

CREDIT OPINION

10 October 2016

Update

Rate this Research >>

RATINGS

SpareBank 1 SR-Bank ASA

Domicile	Norway
Long Term Debt	A1
Type	Senior Unsecured - Fgn Curr
Outlook	Negative
Long Term Deposit	A1
Type	LT Bank Deposits - Fgn Curr
Outlook	Negative

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Analyst Contacts

Nondas Nicolaidis 357-2569-3006
 VP-Sr Credit Officer -
 EMEA Banking Group
 nondas.nicolaides@moody.com

Malika Takhtayeva +44.20.7772.8662
 Associate Analyst
 malika.takhtayeva@moody.com

Jean-Francois Tremblay 44-20-7772-5653
 Associate Managing
 Director
 jean-francois.tremblay@moody.com

Sean Marion 44-20-7772-1056
 Managing Director -
 Financial Institutions
 sean.marion@moody.com

CLIENT SERVICES

Americas 1-212-553-1653

SpareBank 1 SR-Bank ASA

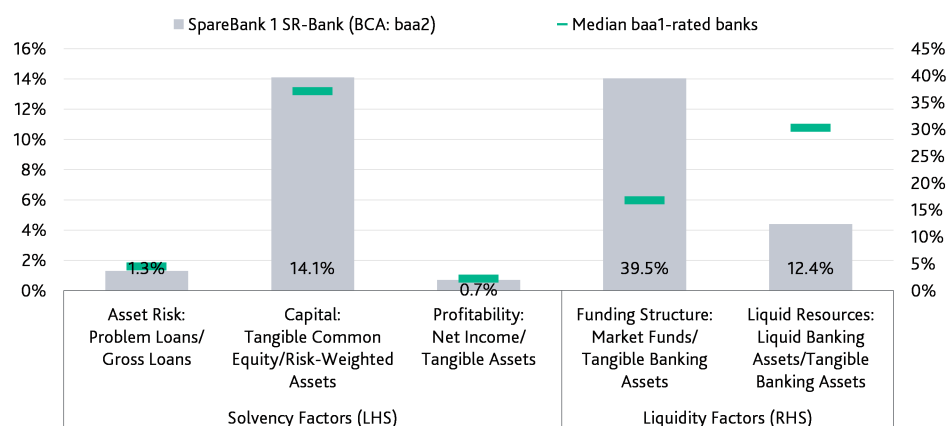
Semi - Annual Update

Summary Rating Rationale

Moody's assigns a baseline credit assessment (BCA) of baa2 SpareBank 1 SR-Bank, an adjusted BCA of baa1, a long-term deposit rating of A1, a senior unsecured debt rating of A1, a senior subordinated rating of Baa2(hyb), a junior subordinated rating of Baa3, and a short term rating of Prime-1. We also assign a Counterparty Risk Assessment (CR Assessment) of Aa3(cr) long term and Prime-1(cr) short term.

SpareBank 1 SR-Bank's BCA of baa2 primarily reflects the bank's solid regional position, strengthened capital buffers (common equity Tier 1 capital ratio of 13.5% in June 2016) and increased pre-provision income in the first-half 2016. These strengths are balanced against the bank's limited geographic reach, which results in high credit-risk concentrations in more volatile sectors, such as oil/offshore and commercial real estate. The bank had a significant increase in problem loans and related impairment in 2016, driven mainly by exposure to the oil sector in view of the bank's location in the city of Stavanger, Norway's oil hub. We expect that the decline in oil-related investments will continue and lead to a more challenging operating environment for SR-Bank compared to its peers, given that the bank has a greater exposure to borrowers that are dependent on oil-related revenue sources. However, the bank's robust risk management systems, which have helped the bank maintain sound asset quality so far, and the bank's sizeable capital buffers and pre-provision income against potential future credit losses, partially mitigate the elevated credit risks it faces.

