

## CREDIT OPINION

12 April 2017

Update

Rate this Research >>

### RATINGS

#### SpareBank 1 Østlandet

Domicile	Hamar, Norway
Long Term Debt	Not Assigned
Type	Not Assigned
Outlook	Not Assigned
Long Term Deposit	A1
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

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.

### Contacts

**Nondas Nicolaidis** 357-2569-3006  
VP-Sr Credit Officer -  
EMEA Banking Group  
nondas.nicolaidis@moodys.com

**Malika Takhtayeva** 44-20-7772-8662  
Associate Analyst  
malika.takhtayeva@moodys.com

**Louise Eklund** 46-8-5025-6569  
Associate Analyst  
louise eklund@moodys.com

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

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

## SpareBank 1 Østlandet

### Update

#### Summary Rating Rationale

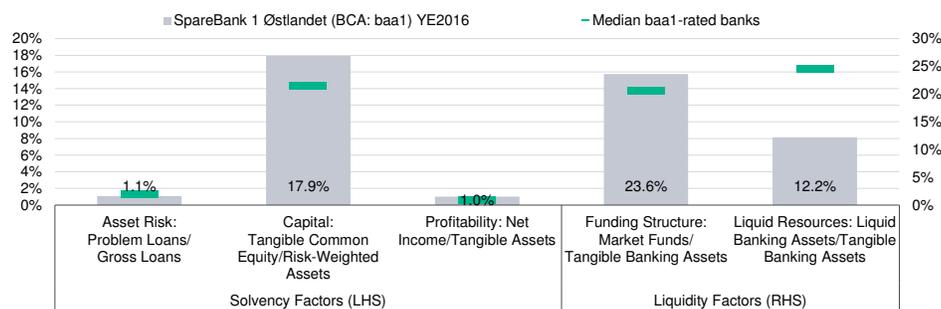
Moody's assigns a baseline credit assessment (BCA) of baa1 to SpareBank 1 Østlandet (known as Sparebanken Hedmark prior to April 2017), a long-term deposit rating of A1, and a senior unsecured debt rating of A1. We also assign a Counterparty Risk Assessment (CR Assessment) of Aa3(cr) long term and Prime-1(cr) short term.

SpareBank 1 Østlandet BCA of baa1 primarily reflects the bank's strengthened franchise and solid regional position following the acquisition of Bank 1 Oslo Akershus (B1OA) in June 2016 and its legal merger (absorption of B1OA as a fully-owned subsidiary) on 1 April 2017, as well as the bank's healthy standalone credit profile. The immediate benefits conferred to the bank include improvements in its asset quality position (problem loans ratio dropped to 0.6% in December 2016 from 1.2% in December 2015), as well as deeper loans and earnings geographical diversification, greater reach in the Oslo-Akershus area and opportunities for further expansion of its client base. Although the transaction has placed some downward pressure on the bank's capital and profitability metrics, we believe that such metrics are likely to recover over the medium term. The bank's BCA also takes into account its relatively high level of capital markets funding, a common feature among the largest savings bank in Norway.

The bank's A1 deposit and senior unsecured debt ratings take into account our Loss Given Failure (LGF) analysis, which benefits from its large volume of deposits and substantial layers of subordination. This liability structure results in very low LGD and in effect two notches of rating uplift from the bank's BCA. In addition our current assessment of a moderate probability of government support results in one additional notch of rating uplift for debt and deposits.

Exhibit 1

#### Rating Scorecard - Key Financial Ratios



Source: Moody's Financial Metrics

## Credit Strengths

- » SpareBank 1 Østlandet's ratings are supported by its Very Strong- Macro Profile
- » Solid capital levels, which are the strongest among peers
- » Asset risk metrics improve post acquisition, on the back of a lower credit risk portfolio
- » Large volume of deposits and junior debt resulting in deposit ratings benefiting from a very low loss-given-failure rate
- » Moderate probability of government support results in one additional notch of uplift for issuer and deposit ratings

## Credit Challenges

- » The bank's funding profile is underpinned by relatively high reliance on market funding but also a sizeable deposit base
- » Acquisition of Bank 1 Oslo Akershus exerts some pressure on profitability, although we expect a gradual recovery

## Rating Outlook

The stable outlook on the bank's ratings reflects our view that the bank's financials will remain broadly resilient in the face of a modest slowdown in Norway's economic performance. We expect the underlying financial fundamentals of SpareBank 1 Østlandet to remain relatively strong and commensurate with its revised BCA of baa1.

