

Kingdom of Norway Rating Report



Credit strengths

- Fiscal and current account surpluses
- Significant fiscal cushion through Government Pension Fund Global
- Strong fiscal, monetary and financial governance

Credit weaknesses

- Macroeconomic imbalances, notably in residential and commercial property markets
- High household debt
- Low growth in productivity

Rating rationale and Outlook: Norway's AAA rating reflects the nation's dual surpluses, very significant net government asset position, and strong fiscal, monetary and financial governance institutions. Scope is attentive to the housing market correction, but views it constructively to date, as potentially moderating prevailing imbalances while Norway is growing near potential. In the event of a future more significant economic and financial shock, Scope believes Norway has the adequate fiscal, external and financial buffers to absorb the shock, underpinned by the nation's sovereign wealth fund valued at USD 1tn. The Stable Outlook reflects Scope's assessment that the risks Norway faces remain manageable given its considerable credit strengths.

Figure 1: Sovereign scorecard results

Scope's sovereign risk categories	Norway	Peer comparison		
		Average	Sweden	Netherlands
Domestic economic risk				
Public finance risk				
External economic risk				
Financial risk				
Political and institutional risk				
Qualitative adjustment (notches)	-	-	-	-
Final rating	AAA		AAA	AAA

NB. The comparison is based on Scope's Core Variable Scorecard (CVS), which is determined by relative rankings of key sovereign credit fundamentals. The CVS peer group average is shown together with two selected countries chosen from the entire CVS peer group. The CVS rating can be adjusted by up to three notches depending on the size of relative credit strengths or weaknesses.

Positive rating-change drivers

- Not applicable

Negative rating-change drivers

- Significant weakening in macroeconomic policy, threatening long-term net asset position
- A sustained period of lower oil prices than presently prevailing and/or a significant financial crisis, damaging Norway's public sector and financial system balance sheets

Ratings and outlook

Foreign currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

Local currency

Long-term issuer rating	AAA/Stable
Senior unsecured debt	AAA/Stable
Short-term issuer rating	S-1+/Stable

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Bloomberg: SCOP

Strong institutional framework

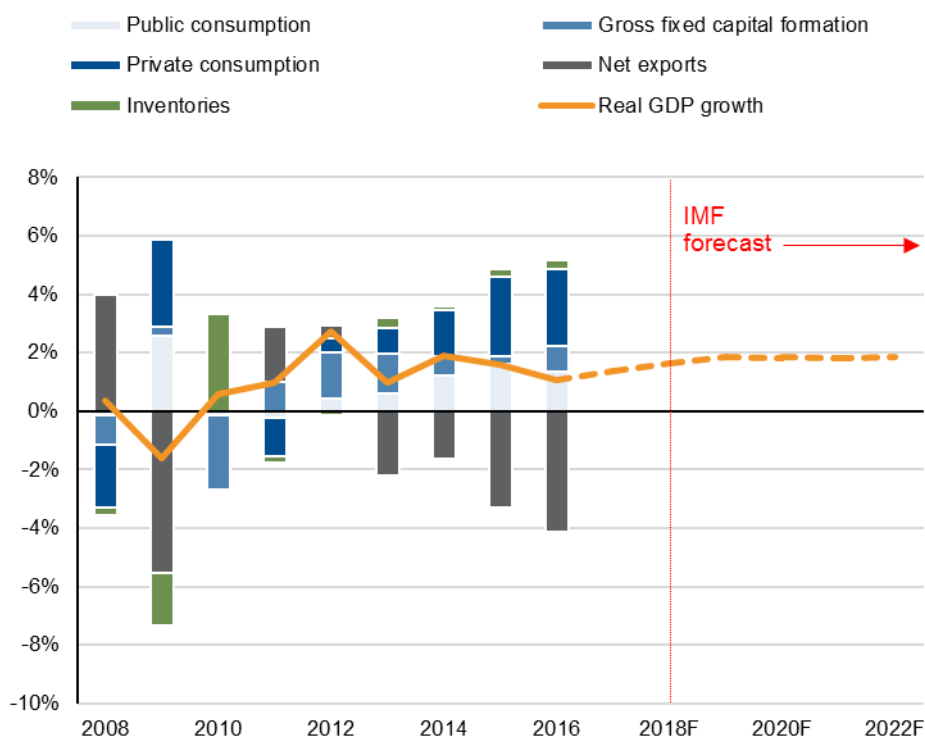
Domestic economic risk

Norway's AAA rating is underpinned by its mature economy with one of the world's highest per capita incomes (USD 73,615 in 2017), an educated and skilled workforce, a credible system of monetary, fiscal and financial supervision, and a stable system of democratic governance. Norway ranked first in the world in the United Nation's 2016 Human Development Index. In addition, very large external and fiscal net asset positions from accumulated petroleum revenues afford a significant shock absorption mechanism.

The Norwegian economy is gradually recovering from the sharp oil price slump of 2014-16. In 2017, Norway's headline gross domestic product expanded by 1.8% YoY; activity in the petroleum sector grew 1.7% YoY, although housing investment dropped 4.5% QoQ in the fourth quarter. The stabilisation in oil prices has also bolstered the mainland economy (excluding the offshore oil and gas extraction and shipping sectors; the mainland economy accounts for 85% of the overall economy), which grew by 1.8% YoY in 2017 – still moderate compared with a 2010-2014 average of 2.4%. The decline in the manufacturing and mining sector has evidently bottomed, with modest growth of 0.3% YoY in 2017. On the whole, growth has been supported by accommodative monetary, financial and global growth conditions, the depreciation of the krone and an expansionary fiscal stance, in addition to higher Brent oil prices.

In the October 2017 World Economic Outlook (**Figure 2**), the IMF revised 2018 growth estimates modestly downwards to 1.6% (from 1.9%) and to 1.9% (from 2.1%) for 2019.

