

MOODY'S

INVESTORS SERVICE

CREDIT OPINION

10 October 2018

Update

✓ Rate this Research

RATINGS

Sparebanken Oest

Domicile	Norway
Long Term CRR	A1
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	A2
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

Effie Tsotsani +44.20.7772.1712
AVP-Analyst
effie.tsotsani@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
MD-Financial Institutions
sean.marion@moodys.com

» Contacts continued on last page

Sparebanken Oest

Update to credit analysis

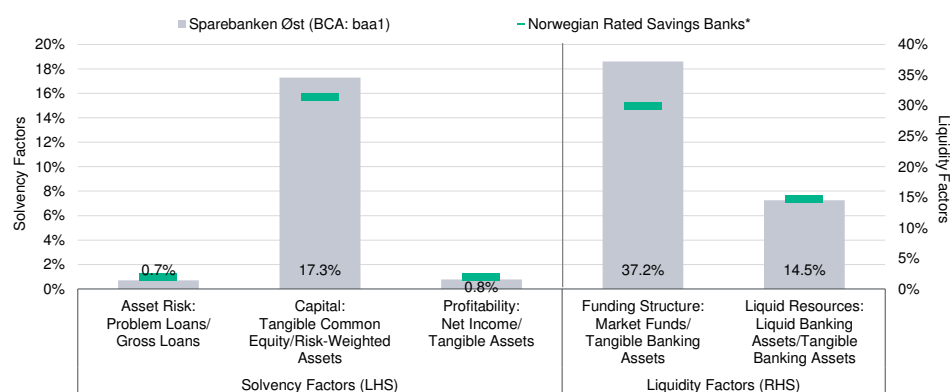
Summary

We assign a baa1 base line credit assessment (BCA) and A2 long-term deposit and issuer ratings to Sparebanken Øst. We also assign a long and short term Counterparty Risk Assessment (CRA) of A1(cr)/Prime-1(cr) to the bank.

Sparebanken Øst's BCA of baa1 primarily reflects its strengthened asset quality and increased coverage of problem loans despite the challenging economic conditions in Norway over the last two years, as well as the maintenance of its solid capitalization, which bring its credit profile well in line with baa1-rated peers. From this strengthened base, we expect the bank's performance to remain steady for the foreseeable future, as asset quality and profitability will benefit from the improving operating environment in Norway.

The bank's A2 deposit and issuer ratings take into account our Loss Given Failure (LGF) analysis of the bank's large volume of deposits and substantial layers of subordination, resulting in two notches of rating uplift. Because of its small size, Sparebanken Øst's ratings do not benefit from government support uplift.

Exhibit 1 Key Financial Indicators



Note: *Figures for Norwegian rated savings banks are based on latest available data
Source: Moody's Banking Financial Metrics

Credit strengths

- » Improving asset quality, through increased granularity in the bank's balance sheet and decreased single name concentrations
- » Resilient profitability, which compares favorably with similarly rated Norwegian savings banks
- » Strengthened capital buffers which compare favorably with those of similarly rated Norwegian savings banks
- » Large volume of deposits and debt provide uplift to deposit ratings

Credit challenges

- » Sparebanken Øst maintains a sizeable reliance to confidence sensitive market funding
- » Core profitability showing signs of improvement but strong competition in its region constrains Øst business growth

Outlook

The stable outlook assigned to Sparebanken Øst remains unchanged, and reflects our view that the bank's financials will remain broadly resilient over the next 12-18 months.

Factors that could lead to an upgrade

Upward rating pressure could develop if Sparebanken Øst demonstrates:

- » Strong earnings generation without an increase in its risk profile or worsening in its business development
- » Sustained good asset quality in its retail and corporate books and a decline in sector/single borrower concentration while maintaining adequate cash coverage of problem loans
- » Continued access to the debt markets without significant changes in pricing

Factors that could lead to a downgrade

Future downward rating pressure would emerge if:

- » Sparebanken Øst's risk profile increases as a result of increased concentration, for example if construction and real-estate concentration or top-20 client concentration as a percent of Core Tier 1 Capital exceeds 150% or if its problem loan ratio increases above our system wide expectation of approximately 2%
- » Any indication that the improvements achieved in recent years are not sustainable
- » Financing conditions become more difficult

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.

