

CREDIT OPINION

28 September 2017

Update

Rate this Research >>

RATINGS

KLP Banken AS

Domicile	Norway
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

Niclas Boheman 44-20-7772-1643
AVP-Analyst
niclas.boheman@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

CLIENT SERVICES

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

KLP Banken A/S

Update following recent affirmation of A2 deposit ratings

Summary

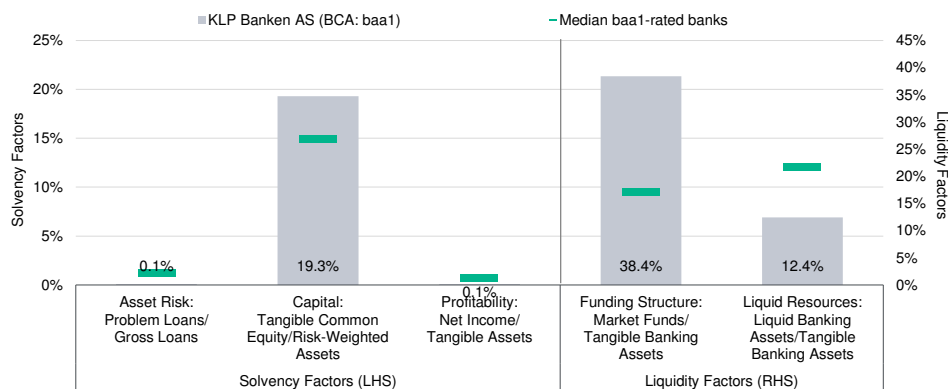
On 26 September, we affirmed the A2/Prime-1 long- and short-term deposit ratings assigned to KLP Banken AS. The outlook on the long-term ratings is stable. At the same time, we upgraded the bank's baseline credit assessment (BCA) to baa1 from baa2, the adjusted BCA to a3 from baa1, and its Counterparty Risk Assessment (CR Assessment) to Aa3(cr)/Prime-1(cr) from A1(cr)/P-1(cr).

The BCA of baa1 reflects the bank's strengthened capital buffers and improving funding profile, with increasing amounts of deposits, balanced against still high – albeit declining – reliance on market funding. The bank also features low asset risk resulting from its specific business model, combining lending to public sector and retail mortgage customers, which explain the comparatively low profitability of the bank.

KLP's A2 deposit ratings reflects the improved standalone credit profile of the bank, as captured by the upgraded BCA of baa1, a very high probability of affiliate support which results in an adjusted BCA of a3, and the concurrent offsetting movement in the rating uplift that the bank receives from our advanced loss given failure (LGF) analysis, moving to one notch from previous two notches. With a declining trend in unsecured debt, our assessment of the cushion of debt that would protect senior creditors in case of bail in has decreased.

Exhibit 1

Rating Scorecard - Key Financial Ratios



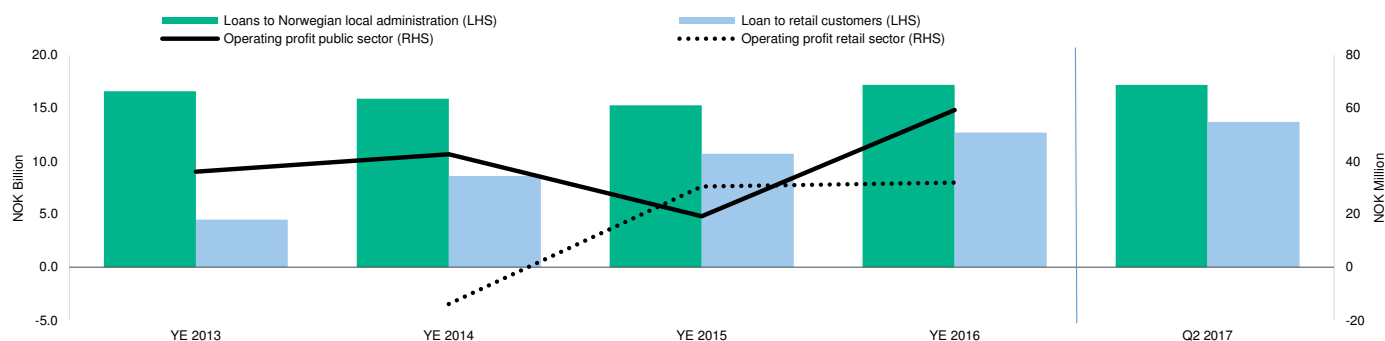
Source: Moody's Financial Metrics

KLP Banken focuses on lending to Norway's municipalities, county administrations and companies carrying out public sector and enterprises assignments (56% of total loans as of Q2 2017), and is increasingly providing mortgage loans to the retail market, prioritising