Figure 2: Percentage point contribution to real GDP growth, annual change



Source: IMF, Scope Ratings GmbH calculations

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**Supportive near-term outlook,
backed by rebound in private
demand**

Unemployment (LFS¹) peaked in the summer of 2016 at 138,000 (5% of the labour force) and stood at 4.1% in the three months to December 2017 (registered unemployment at 2.6% as of January 2018). On a seasonally-adjusted basis, job vacancies have climbed near the highest levels since 2008, signalling further labour market strengthening. Consumer and industrial confidence indicators have improved since early 2016, and Norges Bank's Regional Network indicator of output growth remained robust through Q4 2017. The recovery is consistent with a broader economic revival across Europe, and helped by recovering exports and stronger private demand anchored in the stabilisation of employment.

Rising private demand is bolstered by household consumption – spurred by rising consumer confidence, improving labour markets and the continued availability of credit (credit growth to households grew 6.4% YoY in December). However, the recent cooling in housing market dynamics (home prices are now down about 3% from a 2017 peak), modest real wage growth and high household debt are constraints – which could reduce growth in private consumption and housing investment in coming years.

**Several restrictive factors
affecting the growth outlook**

Inflation, which peaked at 4.3% in July 2016 (well above Norges Bank's 2.5% target rate), has since receded to 1.6% as of January 2018. The consumer price index adjusted for tax changes and excluding energy products (CPI-ATE) stood at just 1.1% YoY in January. But, with annual wage growth of 2.3% in 2017 (though this is expected to increase in coming years), assuming Norges Bank's inflation assessment of 1.5%-2.25% for the coming years, this places real wage growth still at restrictive levels towards a more robust pickup in demand.

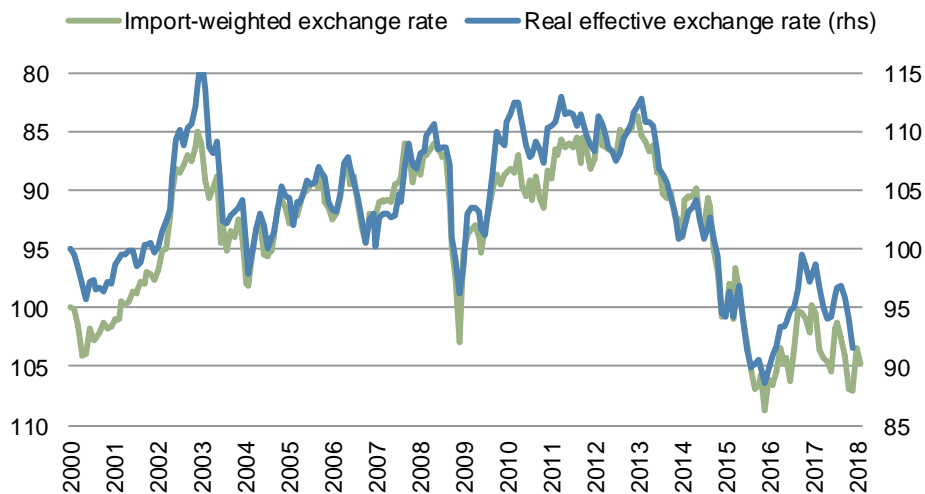
In addition, fiscal policy is moving towards an almost neutral position in 2018 and is anticipated to remain neutral going forward – a significant change from the expansionary stance of previous years. Broadly speaking, contributions to growth will remain robust from private consumption, recovering investments in the petroleum and corporate sectors alongside net exports. This will, however, be counter balanced via some degree of restraint owing to timid real wage growth, a cooling in housing investment and a moderation in the level of fiscal support.

**Recovery in offshore sector
investment**

One supporting factor will come from recovery in oil sector investment. As of Q3 2017, investments in the petroleum sector were down by 15.1% YoY. However, sectoral efficiency gains alongside the decline in the krone (of more than 20% between 2013-2015 in import-weighted terms (**Figure 3**)) should fuel a recovery over the medium term.

¹ From the Labour Force Survey, Statistics Norway

Figure 3: Import-weighted exchange rate index (Jan/00=100) and real effective exchange rate (HICP-deflated), 42 trading partners (Jan/00=100, RHS)



Source: Norges Bank, European Commission

Boost from monetary policy

The Norwegian economy is bolstered by accommodative monetary policy. Norges Bank's policy rate has remained at an all-time low of 0.5% since March 2016. In the December Monetary Policy Report, the key policy rate was forecasted to remain at 0.5% in the period to autumn 2018. Credit growth to the mainland economy stood at 6.4% YoY in December, with an improvement in lending to non-financial enterprises.

Prevailing imbalances in the financial system

Prevailing residential and commercial property market imbalances alongside high debt growth have increased the vulnerability of households and corporates in recent years. Since the spring of last year, house prices have entered a correction phase. This correction is helping to temper still-elevated financial asset prices, and lessen the probability and depth of a more pronounced correction down the road (see section on 'Financial Stability Risk' in this report).

Long-term transition to a post-oil economy

In the future, rebalancing the Norwegian economy away from an economic model dependent on the oil and gas sector will remain an important target. Strengthening growth in non-oil sectors is a challenge, however, due to low productivity growth, high labour costs (resulting in diminished competitiveness), and falling labour force participation rates owing to an ageing population.

A successful economic transition will hinge on an integrated framework of policies ranging from restraint in wage negotiations to reforms aimed at increasing labour force participation, measures to raise productivity, including enhancements to education, investment in innovation, reforms to product markets and steps to facilitate the movement of capital and labour to new industries. Such actions could reverse the erosion of manufacturing competitiveness and boost Norway's ability to compete in existing and new export markets.

The government recognises the gravity of this challenge and has considered the petroleum sector's declining contribution to economic growth in coming decades, with projections that oil and gas production will decrease to about 25% of 2015 production by 2060.

Medium-term growth of 1.75%

Over the medium term, GDP should follow a somewhat contained growth path, averaging around 1.75%. This is supported by working-age population growth of around 0.6% annually according to UN projections for 2018-2022, a negative contribution from

declining labour force participation, a small positive contribution from falling unemployment, and labour productivity growth of around 1.0% (the latter compared with a 2008-2017 average of 0.7% in the mainland economy). By comparison, the IMF forecast medium-term growth in Norway of 1.9%² in its October 2017 World Economic Outlook.