## Factors that Could Lead to an Upgrade

Upward rating pressure could develop if SpareBank 1 Østlandet demonstrates: (1) Good sustainable asset quality and low impairments in its retail and corporate books; (2) comfortable liquidity on an on-going basis; and/or (3) stronger earnings generation without an increase in its risk profile. In addition, further upward pressure could emerge following the takeover of B1OA, if the bank is able to further strengthen its customer base, and enhance its product offering and franchise, which in turn will support the bank's revenues and profitability. However, the operational integration challenges that the bank will face over the next 12-18 months contain any upward rating pressure for now.

## Factors that Could Lead to a Downgrade

Future downward rating pressure could arise if: (1) SpareBank 1 Østlandet's problem loan ratio increases above our system-wide expectation of approximately 2%; (2) financing conditions become more difficult; (3) its risk profile increases, as a result of increased exposures to more volatile sectors resulting in asset quality deterioration; (4) the macroeconomic environment deteriorates more than Moody's estimates, leading to adverse developments in the Norwegian real-estate market; (5) the macroeconomic environment deteriorates more than currently anticipated, leading to a lower Macro Profile; and/or (6) introduction of the official resolution law in Norway and revision of our government support assumptions for all large Norwegian savings banks, including SpareBank 1 Østlandet.

## Key Indicators

Exhibit 2

### SpareBank 1 Ostlandet (Consolidated Financials) [1]

	12-16 <sup>2</sup>	12-15 <sup>2</sup>	12-14 <sup>2</sup>	12-13 <sup>3</sup>	12-12 <sup>3</sup>	Avg.
Total Assets (NOK billion)	101	56	50	47	44	22.9 <sup>4</sup>
Total Assets (EUR million)	11,096	5,804	5,485	5,670	6,012	16.6 <sup>4</sup>
Total Assets (USD million)	11,704	6,305	6,638	7,812	7,926	10.2 <sup>4</sup>
Tangible Common Equity (NOK billion)	11	8.4	7.3	6.4	5.8	18.0 <sup>4</sup>
Tangible Common Equity (EUR million)	1,229	871	808	766	784	11.9 <sup>4</sup>
Tangible Common Equity (USD million)	1,296	946	977	1,055	1,034	5.8 <sup>4</sup>
Problem Loans / Gross Loans (%)	0.6	1.2	1.4	1.6	2.1	1.4 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	17.9	22.2	20.0	20.7	23.5	20.0 <sup>6</sup>

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](http://www.moody's.com) for the most updated credit rating action information and rating history.

Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	4.4	6.3	7.2	9.2	12.1	7.8 <sup>5</sup>
Net Interest Margin (%)	1.9	2.3	2.3	2.4	2.3	2.2 <sup>5</sup>
PPI / Average RWA (%)	2.2	1.9	2.2	2.2	2.3	2.1 <sup>6</sup>
Net Income / Tangible Assets (%)	1.0	1.4	1.9	1.5	1.0	1.4 <sup>5</sup>
Cost / Income Ratio (%)	58.2	59.7	54.5	58.6	60.7	58.3 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	23.6	22.3	19.7	19.5	20.6	21.1 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	12.2	13.6	11.5	13.9	13.6	12.9 <sup>5</sup>
Gross loans / Due to customers (%)	131.5	130.8	128.5	123.5	126.0	128.1 <sup>5</sup>

[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 (%). Any interim period amounts presented are assumed to be fiscal year end amounts for calculation purposes [5] Simple average of periods presented [6] Simple average of Basel III periods presented

Source: Moody's Financial Metrics

## Detailed Rating Considerations

### SpareBank 1 Østlandet's Ratings are Supported by its Very Strong- Macro Profile

As a domestically oriented bank, SpareBank 1 Østlandet's operating environment is in Norway, and the bank's 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. 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.