customers of its parent Kommunal Landspensjonskasse (KLP, A2 insurance financial strength, stable) (44% of total loans) (Exhibit 2). The bank distributes its products online, without a branch network, while also managing a lending portfolio on behalf of its parent. KLP Banken has two wholly owned subsidiaries, KLP Kommunekreditt AS and KLP Boligkreditt AS, which aim to be key financing partners providing public sector and retail mortgages respectively.

Exhibit 2

On – balance sheet lending breakdown and operating profit by business segment



Source: Company reports and presentations

Credit Strengths

- » KLP Banken's BCA is supported by its "Very Strong - " Macro Profile
- » Strong asset quality, with focus on public lending and growing its mortgage lending
- » Strong capital position, supported by the capital injection of NOK 250 million in December 2016

Credit Challenges

- » Low profitability due to KLP Banken's traditional focus on public finance, and hence low internal capital generation constraining further growth.
- » Very high reliance on market funding, but substantially through public sector covered bonds

Rating Outlook

The stable outlooks on the bank's long-term deposit ratings reflect our view that the bank's financial performance will remain broadly unchanged during the forecast period and to be resilient to modest changes in the operating environment.

Factors that Could Lead to an Upgrade

The rating could be upgraded, if KLP Banken demonstrates (1) continued strong capital ratios relative to risk and an improved leverage ratio in line with the regulator's recommendation for banks; and (2) stronger earnings generation in line with the expansion of retail lending, assuming that public sector lending remains at current levels. A change in the liability structure with significantly higher volumes of debt could also lead to an upgrade.

Factors that Could Lead to a Downgrade

Downward pressure on KLP Banken's rating could arise as a result of (1) weaker asset quality, for example following excessive growth in mortgage lending; and/or (2) sustained weaker financial performance, for example due to erosion of the bank's franchise from competitive pressures; (3) a change in the liability structure of the bank, with lower volumes of loss absorbing debt and/or junior deposits, thus reducing the cushion of loss absorbing liabilities for depositors.

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 3

KLP Banken AS (Consolidated Financials) [1]

	6-17 ²	12-16 ²	12-15 ²	12-14 ²	12-13 ²	CAGR/Avg. ³
Total Assets (NOK billion)	35	34	31	30	26	9.0 ⁴
Total Assets (EUR million)	3,678	3,787	3,255	3,280	3,111	4.9 ⁴
Total Assets (USD million)	4,195	3,994	3,536	3,969	4,287	-0.6 ⁴
Tangible Common Equity (NOK billion)	1.9	1.8	1.5	1.3	1.3	11.5 ⁴
Tangible Common Equity (EUR million)	194	202	155	140	152	7.3 ⁴
Tangible Common Equity (USD million)	222	213	168	169	209	1.7 ⁴
Problem Loans / Gross Loans (%)	0.1	0.1	0.1	0.1	0.0	0.1 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	19.3	19.1	17.7	16.9	19.6	18.5 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	1.4	1.2	2.0	2.1	0.8	1.5 ⁵
Net Interest Margin (%)	0.6	0.6	0.6	0.5	0.5	0.6 ⁵
PPI / Average RWA (%)	1.0	1.0	0.7	0.4	1.4	0.9 ⁶
Net Income / Tangible Assets (%)	0.2	0.2	0.1	0.1	0.3	0.2 ⁵
Cost / Income Ratio (%)	67.2	66.1	75.9	85.3	62.1	71.3 ⁵
Market Funds / Tangible Banking Assets (%)	36.7	38.4	40.0	46.9	44.8	41.4 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	11.6	12.4	15.2	15.5	17.2	14.4 ⁵
Gross Loans / Due to Customers (%)	338.1	344.9	355.0	399.1	483.7	384.2 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

KLP Banken AS is wholly owned by the mutual insurance company Kommunal Landspensjonskasse (KLP). Together with its subsidiaries, KLP Banken AS provides or acquire loans to Norwegian municipalities and county authorities, as well as to companies with a public sector guarantee. Traditional banking products are also offered by The Group. As of 30 June 2017, its consolidated assets totalled NOK35 billion.