Economic risks prevail

The adverse scenario of a 'hard Brexit' could negatively affect Norway's trade with the United Kingdom (in 2017, goods exports to the United Kingdom totalled NOK 178bn, or 5% of GDP). We anticipate a modest impact on Norway from the slowdown in the UK, but do not anticipate the hard Brexit scenario. Presently, we consider the prevailing constellation of macroeconomic challenges to remain manageable, supported by Norway's significant credit strengths, notably its fiscal reserves.

Movement towards a neutral fiscal stance

Public finance risk

In response to the sharp decline in oil prices in 2014, the government appropriately utilised counter-cyclical fiscal policy to support the economy. This expansionary fiscal stance was enhanced in the 2016 and 2017 budget bills. In 2018, with the recovery underway, the fiscal impulse will be moderated to under 0.1% of mainland GDP. Measures will be adopted to enhance the attractiveness of investing in Norway, like the reduction in corporate and personal ordinary income tax rates to 23%, and an increase in a valuation discount for shares and operating assets in the net wealth tax from 10% to 20%. Over the medium run, a neutral fiscal stance is expected. The counter-cyclical management of Norway's budgetary policy is prudent, in Scope's view.

Smaller government surplus budgeted in 2018

The general government surplus improved to 5.0% of GDP in 2017, from 4.0% of GDP in 2016. In the 2018 budget, a smaller surplus of around 3.9% of GDP is envisioned – stemming from higher central government spending (on areas including research and development, road and rail services, defence, and health and welfare services) alongside conservative assumptions around the price of oil (at the current NOK/USD exchange rate, implying about a Brent crude price of USD 56 per barrel assumed in the budget; Brent has averaged approximately USD 68 per barrel YTD at the time of this writing).

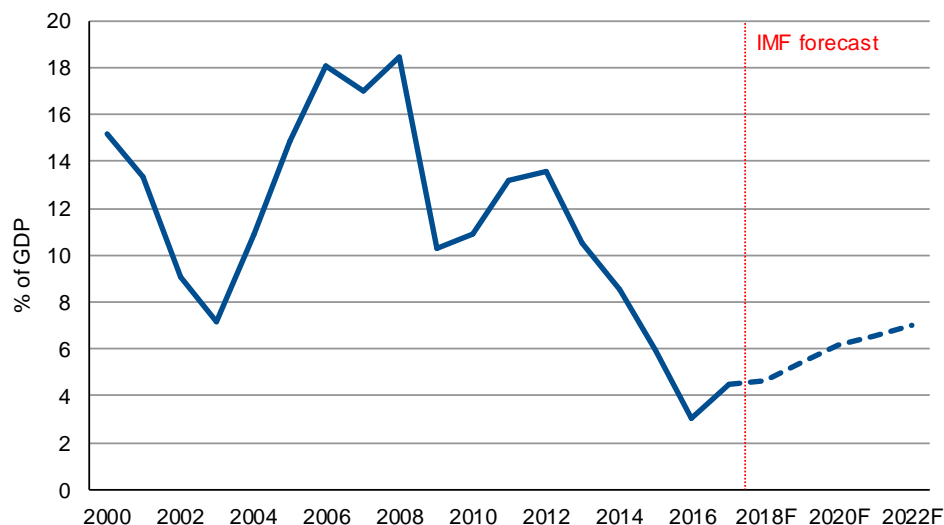
Petroleum revenues are higher, although they are still a distance from former peaks: NOK 208bn is budgeted in 2018 compared to NOK 202bn in 2017 and NOK 153bn in 2016.

A structural shift towards increased reliance on GPFG transfers

The annual cash flow from the sovereign wealth fund (Government Pension Fund Global (GPFG)) for 2018 is expected at NOK 255bn, compensating for a structural non-oil deficit of NOK 231bn (7.7% of mainland GDP). These flows from the GPFG underpin the general government surplus. The 2016 fiscal year was the first year since the fund's inception that GPFG transfers to the central government budget exceeded net petroleum revenues, a trend that should continue going ahead – representing an important structural shift. While this alters the dynamics of Norway's overall budget, it is in line with the lower oil price environment alongside structural declines in petroleum production and represents an anticipated transition in Norway's fiscal execution.

² IMF October 2017 World Economic Outlook. Forecast for Norway's 2022 real growth.

Figure 4: General government balance dynamics, % of GDP

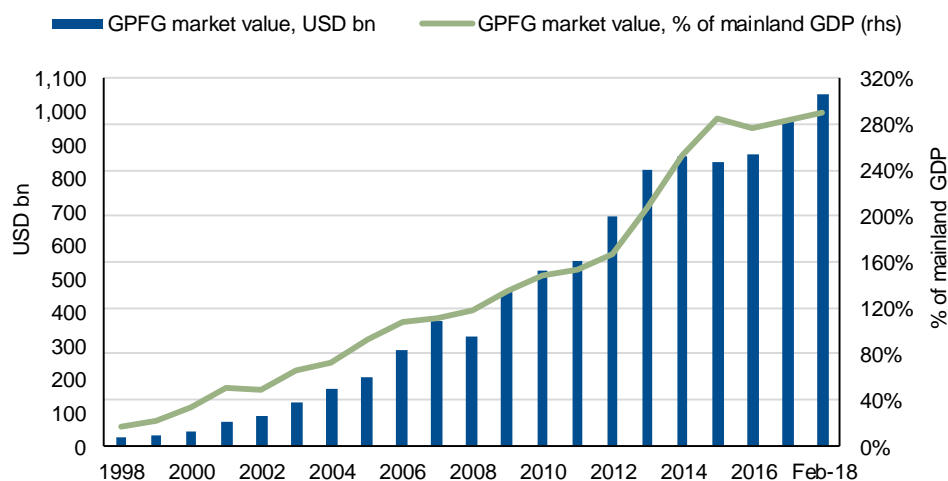


Source: IMF

GPFG underpins sizeable net public assets

Norway's AAA rating is backed by the nation's significant fiscal strength with substantial net public assets (of 288% of nominal GDP as of YE 2016) rather than net liabilities. This net asset ratio is by far the highest in a 'aaa' peer analysis. Since its launch in 1990, the GPFG has grown rapidly to approximately USD 1.05tn at present. Following the weakening of the krone, the fund's market value in local currency has increased (to about 291% of mainland GDP presently from 166% at YE 2012, **Figure 5**).

