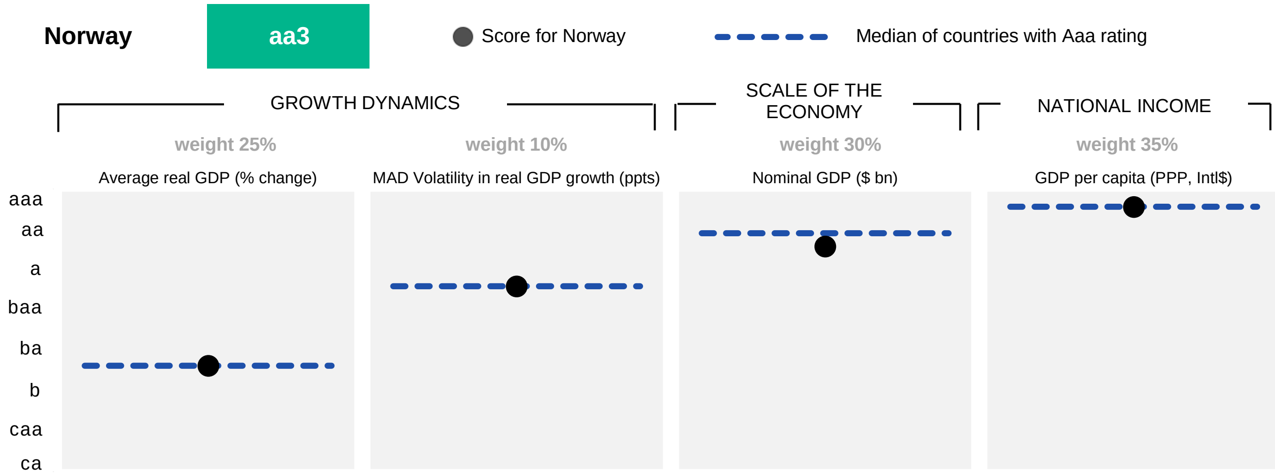
Economic strength score: aa3

Factor 1: Overall score

Scale	aaa	aa1	aa2	aa3	a1	a2	a3	baa1	baa2	baa3	ba1	ba2	ba3	b1	b2	b3	caa1	caa2	caa3	ca	
+				Final	Initial																-

Factor 1: Sub-scores

Norway	aa3



Economic strength evaluates the economic structure, primarily reflected in economic growth, the scale of the economy and wealth, as well as in structural factors that point to a country's long-term economic robustness and shock-absorption capacity. Adjustments to the economic strength factor score most often reflect our judgement regarding the economy's flexibility, diversification, productivity and labour supply.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

We adjust Norway's final economic strength score at "aa3", one notch above the initial score of "a1", to reflect the country's highly competitive position in the oil and gas markets; the significant support from the GPFG's sizable assets, which represent an additional economic diversification that is not captured in nominal GDP; and the large fiscal buffer that can be used to soften the impact of economic shocks.

Our assessment also reflects Norway's large economy, low volatility in its real GDP growth and its GDP per-capita of $78,408 (in purchasing power parity [PPP] terms) in 2022, which is significantly above the median of Aaa-rated peers ($70,444). However, Norway's trend growth is on average 1.7% over 2018-27, almost in line with the Aaa-rated median of 1.8% (see Exhibit 2). Norway's strong competitiveness reflects the flexibility of its wage-setting model and exchange rate, as well as the success of its past cost-cutting efforts in the oil and gas sector. An exceptional social safety net — which includes the provision of basic services, education and healthcare, and safety –, low economic inequality, and relatively high social mobility significantly reduce Norway's susceptibility to social risks.

However, long-term growth challenges include Norway's rapidly aging population, which will slow the projected growth of the labor force, and the country's exposure to the implications of carbon transition. Norway's highly competitive and flexible mainland economy, which is accumulating petroleum revenue in its very sizable sovereign wealth fund and building comparatively "clean" and very competitive oil and gas production, effectively mitigates carbon transition risks.

Other countries with an economic strength score of "aa3" include the Netherlands (Aaa stable), Denmark (Aaa stable), Sweden (Aaa stable), Germany (Aaa stable), Canada (Aaa stable) and Taiwan, China (Aa3 stable).

Exhibit 1

Peer comparison table factor 1: Economic strength

	Norway Aaa/STA	aa3 Median	Netherlands Aaa/STA	Denmark Aaa/STA	Sweden Aaa/STA	Germany Aaa/STA	Canada Aaa/STA	Taiwan, China Aa3/STA
Final score	aa3		aa3	aa3	aa3	aa3	aa3	aa3
Initial score	a1		a1	a2	a1	a2	a1	aa3
Nominal GDP ($ billion)	579.3	673.9	989.7	395.0	585.9	4,069.4	2,139.8	761.8
GDP per capita (PPP, Intl$)	78,408.1	67,323.5	69,963.3	70,924.3	65,496.4	63,868.8	58,292.5	69,150.7
Average real GDP (% change)	1.7	1.8	1.5	1.9	1.5	0.9	1.6	3.2
MAD Volatility in real GDP growth (ppts)	0.6	0.7	0.7	0.9	0.4	0.6	0.8	0.5

Sources: National authorities, IMF and Moody's Investors Service

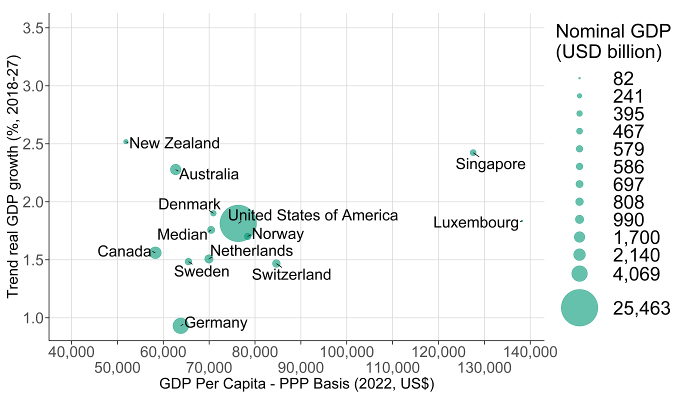
The economic and fiscal importance of the hydrocarbon sector reached a record high in 2022, and will remain elevated in 2023-24

The petroleum sector has been an important contributor to economic growth since the government began to fully exploit the economic potential of Norwegian oil and gas reserves in 1971, and has contributed to the government's vast savings in the GPFG. Over the past 20 years, the share of the petroleum sector accounted for an average 20% of GDP. In addition, the cost-competitiveness of Norwegian producers has improved, with overall costs declining by 27% in 2022 from their 2013-14 levels.

The economic and fiscal importance of the hydrocarbon sector substantially increased in 2021, and jumped to a record-high in 2022 (see Exhibit 3). This increase was related to the significant rise in energy prices caused by Russia's invasion of Ukraine and the shift in energy demand from European countries to alternative sources away from Russia that substantially reduced energy deliveries to European countries.

Exhibit 2

Norway's economy is wealthier than the Aaa-rated median, but is smaller and has weaker trend growth

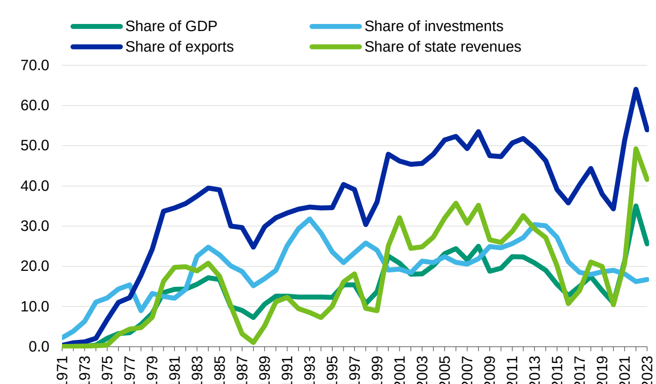


Sources: Eurostat, National Statistical Offices, IMF and Moody's Investors Service

Exhibit 3

The importance of the hydrocarbon sector in the economy and state revenue jumped to record highs in 2022 because of the European energy crisis

In percentage terms



Sources: Statistics Norway, Ministry of Finance, Norwegian Petroleum Directorate and Moody's Investors Service

The substantial increase in export prices led to a 53% improvement in Norway's terms of trade in 2022, compared with the 4% weakening in the terms of trade of EU (Aaa stable) countries. The export value of Norwegian petroleum reached a record high in 2022, with revenue from gas exports jumping to NOK1,356 billion (+170% year over year) and from crude oil increasing to NOK549 billion (+46% year over year). The importance of the hydrocarbon sector reached record highs, accounting for 35% of GDP, 64% of exports and 49% of state revenue in 2022. The Norwegian Petroleum Directorate projects oil and gas investment will increase to its highest level since 2015 over 2022-25.

Norway managed to increase its overall oil and gas production by 0.6% year over year to 234.1 billion standard cubic meter (sm3) in 2022, with gas production up 7.4% to 123.8 billion sm3 and liquid production down 6.1% to 110.3 billion sm3. For 2023, the Norwegian Petroleum Directorate forecasts an overall increase of 2.7% in oil and gas production, with liquid production increasing 6.2% and gas production slightly decreasing by 0.4%. Over 2024-27, the Norwegian Petroleum Directorate expects average overall oil and gas production to be slightly higher than in 2023, with gas production staying roughly stable.

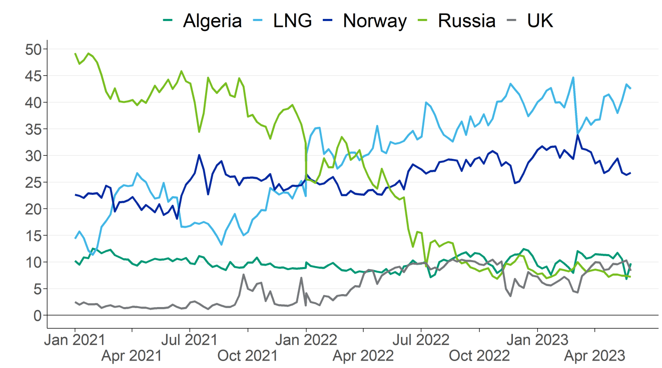
As almost all oil and gas produced on the Norwegian shelf is exported, Norway is the 11th largest oil producer globally and the third largest net gas exporter globally after Qatar (Aa3 positive) and Russia. Most of the gas is exported via the Norwegian gas pipeline network to the European market. Norway is the most important supplier of gas for EU countries, with gas deliveries accounting for 30% of total EU gas imports in year-to-date 2023, compared with 26% in 2022 and 24% in 2021 (see Exhibit 4).

The petroleum sector will remain a crucial part of Norway's economy for the foreseeable future, but the production of oil and gas will gradually start declining in the mid-2020s, according to the projections of the Norwegian Petroleum Directorate. Policymakers have long anticipated these trends, and are prepared to make adjustments to ease the transition to a less petroleum-dependent economy.

Exhibit 4

Norway's gas exports account for around 30% of total EU gas imports in 2023 so far

Percentage of total EU natural gas imports

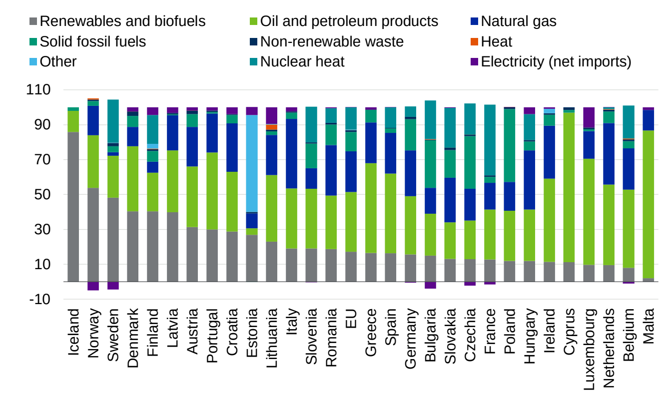


Sources: Bruegel and Moody's Investors Service

Exhibit 5

Renewables and biofuels account for a very large share of the energy mix in Norway

Percentage of fuels in gross available energy, 2021



Source: Eurostat

GDP growth will slow in 2023 and will thereafter accelerate moderately in 2024

GDP growth slowed to 3.3% in 2022 following the strong post-pandemic recovery of 3.9% in 2021, and already reached its 2019 pre-pandemic level in 2021. Mainland GDP (excluding the petroleum sector and ocean transport) increased 3.8% in 2022 following a 4.2% growth in 2021. The share of petroleum activities and ocean transport amounted to 10.7% of GDP in 2022.

For 2023, we forecast GDP growth and mainland GDP growth to slow further to 1.5% and 1.2%, respectively. The Russia-Ukraine military conflict mainly affects Norway's economy indirectly via elevated inflation and higher interest rates hitting domestic demand, as well as weaker growth of trading partners. In addition, a turn in the housing cycle will weigh on consumption and construction investments. Norges Bank forecasts house prices will fall 2.9% in 2023 and stagnate in 2024, after having increased by 5.0% in 2022. However, the government's support to shield households and businesses from the energy crisis (via, for example, subsidy for household electricity consumption, higher housing allowances, subsidies for agriculture and greenhouse industry and support for energy-intensive companies), amounting to about 2% of GDP according to Bruegel's estimate, and the favorable outlook for the petroleum sector, soften the negative effect of these developments.

We forecast both GDP and mainland GDP growth will moderately accelerate to 1.7% in 2024, with the share of petroleum activities and ocean transport remaining slightly below 11% of GDP.