Detailed credit considerations

The financial data in the following sections are sourced from KLP Banken AS's financial statements unless otherwise stated.

KLP Banken's BCA is supported by its "Very Strong-" Macro Profile

As a domestically focused bank, KLP Banken's operating environment, and hence its Macro Profile, is that of Norway at Very Strong-. Norwegian banks benefit from operating in a wealthy and developed country with very high economic, institutional and government financial strength, as well as low susceptibility to event risk. 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 with GDP.

Asset quality is solid

KLP Banken's asset risk is one of its main strengths, with a very low level of problem loans equal to NOK25.5 million, or 0.08% of gross loans, at the end of June 2017. We expect the volume of problem loans to rise only slightly in the coming years following the bank's increased focus on residential mortgage lending.

Competing against fully state-owned Kommunalbanken AS (Aaa stable, a1), KLP Banken has in recent years been challenged in growing its market share in public sector lending given Kommunalbanken's low funding costs and not-for-profit mandate, and the individual municipalities' direct access to the market. In 2015, KLP Banken established a new marketing concept of products offered

to its members. The bank focuses on two main product areas: basic banking services (public sector and mortgage retail lending) and managing its parent loan portfolio, which the parent also funds on its balance sheet.

In 2016 the trend of declining public lending reversed, increasing by 12.6% year on year, while also continuing its growth in mortgage lending, increasing 18.7% at the same time (Exhibit 2). The year on year growth in public and retail lending were 8% and 11%, respectively, at the end of June 2017.

The aa3 Asset Risk score we assign to KLP Banken takes into account the bank's very low problem loan ratio and its low risk public sector and residential mortgage exposure. This score includes a two-notch negative adjustment, which reflects the increasing risk relative to the current dominance of public sector lending, resulting from the very high growth of bank's mortgage lending.

Strong capital position, supported by the capital injection of NOK 250 million in December 2016

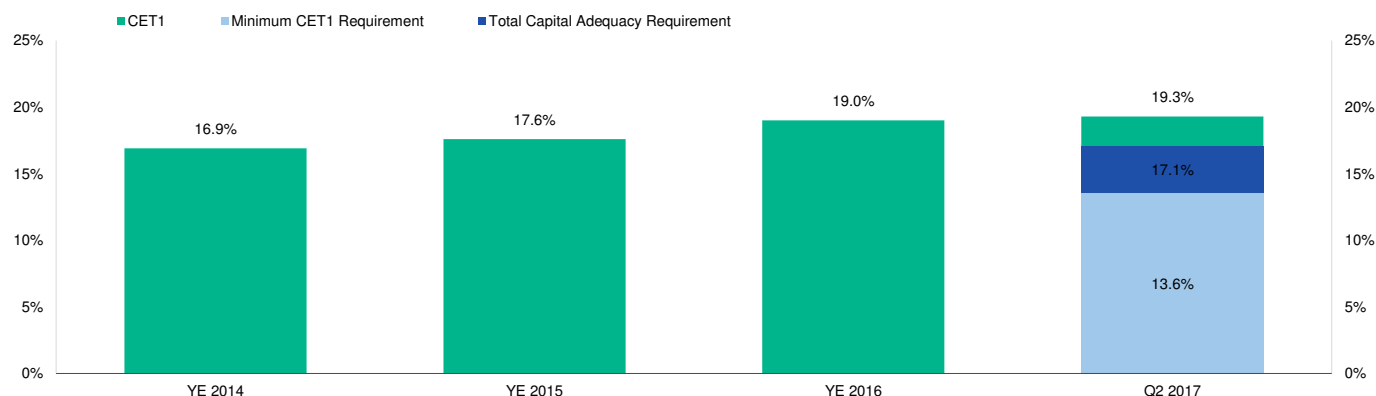
KLP Banken has strong capital adequacy following the strengthening of its capital position in August 2015 and in December 2016 through two capital injections from its parent, NOK 200 million and NOK 250 million respectively. On 9 December 2016, an extraordinary General Meeting decided to increase the equity by NOK 250 million. The share capital increased by NOK 127.5 million, following the increase, the share capital was NOK 982.5 million divided by 7.5 million shares (NOK 131.00/share). The remaining NOK 122.5 million has been added to the bank's share premium reserve (NOK 16.33/share). The capital injection improved the regulatory capital ratios of KLP Banken, with a reported common equity tier 1 (CET1) ratio of 19.3% at the end of June 2017, up from 16.5% at the end of June 2016. This will also enable the bank to comfortably meet stricter capital requirements with the countercyclical buffer increasing to 2% from 1.5% at the end of 2017. The current capital minimum regulatory requirements, are 13.6% (CET1) and 17.1% (total capital adequacy).