Exhibit 1
 Rating Scorecard - Key Financial Ratios



Source: Moody's Financial Metrics

As a member of the SpareBank 1 Alliance, the bank's adjusted BCA of baa1 is aligned with the baa1 average of the other alliance members rated by Moody's (SpareBank 1 SMN, SpareBank 1 Nord-Norge, Sparebanken Hedmark) through one notch of affiliate support.

The bank's A1 deposit and senior unsecured debt ratings take into account our Loss Given Failure (LGF) analysis of the bank's own volume of deposits and debt, as well as the volume of securities subordinated to them. SpareBank 1 SR-Bank benefits from a large volume of deposits and substantial layers of subordination, resulting in very low loss given-failure and incorporation of two notches of rating uplift for deposits and senior debt. In addition our assessment of a moderate probability of government support results in one additional notch of rating uplift for debt and deposits.

SpareBank 1 SR-Bank's deposit and debt ratings carry a negative outlook to capture downward pressure on earnings and increased asset risk in the bank's corporate book, resulting from the weakened operating environment, driven by the reduction in petroleum investments.

Credit Strengths

- » Sparebank 1 SR-Bank's BCA is supported by its Very Strong- Macro Profile
- » A strengthened capital buffer provides protection from current and future credit losses
- » Large volume of deposits and junior debt result in deposit ratings benefiting from a very low loss-given-failure rate, with a two-notch uplift from the BCA
- » Moderate probability of government support resulting in one additional notch of rating uplift for debt and deposits

Credit Challenges

- » Exposures to volatile sectors pose risks to asset quality
- » Profitability under pressure due to elevated credit costs, although pre-provision income has increased
- » Reliance on market funding renders the bank vulnerable to fluctuations in investor sentiment

Rating Outlook

The negative outlook on the bank's senior debt and deposit ratings reflect our expectation that the bank's performance metrics will come under pressure, owing to Norway's slowing growth. SpareBank 1 SR-Bank's business is concentrated on the area around Stavanger, a logistics centre to Norway's off-shore industry that faces the challenges from reduced investments and lower oil prices.

Factors that Could Lead to an Upgrade

Upward rating momentum is currently unlikely given the negative outlook. Over time, upward pressure could develop if SpareBank 1 SR-Bank demonstrates: (1) sustained good asset quality in its retail and corporate loan books, including the more volatile segments, such as oil/offshore and commercial real estate; (2) continued good access to capital markets and improved liquidity; and/or (3) strong earnings generation without an increase in its risk profile.

Factors that Could Lead to a Downgrade

Future downward rating pressure would emerge if (1) Sparebank 1 SR-Bank's problem loan ratio increases significantly above our system-wide expectation of approximately 2%; (2) financing conditions become more difficult; (3) the bank's risk profile increases, for example as a result of increased exposures to more volatile sectors or if the quality of the oil-related portfolio deteriorates on the back of lower oil prices; and/or (4) the macroeconomic environment deteriorates more than currently anticipated, leading to a lower Macro Profile and net profitability falling below 0.5% of total assets, including mortgages transferred to SpareBank 1 Boligkreditt.

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.

Also, a reduction in uplift as a result of our LGF analysis or a revision of government support assumptions could lead to downward rating pressure.

Key Indicators

Exhibit 2

SpareBank 1 SR-Bank ASA (Consolidated Financials) [1]