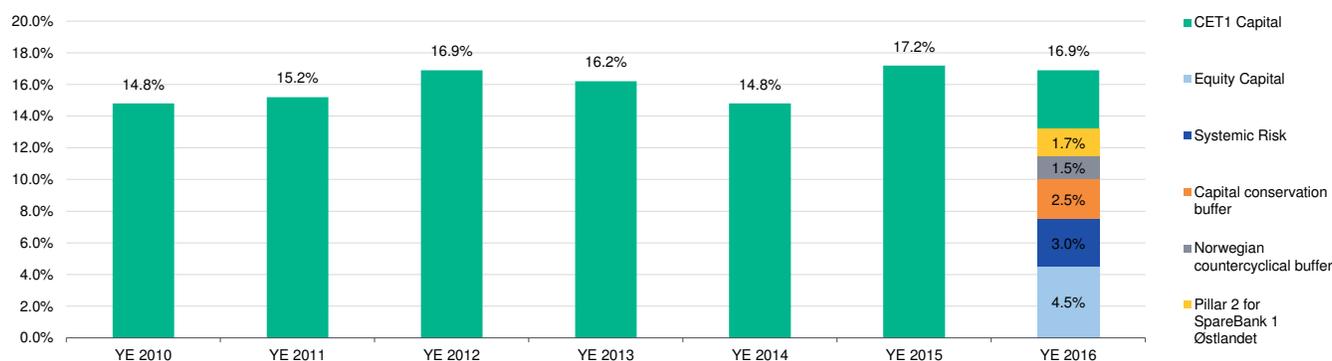
### Solid Capital Levels, Which Are the Strongest Among Peers

At year-end 2016 the combined group remains one of the strongest capitalised bank among savings banks in Norway with a Tangible Common Equity (TCE) to risk weighted assets (RWA) ratio at 17.9% and a common equity Tier 1 (CET1) ratio of 16.9%, although reduced from 17.2% in December 2015. The bank targets to have at least 16% CET1 ratio on an on-going basis, aiming to be one of Norway's most solid regional savings bank having a leverage ratio of 7.4% at year-end 2016.

We note that the Norwegian authorities are concerned about the development of financial imbalances in light of strong growth in house prices, especially in the Oslo region. Consequently, the Ministry of Finance recently increased the countercyclical capital buffer from 1.5% to 2%, with effect from 31 December 2017, in line with Norges Bank's advice, in addition to new home mortgage regulations introduced from 1 January 2017. SpareBank 1 Østlandet recently received from Norway's Financial Supervisory Authority (FSA) its Pillar 2 requirement of 1.7% in CET1 capital, which brings the bank's CET1 requirement at 13.2% for 2016 (Exhibit 3) and 13.7% for 2017.

Exhibit 3

### SpareBank 1 Østlandet CET1 Capital Ratio Evolution



Source: Company reports and presentation

We expect the bank will be able to maintain the combined group's CET1 capital ratio at around 16% through retained earnings, a relatively conservative dividend payout over the next 2-3 years and by discontinuing capital-intensive activities that fall outside the bank's core business. In addition, the bank plans to conduct an IPO through the sale of equity certificates and list on the Oslo Stock

Exchange in 2017, market conditions permitting, which will improve its capacity and access to capital. Through this action, the bank will be able to increase its visibility in the international capital markets by tapping a much larger investor base, given that currently the bank has only six shareholder groups.

The largest stakeholder of the bank is Sparebanken Hedmark Sparebankstiftelse (the Foundation), which is a long-term and financially strong owner with its bylaws stating that it shall maintain its interest through participation in equity certificate issues. Another important innovation, both for the bank and its customers, is that SpareBank 1 Østlandet will become the first bank in Norway to launch customer dividends from 2017, enabling customers to secure a profit via their deposit and loan balances in the bank.

We believe that the bank has strong capital buffers relative to its peers, a distinctive feature of the bank in the last few years, which will also allow the bank to grow its balance sheet and leverage opportunities in the Oslo-Akershus region that now operates. Our assigned Capital score reflects this strength, as well as the bank's adjusted leverage ratio (TCE/Tangible banking assets ratio), which at 7.4% as of year-end 2016 is satisfactory for the Norwegian regulator's requirement and high compared with international standards and similarly-rated global peers.

