MOODY'S INVESTORS SERVICE

CREDIT OPINION

11 July 2018

Update

Rate this Research

RATINGS

NORD/LB Luxembourg S.A. Covered Bond Bank

Domicile	Luxembourg
Long Term Debt	(P)Baa3
Туре	Senior Unsecured MTN - Dom Curr
Outlook	Not Assigned
Long Term Deposit	Baa2
Туре	LT Bank Deposits - Fgn Curr
Outlook	Negative

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Contacts

Katharina Barten +49.69.70730.765 Senior Vice President katharina.barten@moodys.com

Alexander Hendricks, +49.69.70730.779 CFA

Associate Managing Director alexander.hendricks@moodys.com

Carola Schuler +49.69.7073.0766 MD-Banking carola.schuler@moodys.com

» Contacts continued on last page

NORD/LB Luxembourg S.A. Covered Bond Bank

Update to credit analysis

Summary

We assign a Baa3 long-term issuer rating to <u>Norddeutsche Landesbank Luxembourg S.A.</u> <u>Covered Bond Bank</u> (NORD/LB CBB) with a negative outlook. Furthermore, we assign Baa2/ P-2 deposit ratings, a (P)Baa3 senior unsecured programme rating, Baa2/P-2 Counterparty Risk Ratings and a Baa2(cr)/P-2(cr) Counterparty Risk (CR) Assessment. The bank's Baseline Credit Assessment (BCA) is b2 and its Adjusted BCA is ba3. All the ratings and rating inputs are aligned with those of the bank's parent <u>Norddeutsche Landesbank GZ</u> (NORD/LB, Baa2 negative/Baa3 negative, b2)¹.

NORD/LB CBB's ratings reflect (1) the bank's b2 BCA; (2) its ba3 Adjusted BCA, incorporating two notches of affiliate support uplift from its parent, NORD/LB, and <u>Sparkassen-Finanzgruppe</u> (S-Finanzgruppe, Aa2 stable, a2)²; (3) the result of our Advanced Loss Given Failure (LGF) analysis, which takes into account the severity of loss faced by the different liability classes in resolution and provides three notches of rating uplift to NORD/LB CBB's deposit ratings and two notches of rating uplift to the senior unsecured programme ratings; and (4) a moderate probability of NORD/LB CBB receiving support from the <u>Government of Germany</u> (Aaa stable) in case of need, resulting in a one-notch rating uplift.

NORD/LB CBB's b2 BCA is aligned with that of its owner, NORD/LB, because we consider NORD/LB CBB to be a highly integrated and harmonised subsidiary.

Credit strengths

- » NORD/LB CBB's asset quality is sound, characterised by its low share of nonperforming loans and the credit protection granted by its parent.
- » The bank has a cost-efficient covered bond funding franchise.
- » In resolution, senior creditors would face an extremely low loss given failure because they would benefit from the loss absorbing buffers implied by NORD/LB Group's subordinated instruments and its large volume of outstanding senior debt.

Credit challenges

- » Tight integration into NORD/LB, which bears downside potential for NORD/LB CBB's ratings
- » Strong emphasis on market funding
- » Moderate return on assets after credit protection fee payments to the parent

Outlook

- » NORD/LB CBB's long-term ratings carry a negative outlook.
- » This mirrors the negative outlook on the ratings of its parent NORD/LB. As part of our 12 December rating action, we maintained a negative outlook on NORD/LB CBB's long-term issuer rating. The negative outlook therefore reflects our view that once the pending Bank Recovery and Resolution Directive amendments are transposed into German law, unsecured bonds that meet the definition of Article 46f of the German Banking Act (§46f KWG) could rank pari passu with future junior senior bonds. This may call into question the moderate probability of government support we currently consider warranted for senior unsecured debt instruments.

Factors that could lead to an upgrade

- » There is currently limited upward pressure on NORD/LB CBB's ratings, as indicated by the negative outlook.
- » Upward rating pressure on NORD/LB CBB's issuer, senior unsecured programme and deposit ratings would be subject to respective rating upgrades for its parent.