Figure 5: Government Pension Fund Global, market value



Source: Norges Bank Investment Management, Statistics Norway, Scope Ratings GmbH calculations

Norges Bank proposes removal of oil and gas from benchmark

In November 2017, Norges Bank Investment Management (which manages the sovereign fund) proposed to remove oil and gas stocks from the GPFG's benchmark index. Oil and gas equities currently account for around 6% of the GPFG's benchmark index or just over NOK 300bn. This reflects intentions to diversify the fund's holdings and reduce Norway's exposure to future volatility and declines in petroleum prices, given the economy's existing exposure via future petroleum sector revenues (14% of Norway's economic output comes from the oil and gas sector) in addition to via the government's ownership stake in Statoil.

The finance ministry has been reviewing the advice and will recommend the future course of action, to be taken up in parliament. Should the proposal be acted on, Scope has a positive view of the potential divestment as it would reduce Norway's exposure to commodity price shocks, as a further safeguard alongside other institutional strengths such as the saving of petroleum revenues via the sovereign fund and the fiscal rule.

Furthermore, the government has positively proposed several changes to enhance the climate incentivisation of the tax system. Based on recommendations from the Green Tax Commission, the government has suggested that the CO₂ tax be made more cost-effective by removing exemptions and low rates.

Norway's management of oil revenues bolsters fiscal strength

In 2017, the government announced a revision of the annual spending rule from 4% to 3% (of fund assets to be transferred annually to the central government budget); in 2018, 2.9% of the GPFG is seen to be used for government spending. Norway's fiscal rule specifies that transfers from the fund for government spending shall, over time, reflect the expected real return of the fund, although annual short-term spending can be higher or lower than the average based on economic conditions. Prudent investment of Norway's oil wealth, buttressed by the fiscal rule, is a significant credit positive. Using the fund to delink the earning and use of petroleum revenues – to ease the effects of oil price volatility on the mainland economy, decrease the potential for short-term overspending, invest in the long term and in future generations, and provide a formidable tool for business cycle smoothing – bolsters fiscal strengths.

With regard to the GPFG's asset allocation, Scope also observes that Norges Bank has proposed a gradual alteration of the fixed income portfolio (about 32% of the fund) to invest in three major currencies (the dollar, euro and pound) only, dropping 20 currencies from the basket, as well as paring emerging market and corporate debt holdings, in order to improve fund liquidity acknowledging increased demands on net withdrawals. Recently, Norges Bank has sought permission to invest in private equity.

Long-term demographic challenges

Norway faces significant long-term demographic challenges driven by increasing life expectancy (of about 82 years at birth versus 73 years in the mid-1950s) and accentuated by large cohorts born in the post-war era. An ageing population creates intrinsic pressures on the welfare state unless the retirement age also increases (from 67), necessitating the mobilisation of higher labour market participation. Due to higher spending on pensions, health, and long-term care services, these pressures will grow in the near term and accelerate after 2030 as the percentage of persons aged 80 and over increases and the share of public expenditures financed by the GPFG in the long run decreases. In a baseline scenario from the Ministry of Finance³, the growth of public expenditures will exceed that of public revenues between 2030 and 2060, resulting in an average financing requirement per decade of 1.7% of mainland GDP, for a total financing gap of 6.0% by 2060.

Low debt stock, delinked from current expenditure

The central government's debt issuance is detached from current expenditure and is borrowed on the domestic market to finance capital expenditure only, including payments for debt amortisation, net lending to state entities and net equity investments. The Storting (Parliament) assigns annual borrowing limits for the finance ministry. To ensure the timely meeting of payment obligations, a cash reserve is held at Treasury aimed at above NOK 35bn. Central government debt stood at 18% of GDP as of Q3 2017, with general government debt at 35% of GDP in the same quarter. The IMF forecasts general government debt to GDP to remain roughly unchanged over the forecast horizon to 2022. Scope notes, however, that a significant share of Norway's central government bonds is

³ Royal Ministry of Finance. (2017) 'Long-term Perspectives on the Norwegian Economy 2017'. Report to the Storting (White Paper), Meld. St. 29 (2016-17).

Smaller current account surpluses, but bolstered by GPFPG returns

Strong net external asset position

A housing market correction is underway...

held by international investors, a source of risk should sentiment towards Norwegian assets change. However, we consider this scenario unlikely in the short to medium term.

External economic risk

Norway held substantial current account surpluses (of over 10% of GDP) from 2000 to 2014. This surplus fell below 10% in 2015 due to lower oil prices, although it has rebounded somewhat since 2017. The IMF expects surpluses of 5.7% and 5.9% in 2018 and 2019, up from 5.5% in 2017 – representing terms of trade gains, along with a medium-term current account surplus of about 6.1% of GDP in 2022.

In 2016, the net income balance, largely reflecting returns on external GPFPG assets, contributed more to the current account surplus than the goods and services balance. This was the first time since 1987 that the income balance has been greater than that of goods and services, reinforcing a structural shift underlying both the fiscal and current account balances towards greater dependence on GPFPG returns rather than on new petroleum flows. The growing net income surplus will help compensate for the long-term decline in the goods surplus and help offset deficits in the services and transfers balances.

Norway has an extremely strong net external asset position of 207% of GDP (or around 433% of current account receipts) as of Q3 2017, which is underpinned by the GPFPG's investments abroad. This is a marked increase from net external assets of 93% of GDP (186% of current account receipts) as of YE 2012, with this increase bolstered by the revaluation of foreign-currency assets after krone depreciation. However, external short-term debt is high at about 100% of current-account receipts, centred around borrowings of the banking sector, representing an ongoing risk.

Financial stability risk

In Scope's August 2017 rating assessment, we identified house price inflation in Norway as a key risk. Measured relative to per capita disposable income, house prices levels are near all-time highs. The correction has seen prices down 2.2% on an annual basis as of January 2018, with prices off a cumulative 3% from the March 2017 peak. Developments have been led by the Oslo capital region – where annual growth cooled to -10.5% YoY by January 2018.