Norway's labor productivity is one of the highest globally, but its growth slowed over the past decades as in other advanced economies

Norway's labor productivity (per hour) is an important driver of GDP growth, and was one of the second highest globally in 2021 (see Exhibit 6). About half of the average GDP growth of 2.1% between the first quarter of 1996 and that of 2023 was driven by hourly labor productivity growth, and the other half mainly by employment growth, with a small drag from lower average working time. The slowdown in GDP growth to 1.7% over the past 10 years can be explained by lower labor productivity growth (see Exhibit 7).

Exhibit 6

Norway's hourly labor productivity is one of the highest globally

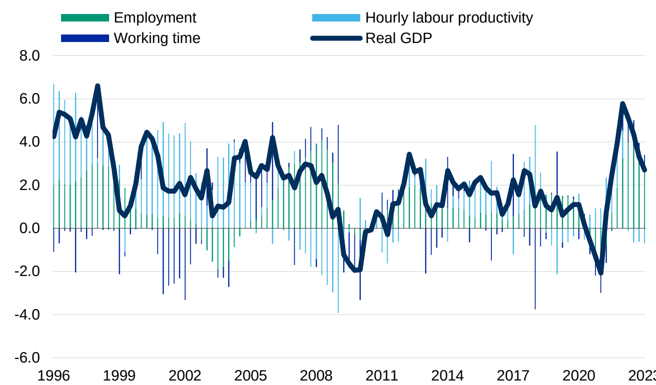
GDP per hour worked (GDP constant 2017 international $ at PPP) in 2021

Sources: International Labour Organization and Moody's Investors Service

Exhibit 7

Norway's trend labor productivity growth slowed over the past decades

In percentage points



Sources: Eurostat and Moody's Investors Service

The slowdown in trend labor productivity growth can be explained by general trends (such as a declining pace of innovations, exhaustion of growth possibilities offered by information and communications technologies, shift to lower-productivity sectors, and labor market reforms and policies to boost the participation rate) that also apply to other countries featuring at the labor productivity frontier. In addition, the composition effect plays a significant role as Norway's labor productivity in the petroleum sector is substantially above the country's average. Structural changes and cyclical developments in the petroleum sector, which also has a significant demand for mainland's goods and services, as well as drives positive productivity spillovers to the mainland economy, substantially affect labour productivity.

Demographic dynamics will intensify already high labor shortages and weigh on potential growth

Norway's population growth slowed to 0.7% in 2021-22 from an average 1.3% over 2011-13 mainly because of lower net migration. The impact of the pandemic on net migration further slowed population growth to just 0.4% in 2020, its lowest level since 1990. Net migration started recovering in 2021, which lifted population growth to 0.6% in 2021 and 1.2% in 2022.

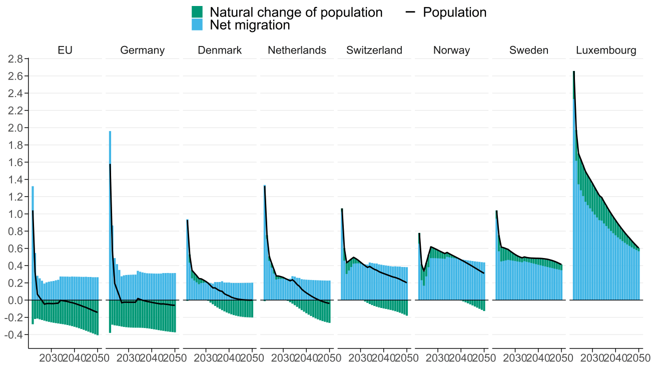
Sustained net immigration to Norway led to an increase in the share of immigrants and first-generation Norwegians in the population to almost 20% at the beginning of 2023 from 4.3% at the beginning of 1992.

Similar to most advanced economies, Norway faces long-term demographic challenges as the “baby boomer” generation ages and retires. According to Eurostat's 2023 population projections, the demographic trends for Norway in 2050 will be less severe than for other Aaa-rated sovereigns such as Germany, Denmark and the Netherlands, as well as the EU average (see Exhibits 8 and 9). This implies that the negative impact of demographic challenges on potential growth will be less severe for Norway than for its peers. Our estimate of potential growth in 2023 is around 1.5%.

Exhibit 8

Norway's population growth will slow mainly because of the natural change of population

Percentage change, year-over-year, 2023-based population projections (baseline)

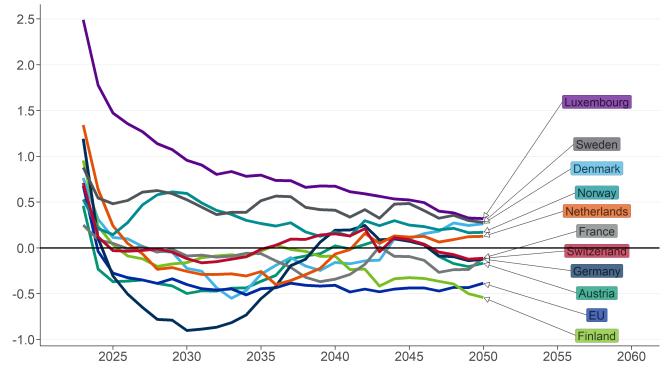


Sources: Eurostat and Moody's Investors Service

Exhibit 9

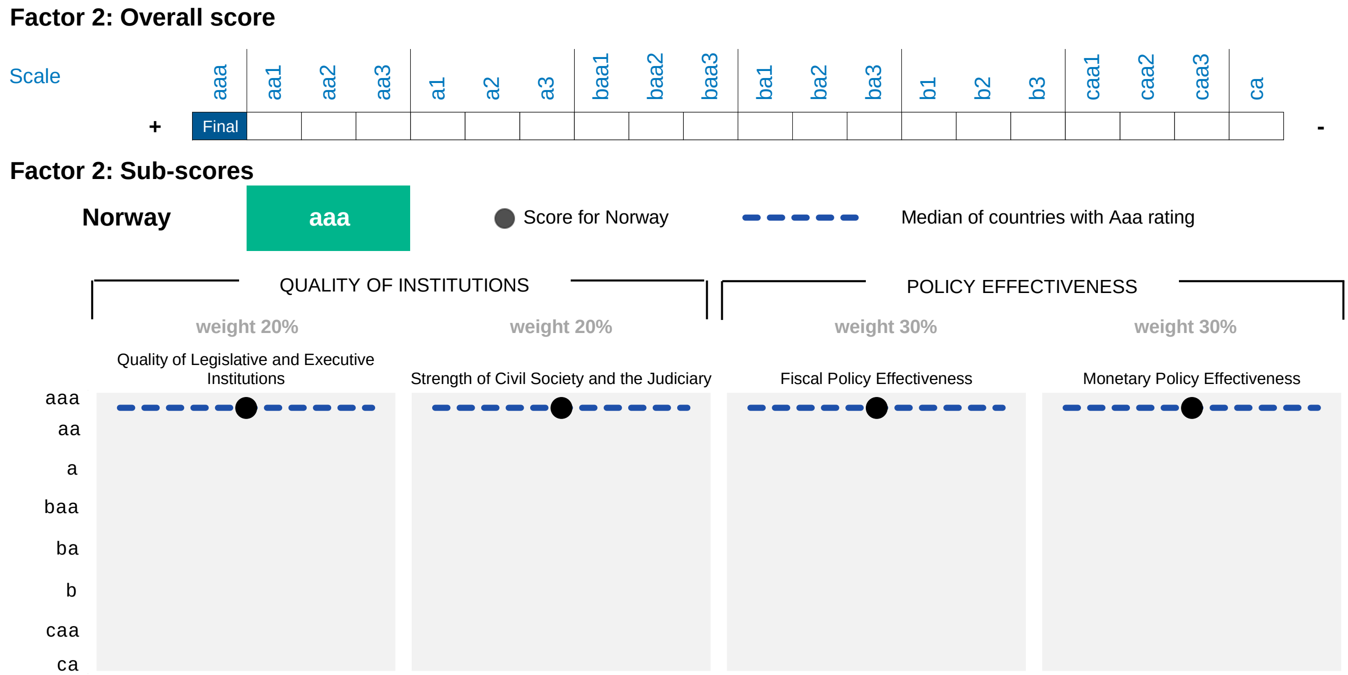
Norway's working-age population growth is likely to remain positive over the next decades

Population aged 20-65, percentage change, year over year, 2023-based population projections (baseline)



Sources: Eurostat and Moody's Investors Service

Institutions and governance strength score: aaa



Institutions and governance strength evaluates whether the country's institutional features are conducive to supporting a country's ability and willingness to repay its debt. A related aspect is the government's capacity to conduct sound economic policies that foster economic growth and prosperity. Institutions and governance strength is most often adjusted for the track record of default, which can only lower the final score.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

Norway's stable, consensus-based political framework and a track record of successive governments that have followed prudent macro strategies, underpin its institutions and governance strength at "aaa", the highest possible level. The efficient and very transparent institutional framework provides a high degree of confidence in the government and its ability to implement effective policies. In terms of quantitative indicators, Norway's institutional setup is one of the strongest globally.

Most other Aaa-rated peers have the same, very high assessment for this rating factor.

Exhibit 10

Peer comparison table factor 2: Institutions and governance strength

	Norway Aaa/STA	aaa Median	Canada Aaa/STA	Denmark Aaa/STA	Netherlands Aaa/STA	Sweden Aaa/STA	Singapore Aaa/STA	Switzerland Aaa/STA
Final score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Initial score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Quality of legislative & executive institutions	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aaa
Strength of civil society & judiciary	aaa	aaa	aaa	aaa	aaa	aaa	aa	aaa
Fiscal policy effectiveness	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aaa
Monetary & macro policy effectiveness	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aaa
Fiscal balance/GDP (3-year average)	24.8	-0.7	-1.4	2.1	-2.0	-0.4	-0.4	0.7
Average inflation (% change)	3.2	2.9	2.7	2.6	3.3	3.0	2.1	1.3
Volatility of inflation (ppts)	1.3	2.1	1.8	2.5	3.4	2.3	2.0	1.1

Sources: National authorities, IMF and Moody's Investors Service

Norway ranks highly in international surveys on rule of law and control of corruption

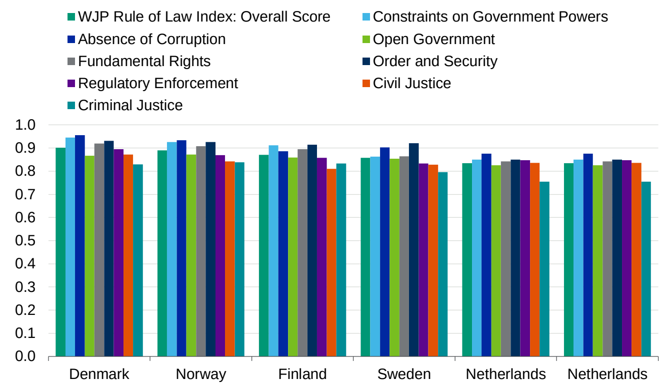
Law enforcement in Norway is highly predictable and consistent. The government consistently and dependably maintains the balance and separation of powers. The country has an independent and impartial judiciary, as reflected in its very high score in the World Justice Project (WJP) Rule of Law Index (overall ranking second globally in 2022, see Exhibit 11). The country has encountered very few corruption problems — Norway consistently ranks very highly in the Corruption Perceptions index of Transparency International (fourth worldwide in 2022, see Exhibit 12).

In addition, Norway's scores in other surveys, such as the Worldwide Governance Indicators (WGIs), are consistently high (see Exhibit 13). It also has very strong civil society institutions and very high assessments for press freedom, as highlighted by its top ranking in the 2023 World Press Freedom Index.