Factors that could lead to a downgrade

- » As indicated by the negative outlook, we may downgrade the ratings of NORD/LB and of its subsidiary NORD/LB CBB if their BCAs are downgraded.
- » We would consider downgrading the BCA of NORD/LB if (1) its pre-provision income proves insufficient to absorb additional loanloss provisioning needs, specifically in the bank's high-risk ship finance portfolio, thereby hurting capitalisation; or (2) the bank faces extended difficulties in accessing debt markets for its medium- and long-term senior funding requirements.
- » Furthermore, the long-term issuer and deposit ratings of NORD/LB and NORD/LB CBB may be downgraded if, at the group level, the amount of equal-ranking or subordinated debt for an individual debt class were to decline beyond our current expectations, leading to a less favourable outcome under our Advanced LGF analysis.
- » We may downgrade by one notch the senior unsecured debt instrument ratings that currently incorporate one notch of government support if German legislative changes rank outstanding senior unsecured debt instruments pari passu with future issuance of junior senior debt. For additional information, please refer to <u>Moody's affirms 22 German banks' senior unsecured debt</u> ratings; changes 16 outlooks to negative, FAQ on credit impact of changes to EU insolvency hierarchy on German bank debt and Proposed Update to the Banks Rating Methodology – Issuer Ratings and German Registered Bonds.

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.moodys.com for the most updated credit rating action information and rating history.

Key indicators

Exhibit 1

NORD/LB Luxembourg S.A. Covered Bond Bank (Consolidated Financials) [1]

0 (
	12-17 ²	12-16 ²	12-15 ²	12-14 ²	12-13 ³	CAGR/Avg.4
Total Assets (EUR million)	14,634	15,134	15,048	15,480	15,873	-2.0 ⁵
Total Assets (USD million)	17,573	15,963	16,346	18,732	21,872	-5.3 ⁵
Tangible Common Equity (EUR million)	664	667	671	702	703	-1.4 ⁵
Tangible Common Equity (USD million)	798	704	729	849	968	-4.7 ⁵
Problem Loans / Gross Loans (%)	0.3	0.8	2.1	1.9	3.4	1.7 ⁶
Tangible Common Equity / Risk Weighted Assets (%)	15.7	15.8	16.2	15.1	15.9	15.7 ⁷
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	4.3	9.1	19.8	15.9	23.4	14.5 ⁶
Net Interest Margin (%)	0.7	0.6	0.6	0.6	0.6	0.6 ⁶
PPI / Average RWA (%)	1.0	0.9	1.0	0.7	0.5	0.9 ⁷
Net Income / Tangible Assets (%)	0.2	0.2	0.2	0.2	0.1	0.26
Cost / Income Ratio (%)	55.9	52.6	53.5	62.3	66.0	58.1 ⁶
Market Funds / Tangible Banking Assets (%)	66.5	66.2	66.8	70.0	89.4	71.8 ⁶
Liquid Banking Assets / Tangible Banking Assets (%)	30.3	33.6	39.8	33.5	49.6	37.3 ⁶
Gross Loans / Due to Customers (%)	268.9	241.5	210.1	197.5	614.3	306.4 ⁶

[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] May include rounding differences due to scale of reported amounts [5] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime [6] Simple average of periods presented for the latest accounting regime. [7] Simple average of Basel III periods presented Source: Moody's Financial Metrics

Profile

NORD/LB Luxembourg S.A. Covered Bond Bank (NORD/LB CBB) is a specialised issuer of public-sector covered bonds (lettres de gage publiques), thereby contributing to the diversified funding structure and funding sources of the Germany-based NORD/LB, its 100% owner. This issuance tool allows NORD/LB Group to increase the scope of assets eligible for refinancing through covered bonds by transferring specific assets eligible for cover pool inclusion under Luxembourg's covered bond framework to the Luxembourg-based subsidiary.

NORD/LB CBB's business model as a specialised issuer of lettres de gage may face challenges in 2018-19, considering the targeted harmonisation of the legal framework for covered bonds in the EU. At the same time, the bank sees opportunities as a specialised issuer of other debt products, including secured green bonds (lettres de gage énergies renouvelables).

NORD/LB CBB reported total assets of \in 15.4 billion as of December 2017 and total outstanding covered bonds of \in 4.0 billion. NORD/LB has pledged to support its subsidiary based on a letter of comfort (*Patronatserklärung*).

Detailed credit considerations

Tight integration into NORD/LB bears downside potential for NORD/LB CBB's ratings

NORD/LB CBB's credit profile is tightly interlinked with that of its parent <u>NORD/LB</u>. Considering the subsidiary's name identity with its parent bank, its role of a specialised financier within NORD/LB Group and its high proportion of intragroup liabilities, we consider the bank to be a highly integrated and harmonised subsidiary, with a limited proprietary franchise. The respective factors that lead to this categorisation imply a high correlation of risk between the parent and the subsidiary.

