

OUTLOOK

28 August 2018



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Banking System Outlook - Norway

Stronger economic growth drives stable outlook

Summary

We have changed our outlook for the Norwegian banking system to stable from negative, reflecting the balance between strong economic and credit fundamentals on one side, and negative pressure on some banks from the Bank Recovery and Resolution Directive (BRRD) on the other. We expect Norway's economy to strengthen, feeding through into improving loan quality for its banks. Meanwhile, Norway's adoption of the EU's BRRD in January 2019 will exert negative rating pressure on the banks. BRRD is designed to shift the cost of bank failure from taxpayers to bank creditors, and will likely lower the government support assumptions in our ratings. New rules as yet unfinalised, requiring banks to hold more loss-absorbing debt, may help to offset this negative pressure, however.

Operating conditions for banks will improve. Stronger private consumption and higher oil prices will support economic growth and stoke credit demand. We forecast GDP growth of 2.4% in 2018 and 2.2% in 2019, up from 1.8% in 2017 and we expect loan growth to remain broadly unchanged at 6% year-on-year.

Banks' loan quality will improve. We expect nonperforming loans (NPLs) to decline modestly from an already low 1.5% as higher oil prices ease pressure on the stressed offshore oil sector. High household debt, fueled by rapid house price inflation, poses a downside risk to banks if interest rates rise abruptly, although this is not part of our central scenario.

Capital will remain strong. Norwegian banks will maintain solid capital buffers above their conservative regulatory targets. Their tangible common equity ratio, currently above 17%, falls to 15.9% under our stress scenario.

The banks will continue to deliver healthy profits. We do not foresee a significant improvement in banks' net interest income, as higher funding costs and stiff inter-bank competition will offset the beneficial impact of rising interest rates. We see modest room for further improvements in banks' already lean cost structures.

Reliance on volatile market funding will remain high. Capital market funding accounts for around 50% of Norwegian banks' assets, making them sensitive to investor sentiment. We expect banks to replace some expiring senior bonds mostly with non-preferred senior bonds to comply with MREL¹ requirements. This will keep their market funding reliance unchanged while providing further support to senior creditors.

Probability of government support will decline. The BRRD will likely result in a reduction of the government support assumptions we incorporate into the largest banks' ratings.

Exhibit 1

Overview of key drivers for Norway's stable banking system outlook

Operating environment	Improving	<ul style="list-style-type: none"> + We expect real GDP to grow by 2.4% in 2018 and 2.2% in 2019 up from 1.8% in 2017 amid stronger business investments and exports. + Stronger household consumption driven by high employment and improved wage growth expectations will also support Norway's growth outlook. + Petroleum-related investments are expected to increase year-on-year in 2018 for the first time since 2013, as oil prices stabilise at a higher level.
Asset risk	Improving	<ul style="list-style-type: none"> + Loan performance will continue to improve as higher oil prices ease pressure on the offshore oil sector. We expect problem loans to improve modestly from the current average of about 1.5% of total loans. - Significant single-borrower concentrations and large exposures to high-risk industries potentially increase the pace and extent of loan-quality deterioration. = We expect house price growth to be contained, owing to stock increases, tighter underwriting rules and moderate interest rate increases. Although, household indebtedness continues to increase and remains an area of concern, we expect household performance to remain strong for the outlook period.
Capital	Stable	<ul style="list-style-type: none"> = We expect capital ratios to increase modestly from current levels to comply with rising local regulatory requirements.
Funding and liquidity	Stable	<ul style="list-style-type: none"> - High reliance on market funding is a key risk in our view, as it renders banks vulnerable to changes in investor sentiment (60% of market funding originates from foreign funding sources). + Norwegian banks benefit from stable deposit bases and their market funds are generally well diversified across instruments. = Growing use of covered bonds has helped banks increase the average maturity of their funds, but makes their funding terms more vulnerable to a fall in house prices. + Norwegian banks' conversion of senior debt to non-preferred senior debt to comply with MREL rules will provide further support to senior creditors in the event of stress.
Profitability and efficiency	Stable	<ul style="list-style-type: none"> = We expect banks' net interest margins to remain stable, as benefits from higher interest rates will be offset by higher funding costs due to issuances of subordinated instruments and competition for deposits. We expect interest rates to increase by 0.25% in Q3 2018, from 0.5% currently, and gradually increase to just above 2% by end 2021. + Improvements in asset quality will result in lower loan-loss provisions for 2018, reflecting more stable economic conditions. = Stable profits and limited cost-cutting capacity mean that there is only modest room to improve efficiency ratios.
Government support	Deteriorating	<ul style="list-style-type: none"> - Implementation of the European Bank Recovery and Resolution Directive in Norway is a credit negative for Norwegian banks' senior unsecured bondholders. Over the outlook period we will reconsider the government support assumptions we incorporate into Norwegian banks' ratings and align them with those of their European peers who are already under the BRRD resolution framework.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moody's.com for the most updated credit rating action information and rating history.

Exhibit 2

Key indicators for rated Norwegian banks

	2012	2013	2014	2015	2016	2017
Core Scorecard Ratios						
Problem Loans / Gross Loans	1.9%	1.8%	1.5%	1.3%	1.8%	1.4%
Tangible Common Equity / Risk Weighted Assets	12.4%	13.4%	13.6%	15.9%	16.6%	17.5%
Net Income / Tangible Assets	0.7%	0.8%	0.9%	0.9%	0.7%	0.8%
Market Funds / Tangible Banking Assets	46.4%	42.3%	41.3%	39.0%	38.0%	35.8%
Liquid Banking Assets / Tangible Banking Assets	24.1%	24.7%	24.3%	22.3%	23.1%	24.2%
Additional Ratios						
Net Interest Margin	1.5%	12.3%	1.8%	1.8%	1.8%	1.8%
Cost / Income Ratio	43.6%	12.3%	42.8%	42.7%	44.6%	45.0%
Loan Loss Provisions / Gross Loans	0.2%	12.3%	0.2%	0.2%	0.4%	0.2%
Loan Loss Reserves / Problem Loans	46.0%	49.8%	56.6%	63.5%	58.8%	63.9%
Tier 1 Ratio	12.3%	13.4%	13.5%	15.8%	17.1%	17.4%
Tier 1 Leverage Ratio	6.4%	6.8%	6.4%	7.2%	7.8%	7.6%

* As per our bank rating methodology, 50% of covered bonds are treated as deposits for the purposes of our calculation of market funds.

Source: Moody's Banking Financial Metrics

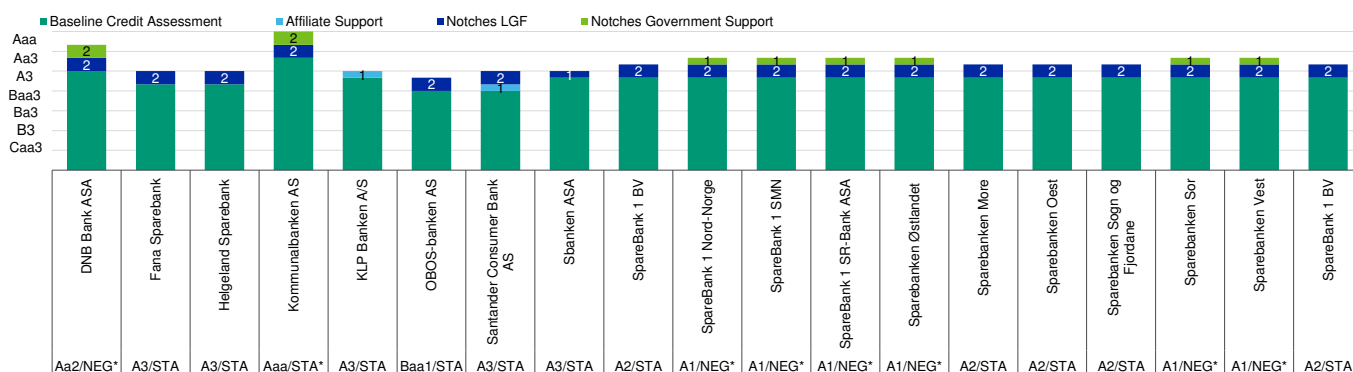
Rating universe

Our banking system outlook focuses on 19 publicly rated financial institutions in Norway that accounted for more than 60% of total banking system assets (including banks and mortgage companies) as of December 2017.

Exhibit 3

Moody's bank ratings in Norway

Breakdown of rating components



Source: Moody's Investors Service

DNB and Nordea are the market leaders operating nationwide. Savings banks operate regionally, and often hold leading market shares in their regions. The Sparebank 1 group brings together 14 savings banks that collaborate through a jointly owned company to gain economies of scale. Together these savings banks have a nationwide network of 300 branches with a national market share of 20%. The Eika Alliance comprises 69 local Norwegian savings banks, Eika Gruppen, and Eika Boligkreditt. Together, the banks have approximately 216 branches and a national market share of 10% (market share in lending to retail customers). Some other savings banks cooperate through joint ownership of product companies. The remainder of the banking system is made up of smaller local banks.

The banks' asset-weighted average standalone and supported ratings (excluding Kommunalbanken AS and Eksportfinans ASA) are baa1 and Aa3, respectively.

Exhibit 4

Rated Norwegian banks by asset size

Name	Total Assets* (NOK billion, as of Dec-2017)	Primary area of operations	BCA	Long-term Bank Deposit Rating (local currency) and Outlook
DNB Bank ASA	2360	National	a3	Aa2/NEG
SpareBank 1 SR-Bank ASA	231	Rogaland, Hordaland, Agder	baa1	A1/NEG
SpareBank 1 SMN	189	Trøndelag, Møre og Romsdal	baa1	A1/NEG
Sparebanken Vest	175	Hordaland, Rogaland	baa1	A1/NEG
Santander Consumer Bank AS	159	National	baa3	A3/STA
Sparebank 1 Ostlandet (ex- Sparebanken)	147	Hedmark, Oslo, Akershus	baa1	A1/NEG
SpareBank 1 Nord-Norge	128	Nordland, Troms, Finnmark	baa1	A1/NEG
Sparebanken Sør	114	Agder, Telemark	baa1	A1/NEG
Sbanken ASA (ex- Skandiabanken ASA)	84	National	baa1	A3/STA
Sparebanken Møre	66	Møre og Romsdal	baa1	A2/STA
Sparebanken Sogn og Fjordane	52	Sogn og Fjordane	baa1	A2/STA
SpareBank 1 BV	46	Buskerud, Vestfold	baa1	A2/STA
Sparebanken Øst	37	Buskerud	baa1	A2/STA
KLP Banken A/S	35	National	baa1	A3/STA
OBOS-banken AS	34	Oslo	baa3	Baa1/STA
Helgeland Sparebank	32	Helgeland	baa2	A3/STA
Fana Sparebank	24	Hordaland	baa2	A3/STA
Kommunalbanken**	413	National	a1	Aaa/STA***
Eksportfinans ASA	22	n.a.	ba2	Baa3/POS***

Note: * Consolidated assets. For members of the SpareBank 1 Alliance, figures include loans transferred to covered bond companies; ** Government-related issuer; *** Senior unsecured ratings.