Exhibit 11

Norway ranks second in the world on the overall WJP Rule of Law Index

Top five countries in 2022, scores range from 0 (weakest) to 1 (strongest adherence to the rule of law)

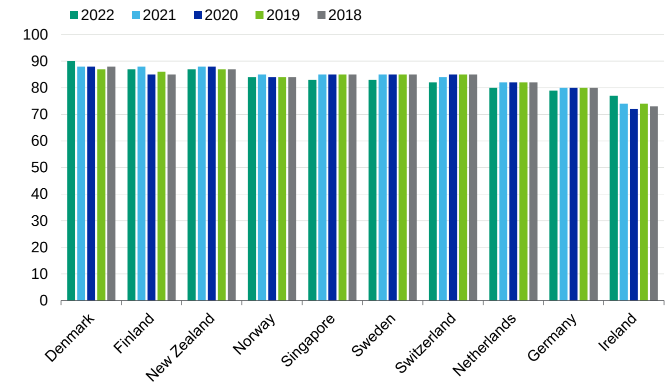


Sources: WJP and Moody's Investors Service

Exhibit 12

... and is ranked fourth in Transparency International's Corruption Perception Index

Top 10 countries of 2022, scale from 0 (highly corrupt) to 100 (very clean)

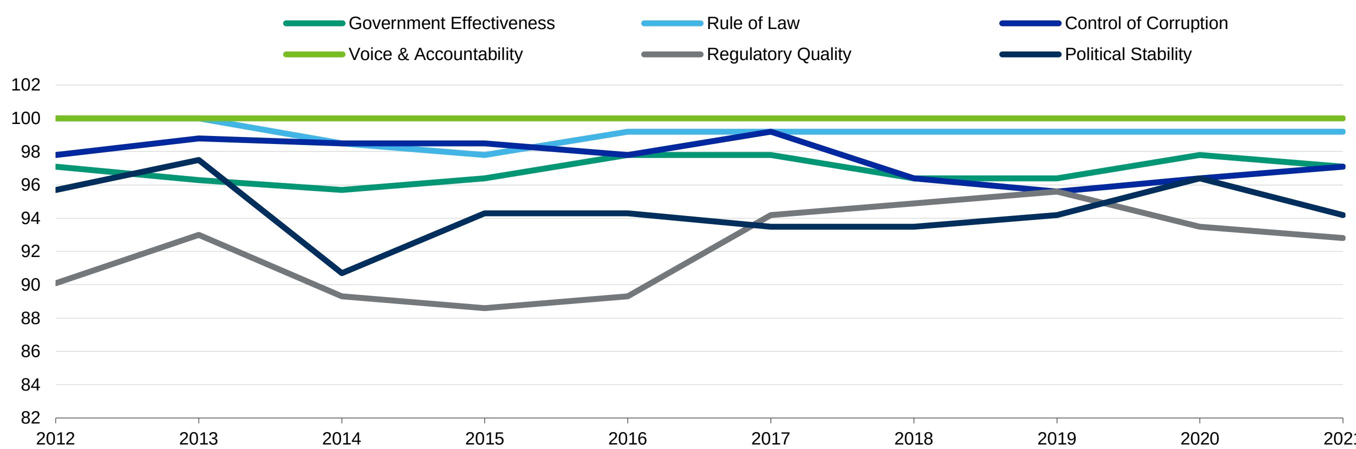


Source: Transparency International

Exhibit 13

Norway has very high scores in the WGIs

Percentile rank based on all sovereigns we rate



Sources: WGIs and Moody's Investors Service

Consistent adherence to the fiscal rule supports institutional strength

The Norwegian government adheres to its fiscal rule that specifies government spending should equal the revenue from the mainland economy and the likely real return from the GPFG over time. According to the Government Pension Fund Act, all the net cash flow from the petroleum industry is transferred to the GPFG, the resources of which can only be transferred to the budget pursuant to a decision in the Parliament.

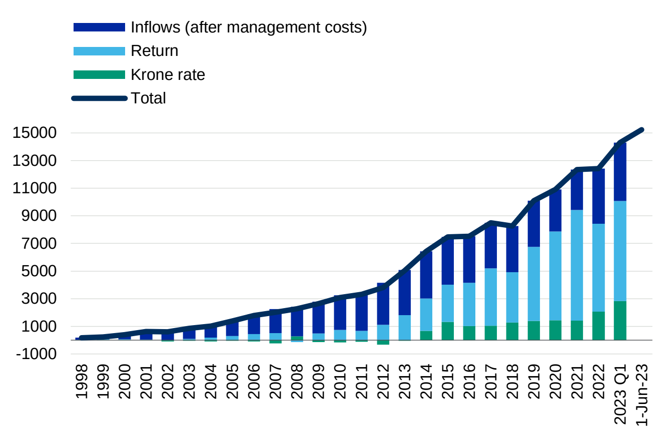
The fiscal rule stipulates that only a "gradual and sustainable" amount of such revenue can be transferred to the government's budget (also depending on the stage of the business cycle), and the amount is determined by the likely real return on the GPFG. The real annual rate of return was estimated at 4% in 2001, and this was the guideline for actual fund transfers to the central government budget until February 2017. At that point, in line with a special expert commission's recommendations, the government reduced the fund's estimated real return to 3%, with the 2018 budget being formulated with the new guideline for fund transfers. The reduction in the estimated fund return coincided with growing government expenses, particularly in areas related to an aging population and social benefits.

According to the revised national budget 2023, which was released on 11 May 2023, the government plans to spend petroleum revenue of 3.0% of the GPFG's capital (at the beginning of 2023), compared with 2.7% in 2022 and the elevated levels of 3.3% in 2021 and 3.7% in 2020. The fiscal policy stance will be roughly neutral in 2023 when excluding the Nansen Support Programme for Ukraine and increased aid to developing countries. According to estimates of the Ministry of Finance, the "fiscal impulse" (percentage-point [pp] change in the structural non-oil budget deficit as a percentage of trend GDP for mainland Norway) will be +0.4 pp in 2023 after a fiscal impulse of -1.0 pp in both 2021 and 2022, and a sizable expansionary fiscal policy stance of 3.8 pp in 2020.

The fiscal framework has helped shield the economy and public finances from the effects of volatility in prices of petroleum products because price movements do not directly affect the budget, but only the income to the GPFG. Accordingly, the impact of price volatility of petroleum products is much less significant for Norway's economy and budget than for those of other commodity producers. While other countries have established fiscal rules with similar intent to Norway's, no natural resource-rich country has segregated so much of its income from commodities.

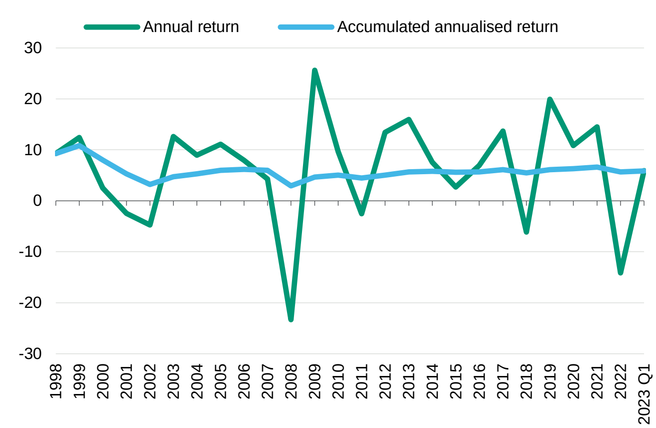
Since the fund's inception (the first capital was allocated in May 1996) until the first quarter of 2023, the total inflow of capital amounted to NOK4,961 billion while the total withdrawal of capital was NOK687 billion and management fees were NOK63 billion. GPFG generated a return of NOK7,263 billion (equal to an annual return of 5.9%, or 3.7% after management costs and inflation), with a market value of NOK14,294 billion (or 236.6% of GDP) at the end of Q1 2023 when taking into account exchange-rate movements (NOK2,820 billion) (see Exhibits 14 and 15). The GPFG's market value increased to NOK15,234 billion on 1 June 2023.

Exhibit 14
GPFG's market value continues to increase, reaching 252% of GDP on 1 June 2023
NOK billions



Source: NBIM

Exhibit 15
GPFG's accumulated annualized return amounts to 5.9% since its inception
In percentage terms



Source: NBIM

The authorities proactively manage petroleum and financial resources

Norway established its sovereign wealth fund (which was then called the Government Petroleum Fund) in 1990, and its first capital transfer to the fund was in May 1996. The GPFG's mandate is to invest the country's petroleum-related wealth responsibly, as well as balance risks against returns. Norges Bank Investment Management (NBIM) was set up at the beginning of 1998 to handle the operational management of the fund. The fund invests solely in foreign assets to reduce distortions in the domestic economy that typically arise from unrestrained spending of earnings from plentiful natural resources.

The fiscal rule and the accumulated savings in the GPFG will enable the government to extend the financial benefits of the country's nonrenewable resources to future generations. The government expects the fund to last indefinitely. Alongside the 2017 decision to reduce the estimated return, the government increased the asset allocation of its strategic benchmark index to equity investments away from fixed-income assets. Following a suggestion from the government, parliament decided to increase the GPFG's equities allocation to 70%.

Investments in unlisted real estate — which accounted for 2.4% of the fund's value as of the end of Q1 2023 — and unlisted renewable energy infrastructure are not defined by GPFG's benchmark index. The managing mandate for the GPFG sets a maximum allocation to unlisted real estate of 7% and to unlisted renewable energy infrastructure of 2% of the investment portfolio. The first unlisted renewable energy infrastructure investment (a 50% stake in the Borssele 1 and 2 offshore wind farm in the Netherlands) was made in 2021, which had a market value of NOK14 billion, or 0.1% of the fund's value, at the end of Q1 2023. NBIM announced its second investment in unlisted renewable energy infrastructure (He Dreiht: an offshore wind project under construction in Germany) on 23 March 2023, which will likely be completed in Q3 2023.

The GPFG is the world's largest sovereign wealth fund in market value terms and, with 223% of nominal GDP at the end of 2023, the third-largest as a percentage of GDP, after those of Abu Dhabi (Aa2 stable) and Kuwait (A1 stable). Norway's system of managing its natural resource income is a model that a number of other countries have tried to emulate, but generally with far less success because of their lower institutional strength or economic diversification. The Ministry of Finance is formally responsible for managing the fund, while NBIM conducts its operational management.

The fund's governance structure and investment strategy have been the subject of political debate in recent years. In 2018, an expert commission recommended that the fund be moved from the central bank's management to that of a new state investment company, to be established and overseen by the Ministry of Finance. The recommendation aimed to alleviate the pressure on Norges Bank to manage the fund, and allow both the fund and the bank to focus on their respective objectives. In 2019, the government decided to retain the fund's management within Norges Bank rather than an independent organization. Nevertheless, the willingness to regularly reevaluate the fund's structure, as well as its investment approach, highlights the authorities' flexibility and openness to adapt as the economic and fiscal situations evolve.

Norges Bank continues to tighten its monetary policy

Norges Bank launched its hiking cycle in September 2021 in response to rising inflation backed by the normalizing economy. In its latest monetary policy action of 4 May 2023, Norges Bank's monetary policy and financial stability committee decided unanimously to increase its policy rate by 25 basis points to 3.25% (effective from 5 May), which is the highest rate since 2008. In its forward guidance, Norges Bank points to a likely further policy rate hike in June 2023 amid continued high inflationary pressures caused by wage growth and a weak Norwegian krone.

A wage norm of 5.2% was agreed for 2023 according to the wage settlement between the Norwegian Confederation of Trade Unions (LO) and the Confederation of Norwegian Enterprise (NHO), as well as in several other settlements. The wage norm for the local government sector is slightly higher at 5.4%. Both wage norms are higher than year-over-year wage growth rates of 4.4% in 2022 and 3.5% in 2021. The Norwegian Krone depreciated by 12.9% year-to-date May 2023 against the currencies of the country's most important trading partners[1] and by 16.0% since the war in Ukraine started in late February 2022. Norges Bank's operational target is annual consumer price inflation of close to 2% over time.

The Harmonized Index of Consumer Prices (HICP) inflation peaked at 8.4% in October 2022 and decelerated to 7.2% in May 2023. We expect inflation to continue to moderately decelerate to 4.2% by year-end 2023 because of energy-related base effects and moderate second round effects, mainly related to the Norwegian wage-setting model being oriented on the benchmark collective agreement in the manufacturing sector, which traditionally focuses on sustaining its high competitiveness. We forecast inflation to average 5.4% in 2023 and 3.4% in 2024, after reaching 5.8% in 2022.

Macroprudential regulation mitigates the risks posed by the housing market

After years of steady growth in house prices in Norway, the market started to cool in mid-2022 mainly because of the significant increase in interest rates. This likely ended the upswing in Norwegian residential house prices that started in 1993[2] and again followed a significant increase in house prices during the pandemic. Real house prices increased 10% between Q4 2019 and the peak in Q1 2022, and nominal house prices increased 19% between Q4 2019 and the peak in Q2 2022. New regulations on the sale of new property led to a further spike in prices in early 2022.

Nominal house prices moderately decreased 0.8% in the second half of 2022 but still increased by 5.0% in full-year 2022. Norges Bank expects house price inflation to slow alongside higher interest rates and as the impact of the new regulation fades. It forecasts house price changes of -2.9% in 2023, 0.0% in 2024 and 4.1% in 2025.