The close integration of NORD/LB CBB into NORD/LB Group therefore also limits the significance of a standalone analysis of the subsidiary's financials. Although the bank itself holds an insignificant amount of high-risk assets and is adequately capitalised, the vulnerabilities at the group level — specifically related to its parent's asset risk and therefore its solvency — drive our assessment of NORD/LB CBB's default risk and therefore limit its BCA and ratings.

NORD/LB CBB does not have to adhere to any regulatory limits for intragroup lending exposures because it is exempt from respective compliance requirements, based on a waiver from the Luxembourg regulator.

Moderate profitability reflects low asset-risk profile

NORD/LB CBB has consistently made positive contributions to group profit in the five years to 2017. Its cost-to-income ratio has moved within a narrow range of 53%-56% since 2015. The bank's broadly resilient revenue and pre-provision income reflect its stable net interest income from long-dated assets and very low risk provisions, owing to its low-risk lending exposures.

The bank's consistently low risk provisions benefit from the credit protection sourced selectively from the parent bank. The respective guarantees provided by NORD/LB stood at \in 3.8 billion as of 31 December 2017, representing over 44% of the bank's \in 8.6 billion loan book.

NORD/LB CBB reported a \leq 40.3 million pretax profit in 2017. With a 0.2% return on assets during 2015-17, the bank's profitability is moderate. NORD/LB CBB's profitability is constrained by its low net interest margin, which was 0.7% in 2017, reflective of the goodquality, and therefore low-yielding, asset portfolio. In addition, the bank has high fee and commission expenses that it pays to its parent for the retention of credit risks on transferred assets. That said, the important role of low-cost market funds in NORD/LB CBB's funding mix has helped the bank withstand the margin pressures that deposit-funded institutions are increasingly exposed to in the low interest rate environment.

Given its low-risk asset base, NORD/LB CBB is adequately capitalised

As of 31 December 2017, NORD/LB CBB reported an adequate Common Equity Tier 1 (CET1) capital ratio of 14.7% (December 2016: 14.8%) and a relatively modest regulatory leverage ratio of 3.8%. The comparatively low leverage ratio primarily reflects the high degree of effective credit risk transfers to its parent bank through individually guaranteed loan exposures. This allows the bank to operate with a low risk-weighted assets (RWA) density. NORD/LB CBB's \leq 4.2 billion in RWA as of year-end 2017 represented 28% of its reported total assets of \leq 15.4 billion.

The low RWA density is a function of not only the considerable guaranteed portion of its loan book but also the low-risk nature of its unguaranteed exposures. Almost 49% of its \leq 17.2 billion total exposure as of December 2017 was to financial institutions and public-sector clients. The bank's defaulted exposure amounted to a low \leq 25 million.

NORD/LB CBB's covered bond franchise and access to parental funding mitigate its high dependence on market funds

NORD/LB CBB sources the vast majority of its funding through debt issuance and interbank borrowings. Moreover, the bank participated in the TLTRO II programme of the ECB in March 2017. However, we do not expect this setup to result in undue liquidity risk that differs from that of its parent, NORD/LB, given the high integration of the subsidiary in the parent's treasury management and the parent's role as the provider of medium- and long-term senior unsecured funding.

NORD/LB generally provides the senior unsecured funding with initial maturities greater than two years for its subsidiary, which covered more than 25% of NORD/LB CBB's €15.4 billion total assets as of December 2017. NORD/LB's significant contribution to the subsidiary's funding needs underscores the importance of the group's funding support for NORD/LB CBB's funding structure.

Support and structural considerations

Affiliate support

We align NORD/LB CBB's Adjusted BCA with the ba3 Adjusted BCA of NORD/LB, which results in a two-notch affiliate support rating uplift. NORD/LB CBB's Adjusted BCA incorporates the high likelihood of support being available to NORD/LB Group from the cross-sector support mechanism of S-Finanzgruppe, from which we expect the Luxembourg-based subsidiary would equally benefit.

NORD/LB provides a letter of comfort for the benefit of its subsidiary and has proven its ability and willingness to support its subsidiaries in case of need, as demonstrated in 2017 when NORD/LB supported (and subsequently merged with) its former subsidiary <u>Bremer Landesbank Kreditanstalt Oldenburg GZ</u>.

Loss Given Failure (LGF) analysis

NORD/LB CBB is subject to the EU Bank Recovery and Resolution Directive, which we consider an operational resolution regime. Notwithstanding the current differences in Luxembourg's and Germany's insolvency hierarchies, we expect NORD/LB CBB to be included in the resolution perimeter of its parent entity NORD/LB and therefore apply our LGF analysis of NORD/LB, which takes into consideration the risks faced by the different debt and deposit classes across the liability structure at failure at the group level. In our LGF analysis for NORD/LB Group, 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, and a 5% run-off in preferred deposits for NORD/LB. These are in line with our standard assumptions. In line with the new German insolvency legislation that effectively subordinates senior bonds and notes to deposits in resolution since January 2017, we base our calculation on the assumption that deposits are preferred to most senior unsecured debt instruments.