	6-16 ²	12-15 ²	12-14 ²	12-13 ³	12-12 ³	Avg.
Total Assets (NOK billion)	196.8	192	174.9	157	141.5	8.6 ⁴
Total Assets (EUR million)	21,165.6	19,973.5	19,281	18,778.6	19,291.2	2.3 ⁴
Total Assets (USD million)	23,513.9	21,697.1	23,331.1	25,875.9	25,433.4	-1.9 ⁴
Tangible Common Equity (NOK billion)	16.9	16.7	15.3	13.9	12.5	7.8 ⁴
Tangible Common Equity (EUR million)	1,819.3	1,735.8	1,689.1	1,657.3	1,706.7	1.6 ⁴
Tangible Common Equity (USD million)	2,021.2	1,885.6	2,043.9	2,283.7	2,250	-2.6 ⁴
Problem Loans / Gross Loans (%)	1.3	0.9	0.7	1.1	1.1	1 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	14.1	14	12.7	12.3	11.3	13.6 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	11.7	8	5.9	8.7	9.4	8.7 ⁵
Net Interest Margin (%)	1.5	1.5	1.5	1.5	1.3	1.5 ⁵
PPI / Average RWA (%)	1.9	1.6	1.9	1.9	1.5	1.8 ⁶
Net Income / Tangible Assets (%)	0.7	0.8	1.1	1.2	0.9	1 ⁵
Cost / Income Ratio (%)	47.4	51.3	48.4	48.3	55.4	50.2 ⁵
Market Funds / Tangible Banking Assets (%)	37.4	39.5	41.6	41.1	38.7	39.7 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	14.5	12.4	11.4	11.3	9.7	11.9 ⁵
Gross loans / Due to customers (%)	174.9	173.5	173.8	167.8	162	170.4 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] Basel III - fully-loaded or transitional phase-in; IFRS [3] Basel II; IFRS [4] Compound Annual Growth Rate based on IFRS reporting periods [5] IFRS reporting periods have been used for average calculation [6] Basel III - fully-loaded or transitional phase-in & IFRS reporting periods have been used for average calculation

Source: Moody's Financial Metrics

Detailed Rating Considerations

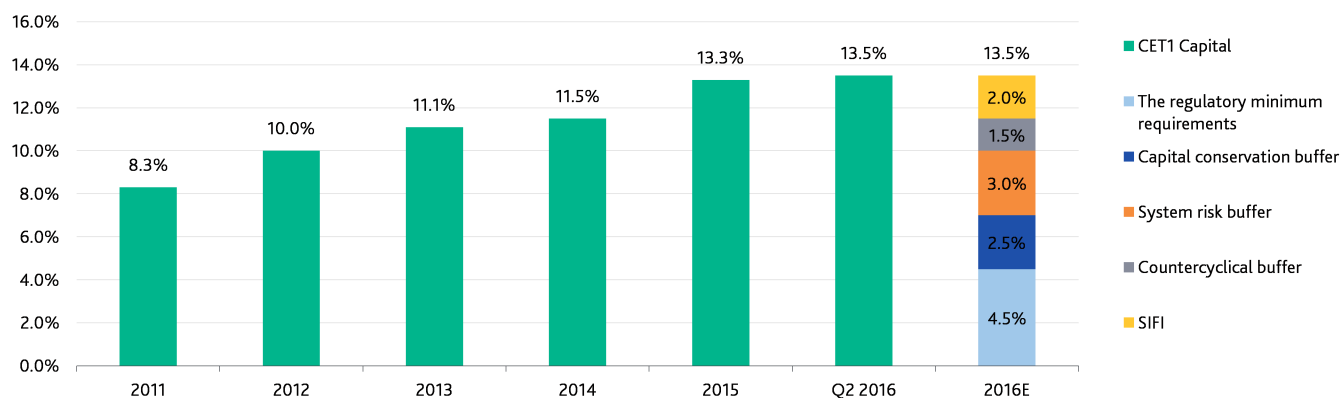
SpareBank 1 SR-Bank's BCA is Supported by its Very Strong- Macro Profile

SpareBank 1 SR-Bank's operating environment is purely domestic and its Macro Profile is thus aligned with that of Norway, at Very Strong-. Norwegian banks benefit from operating in an affluent 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 system stem from a high level of household indebtedness and domestic banks' reliance on market funding. However, these risks are offset by the strength of households' ability to service debt, banks' adequate capitalisation and the relatively small size of the banking system compared to GDP.