Sources: Moody's Investors Service, banks' financial statements

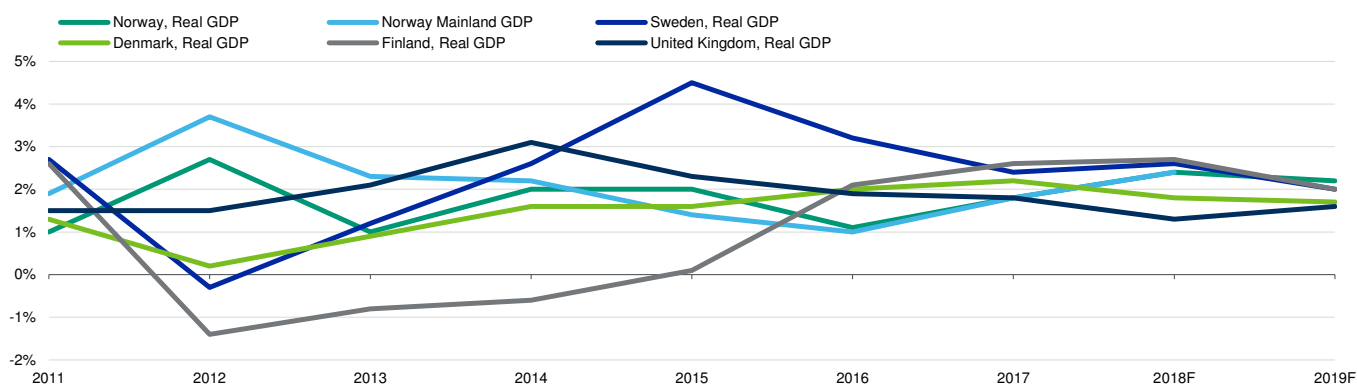
Strengthening economy will improve operating conditions for the banks

We expect the Norwegian economy to grow by 2.4% in 2018 and 2.2% in 2019 (Exhibit 5), up from 1.8% in 2017, helped by stronger household consumption, increased investment in the oil sector and improved exports due to the cyclical upturn in Norway's trading partners². As a result, we expect loan growth to remain broadly unchanged at 6% during 2018, from 6.5% in 2017 and 4.7% in 2016.

The oil sector, accounting for 14% of GDP in 2017, will continue to benefit from the rebound in oil prices which started at the end of 2017. Unemployment declined further to 3.8% in May 2018³, from a peak of 5.1% in January 2016. We expect continued solid job gains to support household consumption patterns and overall household finances. All these factors will support banks' loan quality over the coming 12 to 18 months.

Exhibit 5

Since 2011, Norway's GDP growth has exceeded Nordic peers owing to its large oil and gas sector



Note: Mainland GDP = non-oil GDP

Source: Moody's Investors Service

The mainland economy will revive following a mild slump

The continued resilience of the mainland economy (i.e. non-oil economy) and the brighter prospects for offshore activity support our domestic growth forecasts. Norway's flexible exchange rate and wage moderation after the mid 2014 decline in global oil prices, helped insulate the mainland economy from the worst effects. Negative effects were largely confined to the southwestern region around Stavanger where the country's oil and gas sector facilities are concentrated, but significant cost savings by Norwegian producers during the oil price downturn helped improve their profitability.

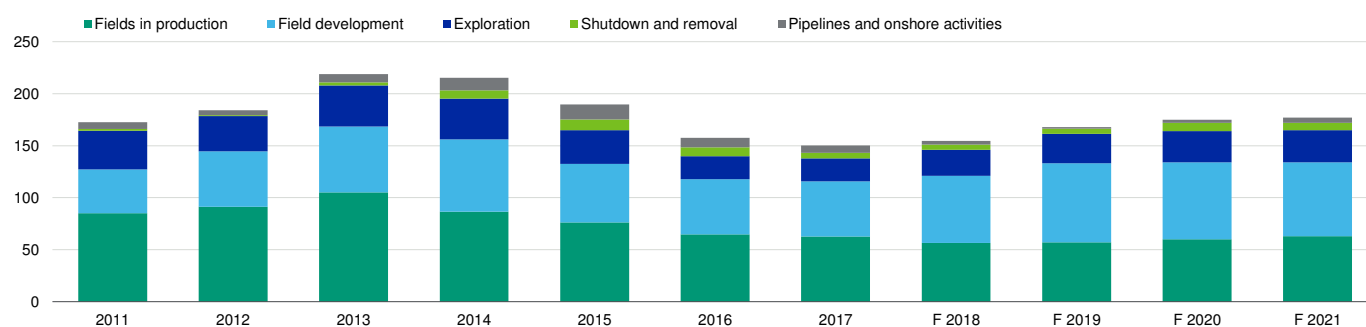
Higher government spending while oil prices were low also helped to soften the impact. Norway's conservative management of its high oil revenues has allowed the country to build up a substantial economic buffer in the form of the Government Pension Fund Global (GPF), whose market value was NOK8.1 trillion (approximately 246% of 2017 GDP) at end March 2018. These funds can be used to support the economy at times of weak economic growth.

Excluding the oil sector, mainland economic growth accelerated to 1.9% in 2017 from 1.0% in 2016, while economic activity from oil activities and ocean transport also increased by 1.9% last year. Both domestic and export-oriented oil service industry indicators for growth over the next six months are in positive territory, according to the central bank, indicating stronger economic activity for 2018-2019. Oil and gas investment will increase year-on-year in 2018, for the first time since 2013, according to the Norwegian Petroleum Directorate (Exhibit 6). It forecasts investment growth will average 4.5% between 2018 and 2020, reaching approximately three quarters, in nominal values, of its recent peak in 2013.

Exhibit 6

Oil and gas investments will increase for the first time year-on-year in 2018

In NOK billion



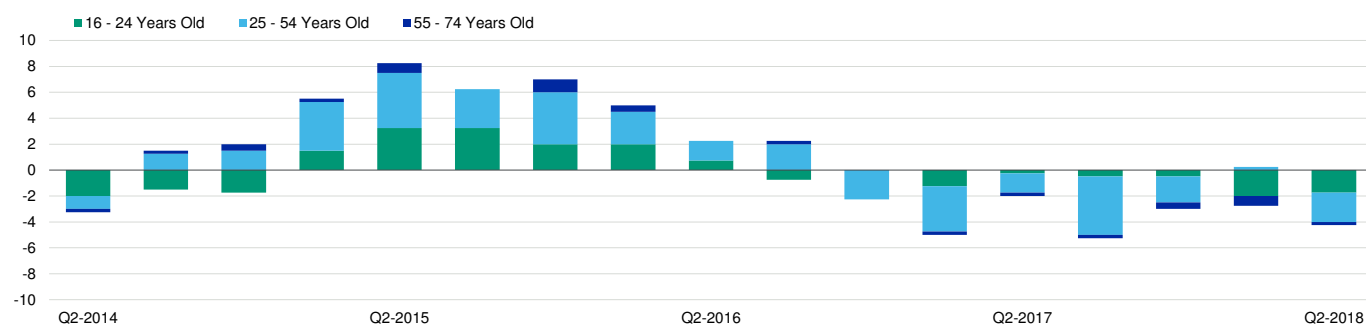
Source: Norges Bank, Norwegian Petroleum Directorate

In this supportive context, unemployment will continue to fall, and the rising unemployment among younger workers (16-24 year olds), prevalent during the second half of 2014 through to 2016 (and particularly pronounced in the oil-dependent regions), has reversed (Exhibit 7).

Exhibit 7

Jobless growth in younger workers is decreasing

(Change in thousands of unemployed people, four quarter moving average)



Source: Statistics Norway

Given the tightening labour market, the improving offshore economy and the collective bargaining model in Norway, nominal wage growth is likely to approach 3.0% in 2018 and 2019, bringing real wage increases closer to 1%. Over the outlook period, we expect wage growth and high employment to support the debt-servicing capacity of households, so lifting loan performance and bank revenues.

Loan quality is improving

Loan performance at Norwegian banks is strong. Problem loans average around 1.5% of total loans sector-wide and we expect them to decline modestly over our outlook period. This is because higher oil prices will ease pressure on the stressed offshore oil sector, while the improving economy will support borrowers' repayment capacity.

The main risk to banks' loan books stems from high household indebtedness, which is linked to high property prices, and makes borrowers vulnerable to interest-rate hikes. The banks' exposure to real estate and construction is also high (at around 15% of the sector-wide loan book) and at least partly correlated to household creditworthiness and consumption.

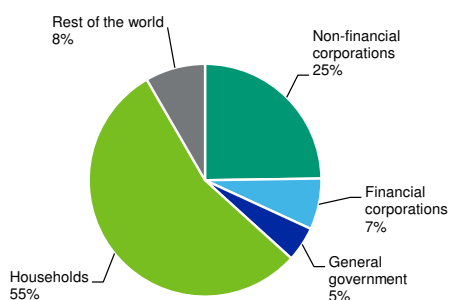
We expect the central bank to begin raising its reference interest rate in the third quarter this year from the current all-time low of 0.50%. Interest rate increases will be very gradual, protecting household finances. At the same time, the stricter lending rules currently in place will help curb house price appreciation in high growth regions.

Norwegian banks are focused on retail borrowers, and mortgages account for more than 50% of their total lending (Exhibit 8). The banks are also exposed to cyclical sectors (shipping, oil and offshore, fishing, construction and real estate) that are vulnerable at times of economic stress. The offshore oil sector has been the main source of problem loans over the past three years. Nonperforming loans (NPLs) represented 4% of loans in this sector at the end of April 2018, but down from 7% in 2015 after some extensive loan book restructuring. We expect pressure in the sector to ease during our outlook period, thanks to higher oil prices and rising oil-related investment.