Key indicators

Exhibit 2

Sparebanken Oest (Consolidated Financials) [1]

	6-18 ²	12-17 ²	12-16 ²	12-15 ²	12-14 ²	CAGR/Avg ³
Total Assets (NOK billion)	39	37	36	35	35	2.9 ⁴
Total Assets (EUR million)	4,070	3,767	3,943	3,589	3,859	1.5 ⁴
Total Assets (USD million)	4,752	4,523	4,158	3,899	4,669	0.5 ⁴
Tangible Common Equity (NOK billion)	3.2	3.2	3.0	2.8	2.6	6.2 ⁴
Tangible Common Equity (EUR million)	338	324	331	288	287	4.8 ⁴
Tangible Common Equity (USD million)	395	390	349	313	347	3.7 ⁴
Problem Loans / Gross Loans (%)	0.6	0.6	0.7	0.9	1.5	0.8 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	17.3	17.7	17.0	15.9	14.6	16.5 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	5.4	5.3	6.7	8.4	15.5	8.3 ⁵
Net Interest Margin (%)	1.4	1.6	1.6	1.7	1.8	1.6 ⁵
PPI / Average RWA (%)	2.4	2.3	2.4	1.9	2.3	2.2 ⁶
Net Income / Tangible Assets (%)	0.9	0.8	0.9	0.7	0.9	0.8 ⁵
Cost / Income Ratio (%)	38.3	40.8	39.1	46.9	41.7	41.4 ⁵
Market Funds / Tangible Banking Assets (%)	36.9	37.2	38.2	39.7	41.0	38.6 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	14.0	14.5	14.7	16.3	14.4	14.8 ⁵
Gross Loans / Due to Customers (%)	226.2	222.4	214.6	213.5	215.2	218.4 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] Basel III - fully-loaded or transitional phase-in; IFRS [3] May include rounding differences due to scale of reported amounts [4] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime [5] Simple average of periods presented for the latest accounting regime. [6] Simple average of Basel III periods presented

Source: Moody's Financial Metrics

Profile

Sparebanken Øst is a savings bank with a well-established market position in southeastern Norway. Traditional banking services including deposit accounts, loans and money-transfer services are provided to retail customers and medium-size enterprise (SMEs). Through agreements with external suppliers, the bank also distributes pension insurance, life and general insurance, and asset management services. As of 30 June 2018, the bank reported total consolidated assets of NOK38.7 billion (€4.1 billion).

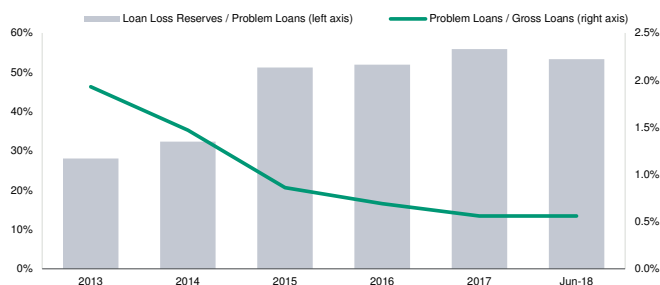
Detailed credit considerations

Improving asset quality through increased granularity in the bank's loan book and decreased single name concentrations

We expect Sparebanken Øst's asset quality metrics to remain strong reflecting its focus on mortgage lending and limited lending to business customers, following a quality improvement program in relation to the bank's corporate portfolio implemented during 2011-2015. Corporate loans declined from 24% of gross loans in December 2011 to 14.3% in June 2018. Although Sparebanken Øst's concentration level to the Commercial Real Estate (CRE) sector has declined, it remains significant. Loans in the real estate and construction sector accounted for around 10% of gross loans as of June 2018 (14.2% in December 2011). Sparebanken Øst established its own debt collection company in 2016 whose main objective is to engage in debt collection operations and other activities naturally associated with this, including reminder services and long-term monitoring of debt collection portfolios.