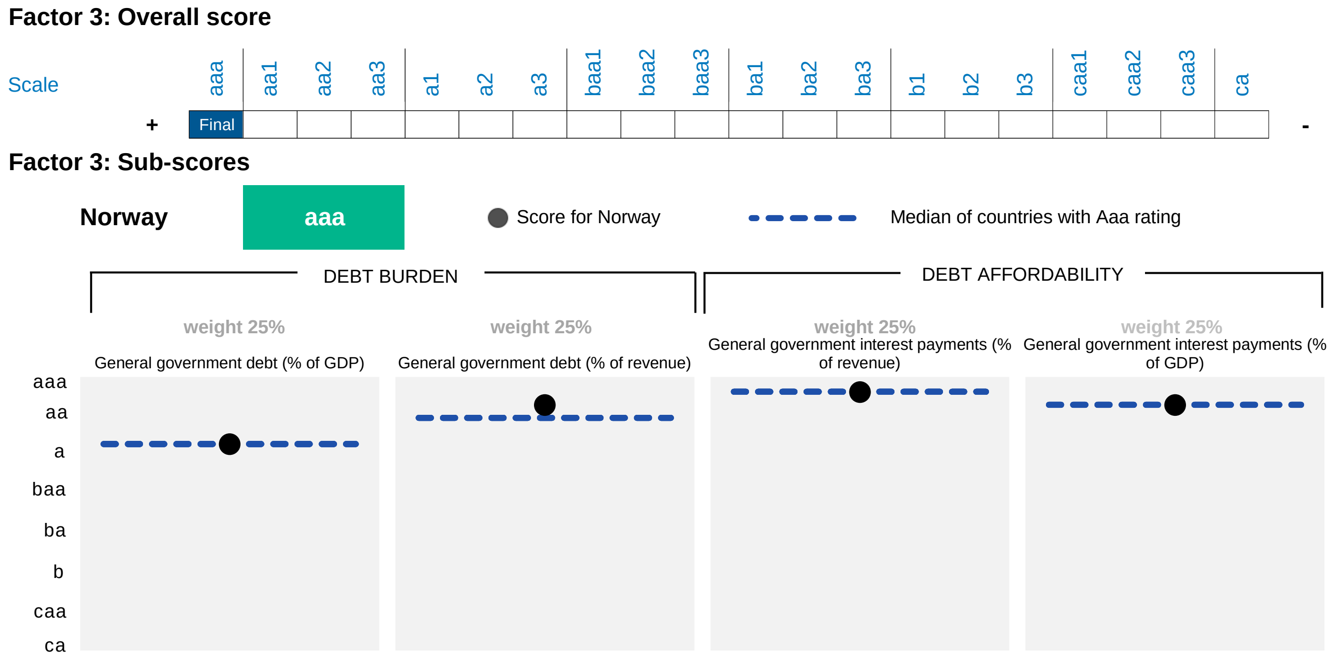
The substantial increase in house prices over the past 30 years, in combination with high household debt, remains a credit challenge for both households and banks. As house price growth surpassed income growth, housing affordability weakened significantly to an all-time low in Norway. Weakening affordability indexes also indicate households becoming more vulnerable to income loss and higher interest rates. Residential property is the largest asset for many households, while housing-related debt is typically the largest liability. In fact, household debt compared with net disposable income is one of the highest among Aaa-rated peers, amounting to 238% in the fourth quarter of 2022. More than 90% of all mortgages in Norway carry variable interest rates and, therefore, rising interest rates quickly increase the mortgage debt-servicing costs for households. According to Norges Bank's estimate, household interest burdens will probably increase to more than 9% over the course of 2023 from almost 7% in Q4 2022 and around 4% in Q4 2020. Household debt service ratios (including interest and ordinary principal payments) will likely increase to a historically high level.

However, most households have adequate buffers in the form of bank deposits and cash, and benefit from the favorable labor market situation. Norwegian households have substantial assets as highlighted by debt of households and nonprofit institutions serving households (NPISHs) amounting to 40% of their total assets in 2020.

In response to accelerating property price inflation and rising household indebtedness, the authorities introduced a series of macroprudential measures, including maximum loan-to-value (LTV) and loan-to-income ratios, affordability tests for borrowers, and amortization requirements.

The credit profile of Norway would be resilient to all but the most severe downturns of its housing market. Robust buffers, public finances and institutions insulate Norway from potential credit pressures. Household buffers and automatic stabilizers would contain the effects on consumption. Moreover, any knock-on effects from a property correction are unlikely to dent Norway's fiscal strength, which is among the strongest across all Aaa-rated sovereigns.[3]

Fiscal strength score: aaa



Fiscal strength captures the overall health of government finances, incorporating the assessment of relative debt burdens and debt affordability as well as the structure of government debt. Some governments have a greater ability to carry a higher debt burden at affordable rates than others. Fiscal strength is adjusted for the debt trend, the share of foreign currency debt in government debt, other public sector debt and for cases in which public sector financial assets or sovereign wealth funds are present. Depending on the adjustment factor, the overall score of fiscal strength can be lowered or increased.

Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

We assess the government's fiscal strength at "aaa", supported by the sizable financial assets of 229% of GDP in 2022, mainly related to the GPFG and including government deposits at the central bank. The government's financial position is very sound compared with most other sovereigns, many of which face similar pressures of aging populations but have net liabilities instead of net assets.

Norway's fiscal rule requires that the government transfers all of its oil and gas-related income to the GPFG. The government then withdraws just a small portion of the fund to finance the non-oil fiscal deficit, with the aim to keep withdrawals in the long run equal to the estimated real return of the GPFG. The central government only borrows to cover lending to and capital injections into state lending institutions like state banks and government lending schemes, and to refinance or repay maturing debt. In addition, liabilities associated with repurchase agreements (repos) in the GPFG are counted as loan debt.

The GPFG is the world's largest sovereign wealth fund, valued at NOK12,340 billion (or 293% of GDP) at the end of 2021. The value of the GPFG increased to NOK12,429 (or 223.2% of GDP) at the end of 2022 because the record-high inflow of capital (+NOK1,090 billion), together with changes from the fluctuations in krone (+NOK642 billion), was higher than the negative return on fund (-NOK1,637 billion) and management fee payment (NOK5 billion). The market value of the GPFG increased to NOK14,294 billion (or 236.6% of GDP) at the end of Q1 2023. The annual return and the net annual real return of the fund measured in the GPFG's currency basket were 5.89% and 3.65%, respectively, between 1998 and the end of Q1 2023.

The GPFG is invested solely abroad to prevent economic distortions (in particular, asset price inflation and currency appreciation) that would occur if invested domestically. The rule was formally tightened, and the estimated real rate of return of the fund was lowered to 3% from 4%, with effect from 2018, which also reduces what can normally be drawn from it for the budget, although it allows for some flexibility over the economic cycle.

Other sovereigns with an "aaa" fiscal strength score include Hong Kong SAR, China (Aa3 stable), Isle of Man (Aa3 negative), Kuwait (A1 stable), Macao SAR, China (Aa3 stable), Singapore (Aaa stable) and Switzerland (Aaa stable).

Exhibit 16

Peer comparison table factor 3: Fiscal strength

	Norway	aaa Median	Hong Kong SAR, China	Isle of Man	Kuwait	Macao SAR, China	Singapore	Switzerland
	Aaa/STA		Aa3/STA	Aa3/NEG	A1/STA	Aa3/STA	Aaa/STA	Aaa/STA
Final score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Initial score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Gen. gov. debt (% of GDP)	37.4	14.5	10.2	6.6	3.0	0.0	35.6	27.6
Gen. gov. debt (% of revenue)	58.0	48.7	48.7	34.6	6.6	0.0	207.6	83.8
Gen. gov. interest payments (% of GDP)	0.6	0.1	0.0	0.1	0.1	0.0	0.0	0.3
Gen. gov. int. payments (% of revenue)	0.9	0.3	0.1	0.6	0.2	0.0	0.1	0.9

Sources: National authorities, IMF and Moody's Investors Service

Fiscal surplus reached record highs, and fiscal policy stance will remain tight

The general government fiscal surplus reached a record high of 26.0% of GDP in 2022 after 10.6% in 2021 mainly because of the substantial increase in petroleum revenue. We forecast an average fiscal surplus of 24% of GDP in 2023-24.

Norway's fiscal rule requires that the government transfers all of its oil and gas-related income to the GPFG. The government then withdraws just a small portion of the fund to finance the non-oil fiscal deficit, with the aim to keep withdrawals in the long run equal to the estimated real return of the GPFG. The inflow of capital from the government to GPFG reached a record high of NOK1,090 billion (or 19.6% of GDP) in 2022 because of high prices for sales of oil and gas.

The revised 2023 national budget as of 11 May 2023 estimates that the structural non-oil fiscal deficit will probably amount to 3.0% of the GPFG at the beginning of 2023, compared with 2.7% in 2022, 3.3% in 2021 and 3.7% in 2020. In terms of mainland trend GDP, the structural non-oil deficit will probably be 10% in 2023 after reaching 9.5% in 2022, 10.6% in 2021 and 11.6% in 2020.

With high inflation and a tight labor market creating wage pressures, the authorities continue to focus their economic policy on limiting inflationary pressure. Fiscal policy will be roughly neutral when excluding the Nansen Support Programme for Ukraine and increased aid to developing countries.

Dependence on fund earnings to finance the non-oil deficit remains a long-term challenge

A key risk for the public finances is the budget's growing exposure to the volatility in global financial markets. This is because investment returns are likely to contribute more to the GPFG's growth than petroleum revenue, as oil and gas revenue will gradually decline over the longer term as reserves are depleted and petroleum prices moderate.

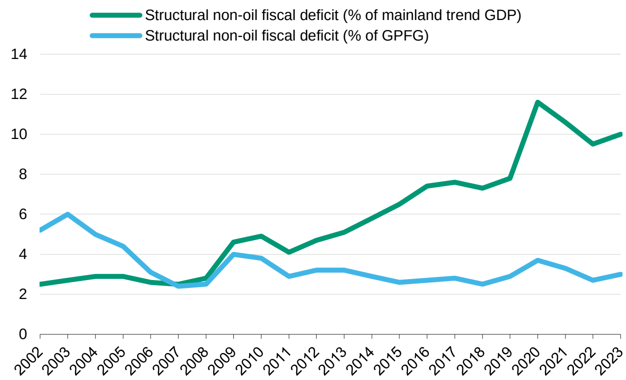
In addition, the structural non-oil fiscal deficit has grown rapidly, peaking at 11.6% in 2020, compared with 2.5% in 2002. With the phasing out of the pandemic support measures, the non-oil fiscal deficit decreased to 10.6% in 2021 and 9.5% in 2022, and will probably increase to 10.0% in 2023 (see Exhibit 17). There is a clear rationale for more stimulus when the economy is trending down, with a more neutral or even mildly restrictive fiscal policy stance resuming as the output gap closes and the economy recovers from the coronavirus pandemic.

Growth in the GPFG's value will derive solely from its returns if net petroleum revenue fails to exceed the government's non-oil budget deficits. For example, the budget made net withdrawals from the fund in 2016-17 following the previous oil price shock and in 2020-21 for the pandemic support measures. The jump in oil prices led to a record-high inflow of petroleum revenue to the GPFG in 2022 (see Exhibit 18). The fund is likely to continue to grow, with fluctuations over the next 15-20 years as investment returns outpace transfers to cover annual non-oil budget deficits.

Exhibit 17

The structural non-oil budget deficit moderated since its pandemic-related peak in 2020

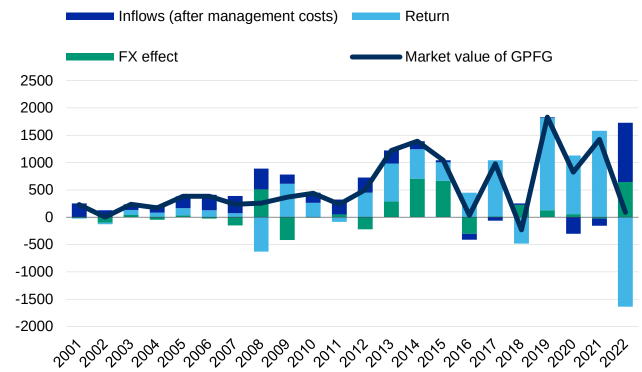
In percentage terms



Source: Ministry of Finance

Exhibit 18

Sizable net inflow to the GPFG in 2022 after net withdrawals in 2020-21



Source: Ministry of Finance

A related concern is that the GPFG's large size could disincentivize efforts to contain expenditure: the GPFG was worth around 255% of nominal GDP at the end of Q1 2023. However, its share of GDP (though not its nominal value) is likely to decline gradually over the medium to long term, particularly as growth in mainland GDP increases and oil revenue reduces and eventually ceases over the long term.

Given the government's track record of fiscal prudence and the temporary nature of the measures taken in response to the pandemic, we expect the structural non-oil public deficit to amount to around 3% of the GPFG in the medium term. Apart from the exceptional circumstances posed by the pandemic, the authorities are likely to continue to consume around 3% of the fund's value every year (the expected real return) as a matter of policy, depending on the stage of the cycle.

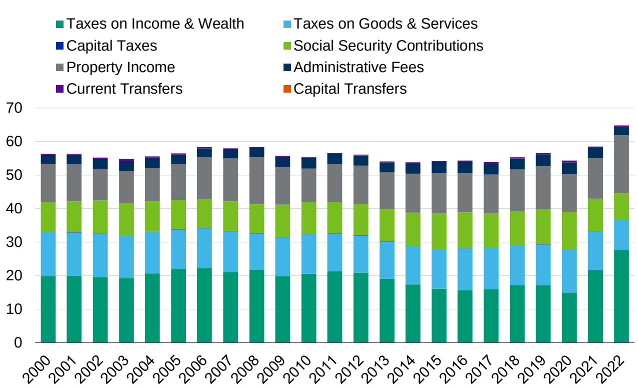
The GPFG's value is likely to plateau accordingly. As this transition occurs, the government may consider additional changes to how much of the fund is used in annual budgets as costs related to Norway's aging population grow. Prudent management to date and proactive steps by the authorities give us confidence that these issues will be addressed in a timely manner.

The government has not relied solely on the GPFG to guarantee the sustainability of public finances. High corporate and personal income tax rates have traditionally been used to bolster non-oil income (see Exhibits 19).

Exhibit 19

General government revenue sources are diverse ...

As a percentage of GDP

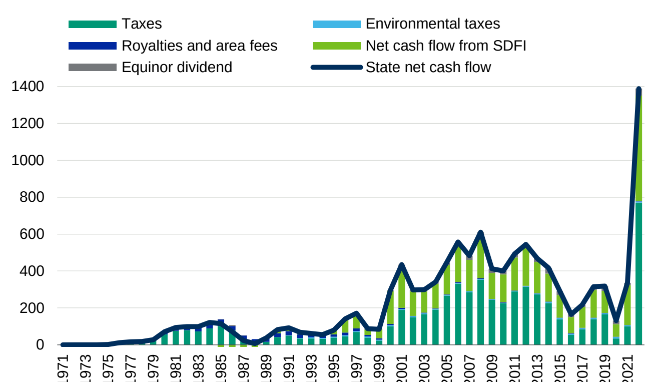


Sources: Statistics Norway and Ministry of Finance

Exhibit 20

... but the oil sector remains a key source of income for the state

NOK billion



Equinor = State-owned energy company; SDFI = State's Direct Financial Interest (in the petroleum sector).