Exhibit 8

Loans to households make up more than half of Norwegian banks' loan books

Loans by borrower segment

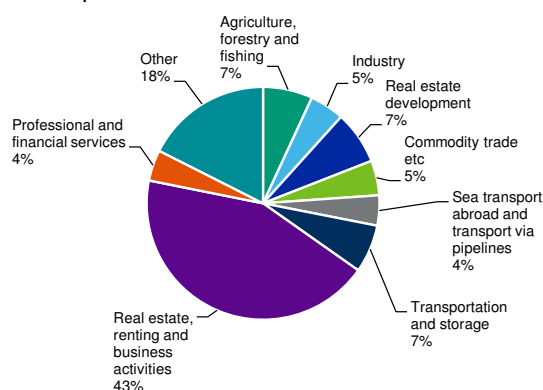


Source: Statistics Norway

Exhibit 9

Real-estate companies are Norwegian banks' largest corporate borrowers

Breakdown of corporate loan book



Source: Statistics Norway

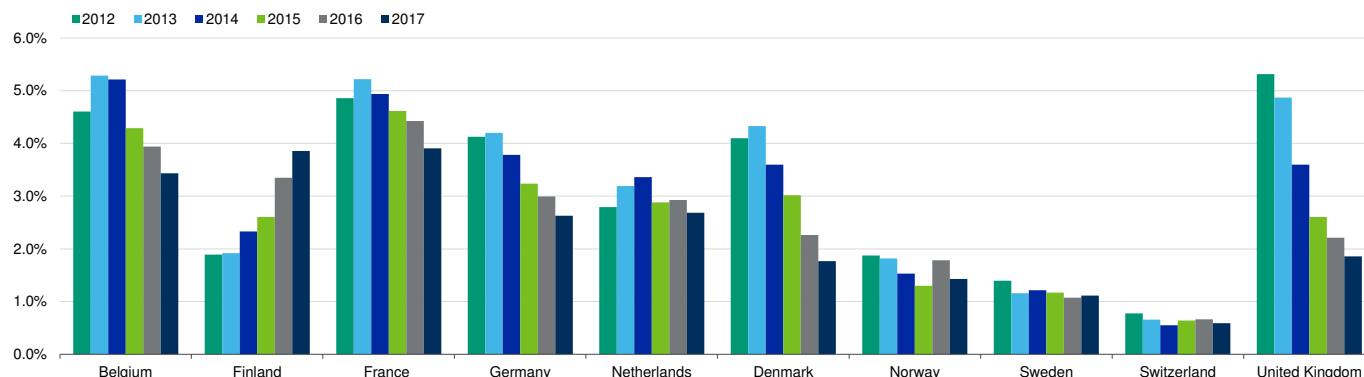
Reported problem loan ratios in Norway are very low compared with other countries in Europe (Exhibit 10) and improvements in the oil sector pushed them even lower in 2017. In contrast with many other banking systems, however, restructured loans are not included in Norwegian banks' reported problem loan calculations.

By the end of 2017, two thirds of Norwegian banks' exposures to the rig and supply segments had been granted repayment reliefs (forbearance)⁴.

Exhibit 10

Problem loan ratios in Norway are very low compared with other countries in Europe

Problem loans/ gross loans



Source: Moody's Investors Service

Last year, Norwegian banks benefited from the reversal of provisions put aside against losses on risky exposures, as economic conditions improved. This led to much lower provisioning needs that year. We expect provisioning requirements to fall further over the outlook period as the recovery gains momentum. We foresee no particularly negative impact from the transition to the IFRS 9 accounting standard, since Norwegian banks are proactive in the early recognition of loan impairment.

Household indebtedness is among the highest in advanced economies...

Norway's households are among the most highly indebted of any advanced economy, particularly those in the lower and middle income groups. Overall debt stood at around 224% of disposable income at the end of 2017. As mentioned above, the debt is largely property-related, reflecting high house prices and fueled by large tax subsidies on housing. Some 93% of household loans carry variable interest rates, making households highly sensitive to changes in borrowing costs.

The stricter mortgage rules currently in place should ease property price appreciation to a significant extent. In particular, loan to value limits of 60% on second homes in Oslo, as well as the nationally applicable aggregate debt limit restriction to five times gross annual income should have some impact in high growth areas over the outlook period⁵.

...but household loan performance remains strong

Norwegian households have a record of strong debt-servicing ability. Even during the Nordic banking crisis in the early 1990s, losses on loans to households were limited. Nonperforming loans (NPLs) for the banking sector as a whole reached 9% at the time, according to Norway's central bank Norges Bank, well below the double-digit levels seen in countries such as Portugal (12%) and Italy (18%) during the 2008 financial crisis. In part, this is due to Norway's strong savings culture. The household savings rate was a high 7.3% of disposable income in 2017, albeit down from the all-time high of 10% in 2015 (Source: Statistics Norway). The current low interest-rate environment further supports the quality of loans to households, which account for 55% of total system loans. Most Norwegian households have two incomes, and the country's unemployment benefits are generous, increasing their ability to service their debts even in the event of job loss.

Risks in the Norwegian property market

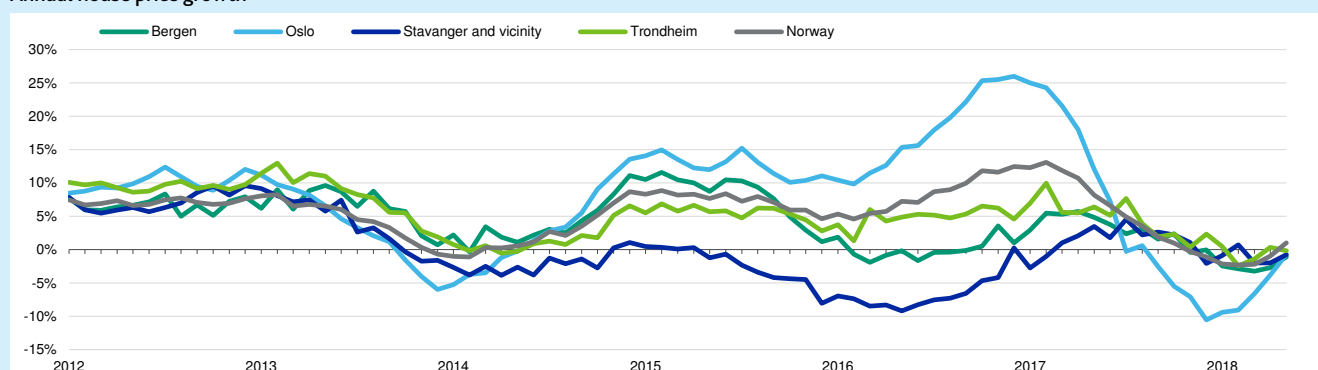
Rising house prices in Norway in recent years have contributed to growing household indebtedness (224% of disposable income at end-2017). While ultra-low interest rates support the affordability of these debt levels for now, the prospect of rising rates in the future poses a potential risk for the banks.

Residential property prices in Norway have doubled since 2000, and annual growth has risen to above 10% during 2016 and early 2017 from around 5% previously. Annual price appreciation reached a peak of 26% in the Oslo metropolitan area in the last quarter of 2016 (Exhibit 11). Low interest rates have made mortgages affordable, despite lower real wage growth in the past couple of years due to weaker economic conditions. And large tax subsidies on housing promote investment in property, resulting in an excess of demand over housing supply.

House prices declined by 4.2% in the second half of 2017, driven by stricter lending regulation put in place by the Ministry of Finance. Oslo was particularly affected due to city-specific regulation regarding loan-to-value limits on purchases of second homes, as well as a nationwide cap on aggregate debt levels (up to five times borrowers' annual income)⁶. However, the downward trend reversed this year. House prices rose 3.5% in the first half of 2018, on a national level, close to the all-time highs witnessed before the 2017 correction. We expect interest rate increases and the underwriting regulations, now extended until December 2019, will help to slow growth over the coming quarters.

Exhibit 11

House price depreciation seen late in 2017 has reversed Annual house price growth



Source: Norges Bank

The commercial real estate (CRE) market in Norway has also experienced a significant inflow of investment in recent years, driven by strong demand in the main metropolitan areas. Developments in the CRE market are important for banks as bank lending to this sector is substantial (around 15% of total lending) and in the past commercial prices have often risen sharply ahead of financial crises.

CRE prices in Oslo are at an all-time high, having risen 79% since 2009. While reduced oil sector activity has increased CRE vacancy rates, the effect on prices has been contained and even boosted by demand from international investors searching for yield in a low interest rate environment, and attracted by Norway's weaker currency. However, we note we have limited visibility of the extent of foreign ownership, which could amplify negative price trends at time of stress.

Another contributing factor to the price appreciation is rising rents, particularly for office spaces. Oslo witnessed the highest increases during 2017 (although rents continued to fall in areas with substantial oil presence such as Stavanger). We expect rents in Oslo to continue to rise as a result of stronger demand for offices and an undersupply of new buildings. However, construction is expected to increase in the coming years which will have a dampening effect in rental growth.

We do not expect these vulnerabilities in the banking system to translate into substantial losses on mortgage loans, given the mitigating effects of unemployment benefits, high savings and limited speculative housing ownership. However, an abrupt and material increase in interest rates or an unexpected economic shock could trigger substantial property price declines, which in turn could slow economic growth and consumer spending. In such a context, we expect that banks' earnings would decline and their losses would increase, especially in the SME, corporate and CRE loan books. We nevertheless consider Norwegian banks well positioned to weather an increase in problem loans when considering their solid capital buffers and strong net earnings.

Solid capital will remain a clear credit strength

The Norwegian banking sector is among the most strongly capitalised in Europe and we expect capital to remain a system strength. Rated Norwegian banks had a Tier 1 capital ratio of 17.4% of risk-weighted assets at the end of 2017, and a tangible common equity ratio of 17.5%.