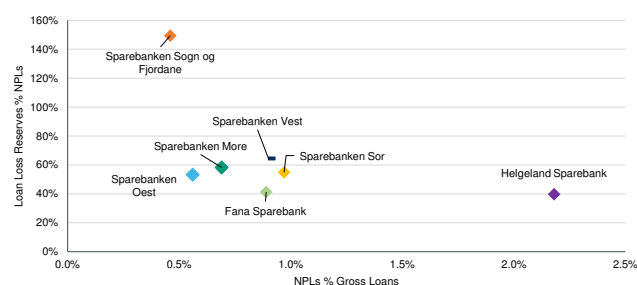
As of June 2018, the bank's problem loan ratio (measured as impaired loans as a percentage of total loans) remained at 0.56% of gross loans in line with December 2017 and improved from 0.69% as of December 2016 and further, compares favourably to rated domestic peers. The bank's cash coverage of problem loans improved to 53% as of June 2018 from below 30% in 2013 (see Exhibit 3 and 4).

Exhibit 3

Sparebanken Øst's asset quality is improving...

Source: Moody's Banking Financial Metrics

Exhibit 4

... and compares well with Norwegian peers

Note: Figures as of June 2018

Source: Moody's Banking Financial Metrics

Although, the exposure in the CRE sector makes its asset quality vulnerable in the case the sector faces difficulties, particularly given that many of the bank's large customers are active in this sector, Sparebanken Øst's portfolio has been decreasing as witnessed by negative growth rates since 2011 while both residential and commercial real estate prices have witnessed exceptional growth, particularly in the Oslo metropolitan area.

The twelve month growth rate in net lending to retail customers was 6.2% at end-June 2018 whilst the net lending to corporate customers increased by 11.5% over the same period. The bank's corporate loan book started growing at the end of 2017 after several years of deleveraging, when the bank became more selective in its lending to the corporate segment. Lending to companies in the bank's area of operations, secured on real estate, will support the bank's corporate loan growth going forward.

The bulk of Sparebanken Øst's lending is nevertheless in retail loans, mostly in the form of mortgages, accounting for around 86% of total loans as of June 2018. Sparebanken Oest is based in Drammen, which is located in the outskirts of Oslo, and residential property prices have increased significantly over the past years. The growth in real estate prices in Oslo and Drammen slowed down significantly in 2017 owing to tighter lending regulation that came into effect in early 2017. In the first half of 2018, house prices started to rise again in Oslo as well as on national level.

Core profitability showing signs of improvement but competition remains strong

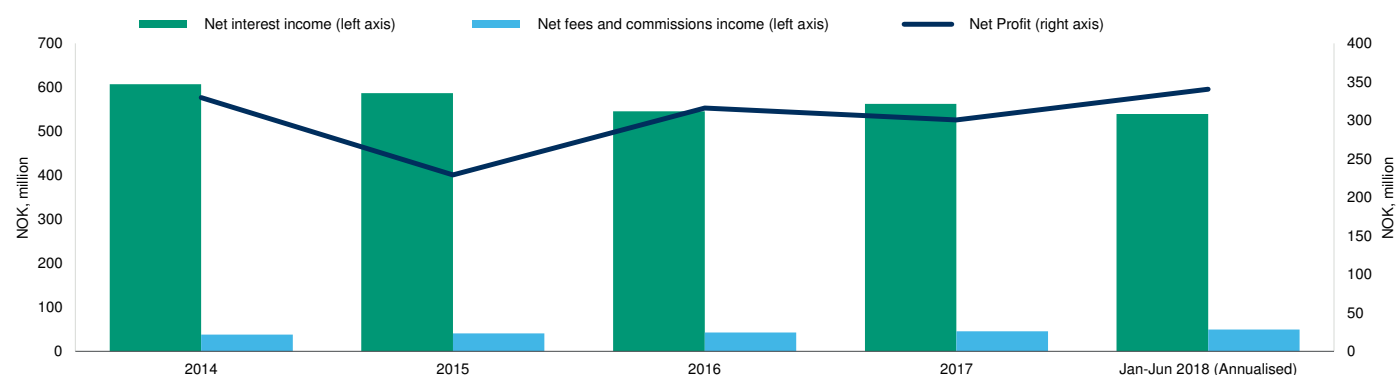
Sparebanken Øst's net income was broadly stable in the first half of 2018 with a 1.2% growth compared to the same period in 2017. Net interest income declined by 1.3% to NOK277.2 million in the first half of 2018 from NOK280.8 million in the same period in 2017, reflecting increasing money market rates. Moreover, the strong competition the bank faces in the greater Oslo and Akershus area, where it also operates, may negatively affect its business prospects constraining its profitability.