Sources: Norwegian Petroleum Directorate, Ministry of Finance and Statistics Norway

In 2018, the authorities agreed upon the public-sector pension reform, which is similar to the earlier private-sector reform. This is also the final key step toward a more actuarially neutral and flexible pension system. A key element is that individuals with an occupational pension can retire from the age of 62 years up to 75 years with pension payouts adjusted to become actuarially neutral regardless of withdrawal age. In addition, a committee was established to review pension reform.

General government gross debt is moderate

As the non-oil budget deficit is covered by transfers from the GPFG and therefore does not imply any borrowing requirement, the main reason for the existence of central government debt is that the central government borrows to cover lending to and capital injections into state lending institutions, such as state banks and government lending schemes, and to refinance or repay maturing debt. In addition, liabilities associated with repurchase agreements (repos) in the GPFG are counted as loan debt, according to the ESA95 government finances methodology.

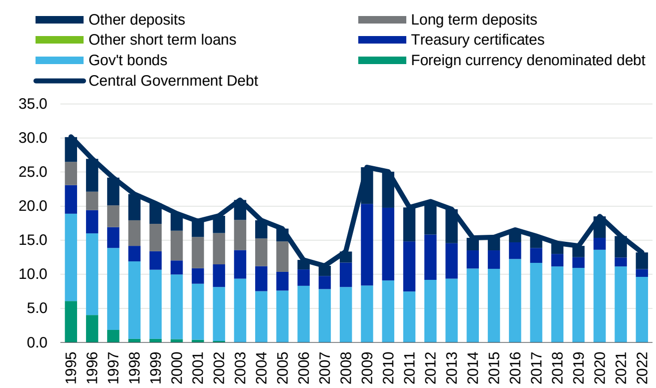
Central government debt declined steadily to 14.2% of GDP at the end of 2019 after peaking at 25.7% in 2009, and consists mostly of government bonds (see Exhibit 21). After increasing to 18.5% in 2020, the central government's debt-to-GDP ratio eased to 15.6% in 2021 and 13.2% in 2022. In addition, exchange-rate fluctuations affect the size of the repos.

Norway's gross general government debt, which also includes municipal debt, decreased to 37.4% of GDP in 2022, already lower than the 2019 level (see Exhibit 22).

Exhibit 21

The central government debt ratio fell in 2022

As a percentage of GDP

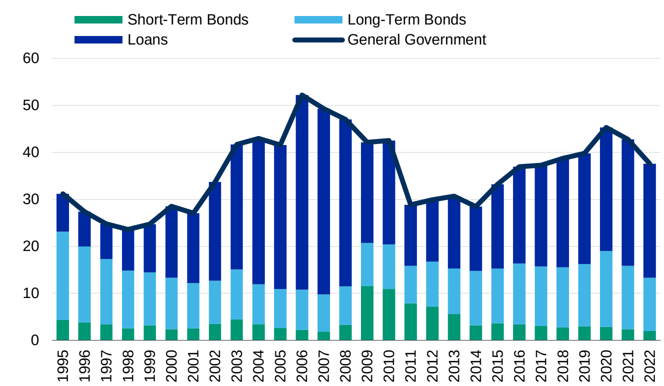


Sources: Statistics Norway and Moody's Investors Service

Exhibit 22

The general government debt ratio also declined in 2022

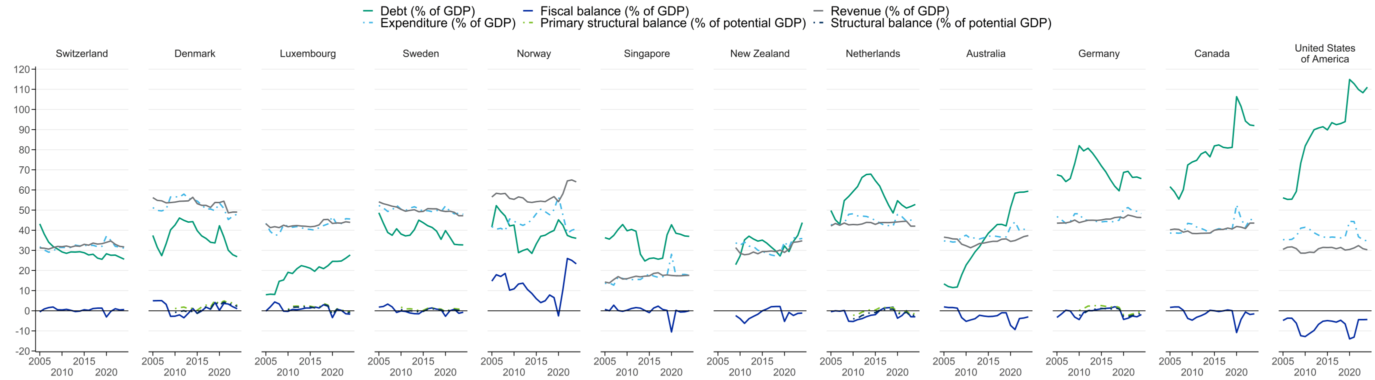
As a percentage of GDP



Sources: Statistics Norway and Moody's Investors Service

Norway's debt-to-GDP level remained slightly higher than the Aaa-rated median (36.5% in 2022). We expect its debt-to-GDP ratio to decrease to 36.0% in 2024 and the distance with the Aaa median to remain roughly unchanged, but much smaller than that of the US (Aaa stable) and Canada (see Exhibit 22).

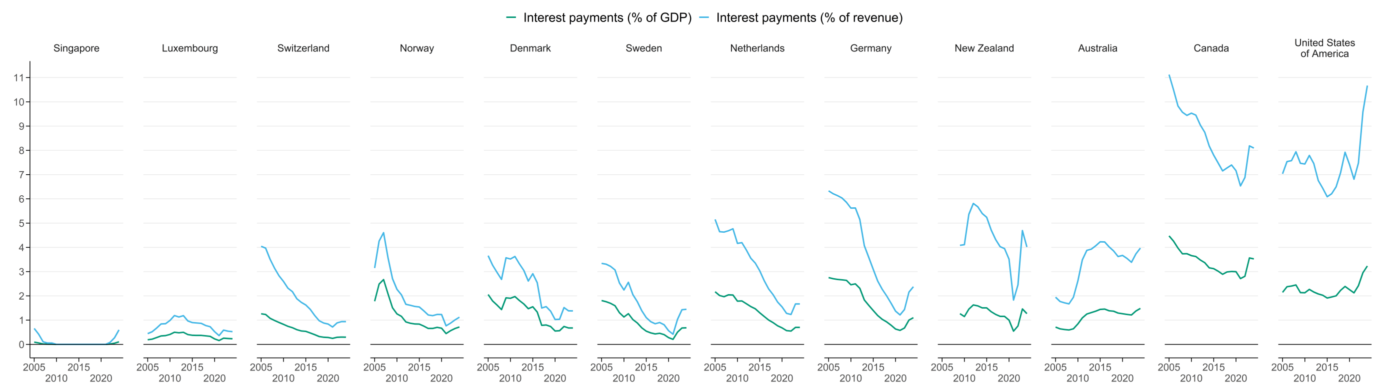
Exhibit 23
Norway's debt burden is roughly in line with the Aaa-rated median
As a percentage of GDP and potential GDP



Sources: National Statistical Offices, European Commission and Moody's Investors Service

In addition, Norway's debt affordability is very strong, reflected in a low interest payments-to-revenue ratio of 0.9% in 2022. This is lower than the Aaa median of 1.3%. As a consequence of the increased interest rates, we forecast debt affordability will gradually weaken with an average interest payments-to-revenue ratio of 1.1% in 2023-24 keeping the gap with the Aaa-rated median unchanged (see Exhibit 24).

Exhibit 24
Debt affordability is very strong in Norway and is roughly in line with the Aaa-rated median
As a percentage of GDP and revenue



Sources: National Statistical Offices and Moody's Investors Service

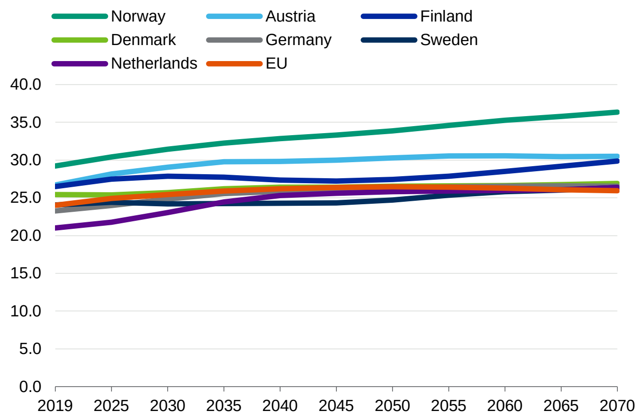
Adverse demographic trends are a longer-term fiscal challenge
The European Commission (EC) projects in its 2021 aging Report that Norway's total aging costs will increase rapidly to 36.4% of GDP in 2070 from 29.2% in 2019 (Exhibit 25). The country's total aging costs were 5 pp above the EU average in 2019, and this gap is projected to increase further to 10 pp in 2070. Unlike most advanced economies, Norway's sovereign wealth fund strengthens the government's ability to cope with the costs of this trend (see Exhibit 26).

However, despite its very substantial size, the GPFG alone is not sufficient to solve these challenges. The EC has pointed out in its policy scenarios that additional policy action would lower the increase in the total cost of aging. Linking the retirement age to increases in life expectancy would slow the increase in the total costs of aging to 5.9 pp over 2019-70 from 7.1 pp in the reference scenario. Alternatively, greater migration or higher employment rates of older workers would reduce the increase to 5.8 pp and 6.0 pp, respectively.

Exhibit 25

Increases in Norway's aging costs will exceed the EU average from an already higher starting point

Total cost of aging, as a percentage of GDP, reference scenario

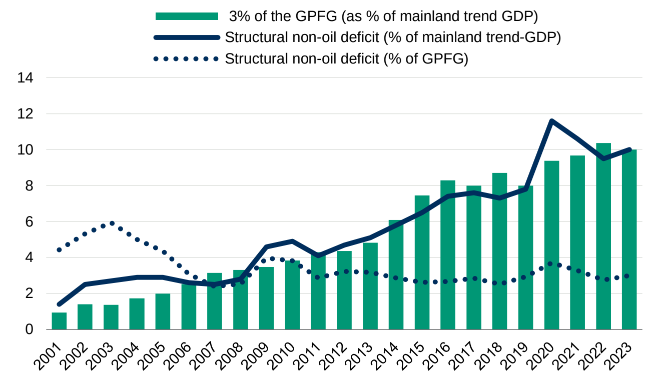


Source: EC and Moody's Investors Service

Exhibit 26

The non-oil fiscal deficit of the government is covered by GPFG returns

In percentage terms



Sources: Ministry of Finance and Moody's Investors Service

Susceptibility to event risk score: baa

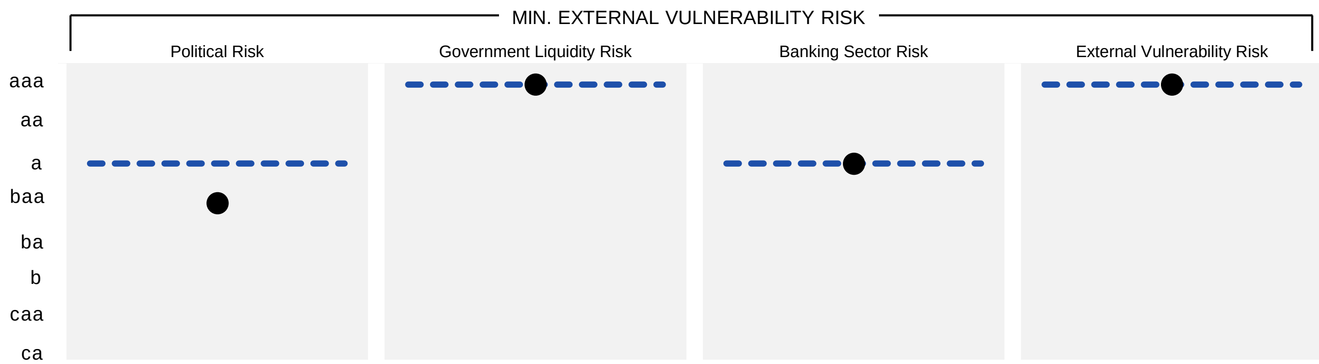
Factor 4: Overall score

Scale	aaa	aa	a	baa	ba	b	caa	ca	
+				Final					-

Factor 4: Sub-scores

Norway **baa** ● Score for Norway - - - - Median of countries with Aaa rating

Overall adjustment to Factor 4 Susceptibility to Event Risk: 0



Susceptibility to event risk evaluates a country's vulnerability to the risk that sudden events may severely strain public finances, thus increasing the country's probability of default. Such risks include political, government liquidity, banking sector and external vulnerability risks. Susceptibility to event risk is a constraint which can only lower the scorecard-indicated outcome.
Note: the initial factor score is shown in light blue in the scale above. In case the initial and final factor scores are the same, only the final score will appear in the table above.

We assess Norway's Susceptibility to event risk at "baa", reflecting geopolitical concerns related to the Russia-Ukraine war.