Figure 6: Housing prices, % year-on-year, Norway and Oslo



Source: Statistics Norway, Scope Ratings GmbH calculations

The sharp reversal in the housing market has followed the temporary tightening of residential mortgage lending since 1 January 2017. To reduce speculative purchases, particularly affecting Oslo, the regulation capped borrowing at five times a borrower's pre-tax annual income. In addition, those buying a second home must meet a loan-to-value limit of 60% (cut from 70%), and against a loan-to-value rule of 85% for those buying primary homes. Banks have a leeway of 10% of approved loans, which do not have to meet all new requirements, although the limit in Oslo is 8%. The Ministry of Finance has asked the Financial Supervisory Authority (FSA) to advise on the impact of the rules and whether they ought to be extended past expiry on 30 June 2018. The FSA will provide advice on this matter by 1 March.

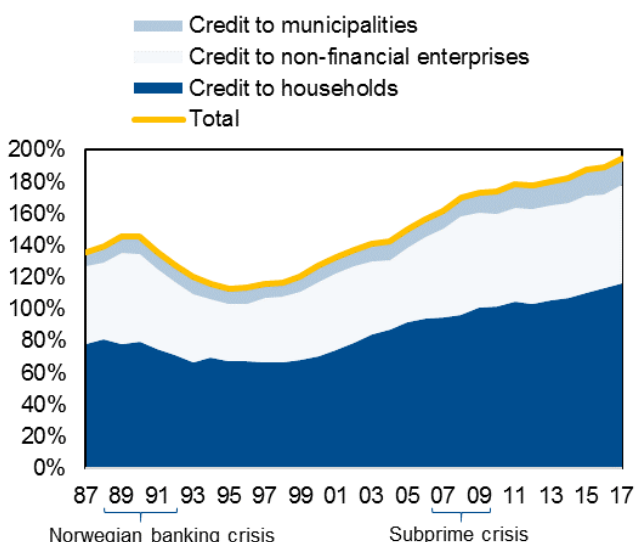
... but home prices remain near historic highs.

The average cost of a home as a ratio of median household income has risen since the mid-1990s, with the ratio in Oslo amongst the highest of major cities in the world. Persistently low interest rates, while bolstering the recovery from the recent oil-price shock, could advance latent financial system imbalances, such as in the housing market. Average nominal house prices have increased substantially (by more than 70%) since 2008 lows, and home prices are very high compared with rental market rates. A deeper correction represents a significant economic vulnerability that could adversely impact the economy and financial stability, compounded by Norway's high homeownership rate (82.7% in 2016). Moreover, commercial real estate prices have been rising for an extended period, especially in Oslo.

Scope views a counter-cyclical correction in housing prices constructively

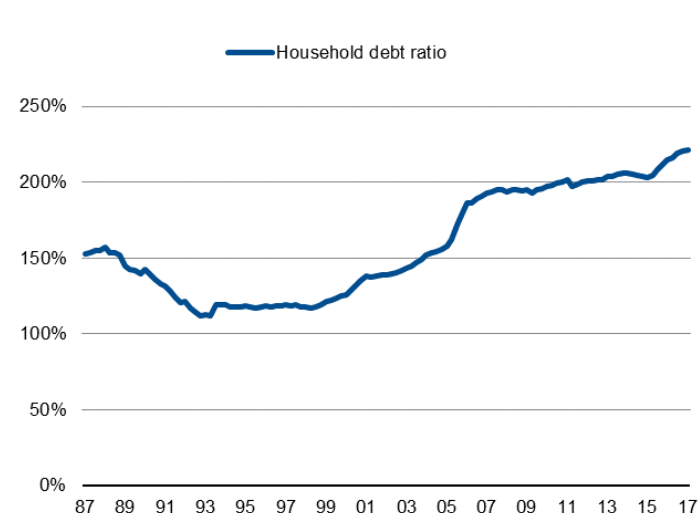
In this context, Scope views the ongoing housing market correction in a constructive light to date, as a form of counter-cyclical reduction of prevailing imbalances while the Norwegian economy is growing near potential. This will reduce the possibility of a deeper (and longer) decline in prices at some later stage, which could easily contribute pro-cyclically to intensifying a simultaneous slowdown in the economy.

Figure 7: Credit as a share of mainland GDP, %



Source: Statistics Norway, Scope Ratings GmbH calculations

Figure 8: Household debt ratio, % of disposable income



Source: Statistics Norway, Scope Ratings GmbH calculations

Household debt and debt service ratios are high

The housing boom of recent years has been linked to a high and rising level of household debt (Figure 8). Household debt has increased by an average of 6.7% annually since 2008, with growth at 6.4% in Q4 2017. Presently, household debt stands at 214% of disposable income (in Q3 2017), up from 144% in 2005, one of the highest ratios in OECD economies. Household debt-service ratios are high, near levels prevailing during the banking crisis of the late 1980s and early 1990s, despite much lower interest rates

currently. The fact that most Norwegian mortgage loans include variable interest rates is a specific concern, subjecting borrowers to higher debt-servicing costs in the event of a sharp rise in short-term rates.

Norwegian households' financial assets represent about 319% of disposable income, offsetting liabilities in nominal terms. However, more than one-third of these assets comprise pension entitlements, insurance assets and long-term loans, which cannot be easily monetised in a stress scenario.

Scope expects the authorities' proactive macroprudential response, alongside cooling housing markets, to slow the pace of household debt formation over time. Nonetheless, rising levels of household debt coupled with increases in corporate debt from domestic sources (particularly tied to commercial real estate enterprises) are areas to be monitored closely.

Macroprudential response in line with risks

An assessment by Norges Bank of prevailing financial imbalances forms the basis for the setting of the countercyclical capital buffer – per Basel III, of between 0% and 2.5%. The buffer rate is currently 2.0%, a level which puts Norway alongside Sweden as the country with the world's highest such rate. Scope has a positive view of the macroprudential governance steps being taken to address financial imbalances in consideration of the outstanding risks.