### Asset Risk Metrics Improve Post Acquisition, on the Back of a Lower Credit Risk Portfolio

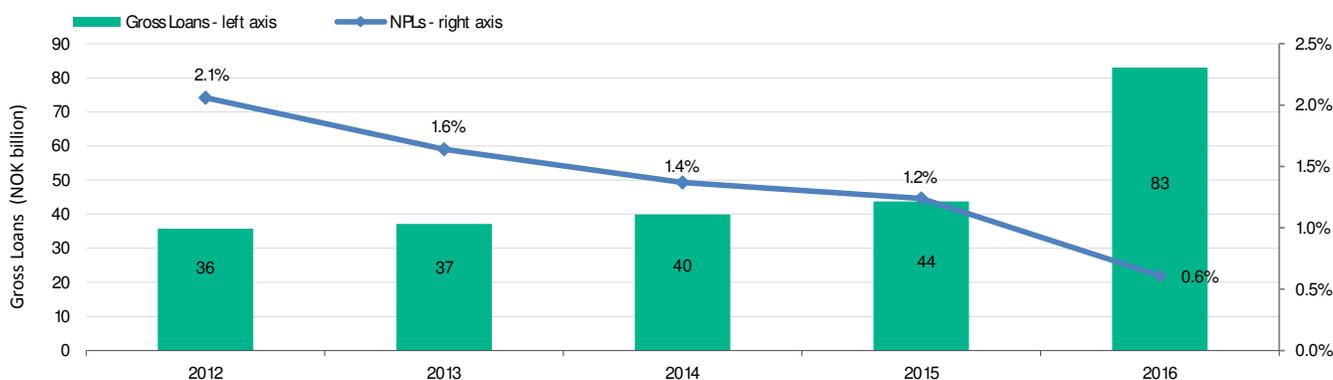
In line with our previous expectation, SpareBank 1 Østlandet's asset quality has improved with overall problem loans for the group reducing to around 0.6% of gross loans (excluding covered bond loans) in December 2016 from 1.2% in December 2015 (see Exhibit 4). This was mainly driven by the strong asset quality of the acquired B1OA's with a very low level of problem loans (0.2% in 2015) on the back of its predominantly retail mortgages credit profile with very low LTVs.

The combined loan book profile of the bank is now geared towards retail borrowers, mostly residential mortgages, accounting for around 74% of gross loans including covered bond loans, with no exposure to the oil sector. This would be supportive to the bank's asset quality, limiting the downside risks from credit impairments, given the traditionally very low loss rates for residential mortgages in Norway.

Both banks' problem loans ratio has been historically low and it has been on an improving trend during 2015-16, with the 3 year average historical ratio in our scorecard at 1.1% in December 2016 down from 1.4% in December 2015 for SpareBank 1 Østlandet on a standalone basis.

Exhibit 4

#### SpareBank 1 Østlandet's Asset Risk Metrics Post Acquisition



YE2016 is based on fully consolidated balance sheet of B1OA

Source: Company reports and Moody's Financial Metrics

Nonetheless, we note that the bank has some concentration in the commercial real estate (CRE) sector with around 13% of its gross loans, including covered bond loans transferred to SpareBank 1 Næringskreditt, while around 1.4% of gross loans, including covered bond loans, are towards the building and construction sector as of December 2016. The exposure towards these two sectors, which is common among all Norwegian savings banks, raises somewhat the bank's credit profile and makes it vulnerable to potential property prices volatility in the market. We also believe that the newly acquired residential mortgages loan book in the Oslo area, where house prices have been growing significantly recently, also exposes the bank to downside risks in case of a material house price decline.

We assign an asset risk score of a3, incorporating four notches of negative adjustment to reflect the bank's exposure to CRE, building and construction sectors, as well as geographical concentration in its regional home market in Norway. We make similar adjustments in the scores of other rated Norwegian savings banks as well.

### Acquisition of Bank 1 Oslo Akershus Exerts Pressure on Profitability, Although we Expect a Gradual Recovery

The take-over of B1OA exerted some downward pressure on SpareBank 1 Østlandet's profitability metrics. B1OA's standalone earnings profile is weaker than Sparebanken Hedmark's prior to the acquisition, as the former operates in a more competitive area than Hedmark, resulting in significantly lower margins and a higher cost base. As a result, there is some softening of the combined entity's profitability metrics, with return on tangible assets dropping significantly to 0.96% in December 2016 from 1.36% in December 2015 (excluding assets transferred to covered bond companies). However, we note the higher level of cross-selling at B1OA during 2016, which to some degree counterbalances its lower net interest income through fee income, contributing to profitability levels closer to SpareBank 1 Østlandet prior to the acquisition.