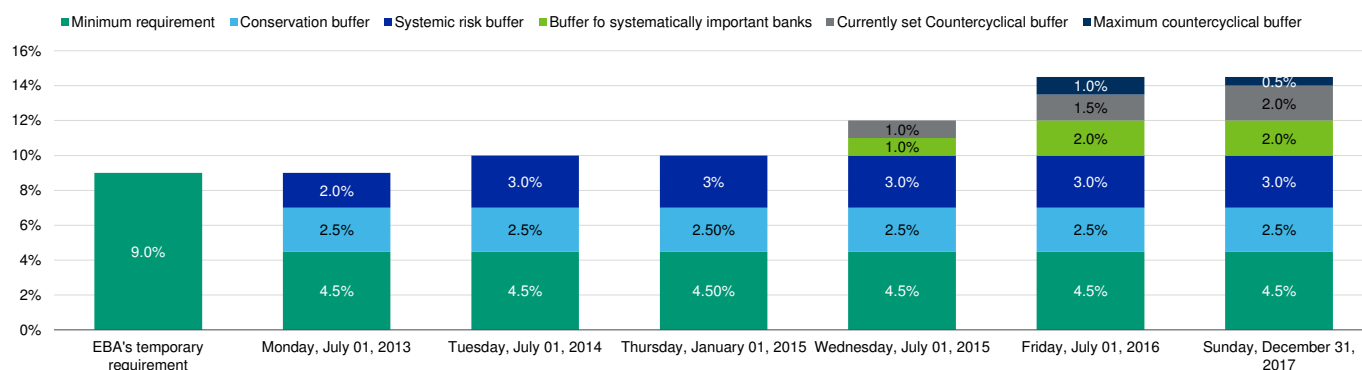
High local regulatory capital requirements have forced Norwegian banks to bolster their capital bases earlier than scheduled under international rules. As a result, the rated banks already comply with the increased Common Equity Tier 1 (CET1) requirements of 14% for systematically important banks and 12% for other lenders, which came into force in December 2017 (Exhibit 12).

In response to a growing debt-to-GDP gap, the FSA has tightened capital requirements for banks by increasing the countercyclical buffer to 2% (from 1.5%) at end 2017. ⁷ We expect the implementation of the European Union's CRR/CRD IV capital regulation to most likely remove the Basel 1 floor ⁸, the application of which results in higher risk weights for Norwegian banks' portfolios compared with other Nordic peers. However, we expect the Norwegian Financial Supervisory Authority to require compensation for the reduction in risk-weighted assets through a combination of internal ratings-based (IRB) model and Pillar 2 requirements.

Two banks have been designated by the regulator as systemically important financial institutions (SIFIs). These are DNB ASA and Kommunalbanken, which are required to hold an extra CET1 buffer of 2% since July 1, 2016. Many other Norwegian banks also target capital ratios in line with SIFI requirements, however.

Exhibit 12

Banks already comply with Common Equity Tier 1 ratio requirements Norwegian banks capital requirements construct

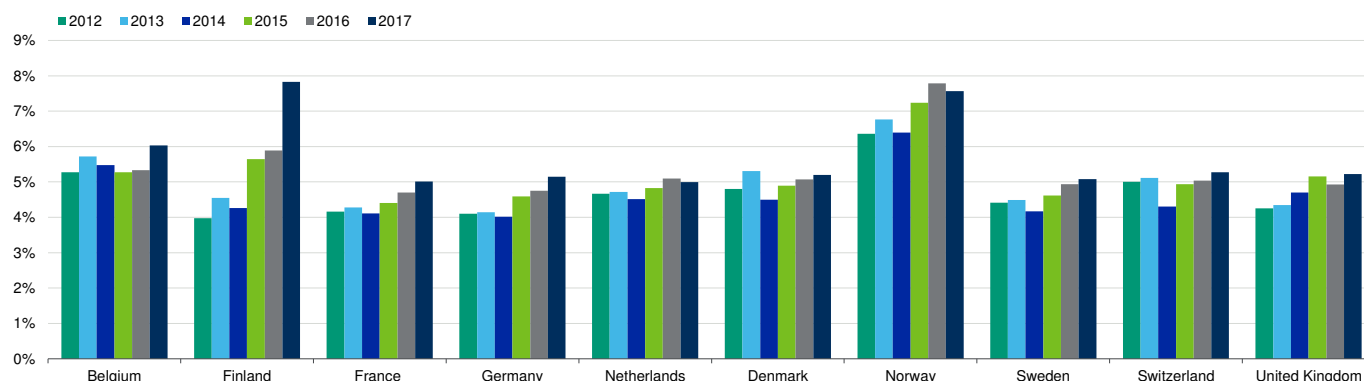


Source: Norges Bank

The Tier 1 leverage ratio of rated Norwegian banks is also high, with equity accounting for around 7.6% of total assets at year-end 2017. This compares well with European peers (Exhibit 13). The Ministry of Finance set a regulatory minimum of 5% for banks (6% for DNB), which allows for a 2% buffer above the 3% minimum set by the Basel Committee.

Exhibit 13

Tier 1 leverage ratio for the Norwegian rated banks compare favourably with selected systems.



Source: Moody's Banking Financial Metrics

Norwegian banks' capital is resilient under our forward-looking stress scenario

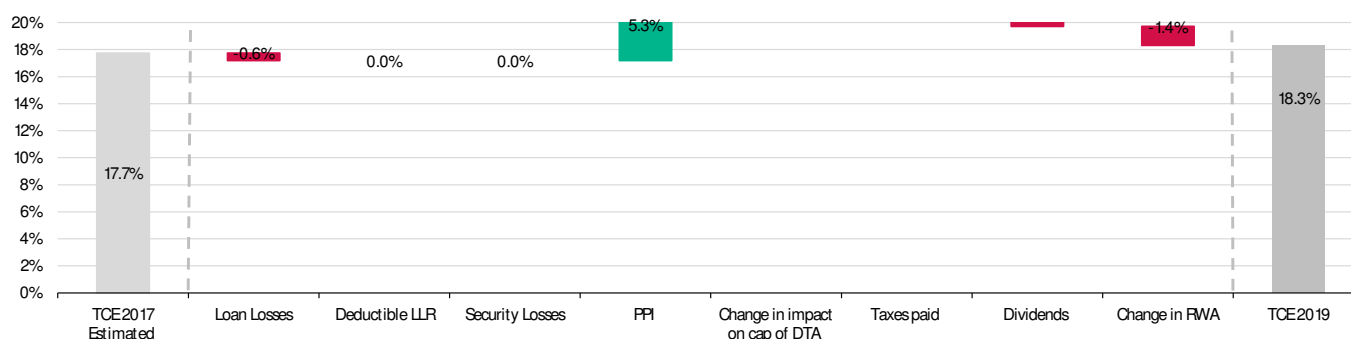
We conduct a scenario analysis to gauge the solvency of banks under both a base-case and a low probability, highly stressed scenario that is roughly equivalent to a 1-in-25-year event. The base-case is based on Moody's current macroeconomic forecasts. The stressed scenario is designed to be globally comparable and is based on a common approach to derive loan and securities losses, as well as stressed income. It includes a set of assumptions regarding loan and asset growth and income haircuts, among other variables and it looks at how these factors will affect capital

Base-line scenario: stable capital

Under our baseline (or most likely) scenario (Exhibit 14), we expect the system-wide capital ratio to remain broadly unchanged over a two-year horizon; i.e., up until end-2019. This is driven by an increase in pre-provision income and low loan losses. This is driven by non-performing loans increasing to near 7% over the period, up from 4.1% at the end of 2014, which would result in credit costs of around 1.5% of total loans per year. Income generation in the system would remain stable. Net income (and retained earnings) would be essentially absorbed by anticipated growth in RWA, leaving the capital ratio virtually unchanged at 17.4% ²

Exhibit 14

Norwegian banks: evolution of capital under our base-line scenario
[Exhibit Subtitle]



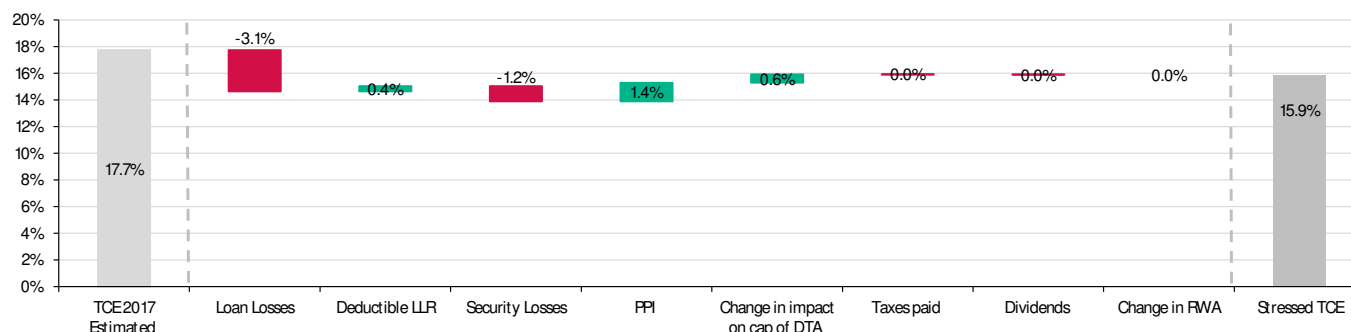
Note: Aggregated data across rated Norwegian banks (excluding Kommunalbanken AS)
Source: Moody's Investors Service

Stress scenario: capital is resilient

We also consider an alternative "stress scenario" (Exhibit 15)¹⁰ This is not our base-line expectation but a measure of banks' capacity to withstand highly stressed conditions. It therefore informs our opinion on the creditworthiness of the system as a whole. The results of our stress scenario on the Norwegian financial system show that it is resilient, retaining capital equivalent to about 15.9% of risk-weighted assets at the end of the two-year horizon, compared with 17.4% at the end of 2017. Assuming that the countercyclical buffer requirements would be reduced to 0% in a severe scenario, that is above the current CET1 requirements of 10% and 12% for SIFIs.