Susceptibility to political risk is "baa"
We assess Norway's political risk as "baa". Other sovereigns with the same political risk assessment include Austria (Aa1 stable), Denmark, Germany, Israel (A1 stable), the Netherlands and Sweden.

Exhibit 27
Peer comparison table factor 4a: Political risk

	Norway	baa Median	Austria	Denmark	Germany	Israel	Netherlands	Sweden
	Aaa/STA		Aa1/STA	Aaa/STA	Aaa/STA	A1/STA	Aaa/STA	Aaa/STA
Final score	baa		baa	baa	baa	baa	baa	baa
Voice & accountability, score[1]	1.8	0.3	1.4	1.6	1.4	0.7	1.5	1.5
Political stability, score[1]	1.1	0.4	0.9	0.9	0.8	-1.1	0.9	1.0

[1] Composite index with values from about -2.50 to 2.50: higher values correspond to better governance.
Sources: WGIs and Moody's Investors Service

Although Norway's NATO membership is ultimately a guarantor of national security, the country also faces contagion risks from the Russia-Ukraine military conflict as it is bound by NATO's Article 5 collective defense clause, which treats an attack on any NATO member as an attack on all treaty signatories. While this is not our base case because of the deterrent effect of this clause, there is a heightened risk that this treaty obligations could ultimately result in Norway needing to use armed force to restore and maintain stability in Europe. The probability of such risks materializing have increased in light of the ongoing military conflict between Russia and Ukraine.

We assess domestic political risks of Norway as very low against the backdrop of its consensus-driven political framework, which has demonstrated its proactiveness in addressing the country's long-term economic and fiscal challenges. Norway has a long track record of stable coalitions and cooperation in Parliament. In addition, the consensus style of governance limits risks of an abrupt change in policy direction, regardless of the parties in government.

Parliamentary elections held on 13 September 2021 saw Labour (26.3% of the vote) defeat the ruling Conservative party of Erna Solberg (20.4%), which had been in power since 2013. The Centre Party (13.5%) and the Socialist left (7.6%) came in third and fourth. Coalition talks resulted in a minority government led by Labour Party leader and now Prime Minister Jonas Støre, and Centre party leader and now Finance Minister, Trygve Slagsvold Vedum. Differences over environmental and fiscal policies meant the Socialist party declined to participate in the new administration.

The government's policy programme for its term out to 2025 focuses on tax increases for high-income and wealthy earners (but with no change in the overall tax burden on labor income), child care subsidies, a temporary electricity-bill compensation scheme for households, more support for rural communities and climate policies. In its revised 2023 budget presented in May 2023, the government's measures include additional spending such as increased social security and pension expenditure, energy subsidy scheme, higher allocations to municipalities and more spending on crucial public services as healthcare, security and refugees as well as the Nansen Support Programme for Ukraine. Norway is a global leader in climate mitigation policies, in particular in carbon pricing as the main policy instrument.

Susceptibility to government liquidity risk is "aaa"

We assess government liquidity risk at "aaa". Relatively small government gross financing needs of 1.6% in 2023 and strong market access keep government liquidity risks low. The non-oil budget deficit is financed with transfers from the GPFG, which keeps borrowing needs small. The GPFG continues to serve as a shock absorber for fluctuations in the economic cycle and its presence has limited the need for the government to rely on external financing during downturns in the economic cycle.

Other sovereigns with the same government liquidity risk assessment include Australia (Aaa stable), Denmark, Germany, Sweden, Switzerland and the US.

Exhibit 28

Peer comparison table factor 4b: Government liquidity risk

	Norway Aaa/STA	aaa Median	Australia Aaa/STA	Denmark Aaa/STA	Germany Aaa/STA	Sweden Aaa/STA	Switzerland Aaa/STA	United States of America Aaa/STA
Final score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Initial score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Ease of access to funding	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aaa
Gross borrowing requirements (% of GDP)	1.6	5.7	5.5	2.7	12.5	5.9	2.0	37.3

Sources: National authorities, IMF and Moody's Investors Service

Susceptibility to banking sector risk is "a"

Our assessment of banking sector-related risks is "a". This score reflects the intrinsic strength of Norway's banking sector marked by a strong "a3" average asset-weighted Baseline Credit Assessment, as well as a total bank assets-to-GDP ratio of 136% as of year-end 2022. In general, we expect Norwegian banks' credit quality will remain sound, despite a moderate asset-quality deterioration, as improving profitability will continue to support their strong capitalization. Our Banking System Outlook (BSO) for Norwegian banks is stable. The BSO reflects our view of credit fundamentals in the banking sector over the next 12 to 18 months.[4]

Potential vulnerability of the banking sector stems from high household indebtedness on the back of increasing interest rates and falling house prices, and lending concentration to the commercial real estate sector. While the Norwegian banks have a significant exposure to commercial property mortgages, the banks have limited exposure to commercial real estate companies that have the weakest financial strength and elevated refinancing risks in the bond market. Macroprudential measures imposed by banking regulators, a strong repayment culture and a low unemployment rate reduce some of the risks posed by the large scale of mortgage financing. We see the Norwegian banking system as broadly resilient to monetary tightening implications, helped by its typical balance sheet structure.

Probability of government support for Norwegian banks remains low. Norway's adoption in 2019 of the EU's Bank Recovery and Resolution Directive (BRRD), designed to ensure that creditors and shareholders rather than taxpayers cover the costs of bank failure, underpins our low government support assumptions for most Norwegian lenders we rate.

Other countries with an "a" score for banking sector risk include the Netherlands, Sweden, Australia, New Zealand (Aaa stable), Canada and the UK (Aa3 negative).

Exhibit 29

Peer comparison table factor 4c: Banking sector risk

	Norway Aaa/STA	a Median	Netherlands Aaa/STA	Sweden Aaa/STA	Australia Aaa/STA	New Zealand Aaa/STA	Canada Aaa/STA	United Kingdom Aa3/NEG
Final score	a		a	a	a	a	a	a
Initial score	a		a	a	a	a	a	a
BCA[1]	a3	baa1	baa1	a3	a2	a3	a2	a3
BSCE[2]	aaa-a3	baa2	baa1	aaa-a3	aaa-a3	aaa-a3	aaa-a3	aaa-a3
Total domestic bank assets (% of GDP)	136.2	170.2	305.0	222.1	251.7	185.3	305.9	374.9

[1] BCA is an average of Baseline Credit Assessments (BCAs) for rated domestic banks, weighted by bank assets.
[2] Where we have no or small rating coverage in a system, we estimate the risk of Banking Sector Credit Event (BSCE) based on available data for aggregate banking system.
Sources: National authorities, IMF and Moody's Investors Service

External vulnerability risk is "aaa"

We assess Norway's external vulnerability risk at "aaa". Norway's very high structural current account surplus, at an average of about 10% over the past decade, coupled with a sizable and growing net asset international investment position, shield the country from external liquidity pressures.

Other countries with a score of "aaa" for external vulnerability risk include Denmark, Germany, the Netherlands, Singapore, Switzerland and the US.

Exhibit 30

Peer comparison table factor 4d: External vulnerability risk

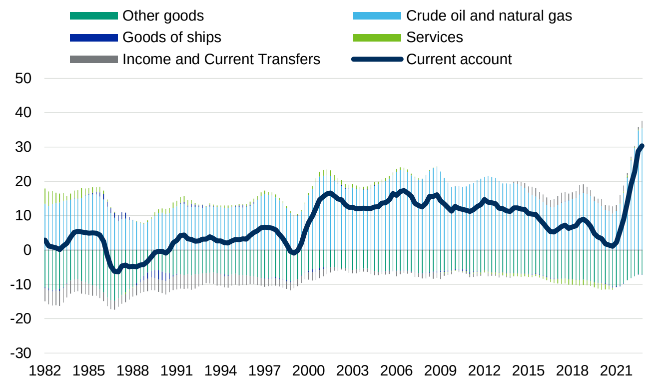
	Norway Aaa/STA	aaa Median	Denmark Aaa/STA	Germany Aaa/STA	Netherlands Aaa/STA	Singapore Aaa/STA	Switzerland Aaa/STA	United States of America Aaa/STA
Final score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Initial score	aaa		aaa	aaa	aaa	aaa	aaa	aaa
Current account balance (% of GDP)	30.4	3.8	13.1	4.2	4.4	19.3	10.1	-3.7
Net IIP (% of GDP)[1]	209.4	64.1	64.1	71.1	75.1	171.8	93.3	-63.3

[1] Net international investment position (as a percentage of GDP).
Sources: National authorities, IMF and Moody's Investors Service

Norway continued to generate current-account surpluses through the petroleum price collapse of 2014-16 and the coronavirus pandemic in 2020, though the latter was smaller than in 2019 because of lower petroleum prices (see Exhibit 31). As a consequence of strongly recovering oil and gas prices in 2021, the current account surplus jumped to 13.6% in that year, which was the highest since 2008. The Russia-Ukraine military conflict further pushed up oil and gas prices, which led the current account surplus to reach its record high of 30.4% of GDP in 2022. We expect the current account surplus to remain high at 26.0% of GDP in 2023 and 24.4% of GDP in 2024.

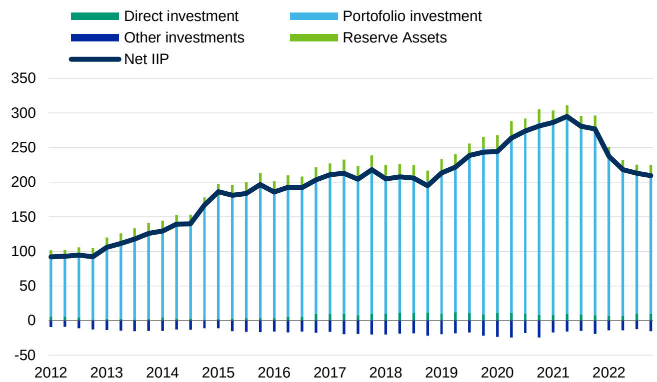
Given the government's policy of investing excess revenue from oil and gas export receipts into overseas assets, Norway's net international investment position (IIP) has improved over the years, reaching 209% of GDP at the end of 2022 (see Exhibit 32), compared with around 52% in 2007. These accumulated assets provide Norway with an exceptionally large buffer against external shocks, greatly limiting the economy's reliance on foreign capital inflows.

Exhibit 31
Current-account surplus jumped to a record high of 30% of GDP in 2022 because of very high oil and gas prices
Four-quarter moving sum, percentage of GDP



Sources: Statistics Norway and Moody's Investors Service

Exhibit 32
Norway has a very strong net international investment position
As a percentage of GDP

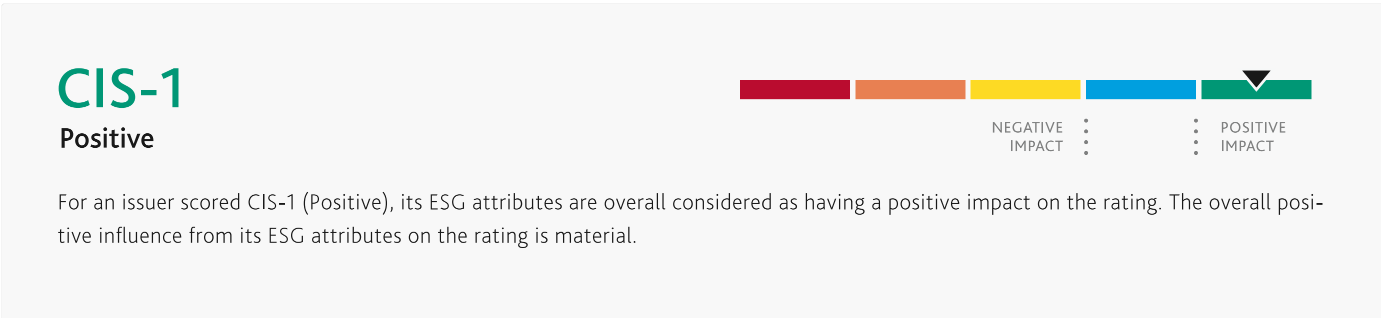


Sources: Statistics Norway and Moody's Investors Service

ESG considerations

Norway's ESG Credit Impact Score is Positive CIS-1

Exhibit 33
ESG Credit Impact Score



Source: Moody's Investors Service

Norway's positive (**CIS-1**) ESG Credit Impact Score reflects neutral-to-low exposure to environmental risk, the credit benefits stemming from its social profile and very strong governance. In addition, Norway's capacity to respond to costly environmental hazards or social demands is very high. This is based on Norway's very high resilience score related to the country's very high income levels, an exceptionally robust government balance sheet and very high quality of governance.

Exhibit 34
ESG Issuer Profile Scores

Source: Moody's Investors Service

Environmental

The E issuer profile score is neutral-to-low (**E-2**), reflecting neutral-to-low exposure to environmental risks across all categories. While Norway's economy has a material dependence on its petroleum sector, the country's exposure to the implications of carbon transition is effectively mitigated by its highly competitive and flexible mainland economy, which is accumulating petroleum revenues in its very sizeable sovereign wealth fund (which successfully separates petroleum-related revenues from government expenditure) and building comparatively "clean" and very competitive oil and gas production.

Social

We assess Norway's S issuer profile score as positive (**S-1**). Norway is among the few sovereigns for which a number of social attributes supports the rating. The score reflects a well-educated labor force, evenly distributed wealth, and very good-quality healthcare and basic services, while the demographic challenges posed by its ageing population are manageable.