Well-capitalised banking sector

Significantly, the largest banks have continued to increase capital ratios (DNB Bank at 17.1% common equity tier 1 (CET1) as of Q3 2017) and have met their individual capital targets, which are themselves somewhat higher than regulatory requirements. Since last year, banks have also been required to meet a new leverage ratio requirement. All Norwegian banks satisfy the leverage ratio requirement, set at 5%; the requirement is higher for DNB at 6%. Banks have seen lower loan losses and stronger loan portfolio growth, supporting profitability.

A degree of resilience in Norges Bank's 2017 stress test

An annual bank stress test by Norges Bank in 2017⁴ showed banks' buffers would be sufficient to absorb losses in the scenario of a severe downturn in the Norwegian economy and the associated unwinding of financial imbalances. In the stress test, output in the economy declines over a two-year period, registered unemployment more than doubles and remains elevated, while house prices fall by 25%–35% with rising default rates on both household and commercial loans. Weighted average CET1 capital ratios decline more than 4pp in the scenarios. Nonetheless, banks' buffers are able to cushion the shock, without the need for sovereign intervention. Even so, in such a situation, Norges Bank concluded that banks may tighten lending significantly, which could easily accentuate an existing downturn.

While Scope remains cautious on the scale of macro-financial risks, the buffers available in the financial system to counter a significant downturn are a credit strength.

Institutional and political risk

Strong institutional backdrop

Norway is a parliamentary constitutional monarchy with a stable and predictable policymaking record. Norway has no modern record of sovereign default.

Renewal of centre-right minority government

Norway's elections on 11 September 2017 brought a continuation of the centre-right government of the Conservative Party and the Progress Party, though the two parties' seats in parliament declined to 72 from 77 after the last election, reflecting a somewhat weakened mandate. On 14 January 2018, the centrist Liberal Party joined the minority government, improving the coalition's total seats to 80 although the government remains

⁴ Norges Bank. (2017) '2017 Financial Stability Report: Vulnerabilities and Risks'.

dependent on support from the Christian Democrats to legislate (85 seats needed for a majority in the unicameral legislature).

With the inclusion of the Liberals, the government platform was adapted to include certain environmental measures like the protection, until 2021, of waters around the Arctic regions of Lofoten, Vesterålen and Senja from oil exploration. New guarantees were also secured on maintaining tax exemptions for electric cars, achieving zero emissions from all vehicles by 2025, and the dismantling of fur farms.

Methodology

The methodology applicable for this rating and/or rating outlook "Public Finance Sovereign Ratings" is available on www.scooperatings.com.

Historical default rates of Scope Ratings can be viewed in the rating performance report on <https://www.scooperatings.com/#governance-and-policies/regulatory-ESMA>. Please also refer to the central platform (CEREP) of the European Securities and Markets Authority (ESMA): <http://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml>.

A comprehensive clarification of Scope's definition of default, definitions of rating notations can be found in Scope's public credit rating methodologies at www.scooperatings.com.

The rating outlook indicates the most likely direction of the rating if the rating were to change within the next 12 to 18 months. A rating change is, however, not automatically ensured.

I. Appendix: CVS and QS results

Sovereign rating scorecards

Scope's Core Variable Scorecard (CVS), which is based on relative rankings of key sovereign credit fundamentals, signals an indicative "AAA" ("aaa") rating range for the Kingdom of Norway. This indicative rating range can be adjusted by the Qualitative Scorecard (QS) by up to three notches depending on the size of relative credit strengths or weaknesses versus peers based on analysts' qualitative analysis.

For the Kingdom of Norway, the following relative credit strengths have been identified: i) economic policy framework; ii) market access and funding sources; iii) excellent resilience to short-term external shocks; and iv) financial sector oversight and governance. Relative credit weaknesses are signalled for: i) current account vulnerabilities; and ii) macro-financial vulnerabilities and fragility. The combined relative credit strengths and weaknesses generate no adjustment and signal a sovereign rating of AAA for Norway. A rating committee has discussed and confirmed these results.

Rating overview

CVS category rating range	aaa
QS adjustment	AAA
Final rating	AAA

To calculate the rating score within the CVS, Scope uses a minimum-maximum algorithm to determine a rating score for each of the 22 indicators. Scope calculates the minimum and maximum of each rating indicator and places each sovereign within this range. Sovereigns with the strongest results for each rating indicator receive the highest rating score; sovereigns with the weakest results receive the lowest rating score. The score result translates to an indicative rating range that is always presented in lower-case.

Within the QS assessment, the analyst conducts a comprehensive review of the qualitative factors. This includes but is not limited to economic scenario analysis, a review of debt sustainability, fiscal and financial performance assessments and policy implementation assessments.

There are three assessments per category for a total of fifteen. For each assessment, the analyst examines the relative position of a given sovereign within its peer group. For this purpose, additional comparative analysis beyond the variables included in the CVS is conducted. These assessments are then aggregated using the same weighting system as in the CVS.

The result is the implied QS notch adjustment, which is the basis for the analyst recommendation to the rating committee.

Foreign versus local currency ratings

Norway's debt is issued in krone. Because of its history of debt repayment, stable local currency and strong resilience to balance of payment shocks, Scope sees no evidence that Norway would differentiate among any contractual debt obligations based on currency denomination.