A Strengthened Capital Buffer Provides Protection from Current and Future Credit Losses

SpareBank 1 SR-Bank improved its common equity Tier 1 (CET1) ratio to 13.5% at end June 2016 (see Exhibit 2), compared to 13.3% at end 2015, well above the increased 11.5% regulatory minimum effective from July 2016, as the bank took initiatives to enhance its capital buffer against potential future losses. SpareBank 1 SR-Bank is planning to focus on strict capital management in order to achieve its target minimum 14% CET1 by year-end 2016 and 14.5% for 2017. This also entails lower lending growth, a stronger focus on risk pricing and a moderate level of dividends. In an effort to rationalise its capital use, the bank's goal will be achieved through good profitability, moderate dividends, zero growth in the risk-weighted balance sheet and reducing loans for commercial property in BN Bank (not rated), which is co-owned by the rest of the SpareBank 1 Alliance banks.

Exhibit 3

SpareBank 1 SR-Bank CET 1 Development

Source: Company report and presentation

We note there is a countercyclical capital buffer requirement in Norway in the range of 0-2.5% in the form of CET1 capital, which increased to 1.5% in June 2016 from 1% in June 2015. The formal requirement for CET1 is thus 11.5% for non-systemically important financial institutions and 13.5% for systemically important financial institutions from 30 June 2016 (see exhibit 3). SpareBank 1 SR-Bank has not been identified as a systemically important financial institution.

Our assigned capital score, incorporating one-notch negative adjustment, takes into account the gap that the bank still has to cover in order to meet the revised pillar II requirements by the Finanstilsynet (FSA), raising the CET1 target for all Norwegian banks to 14.5% by end-2016.

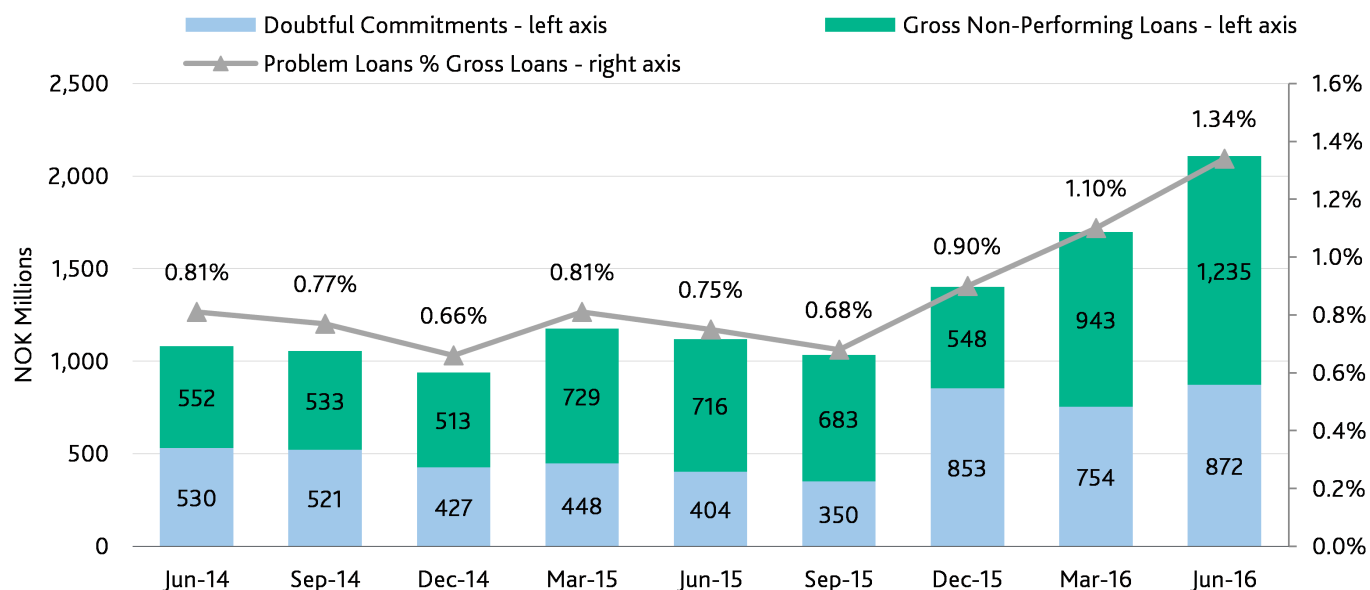
Exposures to Volatile Sectors Pose Risks to Asset Quality