Sparebanken Øst's main income line is net interest income from its lending operations, which are predominantly retail, a more stable income source. Net interest income represented over 74% of net revenue in the first six months of 2018 and around 79% in 2017.

The bank's annualised return on assets, as calculated by Moody's, was 0.88% in the first half of 2018. The bank's reported profit for the first half of 2018 of NOK 186.3 million increased marginally from NOK 184.1 million in the first half of 2017, reflecting a reduction in net interest income but also a modest growth in fees and commissions, gains from financial instruments and other operating income. Operational efficiency is sound and compares well with peers, with a cost-to-income ratio of 38.3% as of June 2018.

The Central Bank of Norway increased its key policy rate to 0.75% on 20 September 2018. The rate hike will benefit Norwegian banks', including Sparebanken Øst's, interest income but we also expect funding costs to rise, thereby offsetting the positive effects of the higher key policy rate.

Exhibit 5

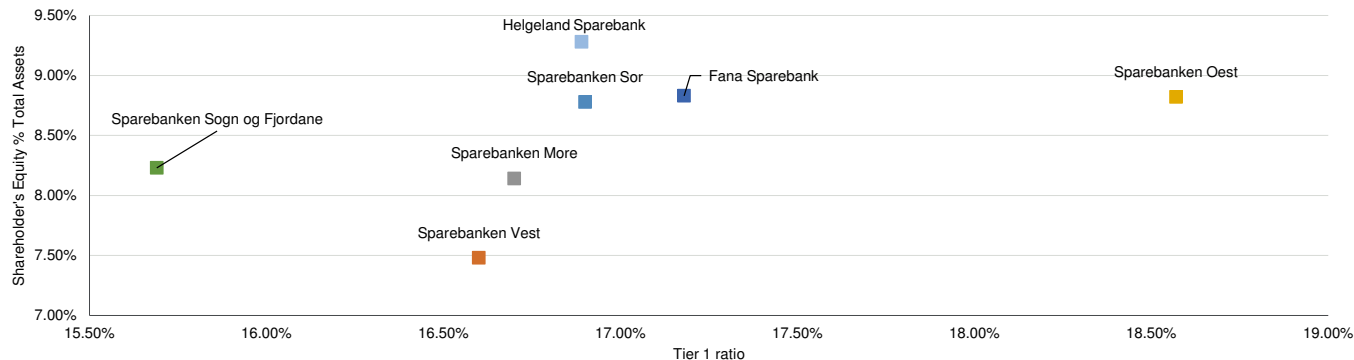
Sparebanken Øst Profitability Evolution

Source: Moody's Banking Financial Metrics

Strengthened capital buffers, which compare favorably with similarly rated Norwegian savings banks

Sparebanken Øst's capital buffers have improved over the last years reflecting higher regulatory requirements. As of June 2018, Sparebanken Øst's Common Equity Tier 1 capital (CET1) ratio was 16.7% ¹ (June 2017: 17.1%, Dec 2017: 17.49%). The bank's CET1 levels compare favorably with other Norwegian savings banks and exceed both the current regulatory requirement of 14.3% (including a Pillar 2 requirement of 2.3% for Sparebanken Øst) and the bank's increased internal target of 14.75% (14.5% previously). Sparebanken Øst also reports a high leverage ratio, which stood at 8.8% as of June 2018 ²

Exhibit 6

Improved capital levels driven by higher regulatory targets compare favorably with peers

Note: Figures as of June 2018

Source: Moody's Banking Financial Metrics

Sparebanken Øst maintains a sizeable reliance to market funding

Sparebanken Øst remains to a greater extent than domestic peers reliant on market funds, which constituted around 37% of the bank's tangible banking assets as of June 2018. As such, the bank is therefore sensitive to fluctuations in investor sentiment, a credit weakness.