The leverage ratio has been a constraint in the capital score in our scorecard. However, the bank has managed to meet and sustain a leverage ratio above the 5% regulatory requirement since the end of December 2016 with a reported leverage ratio of 5.1% at the end of June 2017 (4.3% at the end of June 2016). Leverage ratios became a requirement on 30 June 2017 (minimum requirement of 3% for non-insurance financial institutions, + 2% buffer for banks, +1% buffer for systemically important financial institutions under CRR/CRDIV regulation). The legislation opens for banks to apply for an exception from the 2% buffer if the bank uses standardised approach when calculating Risk Weighted Assets. As this is the case for KLP Banken, we expect that they would be exempt and their requirement to be set at 3%. The legislation introduces leverage ratio requirements earlier than the target set by the EU and creates higher leverage ratio requirements (including the buffers) for Norwegian banks. However, even if leverage ratio requirement would be set at 3%, we do not expect that capitalisation would decrease significantly as Pillar 1 and Pillar 2 requirements are high, at 17.1% and the bank aims at staying above the management buffer, which is 0.5%.

The consolidated Tangible Common Equity (TCE) / Risk Weighted Assets ratio was 19.3% at the end of June 2017. This is a significant improvement compared with 13.9% in 2011 and has been achieved as a result of the above-mentioned capital injections in 2015 and 2016, improved profitability, and the sale of a loan portfolio to the parent in 2012 (Exhibit 3).

Exhibit 4

The capital injection results in a comfortable headroom above capital requirements Capitalisation and the capital requirements as of Q2 2017



Source: Company reports and Moody's Investors Service

The bank has a prudent risk profile and earnings are primarily a result of borrowing and lending activity as well as liquidity management. The bank's market risks are low, with interest and foreign-exchange risks arising within the borrowing and lending activity being largely reduced using derivatives.

Our assigned Capital Score of aa3 reflects the bank's capital strength, which compares well with banks globally with a BCA of baa1.

Profitability is low, but will moderately improve as the bank focuses on retail lending

The relative increase in KLP Banken's mortgage lending versus public sector lending will improve the bank's low profitability moderately. The bank's Net Income/Tangible Assets ratio stood at 0.21% at end of June 2017, unchanged from year end 2016, and up from 0.12% in 2015.

Net income increased to NOK68.9 million in 2016 from NOK35.4 million in 2015. The improved profitability is due to increased business volumes and net interest margins in public lending with the public sector segment increasing its operating profits NOK 59 million in 2016 from NOK 19 million in 2015 (Exhibit 2). Meanwhile, retail market segment generated a profit of NOK 32 million in 2016 compared with NOK 30 million in 2015. Net interest income for the bank increased by 3.8% to NOK 194.3 million compared to NOK 187.1 million in 2015. A 6% increase in costs for the year 2016 corresponds to the increase in business volumes and is in part due to higher marketing costs.

For the first half of 2017, KLP Banken reported an 8% increase in net interest income, reflecting higher margins on public sector lending as NIBOR decreased. We expect those margins to normalise over the outlook period but will be compensated by higher volumes of mortgage lending. The reported net profit declined by 22% to NOK36.3 million as a result of increased costs following the establishment of a credit card portfolio and lower unrealized profits on liquidity investments. Gains on financial instruments declined by 76% and salaries and administrative costs were up by 21%, partly mitigated by increases in commissions and banking fees in addition to the strengthened net interest income.

In addition to its own lending (NOK 30.9 billion at end-June 2017), the bank administers housing mortgages and public sector lending financed by its parent company, KLP. The bank receives a management fee for this over the administered volume which amounted to NOK 28.5 million in the first half of 2017, which is in line with the fee received for the same period in 2016.