As expected, there was some asset-quality deterioration from the bank's previous very strong position, as SpareBank 1 SR-Bank's business is concentrated on the area around Stavanger, a logistics centre to Norway's off-shore industry that faces the challenges from reduced investments and lower oil prices.

The bank's stock of nonperforming loans and doubtful commitments increased from a year earlier by around 88% to approximately NOK2.1 billion (or 1.34% of gross loans) in June 2016, compared with NOK1.1 billion (or 0.75% of gross loans) in June 2015 (see exhibit 4). The increase was predominantly the result of companies in the oil sector experiencing financial difficulties. The Norwegian Petroleum Directorate expects investments in the petroleum sector to decline by 10% in 2016 following a 16% reduction in 2015. As a result, the level of economic activity in the Stavanger area is likely to decrease further, affecting other sectors including real estate and building and construction.

Exhibit 4

SpareBank 1 SR-Bank's Problem Loans



Source: Company reports and presentations

SpareBank 1 SR-Bank is one of the highest exposed Norwegian banks to these sectors, with oil-related borrowers in June 2016 comprising around 11.1% of its loan book (exposure at default of 8.6% including loans in covered bond companies). Loans to the offshore industry (offshore service vessels, rigs and seismic vessels) account for around 6.5% of gross loans, while oil service companies are 3.2%, and exploration and production companies are 1.4%. The bank calculates its approximately NOK2 billion exposure to 17 rigs as having the highest average weighted probability of default in its overall portfolio, at 5.1%, constituting the most risky assets on its balance sheet.

In addition, the bank is also exposed to the commercial real estate sector (14.8% of gross loans in June 2016), a significant part of which is located in the county of Rogaland, where reduced oil investments have led to vacancy rate increases. While the performance in the bank's retail book has been very strong, house prices in Stavanger have grown at a higher rate than in the rest of the country in recent years. Although turnover volume is still high, a significant slowdown in the local economy, combined with the increased vulnerability of households which have increased indebtedness, could further undermine the bank's asset quality. This includes the retail sector, especially as the mortgage loans remaining on the bank's balance sheet have higher loan-to-values than those transferred to the Sparebank 1 Alliance's covered bond company.

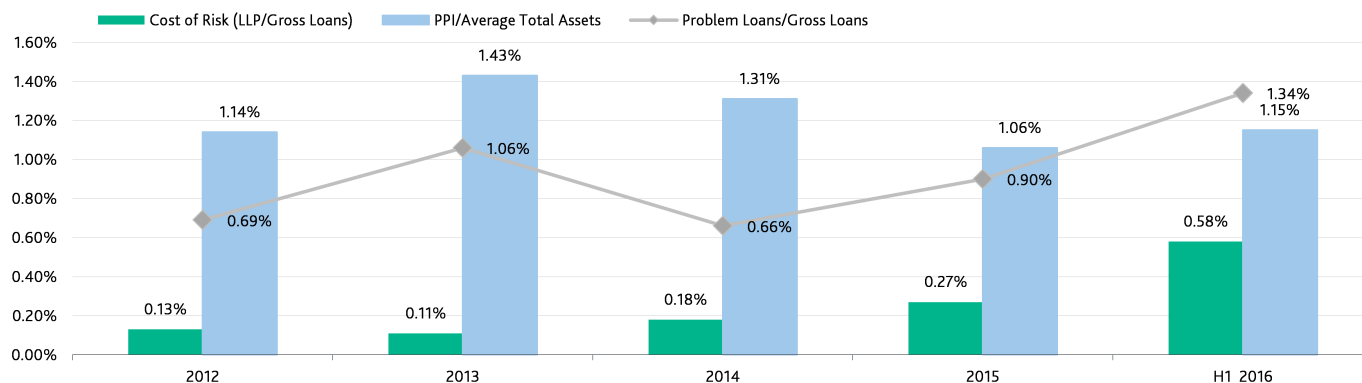
Our assigned Asset Risk score indicates the challenges the bank is currently facing. Over the coming 12-18 months, we expect to see further asset quality deterioration from the currently position as we expect Norway to experience a somewhat tougher banking operating environment compared with recent years, owing to lower oil and gas prices, as well as falling investment levels.