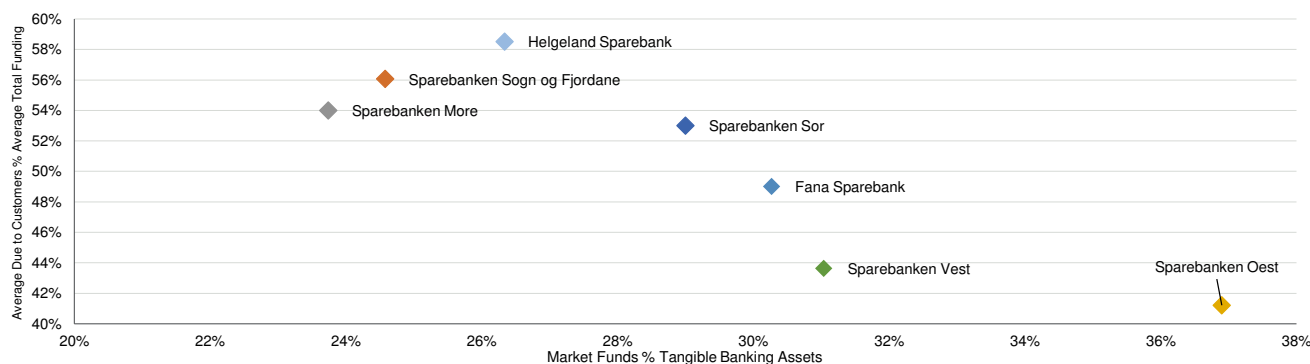
A relatively large part of Sparebanken Øst's market funding consists of covered bonds issued via Sparebanken Øst Boligkreditt, with this source of funding representing around 57% of Sparebanken Øst's market funds as of June 2018. We view the diversification benefit and the typically longer maturity of these funding instruments positively, in particular since recent larger issuances are eligible liquid assets under the liquidity coverage ratio rules.

Deposits accounted for about 41% of Sparebanken Øst's non-equity funding as of June 2018 (42% at December 2017), at the lower end of the range of similarly rated Norwegian savings banks. The 1.6% year-on-year growth in total deposits as of June 2018 was largely driven by the 7.9% increase in corporate deposits, while deposits from the retail sector declined by 2.1% in the same period. Retail deposits have however grown significantly over the past years driven by the bank's alternative delivery channels, especially its

website Topprente.no, which offers competitive savings rates to retail customers. It should nevertheless be noted that we view such deposits as more price-sensitive and therefore less sticky.

Exhibit 7

A relatively large part of Sparebanken Øst's market funding consists of covered bonds



Note: Figures as of June 2018

Source: Moody's Banking Financial Metrics

Mitigating its high reliance on market funds, Sparebanken Øst holds a relatively large liquidity buffer. As of June 2018, liquid assets stood at NOK 5.4 billion or 14.0% (14.5% as of December 2017) of total assets and consisted of cash as well as government and government-related bonds and covered bonds. Furthermore, according to the bank, liquid assets cover its funding needs for the next 12 months, and its LCR ratio stands at 257.1% as of June 2018.

Support and structural considerations

Loss Given Failure

Norway is in the process of implementing the EU Bank Recovery and Resolution Directive (BRRD). In our LGF analysis we assume junior deposits account for 26% of total, residual tangible common equity of 3%, losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits, as well as a 5% run-off in preferred deposits. We assign a 25% probability to deposits being preferred to senior unsecured debt. These are in line with our standard assumptions.

For Sparebanken Øst's long-term deposit ratings, our ratings have considered the likely impact on loss-given-failure of the volume of deposits and the amount of debt subordinated to them. This has resulted in a Preliminary Rating Assessment of two notches above the BCA, reflecting very low loss-given-failure.

Government support

The expected implementation of resolution legislation has caused us to reconsider the probability that government support would benefit certain creditors. Sparebanken Øst benefits from a well-established market position in the lower Buskerud County of south-eastern Norway. Whilst its market share in this county is material (we estimate it at around 6% by loans), it falls to around 1.3% if we include the greater Oslo and Akershus areas, in which Sparebanken Øst also operates. We also note that the close proximity of the bank's home region to Oslo means that a number of other Norwegian banks are operational in the area. Therefore we consider the probability of government support for debt and deposits as low, resulting in no rating uplift. Sparebanken Øst's market share in loans on a national basis is around 0.7%.

Counterparty Risk Assessment

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.

Sparebanken Øst's CR Assessment is positioned at A1(cr)/P-1(cr)

Sparebanken Øst's CR Assessment is positioned at A1(cr)/P-1(cr), three notches above the bank's Adjusted BCA of baa1, based on the cushion against default provided by junior deposits, senior unsecured, subordinated debts and preference shares. The bank's CR Assessment does not benefit from any government support, in line with deposits and senior unsecured debt ratings.