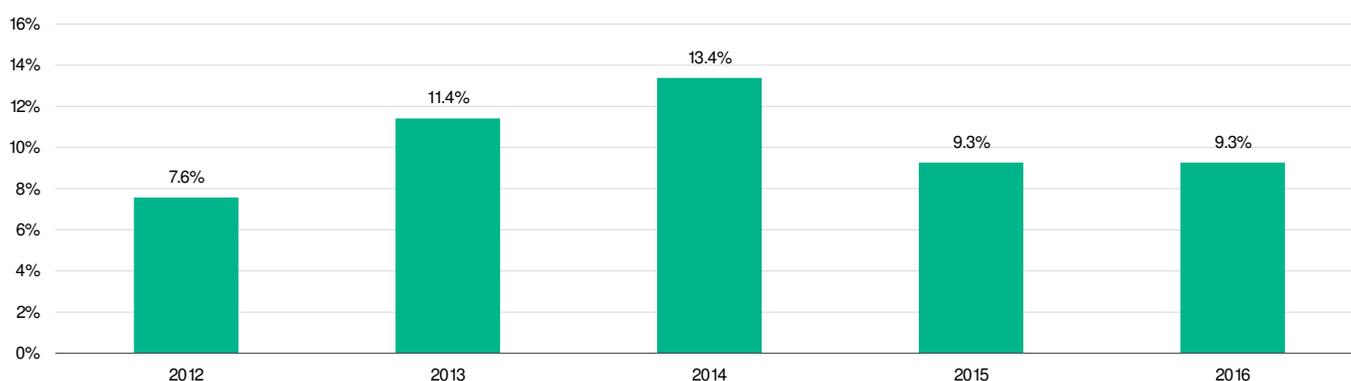
SpareBank 1 Østlandet's profit after tax increased to NOK1.1 billion in 2016 (including 6-months consolidated profits of B1OA and 6-months accounted under the equity method), compared with NOK930 million the year before on a standalone basis prior to the acquisition. SpareBank 1 Østlandet's main source of earnings is net interest income (including fees from loans transferred to the covered bond company), representing over 56% of its operating income at end December 2016. The bank's cost-to-income ratio (according to Moody's adjusted metrics) was almost 58.2% at end

December 2016, slightly higher than the average of the Norwegian rated peers, while loan loss provisions remained low at 0.11% of average loans from 0.13% reported at end 2015. However, we expect that the bank will likely increase its loan losses in 2017-18, mainly driven by the adoption of IFRS 9 with new more conservative principles for write-downs from January 2018 onwards. The methodology in the IFRS 9 standard entails somewhat larger volatility in write-downs, as they will be made at an earlier stage than under current practice.

Nonetheless, we expect that the bank's profit metrics, including its net interest margins will gradually recover, with the contribution of cost synergies that will come about, estimated by the bank at minimum NOK75 million per annum. We note that the bank aims to have a long-term target of at least 10% return on equity (RoE) as reported by the bank (10.5% in December 2016), while the current Moody's adjusted RoE (net profit before unusual items over average shareholders' equity) stood at 9.3% as of December 2016 (see Exhibit 5).