Profitability Under Pressure Due to Elevated Credit Costs, Although Pre-Provision Income has Increased

SpareBank 1 SR-Bank's half-year 2016 net profit declined approximately 15% from a year earlier, mainly because of higher impairment losses on loans and guarantees. The increase in impairments largely was due to losses on four individual commitments in the oil-services sector, and NOK93 million of collective impairment losses out of total provisions of NOK455 million during the first six months of the year, up from NOK132 million a year earlier. The bank expects to carry out loan write-downs of similar magnitudes in the second half of the year, which would take full-year loan impairments up to NOK900 million, more than double the NOK420 million reported for 2015.

Despite the elevated risks that SpareBank 1 SR-Bank will continue to face through these oil-related exposures, the bank during the first half of 2016 increased its pre-provision income by around 9% year on year as a result of higher corporate lending margins and cost containment.

Exhibit 5

SpareBank 2 SR-Bank Cost of Risk and PPI evolution

Source: Moody's Financial Metrics

Net interest income continues to be SpareBank 1 SR-Bank's main source of earnings, corresponding to almost 58% of the bank's H1 2016 operating income. Net commission income was stable in H1 2016 comparing to the same period a year earlier, although commission income related to loans transferred to covered bond companies was lower by 44% year-on-year. Overall net commission and other income contributed around 30% of total income as of June 2016, providing a level of diversification to the bank's total revenues. Overall, SpareBank 1 SR-Bank's cost efficiency remained good in H1 2016, as reflected by a cost-to-income ratio at 47.4%.

Our Profitability score reflects our expectation that Norway is likely to experience a slightly tougher banking operating environment than in recent years.

Reliance on Market Funding Renders it Vulnerable to Fluctuations in Investor Sentiment

While SpareBank 1 SR-Bank benefits from solid access to domestic and international capital markets, its reliance on wholesale funding remains high, with market funds at 39% of tangible banking assets (including assets transferred to covered bond companies), which renders the bank susceptible to potential shifts in investor sentiment.

SpareBank 1 SR-Bank benefits from a good deposit base, which represented almost half of on-balance-sheet funding at end-June 2016, which has proven to be resilient and stable over many years. As of end-June 2016, the bank's deposits declined by only 1.3% year-on-year. Lower deposit growth in the corporate market (incl. capital market) is a result of larger deposits from institutional customers, held as part of the liquidity portfolio, having been replaced by other instruments to protect the group's liquidity. The bank's gross loans-to-deposits ratio was around 175% in June 2016.

As per our methodology, we globally reflect the relative stability of covered bonds compared to unsecured market funding through a standard adjustment in our scorecard. Covered bonds have become an increasingly important source of funding for the bank; such funding is completed off-balance-sheet through specialised companies it owns jointly with other members of the SpareBank 1 Alliance (SpareBank 1 Boligkreditt for residential mortgages and SpareBank 1 Næringskreditt for commercial mortgages).