Our assigned profitability score of b1 reflects the bank's relatively weak profitability. Despite the improvements, we believe that there is limited upside from the bank's current profitability levels given (1) the more challenging operating environment; and (2) interest margin pressure from competition and low interest rates.

Improving funding profile, although reliance on covered bonds remains very high

KLP Banken's funding profile is improving, with gradually increasing volumes of deposits and a lower share of unsecured market funding than in previous years. The deposit base with deposits from individuals, public sector entities and companies increased to 27% of total

liabilities at end-June 2017, compared with 25% in June 2016. At the same time, senior unsecured funding decreased to NOK 1.5 billion (4.7% of liabilities at end-June 2017 from 8.9% at end-June 2016). As of end-June 2017, total issued securities accounted for 72% of total liabilities.

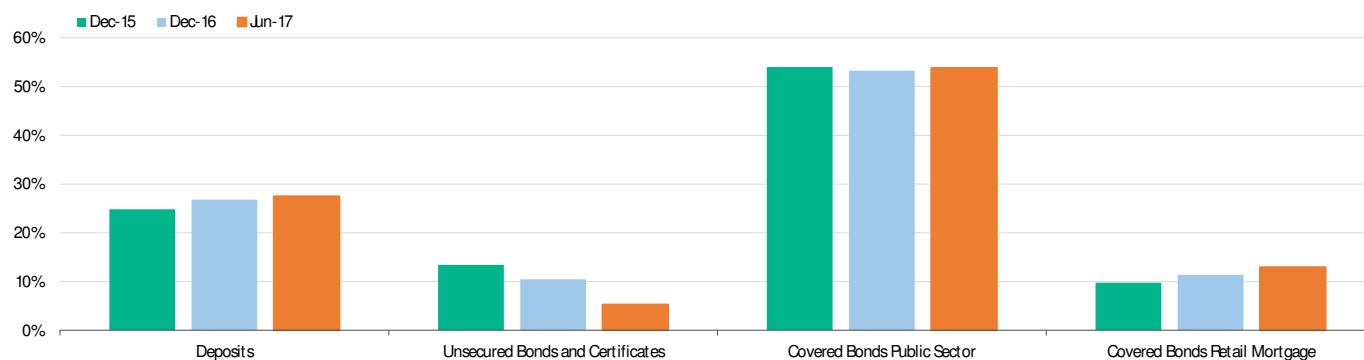
While we see some potential downside risks given the material refinancing needs, the covered bonds issued by KLP Kommunekreditt AS (NOK 17.9 billion public covered bonds outstanding, 54% of total liabilities) and KLP Boligkreditt AS (NOK 4.3 billion retail covered bonds outstanding at end June 2017, 13% of liabilities) are considered less confidence sensitive than, for example, unsecured and short-term market funding (5% of liabilities). Market participants have demonstrated appetite for covered bonds given the high quality of the collateral mitigating the refinancing risk. The bank plans to market its retail mortgage covered bonds more broadly and to capitalise on KLP's and KLP Kommunekreditt's reputations. (Exhibit 5).

According to our Bank rating methodology, we consider covered bonds materially less confidence sensitive than other types of market funding. Therefore, we treat 50% of the covered bonds as deposits given the low risk of the bonds backed by the public sector assets and a very low refinancing risk. Even though we do not expect that KLP Banken will have the capacity to make large benchmark issuances of retail mortgage covered bonds, we expect that these will also be less confidence sensitive due to the association with the KLP brand.

We assign the bank a Funding Score of ba3, which reflects its currently high usage of wholesale funding.

Exhibit 5

Funding source as of 30 June 2017



Source: Source: company reports and presentations

KLP Banken's high reliance on market funding is further mitigated by its adequate liquidity profile, as the bank has obtained more funding than required to meet its operational needs. The bank's liquidity portfolio comprises Norwegian high-rated covered bonds and bonds issued by Norwegian municipalities. The book value of the interest bearing securities portfolio stood at NOK 2.7 billion at year-end 2016 (2.75 billion at end-June 2017). At the end of December 2016, the bank's liquidity coverage ratio stood at 276%, compared to the FSA's minimum LCR requirement of 80% by end-2016 and 100% from end-2017. Furthermore, the bank reported a very high LCR of 365% at end-June 2017. KLP Banken's liquid banking assets to tangible banking assets stood 12.41% at end-December 2016 and 11.6% at end-June 2017. We assign the bank a baa3 liquidity score, reflecting the bank's sizeable liquidity coverage and buffers.