Exhibit 5

#### SpareBank 1 Østlandet's Moody's Adjusted Return on Equity (RoE)



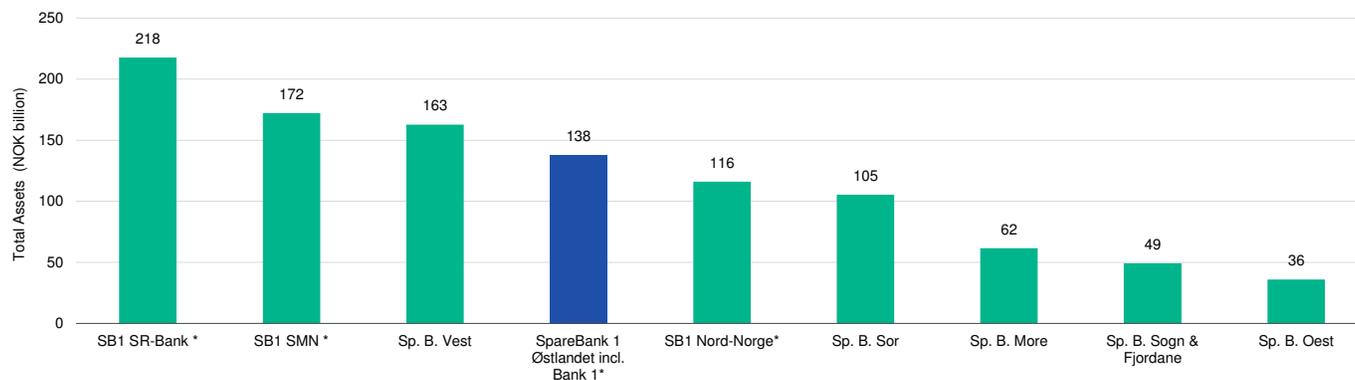
YE2016 is based on consolidated financials including results from Bank 1 Oslo Akershus  
 Source: SpareBank 1 Østlandet reports, Moody's Investors Service

We also expect that over the medium term, the bank's earnings will get a boost from its increased client base and cross-selling opportunities, as well as the bank's capacity now to expand in the more wealthy Oslo-Akershus region. The bank had already a dominant position in the Hedmark region with market share in both retail and corporate of around 50%, and now adds around 6% retail market share and 3% in SMEs in the Oslo-Akershus area. As the fourth largest Norwegian bank now (see Exhibit 6), SpareBank 1

Østlandet will also have the potential to participate in bigger syndications along with other banks, and also attract more business from larger borrowers in the market.

Exhibit 6

### Consolidated SpareBank 1 Østlandet (including Bank 1 Oslo Akershus) is Norway's Fourth Largest Savings Bank (31 December 2016)



\*SpareBank 1 Alliance banks include assets transferred to Covered Bond companies

Source: Source: Moody's Financial Metrics and Companies' reports

### The Bank's Funding Profile is Underpinned By Relatively High Reliance on Market Funding But Also a Sizeable Deposit Base

SpareBank 1 Østlandet's funding profile has not changed in any significant way compared to prior the acquisition in December 2015, with market funding reliance (assuming 50% of covered bonds as market funding) to be around 30.5% of total tangible banking assets in December 2016, mainly driven by the issuance of covered bonds. We also note that since June 2016 the bank participates in the SpareBank 1 Alliance's EUR10 billion EMTN program, and was able to issue EUR50 million of senior bonds in November 2016. The bank's funding position is also underpinned by a substantial deposit base, which accounted for over 70.8% of on-balance-sheet funding at end-December 2016, with nearly 35% of the bank's deposits originated from the retail sector.

We globally reflect the relative stability of covered bonds compared to unsecured market funding through a standard adjustment in our scorecard. SpareBank 1 Østlandet has increasingly used covered bond funding, which is done off-balance-sheet through specialized companies it jointly owns together with the other members of SpareBank 1 Alliance (SpareBank 1 Boligkreditt for residential mortgages and SpareBank 1 Næringskreditt for commercial mortgages). At end-December 2016, SpareBank 1 Østlandet had transferred retail mortgages worth NOK35.2 billion to SpareBank 1 Boligkreditt and NOK1.3 billion commercial mortgages to SpareBank 1 Næringskreditt (i.e., equivalent to 30.6% of total gross loans including loans transferred to covered bond companies).

Whilst we positively view the diversification benefit of covered bond funding, our assessment of the bank's funding structure reflects our view that SpareBank 1 Østlandet has some reliance on market funds - a common feature at Nordic banks - but to a lesser degree than peers. On balance sheet market funding accounted for 23.6% of the bank's tangible assets at year-end 2016 (30.6% when adjusting for covered bonds), a share that has been stable over the years.

We assign a score of baa3 compared to baa1 suggested by the scorecard's historical ratio because we use the consolidated market funding reliance to be at 30.6% of total tangible banking assets adjusted for covered bonds as a proxy for the forecast ratio in the consolidated funding score.