- » For deposits, our LGF analysis indicates an extremely low loss given failure, leading to a three-notch uplift from the bank's ba3 Adjusted BCA.
- » For senior unsecured debt and the issuer rating, our LGF analysis indicates a very low loss given failure, leading to a two-notch uplift from the bank's ba3 Adjusted BCA.

Government support

As a result of the Luxembourg-based bank's close integration into NORD/LB Group, we expect any potential support from the German government — which would be made available through S-Finanzgruppe — to be available to both NORD/LB and NORD/LB CBB. We therefore include one notch of government support from Germany in the deposit, issuer and Counterparty Risk Ratings and the CR Assessment of NORD/LB CBB.

Counterparty Risk Ratings (CRRs)

CRRs are opinions of the ability of entities to honour the uncollateralised portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honoured. CRRs are distinct from ratings assigned to senior unsecured debt instruments and from issuer ratings because they reflect that, in a resolution, CRR liabilities might benefit from preferential treatment compared with senior unsecured debt. Examples of CRR liabilities include the uncollateralised portion of payables arising from derivatives transactions and the uncollateralised portion of liabilities under sale and repurchase agreements.

NORD/LB CBB's CRRs are positioned at Baa2/P-2

The CRRs, prior to government support, are positioned three notches above the Adjusted BCA of ba3, reflecting the extremely low loss given failure from the high volume of instruments that are subordinated to CRR liabilities. NORD/LB CBB's CRRs benefit from one notch of rating uplift based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Counterparty Risk (CR) 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 both 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 (for example, swaps), letters of credit, guarantees and liquidity facilities.

NORD/LB CBB's CR Assessments are positioned at Baa2(cr)/P-2(cr)

The CR Assessment, prior to government support, is positioned three notches above the Adjusted BCA of ba3 based on the buffer against default provided to the senior obligations represented by the CR Assessment by more subordinated instruments, including junior deposits and senior unsecured debt, within the context of the group liability structure of NORD/LB.

NORD/LB CBB's CR Assessment benefits from one notch of rating uplift based on government support, in line with our support assumptions on deposits and senior unsecured debt.

Rating methodology and scorecard factors

The principal methodology we used in rating NORD/LB CBB was the <u>Banks</u> rating methodology published in June 2018.

We do not apply our banking scorecard for the positioning of NORD/LB CBB's BCA, given the alignment of the bank's BCA with that of its parent.

Ratings

Category	Moody's Rating		
NORD/LB LUXEMBOURG S.A. COVERED BOND			
BANK			
Outlook	Negative		
Counterparty Risk Rating	Baa2/P-2		
Bank Deposits	Baa2/P-2		
Baseline Credit Assessment	b2		
Adjusted Baseline Credit Assessment	ba3		
Counterparty Risk Assessment	Baa2(cr)/P-2(cr)		
Issuer Rating	Baa3		
Senior Unsecured MTN -Dom Curr	(P)Baa3		
ST Issuer Rating	P-2		
PARENT: NORDDEUTSCHE LANDESBANK GZ			
Outlook	Negative		
Counterparty Risk Rating	Baa2/P-2		
Bank Deposits	Baa2/P-2		
Baseline Credit Assessment	b2		
Adjusted Baseline Credit Assessment	ba3		
Counterparty Risk Assessment	Baa2(cr)/P-2(cr)		
Issuer Rating	Baa3		
Senior Senior Unsecured -Dom Curr	Baa2		
Senior Unsecured	Baa3		
Subordinate	B1		
Commercial Paper	P-2		
Other Short Term -Dom Curr			
Source: Moody's Investors Service			

Source: Moody's Investors Service

Endnotes

- 1 The ratings shown are NORD/LB's deposit rating and outlook, its senior unsecured rating and outlook, and its Baseline Credit Assessment.
- 2 The ratings shown are S-Finanzgruppe's corporate family rating and outlook, and its BCA.

© 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 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.moodys.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. ("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 1126033

Contacts

Katharina Barten Senior Vice President katharina.barten@moodys.com **Christina Holthaus** *Analyst* christina.holthaus@moodys.com

CLIENT SERVICES

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

MOODY'S INVESTORS SERVICE