Support and structural considerations

Affiliate Support

We assign KLP Banken AS an a3 Adjusted BCA, which incorporates one notch of affiliate support. The affiliate support uplift reflects our view that KLP will likely provide support to KLP Banken, if needed, given the importance of the bank to its business strategy. The parent's support has been demonstrated by two capital injections in August 2015 for NOK 200 million and in December 2016 for NOK 250 million. We use A3 as an anchor rating for KLP, which is one notch below its insurance financial strength rating of A2 because any potential support to its subsidiaries will be subordinated to claims from policyholders.

Loss Given Failure

We expect that Norway will transpose the EU Bank Recovery and Resolution into local legislation and as such we consider the bank to be subject to an Operational Resolution Regime. In accordance with our methodology, we therefore apply our advanced loss given failure (LGF) analysis, considering the risks faced by different debt and deposit classes across the liability structure should the bank enter resolution. In our LGF analysis we assume residual TCE of 3%, losses post-failure of 8% of Tangible Banking Assets, a 25% run-off in "junior" wholesale deposits, and 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 KLP Banken AS's long-term deposit rating, we take into consideration the likely loss given failure, given the combination of the instruments' own volume and the amount of debt subordinated to them. According to our LGF model, this results in a Preliminary Rating Assessment that is one notch above the bank's Adjusted BCA of a3 for deposits, reflecting a low loss given failure. If we expect that the amounts of senior unsecured funding will be consistently lower going forward, the balance sheet at failure analysis could result in a lower notching.

Government Support

The expected implementation of resolution legislation has caused us to reconsider the potential for government support to benefit certain creditors. While KLP Banken is the second-largest provider of funding to the public sector, with a 13% market share as of end-March 2016, its national market share is limited at 0.7% (based on on-balance sheet lending nationwide, using Statistics Norway data as of December 2016). We therefore consider the probability of government support for KLP Banken's deposits to be low, which results in no ratings uplift.

Counterparty Risk Assessment

We assign a Aa3(cr) long term and P-1(cr) short-term CR Assessment to KLP Banken AS.

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. bank's critical functions.

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 6

KLP Banken AS

Macro Factors

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

Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	0.1%	aa1	← →	aa3	Quality of assets	
Capital						
TCE / RWA	19.3%	aa1	← →	aa3	Access to capital	
Profitability						
Net Income / Tangible Assets	0.1%	b1	← →	b1	Return on assets	
Combined Solvency Score		a1		a2		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	38.4%	ba2	← →	ba3	Market funding quality	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	12.4%	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				--		
Adjusted BCA				a3		

Balance Sheet	in-scope (NOK million)	% in-scope	at-failure (NOK million)	% at-failure
Other liabilities	23,357	66.5%	24,289	69.2%
Deposits	9,138	26.0%	8,206	23.4%
Preferred deposits	6,762	19.3%	6,424	18.3%
Junior Deposits	2,376	6.8%	1,782	5.1%
Senior unsecured bank debt	1,562	4.4%	1,562	4.4%
Equity	1,053	3.0%	1,053	3.0%
Total Tangible Banking Assets	35,110	100%	35,110	100%

Debt class	De Jure waterfall		De Facto waterfall		Notching		LGF Notching Guidance vs. Adjusted 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	12.5%	12.5%	12.5%	12.5%	3	3	3	3	0	aa3 (cr)
Deposits	12.5%	3.0%	12.5%	7.4%	1	1	1	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	0	A2	A2

Source: Moody's Financial Metrics

Ratings

Exhibit 7

Category	Moody's Rating
KLP BANKEN AS	
Outlook	Stable
Bank Deposits	A2/P-1
Baseline Credit Assessment	baa1
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa3(cr)/P-1(cr)
PARENT: KOMMUNAL LANDSPENSJONSKASSE	
Outlook	Stable
Insurance Financial Strength	A2
Subordinate	Baa1 (hyb)

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 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 1092982

Contacts

Niclas Boheman 44-20-7772-1643
AVP-Analyst
niclas.boheman@moody.com

CLIENT SERVICES

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