Similarly, the bank's liquidity position also remains modest following the acquisition, with the consolidated liquid assets to total tangible banking assets at around 12.2% as of year-end 2016 excluding refinancing of the covered bond companies and, according to the bank, cover funding needs for 18 months. The portfolio consists of cash and deposits with the central bank, senior bonds, covered bonds and limited equity investments. The holdings are concentrated on Norwegian securities, which could be a source of vulnerability from a concentration risk point of view, but are positive in terms of currency risk. In addition, the bank reported a comfortable liquidity coverage ratio (LCR) of approximately 116.6% at the year-end of 2016.

## Notching Considerations

### Loss Given Failure and Additional Notching

We expect that Norway will seek to introduce legislation to implement the EU Bank Resolution and Recovery Directive (BRRD). In our LGF 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 metrics are in line with our standard assumptions.

The ratings take into account Moody's LGF analysis of the combined entity's volume of deposits and senior unsecured debt, as well as the volume of securities subordinated to them. This results in an assessment of very low loss given failure and leads to two notches of rating uplift for the issuer ratings, which is the same uplift afforded for the bank's deposit ratings.

### Government Support

Following the acquisition, SpareBank 1 Østlandet has become the fourth largest savings bank in Norway, from sixth before, while also having presence now in the most important and economically developed region of Oslo-Akershus.

Accordingly, in our opinion the bank is now likely to be considered sufficiently systemically important to assume a moderate probability of government support into its ratings (from low pre-acquisition), which translates into one notch of rating uplift for its deposit and issuer ratings. In particular Moody's considers the bank to be a vital intermediary in financing the SME sector especially in the agricultural and forestry sectors that are central for the Hedmark region. The government support rating uplift overlays the two notches rating uplift incorporated into the deposit and issuer ratings, based on the loss given failure (LGF) analysis of the bank's liability structure. However, the expected implementation of an official resolution regime in Norway in the coming months, might cause us to reconsider/lower our government support assumptions for all rated savings banks in Norway, including SpareBank 1 Østlandet.

### Counterparty Risk Assessment

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

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.

### 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.

## Rating Methodology and Scorecard Factors

Exhibit 7

### SpareBank 1 Østlandet

#### Macro Factors

<b>Weighted Macro Profile</b>	<b>Very Strong -</b>	<b>100%</b>
-------------------------------	----------------------	-------------

Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	1.1%	aa2	↓↓	a3	Geographical concentration	Sector concentration
Capital						
TCE / RWA	17.9%	aa2	← →	aa2	Expected trend	
Profitability						
Net Income / Tangible Assets	1.0%	baa1	← →	baa1	Expected trend	
Combined Solvency Score		aa3		a2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	23.6%	baa1	↓↓	baa3	Market funding quality	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	12.2%	baa3	← →	baa3	Stock of liquid assets	
Combined Liquidity Score		baa2		baa3		
Financial Profile				a3		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint:				Aaa		
Scorecard Calculated BCA range				a2-baa1		
Assigned BCA				baa1		
Affiliate Support notching				0		
Adjusted BCA				baa1		

Balance Sheet	in-scope (NOK million)	% in-scope	at-failure (NOK million)	% at-failure
Other liabilities	11,153	11.1%	17,586	17.5%
Deposits	63,070	62.8%	56,637	56.4%
Preferred deposits	46,672	46.5%	44,338	44.2%
Junior Deposits	16,398	16.3%	12,299	12.3%
Senior senior unsecured bank debt	21,937	21.9%	21,937	21.9%
Dated subordinated bank debt	1,203	1.2%	1,203	1.2%
Equity	3,011	3.0%	3,011	3.0%
Total Tangible Banking Assets	100,374	100%	100,374	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	38.3%	38.3%	38.3%	38.3%	3	3	3	3	0	a1 (cr)
Deposits	16.5%	4.2%	38.3%	4.2%	2	2	2	1	0	a2

Instrument class	Loss Given Failure notching	Additional Notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Deposits	1	0	a2	1	A1	A1

Source: Moody's Financial Metrics

## Ratings

Exhibit 8

Category	Moody's Rating
<b>SPAREBANK 1 OSTLANDET</b>	
Outlook	Stable
Bank Deposits	A1/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
Issuer Rating	A1

Source: Moody's Investors Service

© 2017 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 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.com](http://www.moody.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 657AFSL 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. ("MJJK") 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 MJJK. 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. MJJK 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.

MJJK 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 MJJK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJJK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

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

REPORT NUMBER

1068863