At end-June 2016, the bank had transferred NOK26.2 billion to Sparebank 1 Boligkreditt and NOK0.5 billion to SpareBank 1 Næringskreditt, i.e. almost 17% of its total loan book. In addition, in the second quarter of 2015 the bank set up SR-Boligkreditt AS, a wholly owned covered bond company, to diversify and optimise its funding. While we view positively the diversification benefit of covered bond funding, extensive use of covered bond funding increases the amount of pledged assets unavailable for unsecured bondholders, including depositors in liquidation.

Our Funding Structure score reflects our view that although SpareBank 1 SR-Bank has benefitted from good access to domestic and international capital markets, its reliance on market funding - a common feature at Nordic banks - is a material source of risk because, in times of market stress, market funding can become more expensive and/or restricted.

A mitigating factor to the bank's reliance on market funds is its improved liquidity buffer. The liquidity buffer (NOK28.5 billion or around 15% of tangible assets at end-June 2016) consists mainly of cash, short-term investments, and drawing rights in Norges Bank

(bonds including covered bonds). In addition to the liquidity buffer, the bank has NOK26.2 billion in home mortgages ready to be transferred to a covered bond company. Concurrently, the bank reported a commendable liquidity coverage ratio (LCR) of 173% in June 2016, compared to 111% in June 2015.

Notching Considerations

Affiliate Support Notching

As a member of the SpareBank 1 Alliance, SpareBank 1 SR-Bank's Adjusted BCA is aligned with the baa1 average of the other alliance members rated by Moody's (SpareBank 1 SMN, SpareBank 1 Nord-Norge, Sparebanken Hedmark) through one notch of affiliate support.

Loss Given Failure and Additional Notching

We expect that Norway will look to introduce the EU's Bank Resolution and Recovery Directive in 2017. For our resolution analysis, we assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits, a 5% run-off in preferred deposits, and assign a 25% probability to deposits being preferred to senior unsecured debt. These are in line with our standard assumptions.

For SpareBank 1 SR-Bank's long-term deposit rating and senior unsecured debt rating, our LGF analysis considers the combination of the bank's junior deposits, its outstanding debt volume and the amount of debt subordinated to this. This has resulted in a Preliminary Rating Assessment (PRA) of two notches above the BCA, reflecting very low loss-given-failure.

For junior securities issued by SpareBank 1 SR-Bank, our LGF analysis confirms a high level loss-given-failure, given the small volume of debt and limited protection from more subordinated instruments and residual equity.

Government Support

The expected implementation of resolution legislation has caused us to reconsider the probability that government support would benefit certain creditors.

SpareBank 1 SR-Bank has a sound franchise in the county of Rogaland, south-west Norway, with 49 branches. We estimate that the bank has regional market shares of around 51% for lending and over 43% for deposits (based on total lending in the county according to Statistics Norway). The bank has also expanded into the neighbouring counties, but has a limited national market share at around 5.8%. Therefore, we expect a moderate probability of government support for debt and deposits, resulting in one additional notch of rating uplift.

For the bank's junior securities, we continue to consider that potential government support is low and these ratings do not include any related uplift. Junior securities also include additional downward notching from the BCA reflecting coupon suspension risk ahead of a potential failure.

The rating agency intends to reassess its government support assumptions for all Norwegian savings banks, including SpareBank 1 SR-Bank, once there is more clarity regarding the timing of the implementation of an official resolution regime through the enactment of a relevant local legislation. This is likely to be aligned with the EU's bank recovery and resolution directive (BRRD), as indicated by the domestic authorities in the past.

Counterparty Risk Assessment

We assign a Aa3(cr) long term and P-1(cr) short term CR Assessment to SpareBank 1 SR-Bank.

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they (1) consider only the risk of default rather than the likelihood of default and the expected financial loss suffered in the event of default; and (2) apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (e.g., swaps), letters of credit, guarantees and liquidity facilities.