Counterparty Risk Ratings (CRR)

Counterparty Risk Ratings are opinions of the ability of entities to honour the uncollateralized portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honoured. CRR liabilities typically relate to transactions with unrelated parties. Examples of CRR liabilities include the uncollateralized portion of payables arising from derivatives transactions and the uncollateralized portion of liabilities under sale and repurchase agreements. CRRs are not applicable to funding commitments or other obligations associated with covered bonds, letters of credit, guarantees, servicer and trustee obligations, and other similar obligations that arise from a bank performing its essential operating functions.

Sparebanken Øst's CRR is positioned at A1/P-1

The CRR is positioned three notches above the Adjusted BCA of baa1 and at the same level as the counterparty risk assessment, reflecting the buffer against default provided by more junior instruments to the CRR liabilities.

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 8

Sparebanken Oest

Macro Factors

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

Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	0.7%	aa1	← →	a3	Geographical concentration	Sector concentration
Capital						
TCE / RWA	17.3%	aa2	← →	aa2	Risk-weighted capitalisation	
Profitability						
Net Income / Tangible Assets	0.8%	baa1	← →	baa1	Expected trend	
Combined Solvency Score		aa3		a2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	37.2%	ba2	← →	ba3	Market funding quality	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	14.5%	baa3	← →	baa3	Stock of liquid assets	
Combined Liquidity Score		ba1		ba2		
Financial Profile				baa1		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint:				Aaa		
Scorecard Calculated BCA range				a3-baa2		
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	14,687	37.9%	16,142	41.7%
Deposits	14,268	36.8%	12,813	33.1%
Preferred deposits	10,558	27.3%	10,030	25.9%
Junior Deposits	3,710	9.6%	2,782	7.2%
Senior unsecured bank debt	7,915	20.4%	7,915	20.4%
Dated subordinated bank debt	350	0.9%	350	0.9%
Preference shares (bank)	350	0.9%	350	0.9%
Equity	1,162	3.0%	1,162	3.0%
Total Tangible Banking Assets	38,732	100%	38,732	100%

Debt class	De Jure waterfall		De Facto waterfall		Notching		LGF	Assigned	Additional	Preliminary
	Instrument	Sub-	Instrument	Sub-	De Jure	De Facto	Notching	LGF	notching	Rating
	volume +	ordination	volume +	ordination			Guidance	notching		Assessment
	subordination		subordination				vs.			
							Adjusted			
							BCA			
Counterparty Risk Rating	32.4%	32.4%	32.4%	32.4%	3	3	3	3	0	a1
Counterparty Risk Assessment	32.4%	32.4%	32.4%	32.4%	3	3	3	3	0	a1 (cr)
Deposits	32.4%	4.8%	32.4%	25.2%	2	3	2	2	0	a2
Senior unsecured bank debt	32.4%	4.8%	25.2%	4.8%	2	2	2	2	0	a2

Instrument class	Loss Given		Additional	Preliminary Rating	Government		Local Currency	Foreign
	Failure	notching			Support	notching	Rating	Currency
			Notching	Assessment				Rating
Counterparty Risk Rating	3		0	a1	0		A1	A1
Counterparty Risk Assessment	3		0	a1 (cr)	0		A1 (cr)	--
Deposits	2		0	a2	0		A2	A2
Senior unsecured bank debt	2		0	a2	0		A2	A2

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Financial Metrics

Ratings

Exhibit 9

Category	Moody's Rating
SPAREBANKEN OEST	
Outlook	Stable
Counterparty Risk Rating	A1/P-1
Bank Deposits	A2/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	baa1
Counterparty Risk Assessment	A1(cr)/P-1(cr)
Issuer Rating	A2

Source: Moody's Investors Service

Endnotes

- [1](#) The ratio increases to 17.2% when we include 50% of interim profit.
- [2](#) 9.0% when we include 50% of interim profit.

© 2018 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.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

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.

Contacts

Effie Tsotsani +44.20.7772.1712
AVP-Analyst
effie.tsotsani@moodys.com

Jean-Francois Tremblay +44.20.7772.5653
Associate Managing
Director
jean-francois.tremblay@moodys.com

Louise Eklund +46.8.5025.6569
Associate Analyst
louise eklund@moodys.com

Sean Marion +44.20.7772.1056
MD-Financial Institutions
sean.marion@moodys.com

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454