Exhibit 15

Norwegian banks: evolution of capital ratio under our stress scenario



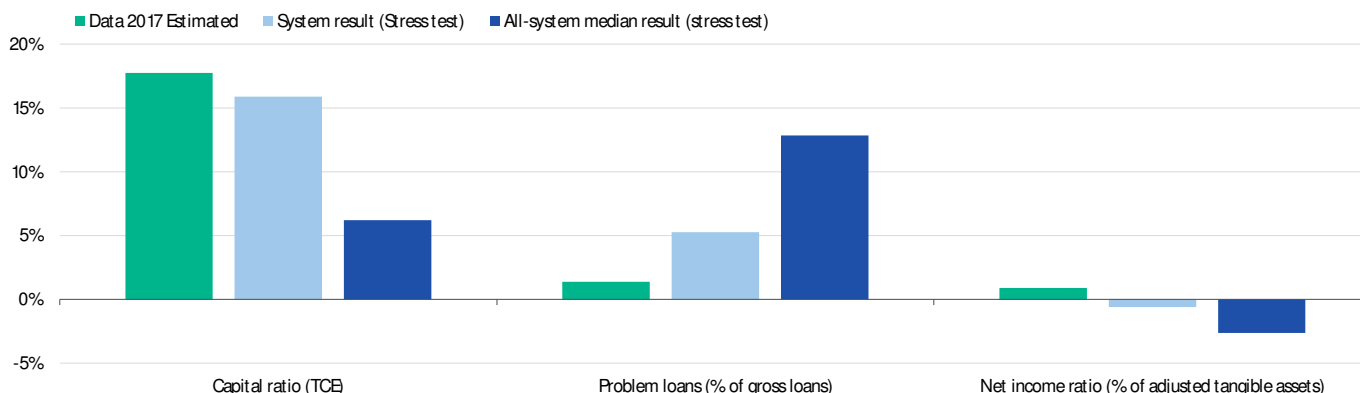
Note: Aggregated data from rated Norwegian banks (excluding Kommunalbanken AS)

Source: Moody's Investors Service

The Norwegian banking system's asset quality, and to a lesser extent its capital and profitability ratios, are more resilient in the stressed scenario than for other banking systems (Exhibit 16).

Exhibit 16

Solvency metrics under Moody's stress test - Norway versus median banking system



Source: Moody's Investors Service

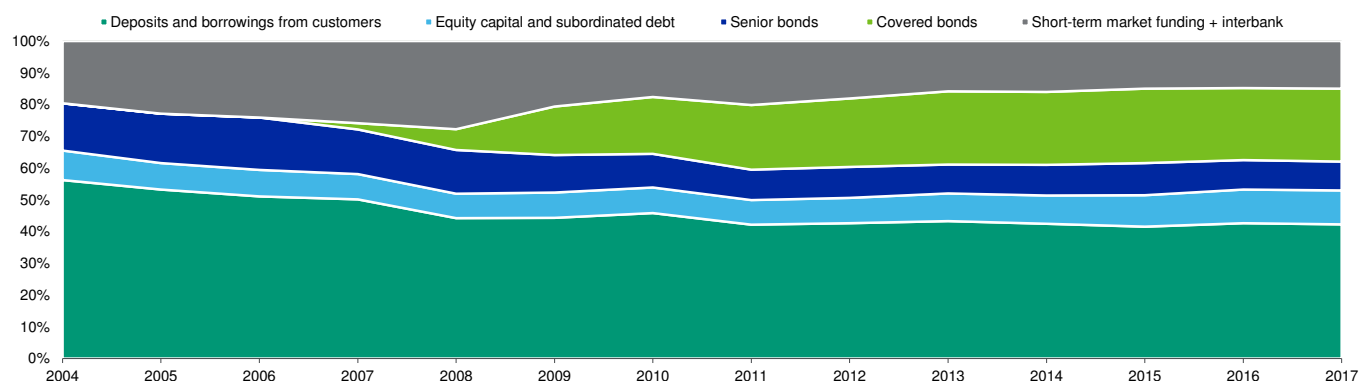
High reliance on market funding renders banks sensitive to investor sentiment

Norwegian banks' use of market funding has stabilised in recent years (around 50% of total funding as of December 2017). We expect it to stay close to current levels over our outlook period because we anticipate deposit growth will slightly outpace credit growth.

We consider Norwegian banks' high reliance on wholesale funding as a weakness, since it renders the banks vulnerable to changes in investor sentiment, which can push up funding costs, eroding profitability, or force deleveraging. Since 2012, covered bonds have been a growing source of funding for the system, overtaking reliance on more volatile short-term market finance. Covered bond issuance has helped the banks to extend their debt maturities to more closely match their longer-term loans, but it has also increased their sensitivity to house price movements because the bonds are backed by mortgages.

Exhibit 17

Covered bond funding has become Norwegian banks' largest source of wholesale funding



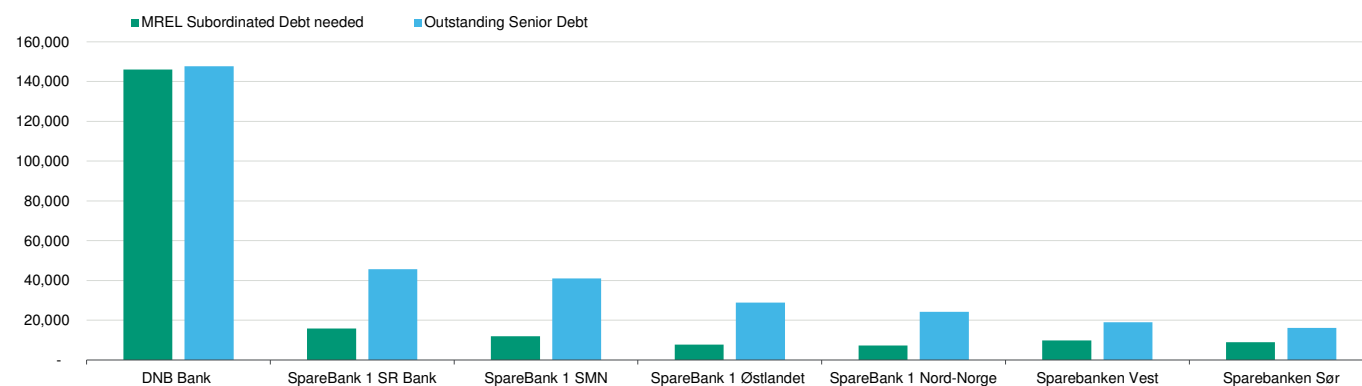
Source: Norwegian Financial Supervisory Authority (FSA)

We expect Norwegian banks' reliance on market funds to remain broadly unchanged as a result of their compliance with the minimum requirement of own funds and eligible liabilities (MREL) rule¹¹. In accordance with the Norwegian FSA's draft proposal, banks must hold minimum volumes of loss-absorbing debt so as to shield taxpayers from the cost of bank insolvency. Although Norwegian banks will have to hold substantially more subordinated debt than they do now, we expect them to cover their MREL requirements by converting existing outstanding senior debt into the new "non-preferred senior" debt class.

We estimate that Norway's largest rated savings banks will have to issue a combined total of NOK200 billion of subordinated debt over the next five years, and will use it to replace expiring senior debt.¹² This is equal to almost two thirds of the outstanding debt that they will need to refinance during this period (Exhibit 18).

Exhibit 18

The largest rated Norwegian savings banks already hold senior debt in excess of their estimated MREL requirements



Note: All figures are as of Q1 2018, apart from DNB for which we use Q2 2018 data.

Sources: Company reports, Moody's Investors Service

High reliance on international investors increases refinancing risk

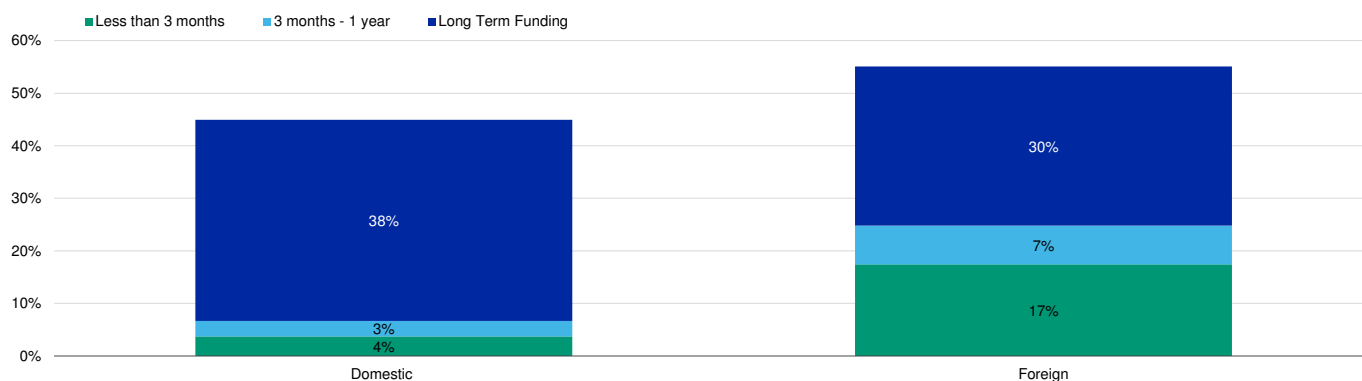
More than half of Norwegian banks' market funding was denominated in foreign currency at the end of March 2018 (Exhibit 19). The largest banks hold the greatest exposures. Since investors are sensitive to events that could adversely affect their overseas assets, a deterioration in Norway's economy could sharply increase funding costs for Norwegian banks, or even create refinancing problems for the sector.

In mitigation, international fixed-income investors seeking exposure to Norway's economy do not have many alternatives to bank bonds, owing to the limited availability of outstanding Norwegian government and corporate debt. As a result, Norwegian bank debt has been in high demand and risk premiums have been low.

Exhibit 19

High reliance on foreign currency wholesale funding increases refinancing risks

Share of total assets



Source: Norges Bank

Basel III liquidity requirements provide further protection against potential funding challenges. At end-December 2017, Norwegian banks' had a weighted average Net Stable Funding Ratio (NSFR) of 114%. Larger Norwegian banks report higher NSFR ratios than their smaller counterparts, reflecting greater use of short-term market funding.

By the end of 2017, all Norwegian banks must achieve a liquidity ratio (LCR)¹³ of 100%. On an aggregate level, the LCR stood at 126% at end-December 2017. The approval of covered bonds as eligible for the highest quality category of liquid asset ("Level 1" assets) in the LCR calculation encourages continued issuance. This will support the liquidity of the covered bond market.

Covered bond credit quality will remain strong

Covered bonds are an increasingly important funding source for Norwegian banks (Exhibit 17). Covered bond investors have dual recourse to both the issuing entity and a segregated collateral pool. In Norway, issuers are specialist entities that are typically credit-linked to a rated parent. The two exceptions are the issuing entities of the Eika and Sparebank 1 platforms, which are supported by their member banks.