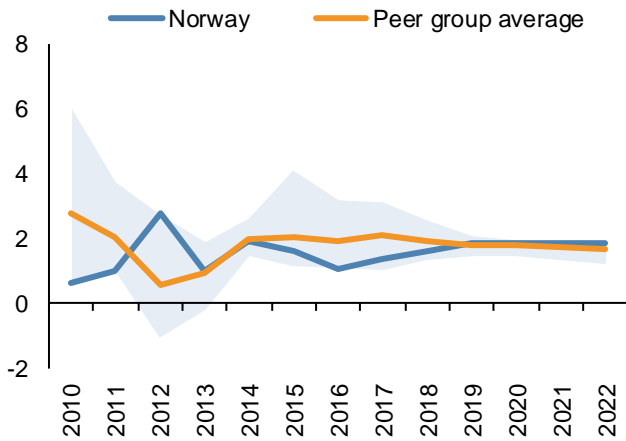
II. Appendix: CVS and QS results

CVS		QS					
Rating indicator	Category weight	Maximum adjustment = 3 notches					
		+2 notch	+1 notch	0 notch	-1 notch	-2 notch	
Domestic economic risk 35%	Growth potential of the economy	Excellent outlook, strong growth potential	Strong outlook, good growth potential	Neutral	Weak outlook, growth potential under trend	Very weak outlook, growth potential under trend or negative	
	Economic growth Real GDP growth Real GDP volatility GDP per capita Inflation rate	Excellent	Good	Neutral	Poor	Inadequate	
	Labour & population Unemployment rate Population growth	Excellent	Good	Neutral	Poor	Inadequate	
	Public finance risk 30%	Fiscal performance	Exceptionally strong performance	Strong performance	Neutral	Weak performance	Problematic performance
		Debt sustainability	Exceptionally strong sustainability	Strong sustainability	Neutral	Weak sustainability	Not sustainable
		Market access and funding sources	Excellent access	Very good access	Neutral	Poor access	Very weak access
External economic risk 15%		Current-account vulnerabilities	Excellent	Good	Neutral	Poor	Inadequate
		External debt sustainability	Excellent	Good	Neutral	Poor	Inadequate
	Vulnerability to short-term shocks	Excellent resilience	Good resilience	Neutral	Vulnerable to shock	Strongly vulnerable to shocks	
	Institutional and political risk 10%	Perceived willingness to pay	Excellent	Good	Neutral	Poor	Inadequate
Recent events and policy decisions		Excellent	Good	Neutral	Poor	Inadequate	
Geo-political risk		Excellent	Good	Neutral	Poor	Inadequate	
Financial risk 10%	Financial sector performance	Excellent	Good	Neutral	Poor	Inadequate	
	Financial sector oversight and governance	Excellent	Good	Neutral	Poor	Inadequate	
	Macro-financial vulnerabilities and fragility	Excellent	Good	Neutral	Poor	Inadequate	
Indicative rating range	aaa						
QS adjustment	AAA	* Implied QS notch adjustment = (QS notch adjustment for domestic economic risk)*0.35 + (QS notch adjustment for public finance risk)*0.30 + (QS notch adjustment for external economic risk)*0.15 + (QS notch adjustment for institutional and political risk)*0.10 + (QS notch adjustment for financial stability risk)*0.10					
Final rating	AAA						

Source: Scope Ratings GmbH

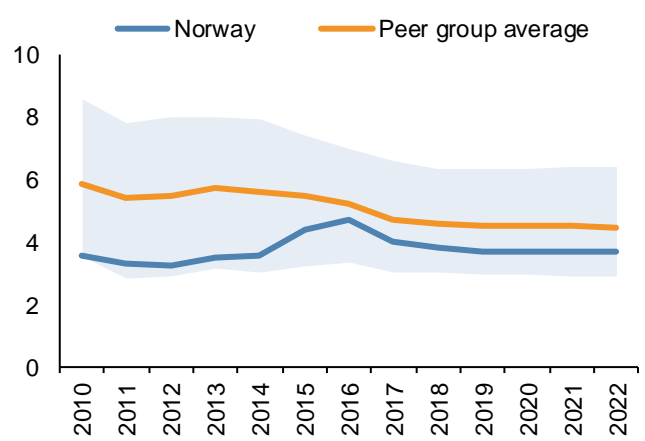
III. Appendix: Peer comparison

Figure 9: Real GDP growth



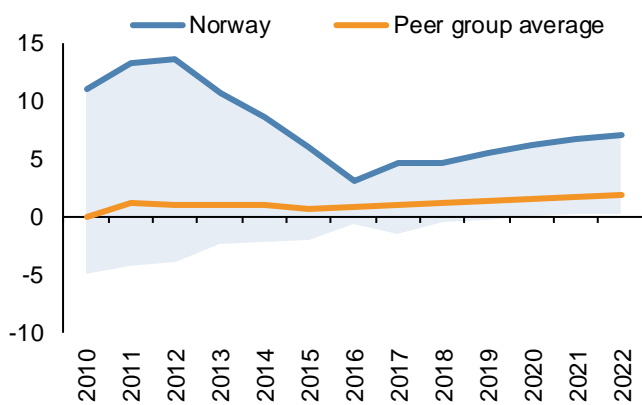
Source: IMF, Calculations Scope Ratings GmbH

Figure 10: Unemployment rate, % of total labour force



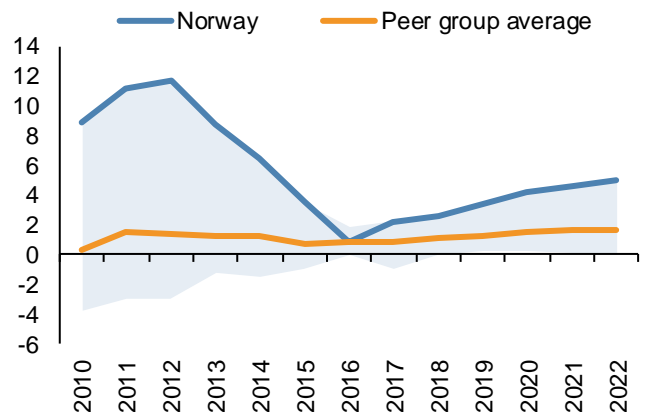
Source: IMF, Calculations Scope Ratings GmbH

Figure 11: General government balance, % of GDP



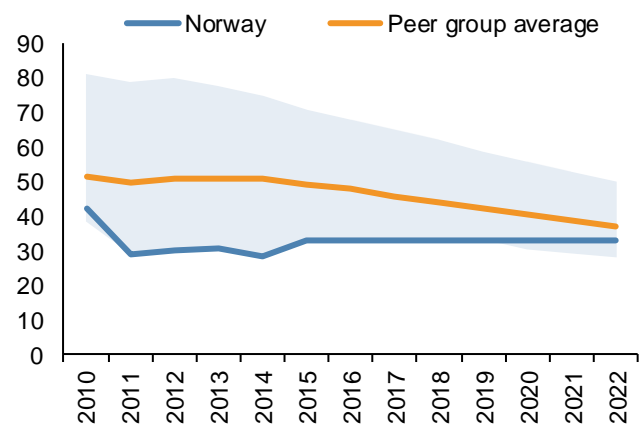
Source: IMF, Calculations Scope Ratings GmbH