Governance

Norway's very strong institutions and governance profile supports its rating, as captured by a positive G issuer profile score (**G-1**) as the efficient and very transparent institutional framework provides a high degree of confidence in the authorities' ability to implement effective policies. Coupled with exceptionally high wealth levels and financial strength, this supports a high degree of resilience.

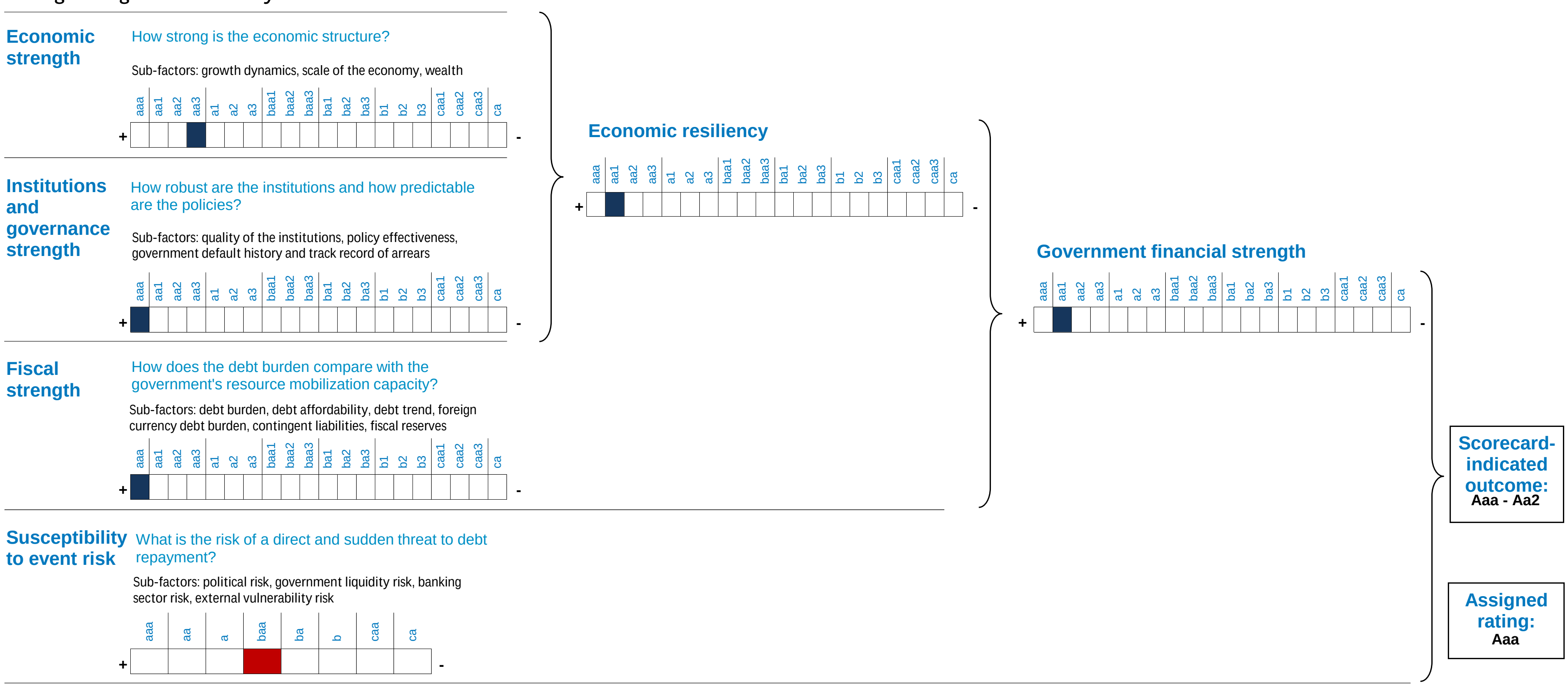
All of these considerations are further discussed in the "Credit profile" section above. Our approach to ESG is explained in our report on how the scores depict varied and largely credit-negative impact of ESG factors and our cross-sector methodology General Principles for Assessing Environmental, Social and Governance Risks Methodology.

Scorecard-indicated outcome

Combining the scores for individual factors provides the scorecard-indicated outcome. While the information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the scorecard-indicated outcome. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the scorecard-indicated outcome. For more information, please see our Rating Methodology: Sovereigns.

Exhibit 35

Sovereign rating metrics: Norway



Source: Moody's Investors Service

Comparatives

This section compares credit relevant information regarding Norway with other sovereigns that we rate. It focuses on a comparison with sovereigns within the same scorecard-indicated outcome and shows the relevant credit metrics and factor scores.

Exhibit 36

Norway's key peers

	Year	Norway	Netherlands	New Zealand	Denmark	Sweden	Germany	Aaa Median	Western Europe Median
Rating/outlook		Aaa/STA	Aaa/STA	Aaa/STA	Aaa/STA	Aaa/STA	Aaa/STA	Aaa	Aa3
Scorecard-indicated outcome		Aaa - Aa2	Aaa - Aa2	Aaa - Aa2	Aaa - Aa2	Aaa - Aa2	Aaa - Aa2	Aaa - Aa2	Aa2 - A1
Factor 1		**aa3**	**aa3**	**a1**	**aa3**	**aa3**	**aa3**	**aa3**	**a2**
Nominal GDP ($ bn)	2022	579.3	989.7	241.1	395.0	585.9	4069.4	696.8	528.5
GDP per capita (PPP, Intl$)	2022	78,408	69,963	51,861	70,924	65,496	63,869	70,444	64,683
Avg. real GDP (% change)	2018 - 2027F	1.7	1.5	2.5	1.9	1.5	0.9	1.8	1.5
MAD Volatility in real GDP growth (ppts)	2013 - 2022	0.6	0.7	0.5	0.9	0.4	0.6	0.6	0.9
Factor 2		**aaa**	**aaa**	**aaa**	**aaa**	**aaa**	**aa1**	**aaa**	**aa2**
Quality of legislative & executive institutions	Latest available	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aa
Strength of civil society & judiciary	Latest available	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aaa
Fiscal policy effectiveness	Latest available	aaa	aaa	aaa	aaa	aaa	aaa	aaa	aa
Monetary & macro policy effectiveness	Latest available	aaa	aaa	aaa	aaa	aaa	aa	aaa	aa
Gen. gov. fiscal balance (% of GDP)	2022 - 2024F	24.8	-2.0	-1.4	2.1	-0.4	-2.5	-1.2	-2.0
Average inflation (% change)	2018 - 2027F	3.2	3.3	3.0	2.6	3.0	3.1	2.9	2.7
Volatility of inflation (ppts)	2013 - 2022	1.3	3.4	2.0	2.5	2.3	2.5	2.1	2.3
Factor 3		**aaa**	**aa2**	**aa1**	**aa1**	**aa2**	**aa1**	**aa1**	**a1**
Gen. gov. debt (% of GDP)	2022	37.4	51.0	34.4	30.1	33.0	66.2	36.5	66.2
Gen. gov. debt (% of revenue)	2022	58.0	114.6	101.2	61.9	67.5	140.8	107.9	152.2
Gen. gov. interest payments (% of revenue)	2022	0.9	1.2	2.5	1.5	1.0	1.4	1.3	2.0
Gen. gov. interest payments (% of GDP)	2022	0.6	0.5	0.8	0.7	0.5	0.7	0.6	0.7
Factor 4		**baa**	**baa**	**baa**	**baa**	**baa**	**baa**	**baa**	**baa**
Political risk	Latest available	**baa**	**baa**	**aaa**	**baa**	**baa**	**baa**	**a**	**baa**
Government liquidity risk	Latest available	**aaa**	**aaa**	**aaa**	**aaa**	**aaa**	**aaa**	**aaa**	**aaa**
Gross borrowing requirements (% of GDP)	2023F	1.6	10.8	4.5	2.7	5.9	12.5	5.6	10.4
Banking sector risk	Latest available	**a**	**a**	**a**	**a**	**a**	**baa**	**a**	**a**
BSCE[1]	Latest available	aaa-a3	baa1	aaa-a3	baa1	aaa-a3	baa2	aaa-a3	baa1
Total domestic bank assets (% of GDP)	2022	136.2	305.0	185.3	331.7	222.1	271.8	271.8	232.3
External vulnerability risk	Latest available	**aaa**	**aaa**	**baa**	**aaa**	**aa**	**aaa**	**aaa**	**aa**
Current account balance (% of GDP)	2022	30.4	4.4	-8.9	13.1	4.3	4.2	4.2	0.6
External debt (% of current account receipts)	2022	199.6	309.7	--	166.9	254.7	261.0	272.4	285.5
Net international investment position (% of GDP)	2022	209.4	75.1	-50.7	64.1	39.8	71.1	51.9	23.0

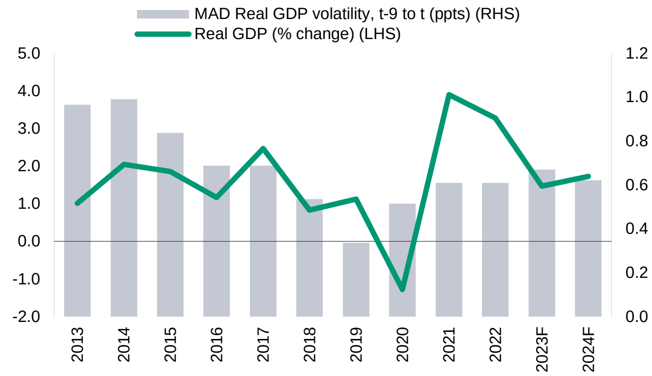
[1] BSCE is our estimate of the risk of a Banking Sector Credit Event (BSCE), which we use for sovereigns where we have no or very limited rating coverage of a system. Otherwise, we use the Baseline Credit Assessment (BCA) for rated domestic banks, weighted by bank assets.