Due to the dual recourse nature of covered bonds, the bonds are materially exposed to the creditworthiness of the parent or sponsor entities. As a result, changes in the credit quality of Norwegian banks will impact covered bonds supported by those banks. However, investors' recourse to the collateral pool, which is supported by Norway's covered bond regulatory framework, means that covered bonds are usually less affected by the credit deterioration of parent or sponsor bank(s) than equivalent unsecured debt.

Most collateral pools backing Norwegian covered bonds consist of residential mortgage loans. Despite the challenges of high overall debt levels in Norway, this collateral will continue to perform well and will be supported by Norwegian borrowers' strong debt servicing ability. Loans in cover pools benefit from relatively low LTV ratios, averaging below 55% on a whole-loan indexed basis¹⁴, as well as good levels of seasoning and moderate house price growth. Residential mortgage cover pools also benefit from average surplus over-collateralisation of around 20% as of end December 2017, meaning that issuers have capacity in their covered bond programmes to compensate for higher credit risks if there is deterioration in bank or collateral risk.

Collateral in cover pools have been vulnerable to the house price volatility recently observed in the Oslo metropolitan area (Exhibit 11). However, we expect interest rate increases and the extension of the underwriting regulations will help to slow growth over the coming quarters. Covered bond issuers tend to be regionally focused and as a result fewer than a third have more than 20% exposure to any ongoing volatility in Oslo. Conversely, high exposure to regional concentrations means many issuers' cover pools could be negatively affected by a material fall in local house prices.

Under Norway's new bank resolution regime Norwegian covered bonds will be less exposed than unsecured debt to bank defaults and losses, although covered bonds will still be somewhat negatively affected by any reduced government support for an issuer's parent bank. Covered bonds effectively benefit from greater seniority in the issuer group's liability structure because they are exempt from bail-in under the BRRD, and are therefore more likely to remain in a going concern entity after resolution.

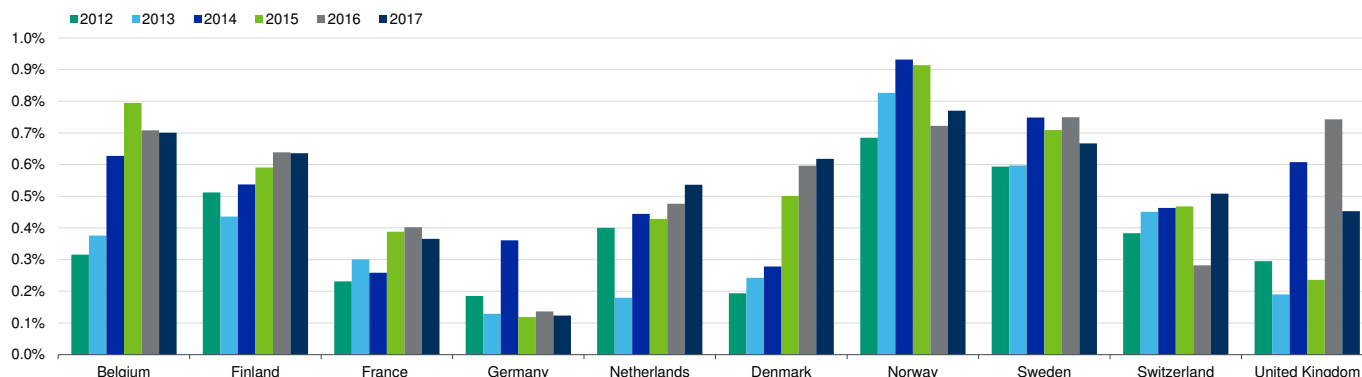
Banking profits will remain stable

We expect Norwegian banks' profits to stabilise over our outlook period, following an improvement in 2017. Rising interest rates will gradually boost interest income from loans but this will be offset by increased funding costs. Net interest income accounted for around 70% of total earnings in 2017 (Exhibit 20), but has been under pressure from low interest rates and volatile funding costs over the past year. We expect it to remain stable over our outlook period.

Exhibit 20

Norwegian banks profitability has been resilient despite challenges in the economy

Net income/tangible assets



Source: Moody's Investors Service

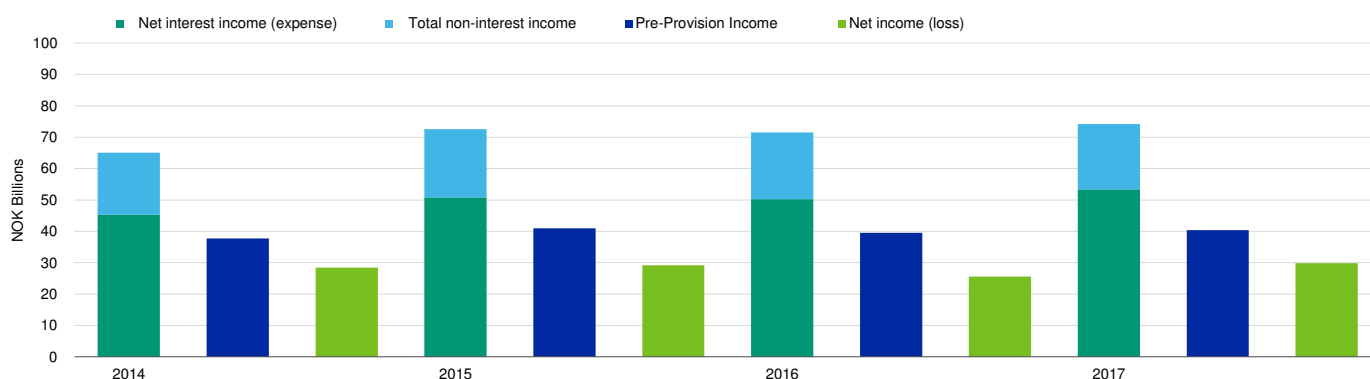
We anticipate that Norway's central bank will increase the benchmark interest rate by 0.25% in the third quarter of 2018 and continue raising interest rates to 2% by 2021. This follows seven years of consecutive cuts that have taken the rate to an all-time low of 0.5%. Large shares of flexible-rate loans in the banks' portfolios mean that rising rates will benefit the banks' interest income. However, we anticipate that funding costs will rise as banks replace their maturing senior bonds with riskier (and costlier) subordinated instruments to comply with MREL requirements, so offsetting the benefits.

Provisioning levels are likely to fall over our outlook period, supported by improvements in the banks' loan quality. In the first half of this year, Norwegian banks' impairment losses on loans decreased owing to positive developments in the corporate portfolios, particularly in the offshore oil sector. In some cases there have been releases of both individual and collective provisions that were made in previous years, reflecting more stable economic conditions.

Exhibit 21

Norwegian banks' earnings structure is stable

NOK billion, totals for Norwegian rated banks



Source: Moody's Banking Financial Metrics

There is only modest room for efficiency improvements

In recent years, most Norwegian banks have put in place cost-cutting strategies to improve net income and capital generation, mainly through branch closures and headcount reduction, and we see only modest room for realising further cost benefits in these areas.

We expect Norwegian banks to remain focused on cost control and realise benefits by scaling up digitalisation initiatives. However, efficiency ratios are already at very low levels and we expect only limited improvement during the outlook period. Helped by tight operating cost control, as well as by more a supportive macroeconomic environment that has driven solid revenue growth, the sector

had an average cost-to-income ratio of 45% in 2017, compared to a European average of 67% and lower cost-to-assets ratios than European peers

Fintech in Focus - Norwegian banks are at the forefront of digital innovation

Digital innovation in financial services is opening banking to competition from technology companies and driving disruption in banking systems through the world (see our report on Bank of the Future). Banks that have the resources and strategic vision to develop or acquire innovative products and processes and integrate new technology into their business models will be most successful in defending their business.

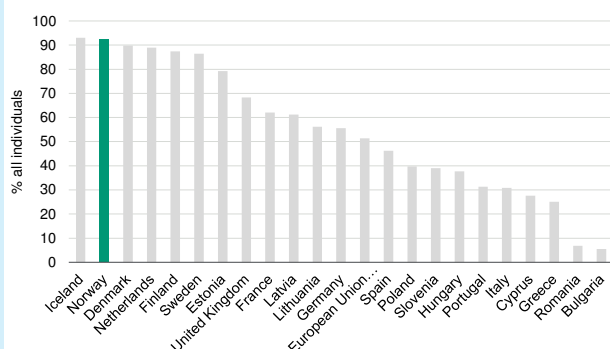
Irrespective of their size, Norwegian banks are rapidly embracing new technology and are continuously investing in their digital strategies in different ways. Full in-house software development, use of third party providers, acquisition of fintech firms, as well as cross-bank collaboration enabling cost sharing and realisation of economies of scales, particularly for small-sized banks, are some of the strategies deployed so far. As a result, late last year, DNB Bank launched a fully automated mortgage approval process and SpareBank 1 SR bank was the first bank in Norway to launch robot technology providing customer services.

Norwegian banks joined forces to create a shared digital ecosystem, sidelining potential disrupters. In May 2015, Norway's DNB Bank (DNB) launched the Vipps mobile payment app, seeking to protect its payment business from rival Nordic platforms. To accelerate this process, and although the platform had been open to the customers of any Norwegian bank since inception, DNB spun off Vipps in early 2017. More than 100 Norwegian banks took a stake in the entity, with DNB retaining a 52% share. The sale convinced some participating banks to shelve their own mobile payment offerings in favour of Vipps.

This collaboration has allowed Norwegian banks to maintain a central role in their respective markets in light of changing customer behaviour and new fintech entrants. Although new digital services such as Vipps may lead to some cannibalisation of traditional payment revenues, it has allowed banks to preserve core customer relationships during a period of rapid industry change driven by digitalisation.