Rating Methodology and Scorecard Factors

Exhibit 6

SpareBank 1 SR-Bank ASA

Macro Factors

Weighted Macro Profile	Very Strong -	100%
-------------------------------	----------------------	-------------

Financial Profile

Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	1.3%	aa2	← →	baa1	Geographical concentration	Sector concentration
Capital						
TCE / RWA	14.1%	aa3	← →	a1	Risk-weighted capitalisation	
Profitability						
Net Income / Tangible Assets	0.7%	baa2	← →	baa2	Earnings quality	Expected trend
Combined Solvency Score		a1		a3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	39.5%	ba2	↓	b1	Market funding quality	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	12.4%	baa3	← →	baa3	Quality of liquid assets	
Combined Liquidity Score		ba1		ba2		
Financial Profile						
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint:				Aaa		
Scorecard Calculated BCA range				baa1-baa3		
Assigned BCA				baa2		
Affiliate Support notching				1		
Adjusted BCA				baa1		

Balance Sheet	in-scope (NOK)	% in-scope	at-failure (NOK)	% at-failure
Other liabilities	24,061	12.2%	33,203	16.9%
Deposits	89,633	45.6%	80,490	40.9%
Preferred deposits	66,328	33.7%	63,012	32.0%
Junior Deposits	23,305	11.8%	17,478	8.9%
Senior unsecured bank debt	73,793	37.5%	73,793	37.5%
Dated subordinated bank debt	3,284	1.7%	3,284	1.7%
Junior subordinated bank debt				
Preference shares (bank)				
Senior unsecured holding company debt				
Dated subordinated holding company debt				
Junior subordinated holding company debt				
Preference shares (holding company)				
Equity	5,900	3.0%	5,900	3.0%
Total Tangible Banking Assets	196,671	100%	196,671	100%

Debt class	De jure waterfall		De facto waterfall		Notching		LGF notching guidance versus BCA	Assigned LGF notching	Additional notching	Preliminary Rating Assessment
	Instrument volume + subordination	Sub-ordination	Instrument volume + subordination	Sub-ordination	De jure	De facto				
Counterparty Risk Assessment	51.1%	51.1%	51.1%	51.1%	3	3	3	3	0	a1 (cr)
Deposits	51.1%	4.7%	51.1%	42.2%	2	3	2	2	0	a2
Senior unsecured bank debt	51.1%	4.7%	42.2%	4.7%	2	2	2	2	0	a2
Dated subordinated bank debt	4.7%	3.0%	4.7%	3.0%	-1	-1	-1	-1	0	baa2 (hyb)
Junior subordinated bank debt	3.0%	3.0%	3.0%	3.0%	-1	-1	-1	-1	-1	baa3

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency rating	Foreign Currency rating
Deposits	2	0	a2	1	A1	A1
Senior unsecured bank debt	2	0	a2	1	--	A1
Dated subordinated bank debt	-1	0	baa2 (hyb)	0	--	Baa2 (hyb)
Junior subordinated bank debt	-1	-1	baa3	0	--	Baa3

Source: Moody's Financial Metrics

Ratings

Exhibit 7

Category	Moody's Rating
SPAREBANK 1 SR-BANK ASA	
Outlook	Negative
Bank Deposits	A1/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
Issuer Rating	A1
Senior Unsecured	A1
Subordinate	Baa2
Jr Subordinate MTN	(P)Baa3

Source: Moody's Investors Service

Foreign Currency Deposit Rating

SpareBank 1 SR-Bank's foreign-currency deposit rating of A1 is unconstrained, given that Norway has a country ceiling of Aaa.

Foreign Currency Debt Rating

SpareBank 1 SR-Bank's foreign-currency debt rating of A1 is unconstrained given that Norway has a country ceiling of Aaa.

About Moody's Bank Scorecard

Our Scorecard is designed to capture, express and explain in summary form our rating committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment is expressed. As a result, the output of our Scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The Scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

© 2016 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

REPORT NUMBER 1043320