Sources: National authorities, IMF and Moody's Investors Service

DATA, CHARTS AND REFERENCES

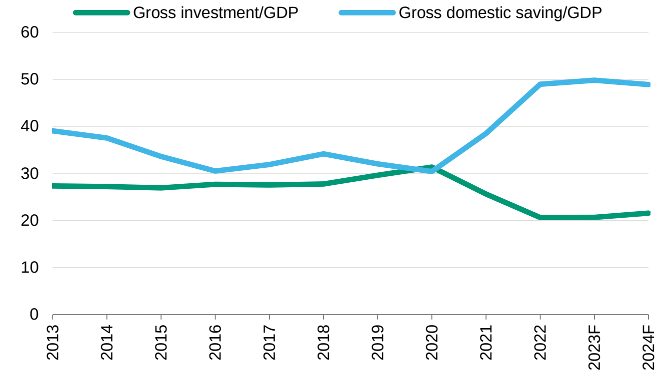
Chart pack: Norway

Exhibit 37
Economic growth



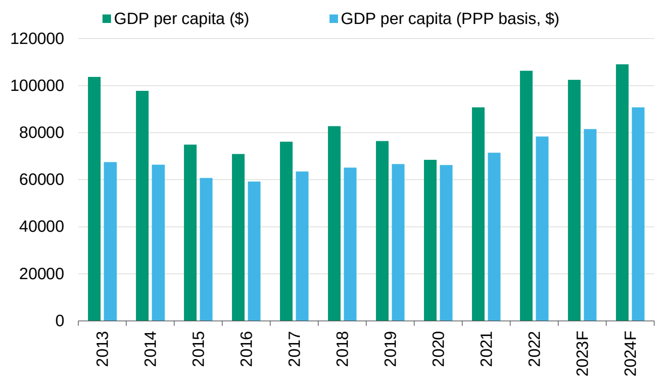
Source: Moody's Investors Service

Exhibit 38
Investment and saving



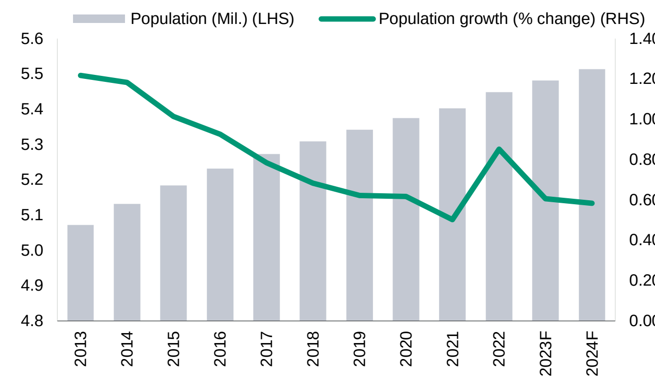
Source: Moody's Investors Service

Exhibit 39
National income



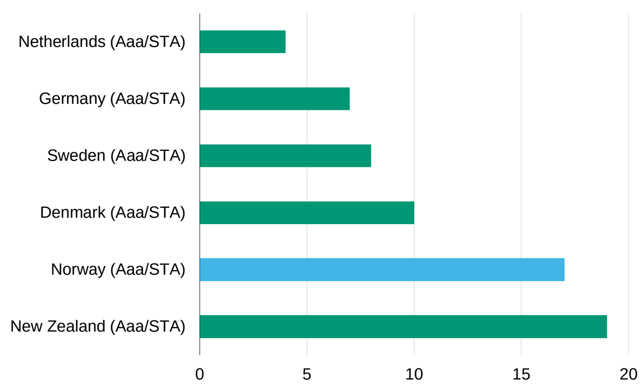
Source: Moody's Investors Service

Exhibit 40
Population



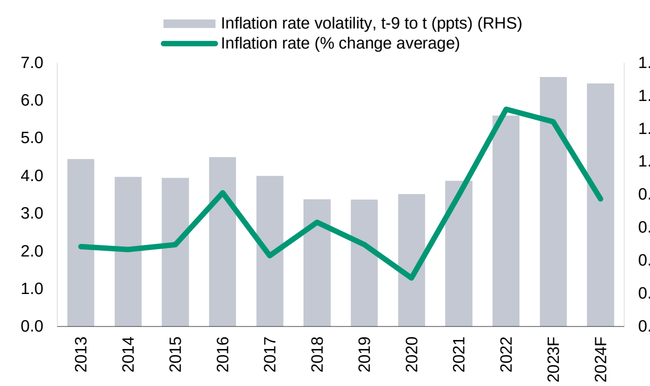
Source: Moody's Investors Service

Exhibit 41
Global Competitiveness Index
Rank 17 out of 141 countries



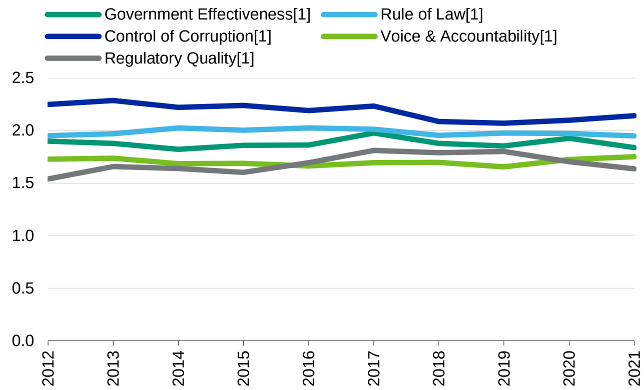
Source: World Economic Forum

Exhibit 42
Inflation and inflation volatility



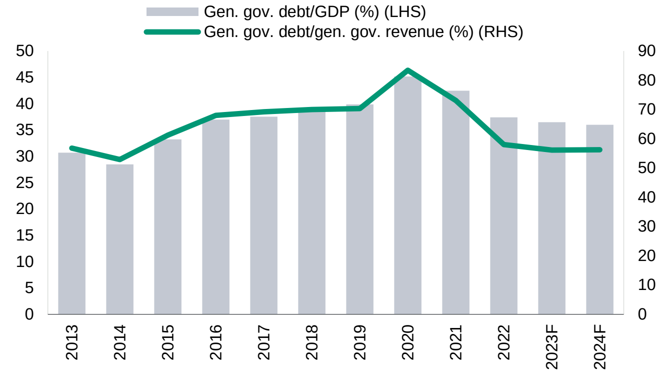
Source: Moody's Investors Service

Exhibit 43
Institutional framework and effectiveness



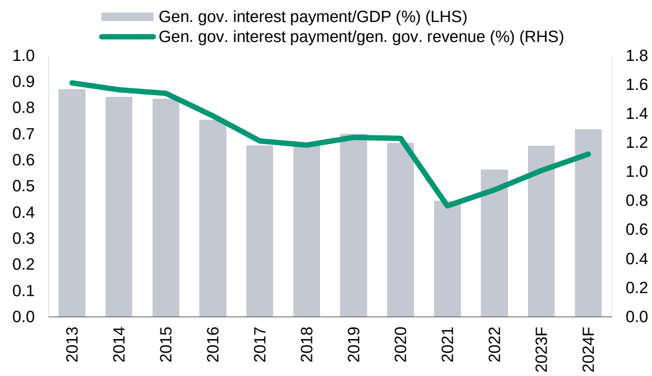
[1] Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions.
Source: WGIs

Exhibit 44
Debt burden



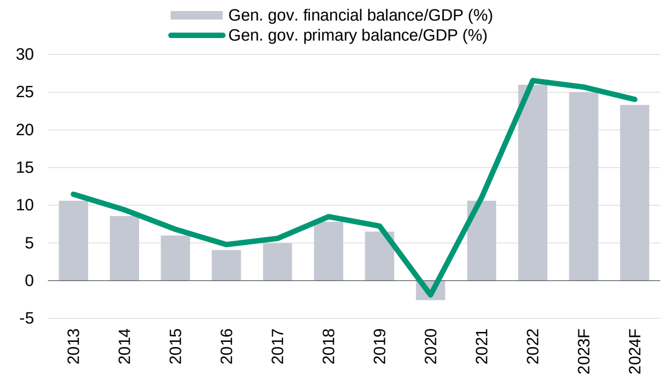
Source: Moody's Investors Service

Exhibit 45
Debt affordability



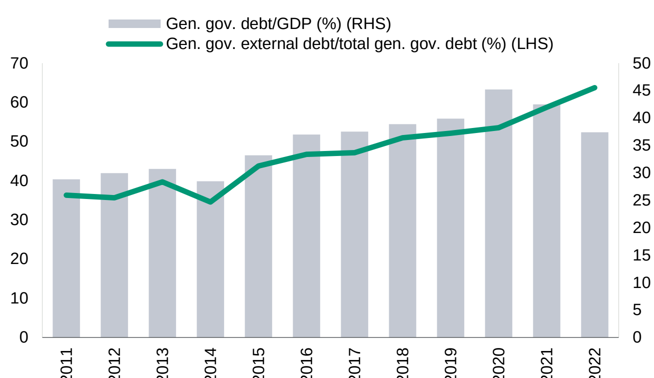
Source: Moody's Investors Service

Exhibit 46
Financial balance



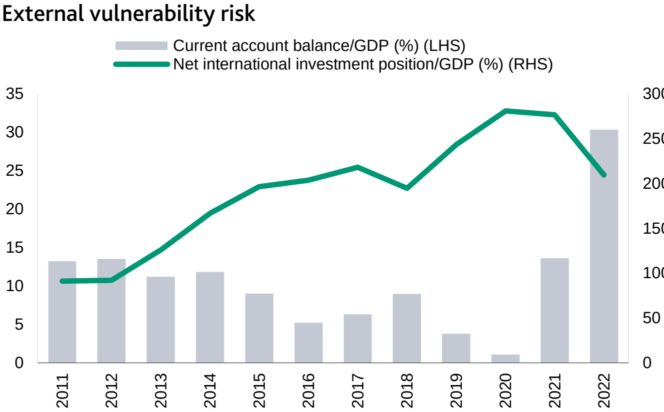
Source: Moody's Investors Service

Exhibit 47
Government liquidity risk



Source: Moody's Investors Service

Exhibit 48
External vulnerability risk



Source: Moody's Investors Service

Rating history

Exhibit 49

Norway[1]

Long Term Ratings		Outlook	Review Action		Short Term Ratings		Action Date
Foreign Currency	Local Currency		Foreign Currency	Local Currency	Foreign Currency	Local Currency	
Aaa	Aaa	STA	-	-	-	-	May-22
Aaa	Aaa	STA	-	-	-	-	Nov-03
Aaa	Aaa	-	-	-	-	-	Sep-97
Aa1	Aaa	-	-	-	-	-	Aug-95
Aa1	-	-	-	-	-	-	Jul-87
Aaa	-	-	-	-	-	-	Jan-78

[1] Table excludes rating affirmations and ceilings. Please visit the issuer page for Norway for the full rating history.
Source: Moody's Investors Service

Annual statistics

Exhibit 50

Norway

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023F	2024F
Economic structure and performance												
Nominal GDP (US$ bil.)	526.0	501.7	388.2	371.0	401.7	439.8	408.7	367.6	490.3	579.3	561.6	601.7
Population (Mil.)	5.1	5.1	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.4	5.5	5.5
GDP per capita (US$)	103,709	97,766	74,876	70,901	76,189	82,838	76,515	68,397	90,761	106,327	102,463	109,137
GDP per capita (PPP basis, US$)	67,476	66,402	60,803	59,308	63,513	65,143	66,641	66,238	71,552	78,408	--	--
Nominal GDP (% change, local currency)	3.6	2.3	-1.0	-0.5	6.6	7.6	0.6	-3.8	21.7	32.2	8.5	1.7
Real GDP (% change)	1.0	2.0	1.9	1.2	2.5	0.8	1.1	-1.3	3.9	3.3	1.5	1.7
Inflation rate (% change average)	2.1	2.0	2.2	3.5	1.9	2.8	2.2	1.3	3.5	5.8	5.4	3.4
Unemployment rate (%)	3.9	3.8	4.7	4.9	4.4	4.0	3.9	4.8	4.5	3.2	3.0	3.0
Gross investment/GDP	27.3	27.2	26.9	27.7	27.6	27.7	29.6	31.4	25.6	20.6	20.6	21.6
Gross domestic saving/GDP	39.1	37.5	33.6	30.5	31.9	34.2	32.0	30.4	38.5	49.0	49.8	48.9
Nominal exports of G & S (% change, US$ basis)	-1.0	-4.9	-24.9	-11.0	10.7	13.9	-10.9	-20.9	72.8	57.6	-8.0	6.5
Nominal imports of G & S (% change, US$ basis)	6.0	-0.2	-16.2	-0.5	5.7	7.5	0.2	-13.0	15.9	12.1	-3.0	12.0
Real exports of G & S (% change)	-1.7	3.8	3.9	0.4	1.6	-1.5	2.1	-2.3	5.8	5.9	4.9	4.1
Real imports of G & S (% change)	5.0	2.2	1.9	1.9	1.8	1.4	5.3	-9.9	1.7	9.3	7.7	4.1
Net exports of goods & services/GDP	11.7	10.3	6.7	2.8	4.4	6.4	2.4	-0.9	12.9	28.3	25.5	23.9
Openness of the economy[2]	68.0	69.1	70.4	69.1	69.1	70.0	70.9	65.4	70.5	83.0	80.2	81.1
Government Effectiveness[3]	1.9	1.8	1.9	1.9	2.0	1.9	1.9	1.9	1.8	--	--	--
Government finance												
Gen. gov. revenue/GDP	54.1	53.8	54.2	54.4	54.2	55.5	56.7	54.2	58.1	64.5	65.0	64.0
Gen. gov. expenditures/GDP	43.5	45.2	48.2	50.4	49.2	47.7	50.2	56.7	47.5	38.5	40.0	40.7
Gen. gov. financial balance/GDP	10.6	8.6	6.0	4.0	5.0	7.8	6.5	-2.6	10.6	26.0	25.0	23.3
Gen. gov. primary balance/GDP	11.5	9.4	6.8	4.8	5.6	8.5	7.2	-1.9	11.1	26.5	25.7	24.0
Gen. gov. debt (US$ bil.)[4]	156.0	121.1	117.9	133.7	151.8	160.0	163.4	183.3	202.8	211.3	207.8	222.8
Gen. gov. debt/GDP[4]	30.7	28.5	33.2	37.0	37.5	38.9	39.9	45.2	42.5	37.4	36.5	36.0
Gen. gov. debt/gen. gov. revenue[4]	56.8	52.9	61.3	68.0	69.2	70.0	70.3	83.4	73.1	58.0	56.1	56.2
Gen. gov. interest payments/gen. gov. revenue	1.6	1.6	1.5	1.4	1.2	1.2	1.2	1.2	0.8	0.9	1.0	1.1
External payments and debt												
Nominal exchange rate (local currency per US$, Dec)	6.1	7.4	8.8	8.6	8.2	8.7	8.8	8.5	8.8	9.9	10.6	9.9
Real eff. exchange rate (% change)	-1.9	-2.9	-9.5	-1.0	3.2	2.0	-2.6	-5.0	5.9	1.1	--	--
Relative unit labor cost	94.4	96.1	100.0	102.0	98.9	96.2	101.3	105.8	92.6	85.4	--	--
Current account balance (US$ bil.)	59.0	59.3	34.9	19.4	25.4	39.4	15.5	4.1	66.8	175.8	146.0	146.9
Current account balance/GDP	11.2	11.8	9.0	5.2	6.3	9.0	3.8	1.1	13.6	30.4	26.0	24.4
Net foreign direct investment/GDP	-2.5	-4.2	-3.6	-6.7	0.7	-4.6	2.2	1.9	-2.8	-1.8	--	--
Net international investment position/GDP	126.1	166.9	196.6	203.6	218.2	194.8	243.4	281.0	276.8	209.4	--	--
Official forex reserves (US$ bil.)	54.6	61.6	54.6	57.9	63.0	60.2	63.6	71.6	75.3	63.3	63.3	63.3

[1] Economic forecasts based on an assumed average price for the benchmark Brent crude oil of around $85/b in 2023 and $83/b in 2024. Our broad expectations are that prices will remain volatile within a range of $50-$70/b in the medium term. [2] Sum of Exports and Imports of Goods and Services/GDP [3] Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions [4] Data until 2013 reported under ESA95; ESA2010 from 2014 onwards

Source: Moody's Investors Service

Related websites and information sources

» Sovereign risk group webpage

» Sovereign ratings list

Endnotes

1 Import weighted krone exchange rate (I44).

2 The longer-term trend of rising house prices was fueled by the low interest rate environment, increasing disposable incomes, insufficient supply in many areas like the Oslo region and long-standing tax benefits for Norwegian property owners that have been exacerbated by the recent pandemic-related supply and demand factors.

3 Macroeconomic stability – Scandinavia: Sovereign and bank credit profiles are resilient to a potential housing market correction, 9 November 2022.

4 Banking System Outlook — Norway: Outlook stable as better profit and strong capital offset slower economic growth, 29 March 2023.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

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EMEA	44-20-7772-5454