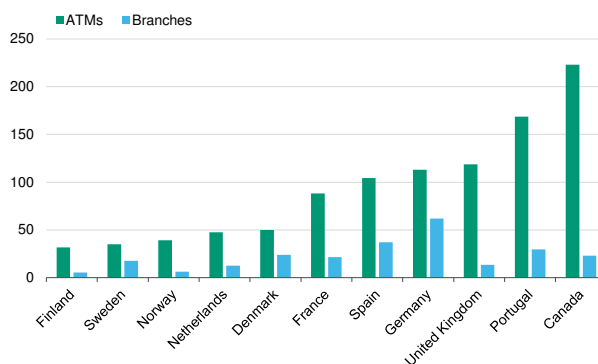
The focus on new technology in combination with large-scale adoption of online banking across the population, has allowed Norwegian banks to significantly reduce their branch networks. Norwegians have the highest usage of online banking services among 16-74 year olds in Europe (Exhibit 22), allowing for early adoption of digital banking channels which has improved costs and efficiency. However, we expect modest improvements in efficiency as Norwegian banks currently benefit from lean cost structures as reflected by their cost-to-income ratio (45% in 2017), which compares favourably with European peers (average of 67% in 2017).

Exhibit 22
Norway has the highest usage of online banking among 16-74 year olds in Europe
% of individuals using online banking



Source: European Commission's Digital Scoreboard

Exhibit 23
Norway has a low number of bank branches and ATMs
Number of branches and ATMs per 100 thousand inhabitants



Source: The World Bank

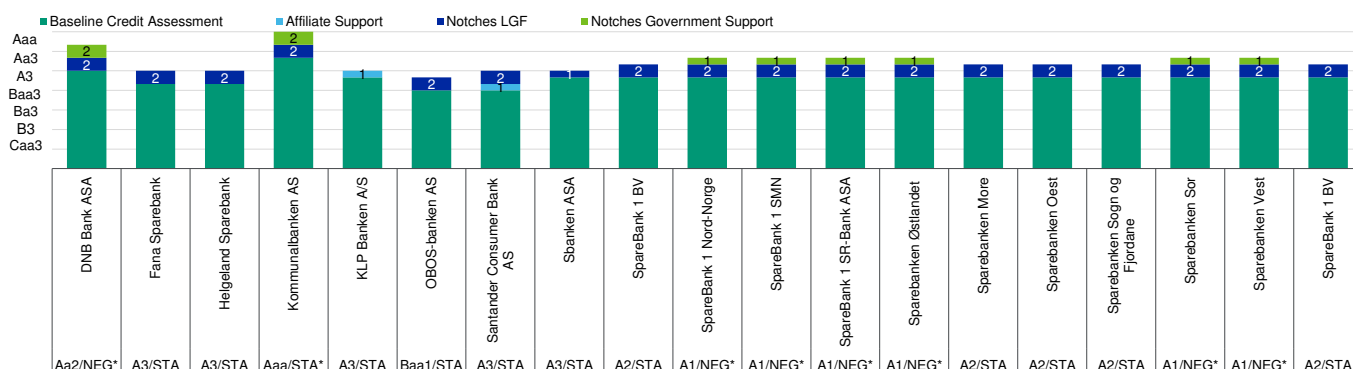
BRRD adoption will likely lower our government support assumptions

In March 2018, the Norwegian parliament agreed to transpose the EU's bank resolution regime, the Banking Recovery and Resolution Directive (BRRD), into Norwegian law. The new law is likely to enter into force on 1 January 2019. In accordance with the restrictions on government support included in the BRRD legislation, we assume that the probability of banks' receiving support from the Norwegian government in a crisis is reduced. Consequently, the government support uplift in Norwegian banks' ratings will likely reduce over the next 12-18 months. See our report [Moody's Changes Rating Outlook to Negative For Five Norwegian Banks Following Proposed BRRD Legislation; Ratings Affirmed](#).

We currently incorporate a "moderate" probability of government support into the long-term debt and deposit ratings of seven Norwegian banks (Exhibit 24). This assumption takes into account; 1) Norway's considerable capacity to provide financial support; 2) its non-EU status, which gives it increased regulatory flexibility to provide banks with support; and 3) the Norwegian authorities' view that the regional savings bank model is important for the country's financial stability.

Exhibit 24

Senior unsecured and deposit ratings reflect government support and loss given failure analysis



Note: * Issuers that currently benefit from government support uplift in their ratings

Source: Moody's Investors Service.

Norway's BRRD legislation includes the central elements of the EU directives, such as MREL (see page 12). The Norwegian FSA's draft MREL proposal suggests that Norwegian banks will need to hold substantially more subordinated liabilities than they do now, mostly in the form of non-preferred senior bonds. This will provide a larger cushion to protect senior creditors, a credit positive. However, until greater disclosure is provided on individual banks' respective requirements and funding strategies, the full extent to which this extra layer of protection could lead to rating uplift for senior debt classes will remain unclear.

Similarly, it is too early to determine whether such uplift could fully offset the negative pressure that arise on some banks' ratings due to our planned reduction in government support assumptions.

Moody's Related Research

Banking System Outlook:

- » [Norway, August 2017 \(1076131\)](#)
- » [Norway, August 2016 \(1024120\)](#)
- » [Norway, December 2015 \(1002627\)](#)

Banking System Profile:

- » [Norway, March 2016 \(190105\)](#)

Macro Profiles:

- » [Norway Macro Profile: Very Strong - , December 2017](#)
- » [Norway Macro Profile: Very Strong - , March 2016 \(1012721\)](#)
- » [Global Banking: Moody's Macro Profiles: A Compendium \(1002450\)](#)

Analysis:

- » [Norway, Government of, June 2017 \(1075983\)](#)
- » [Government of Norway - Aaa Stable, June 2017 \(1075981\)](#)
- » [Banking Systemic Support Global Update: Resolution Regimes Drive Shifts in Support \(166101\)](#)
- » [Norway's draft MREL proposal is credit positive for senior bondholders, August 2018 \(1133505\)](#)
- » [Tighter underwriting rules cool housing market but high household debt is a risk, March 2018 \(1096661\)](#)
- » [Nordic banks cooperate and drive innovation during period of rapid digitalisation, October 2017 \(1089987\)](#)

Rating Actions:

- » [Moody's changes rating outlook to negative for five Norwegian banks following proposed BRRD legislation; ratings affirmed, July 2017 \(369249\)](#)

Rating Methodology:

- » [Resource page, Bank Rating Methodology](#)
- » [Stress Testing Banks: A Globally Comparable Approach, November 2016 \(1044659\)](#)
- » [Banks, January 2016 \(186998\)](#)

Credit Opinions:

- » [DNB Bank ASA](#)
- » [Eksportfinans ASA](#)
- » [Fana Sparebank](#)
- » [Helgeland Sparebank](#)
- » [KLP Banken A/S](#)

- » [Kommunalbanken AS](#)
- » [OBOS-banken AS](#)
- » [Santander Consumer Bank AS](#)
- » [Sbanken ASA](#)
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- » [SpareBank 1 Nord-Norge](#)
- » [SpareBank 1 SMN](#)
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- » [Sparebanken Oest](#)
- » [Sparebanken Sogn og Fjordane](#)
- » [Sparebanken Sor](#)
- » [Sparebanken Vest](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

Banking System Outlook Definition

Banking system outlooks represent our forward-looking assessment of fundamental credit conditions that will affect the creditworthiness of banks in a given system over the next 12-18 months. As such, banking system outlooks provide our view of how the operating environment for banks, including macroeconomic, competitive and regulatory trends, will affect asset quality, capital, funding, liquidity and profitability. Banking system outlooks also consider our forward-looking view of the government support environment for bank creditors.

Since banking system outlooks represent our forward-looking view on credit conditions that factor into our bank ratings, where a negative (positive) outlook value is given, this suggests that negative (positive) rating actions are more likely on average. Outlook values are not given for all systems.

Overview of Banking System Outlooks

Exhibit 25

Banking System Outlook Table

As of 7 August 2017

Banking System	Positive	Stable	Negative
Argentina		Stable	
Armenia		Stable	
Australia		Stable	
Austria	Positive		
Azerbaijan		Stable	
Bahrain			Negative
Baltic Countries	Positive		
Belarus		Stable	
Belgium		Stable	
Bermuda		Stable	
Bolivia		Stable	
Brazil		Stable	
Canada			Negative
Chile			Negative
China		Stable	
Colombia			Negative
Cyprus	Positive		
Czech Republic		Stable	
Denmark		Stable	
Egypt		Stable	
Finland		Stable	
France		Stable	
Germany		Stable	
Greece	Positive		
Hong Kong		Stable	
Hungary	Positive		
India		Stable	
Indonesia		Stable	
Ireland		Stable	
Israel		Stable	
Italy			Negative
Japan		Stable	
Kazakhstan		Stable	
Korea		Stable	
Kuwait		Stable	

Banking System	Positive	Stable	Negative
Lebanon		Stable	
Malaysia		Stable	
Mexico		Stable	
Mongolia		Stable	
Morocco	Positive		
Netherlands		Stable	
New Zealand		Stable	
Nigeria		Stable	
Norway			Negative
Oman			Negative
Pakistan		Stable	
Paraguay		Stable	
Peru	Positive		
Philippines		Stable	
Poland		Stable	
Portugal		Stable	
Qatar			Negative
Russia		Stable	
Saudi Arabia		Stable	
Singapore		Stable	
Slovakia		Stable	
South Africa			Negative
Spain	Positive		
Sri Lanka			Negative
Sweden		Stable	
Switzerland		Stable	
Taiwan		Stable	
Thailand		Stable	
Turkey			Negative
Ukraine	Positive		
United Arab Emirates		Stable	
United Kingdom		Stable	
United States		Stable	
Uruguay		Stable	
Vietnam	Positive		