Figure 12: General government primary balance, % of GDP



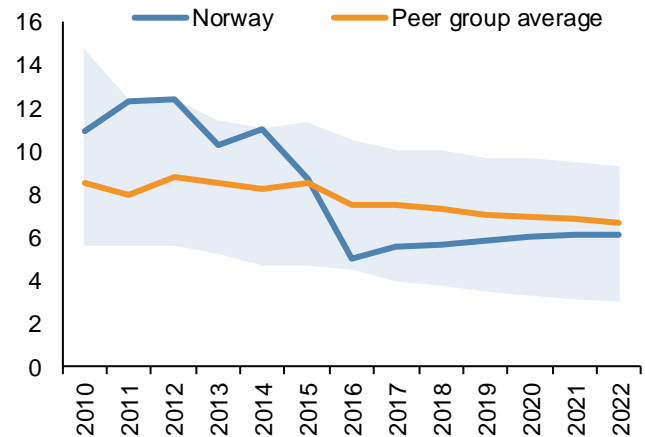
Source: IMF, Calculations Scope Ratings GmbH

Figure 13: General government gross debt, % of GDP



Source: IMF, Calculations Scope Ratings GmbH

Figure 14: Current account balance, % of GDP



Source: IMF, Calculations Scope Ratings GmbH

IV. Appendix: Statistical tables

	2012	2013	2014	2015	2016	2017E	2018F
Economic performance							
Nominal GDP (NOK bn)	2,965.2	3,071.1	3,140.4	3,117.4	3,112.7	3,305.5	3,445.9
Population ('000s)	5,038.0	5,096.0	5,156.0	5,205.0	5,252.0	5,326.0	5,395.0
GDP-per-capita PPP (USD)	65,447.5	67,056.1	65,787.1	62,066.8	59,384.8	-	-
GDP per capita (NOK)	588,552.7	602,620.3	609,017.9	598,880.7	592,646.2	620,669.4	638,727.9
Real GDP growth, % change	2.7	1.0	1.9	1.6	1.1	1.4	1.6
GDP growth volatility (10-year rolling SD)	1.6	1.6	1.4	1.4	1.3	1.1	1.1
CPI, % change	0.7	2.1	2.0	2.2	3.6	2.1	2.0
Unemployment rate (%)	3.2	3.5	3.5	4.4	4.7	4.0	3.8
Investment (% of GDP)	26.5	27.9	28.1	28.2	29.1	28.8	29.1
Gross national savings (% of GDP)	39.0	38.2	39.2	36.9	34.1	34.4	34.8
Public finances							
Net lending/borrowing (% of GDP)	13.5	10.5	8.5	5.9	3.1	4.5	4.6
Primary net lending/borrowing (% of GDP)	11.7	8.7	6.4	3.4	0.8	2.2	2.5
Revenue (% of GDP)	55.8	53.9	53.7	53.9	53.3	53.5	54.7
Expenditure (% of GDP)	42.2	43.3	45.1	48.0	50.2	49.0	50.0
Net Interest payments (% of GDP)	-1.8	-1.9	-2.2	-2.5	-2.3	-2.3	-2.1
Net Interest payments (% of revenue)	-3.3	-3.4	-4.0	-4.6	-4.3	-4.3	-3.9
Gross debt (% of GDP)	30.2	30.5	28.4	33.1	33.1	33.1	33.1
Net debt (% of GDP)	-49.9	-61.3	-76.1	-86.8	-87.8	-88.3	-90.2
Gross debt (% of revenue)	54.1	56.6	52.8	61.4	62.2	61.9	60.6
External vulnerability							
Gross external debt (% of GDP)	138.1	144.0	157.5	169.6	169.6	-	-
Net external debt (% of GDP)	-	-	-	-	-	-	-
Current-account balance (% of GDP)	12.4	10.2	11.0	8.7	5.0	5.5	5.7
Trade balance (% of GDP)	13.5	11.6	10.0	6.3	3.2	-	-
Net direct investment (% of GDP)	-0.1	1.8	4.1	3.9	7.7	-	-
Official forex reserves (EOP, mil EUR)	34,212.2	39,751.6	49,233.4	51,421.2	50,804.6	52,691.4	-
REER, % change	-1.3	-1.7	-5.9	-8.7	2.1	1.2	-
Nominal exchange rate (EOP, NOK/EUR)	7.3	8.4	9.0	9.6	9.1	9.8	-
Financial stability							
Non-performing loans (% of total loans)	1.5	1.3	1.1	1.1	1.2	-	-
Tier 1 Ratio (%)	13.2	13.8	14.5	16.7	19.7	-	-
Private debt (% of GDP)	269.4	265.0	271.6	291.6	295.1	-	-
Domestic credit-to-GDP gap (%)	4.7	-2.5	-0.1	13.2	8.9	-	-

Sources: IMF, European Commission, European Central Bank, Statistics Norway, World Bank, Haver Analytics, Scope Ratings

V. Regulatory disclosures

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Rating prepared by Dennis Shen, Lead Analyst

Person responsible for approval of the rating: Dr Giacomo Barisone, Managing Director, Public Finance

The ratings/outlook were first assigned by Scope as a subscription rating in January 2003. The ratings/outlooks were last updated on 18.08.2017.

The senior unsecured debt ratings as well as the short-term issuer ratings were last assigned by Scope on 18.08.2017.

Rating committee: The main points discussed were: (1) the commodity dependence of the Norwegian economy and its consequences for future growth, (2) fiscal performance and debt sustainability, (3) housing market vulnerabilities and macroprudential policies, (4) demographic challenges in the context of a high net public assets ratio.

Solicitation, key sources and quality of information

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The following material sources of information were used to prepare the credit rating: public domain and third parties. Key sources of information for the rating include: Statistisk Sentralbyrå (Statistics Norway), Norges Bank, Norway Ministry of Finance, Real Estate Norway, European Commission, Statistical Office of the European Communities, IMF, OECD, and Haver Analytics.

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