Appendix 1

Norway Macro Profile: Very Strong -

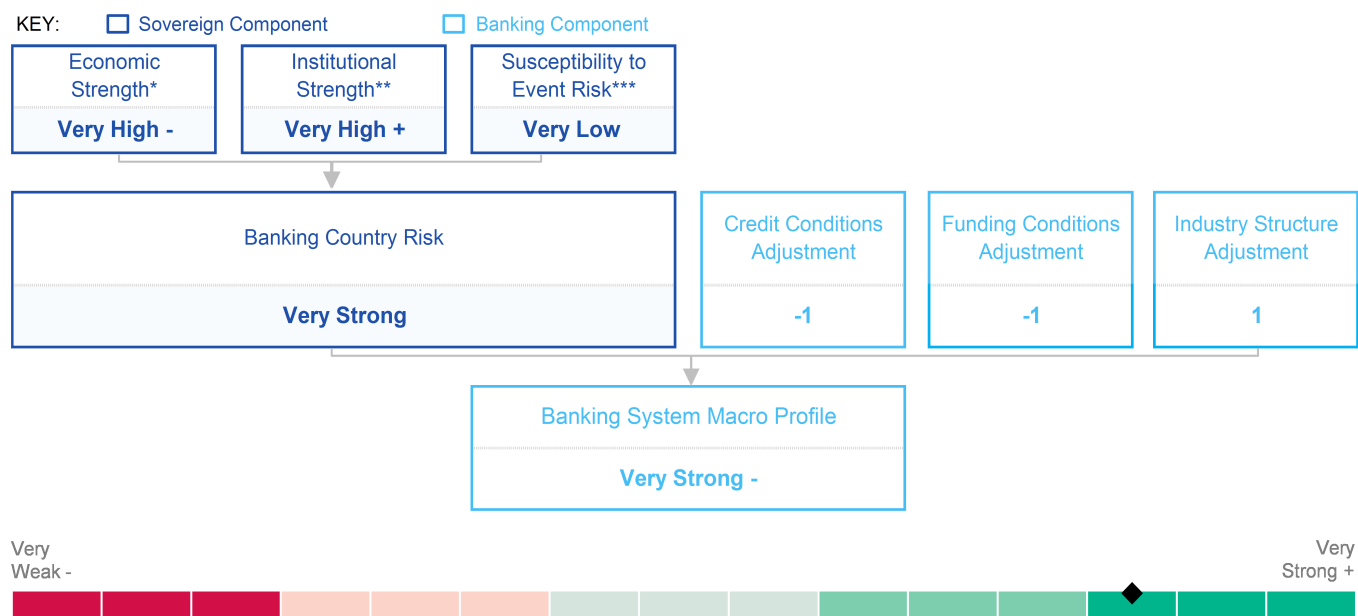
The Macro Profile is a rating input used to determine each bank's Baseline Credit Assessment. It is designed to capture the system-wide factors that are predictive of the propensity of banks to fail.

Despite the shock from significantly lower oil prices in 2015 and 2016, Norway's macro profile remains intact at Very Strong -. Banks in Norway (Aaa stable) benefit from operating in a wealthy and developed country with very high economic, institutional and government financial strength as well as low susceptibility to event risk. Norway has a diversified and growing economy, which demonstrates resilience to the ongoing weakness in the oil sector. The main risks to the banking system stem from the high level of household indebtedness, elevated real estate prices and domestic banks' extensive use of market funding. However, these risks are mitigated by the strength of households' ability to service debt, banks' adequate capitalization and the relatively small size of the banking system compared with the total size of the economy.

Read the full report, [Norway Macro Profile: Very Strong -](#). For more information about Moody's Macro Profiles, please see [Moody's Macro Profiles: A Compendium](#) and consult [Moody's Bank Rating Methodology](#).

Exhibit 26

Arriving at Norway Macro Profile: Very Strong -



*excluding adjustment related to "credit boom"

**excluding adjustment related to track record of sovereign default

***excluding banking factors

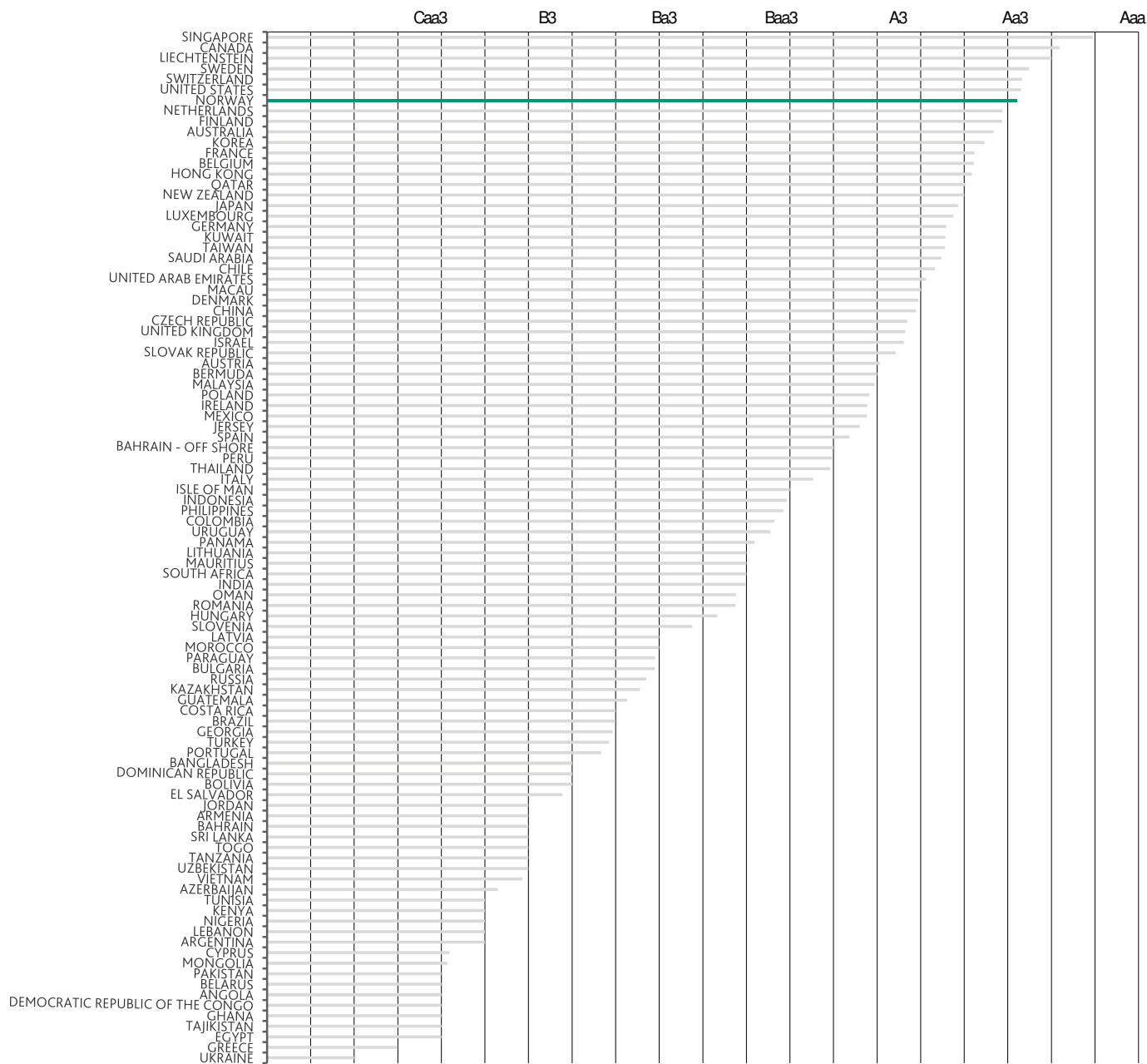
Note: The Macro Profile is a rating input used to determine each bank's Baseline Credit Assessment. It is designed to capture the system-wide factors that are predictive of the propensity of banks to fail. For more information, please consult Moody's Bank Rating Methodology.

Source: Moody's Investors Service

Appendix 2

Average Long-Term* Ratings (Asset-Weighted) - Moody's Rated Banks** (as of June 28, 2017)

Exhibit 27



Source: Moody's Investors Service

Endnotes

- 1 MREL is a post-crisis regulatory reform that ensures banks hold a sufficient layer of loss-absorbing debt (Minimum Requirement for own funds and Eligible Liabilities) to facilitate the recapitalisation of the bank in a resolution.
- 2 [Government of Norway - Aaa Stable - Annual Credit Analysis 2018](#)
- 3 According to the Statistics Norway's Labour Force Survey
- 4 [Finanstilsynet: Finansielt utsyn - June 2018](#)
- 5 Norway maintains stricter Oslo-specific mortgage regulations, a credit positive for banks
- 6 Norway maintains stricter Oslo-specific mortgage regulations, a credit positive for banks
- 7 [Norway's Increased Countercyclical Capital Buffer Is Credit Positive for Banks](#)
- 8 Under Basel II standards, as of 2007 banks were permitted to use their own models to calculate risk weights (IRB method). To prevent calculated risk weights from being too low due to use of these models, a transitional rule was introduced in the form of a minimum value for aggregate risk-weighted assets. The value could not be less than 80% of what it would have been under Basel I rules. This is the so-called Basel I floor. Norway is the only country that has decided to keep the Basel I floor. This practice means that Norwegian banks capital ratios are not directly comparable of that of their peers.
- 9 Our baseline forecasts are based on econometric models and a set of assumptions. Probabilities of default per asset class are derived from our forecasts for problem loans, and general assumptions on loan book growth and write-off rates that have been adapted to the particular circumstances of the system. The model includes macroeconomic variables such as real GDP growth, unemployment, inflation and exchange rate. For investments and securities held to maturity (government, corporate and other securities), we use idealized tables based on current ratings. In line with our Rating Methodology, we do not book losses on the available for sale securities. We assume that securities in the trading book do not generate profit or losses. In general, we assume that pre-provision income, risk-weighted assets and adjusted tangible assets grow as a function of the size of the economy, although we test and adjust these assumptions against their recent and likely evolution. Dividend pay-out ratios are kept constant throughout the forecasting period, or adjusted to include reasonable changes in banks' dividend policies.
- 10 For a full description of our stress testing approach see [Stress Testing Banks: A Globally Comparable Approach](#). Our approach is based on a 1-in-25 year event and consists of three main components: loan losses calculated using a multiplier approach; security losses calculated using idealized loss rates based on the ratings of the bonds held to maturity or available for sale or calculated using an expected shortfall approach for bonds in the trading book as well as equity securities; stressed pre-provision income, based on haircuts on net interest income (33%) and on non-trading, non-interest income (75%). We also take a static balance-sheet assumption, maintaining RWA or operating expenses constant.
- 11 MREL is a post-crisis regulatory reform that ensures banks' liability structures hold a sufficient layer of loss-absorbing debt (or minimum own funds and eligible liabilities) to facilitate the recapitalisation of the bank in a resolution
- 12 Norway's draft MREL proposal is credit positive for senior bond holders
- 13 Banks must hold highly liquid assets (e.g. cash, Treasury bonds) equal to or greater than their net cash flow over a 30-day stress period.
- 14 Residential mortgage loans LTVs published in Moody's Performance Overviews for rated Norwegian covered bonds for Q4 2017. Where available, the LTV takes into account any part of mortgage loan that remains with the parent bank.

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