

Global Credit Research - 25 Jan 2016

Helsinki, Finland

Ratings

Category	Moody's Rating
Outlook	Stable
Bank Deposits	Aa3/P-1
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Issuer Rating	Aa3
Senior Unsecured	Aa3
Subordinate	Baa1
Pref. Stock Non-cumulative	Baa3 (hyb)
Commercial Paper -Dom Curr	P-1
Other Short Term -Fgn Curr	P-1
Other Short Term -Dom Curr	(P)P-1
Parent: OP Financial Group	
Outlook	Stable
Baseline Credit Assessment	a3
Adjusted Baseline Credit Assessment	a3
Counterparty Risk Assessment	Aa2(cr)/P-1(cr)
Pohjola Insurance Ltd	
Outlook	Stable
Insurance Financial Strength	A3

Contacts

Analyst	Phone
Maria Cabanyes/Madrid	34.91.768.8200
Giovanni Fontana/London	44.20.7772.5454
Sean Marion/London	
Malika Takhtayeva/London	

Key Indicators

Pohjola Bank plc (Consolidated Financials)[1]

	[2]9-15	[2]12-14	[3]12-13	[3]12-12	[3]12-11	Avg.
Total Assets (EUR million)	51,009.0	45,111.0	40,664.0	44,623.0	41,069.0	[4]5.6
Total Assets (USD million)	56,938.6	54,586.7	56,032.6	58,830.6	53,313.5	[4]1.7
Tangible Common Equity (EUR million)	2,614.0	2,300.0	1,970.0	1,680.0	1,510.6	[4]14.7
Tangible Common Equity (USD million)	2,917.9	2,783.1	2,714.5	2,214.9	1,961.0	[4]10.4
Problem Loans / Gross Loans (%)	2.8	3.1	3.3	2.4	2.5	[5]2.8
Tangible Common Equity / Risk Weighted Assets (%)	12.5	10.5	12.3	11.0	10.5	[6]11.5
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	16.5	19.3	22.2	17.4	18.6	[5]18.8
Net Interest Margin (%)	0.5	0.6	0.6	0.6	0.8	[5]0.6
PPI / Average RWA (%)	3.4	2.9	3.2	2.8	2.2	[6]3.1
Net Income / Tangible Assets (%)	1.1	1.1	1.1	0.7	0.5	[5]0.9
Cost / Income Ratio (%)	38.7	49.8	52.5	57.4	62.8	[5]52.2
Market Funds / Tangible Banking Assets (%)	55.0	58.9	59.3	60.2	66.6	[5]60.0

Liquid Banking Assets / Tangible Banking Assets (%)	57.7	55.0	54.2	49.2	49.8	[5]53.2
Gross loans / Due to customers (%)	114.9	137.8	145.0	130.7	161.0	[5]137.9

Source: Moody's

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

Opinion

SUMMARY RATING RATIONALE

Pohjola Bank Plc's senior debt and deposit ratings of Aa3/Prime-1 reflect (1) the bank's baseline credit assessment (BCA) of baa2; (2) its a3 adjusted BCA (BCA + affiliate support), reflecting the joint and several guarantee scheme within OP Financial Group (BCA a3); (3) the two-notch rating uplift from our advanced Loss Given Failure (LGF) analysis which reflects the debt cushion of bail-in able liabilities; and (4) one-notch uplift from our assessment of a moderate likelihood of government support.

The bank's BCA reflects the bank's strong national franchise, focused mainly on corporate lending, its stable asset quality and improving capitalisation. The BCA is constrained by the bank's high sector concentration and reliance on market funding.

Pohjola Bank's Counterparty Risk Assessment (CR Assessment) is Aa2(cr)/Prime-1(cr).

Rating Drivers

- Strong domestic franchise in corporate banking although some functions are transferred away from the bank to other parts of the OP Financial Group
- Improving profitability trend could reverse as functions are transferred away from the bank
- Pohjola Bank's ratings are supported by Finland's Strong+ Macro Profile
- High reliance on short-term wholesale funding mitigated by liquidity buffer
- Asset quality is stable in spite of some sector concentration
- Good capital position likely to strengthen further

Rating Outlook

The outlook on Pohjola Bank's deposit and senior unsecured ratings is stable.

What Could Change the Rating - Up

Upward pressure on the ratings could develop as a result of: (1) stronger profitability; (2) reduced reliance on market funding and a longer debt maturity profile; and (3) a sustained reduction in sector concentration risks, particularly related to real estate.

What Could Change the Rating - Down

Pohjola Bank's ratings could be downgraded as a result of weaker asset quality, capitalisation or a downgrade of OP Financial Group. A smaller cushion of bail-in eligible liabilities (on OP Financial Group level) or less likely government support would also result in downward rating pressure.

DETAILED RATING CONSIDERATIONS

STRONG DOMESTIC FRANCHISE IN CORPORATE BANKING ALTHOUGH SOME FUNCTIONS ARE TRANSFERRED AWAY FROM THE BANK TO OTHER PARTS OF THE OP FINANCIAL GROUP

Pohjola Bank's strong franchise supports its asset quality and profitability, and is underpinned by its strong domestic market position in corporate banking, with a reported a market share of 22% at end-August 2015. The bank is also a leading player in non-life insurance, with a market share of 31.5% (of written premiums) at year-end 2014. In addition, the bank benefits from being part of OP Financial Group, a leading financial services group in Finland, thus laying ground for cross-selling insurance products to banking customers and vice versa.

Pohjola Bank will play a lesser role within OP Financial Group in the future, negatively impacting the bank's franchise. On 30 December 2015, Pohjola Bank announced the execution of its de-merger plan by which Group treasury, corporate bank activities, equities and non-life insurance will remain with Pohjola Bank plc while all other operations, namely wealth management, card and property management operations will be transferred to a newly-created company. In addition, OP Financial Group is assessing whether the bank should continue to play the role of central bank for the group or whether the central banking operations should be separated as a detached subsidiary, wholly owned by OP Cooperative (the central institution of OP Financial Group). Since a more specific plan or schedule for the structural change of the non-life insurance segment (potentially transferring from Pohjola Bank to the direct ownership of OP Cooperative) has not yet been decided, it is reported as continuing operations together with Banking and Other Operations in Pohjola Bank's financial reporting.

As Pohjola Bank and other member credit institutions of OP Financial Group are responsible for each other's liabilities, as outlined in the Act on the Amalgamation of Deposit Banks, Pohjola Bank can issue debt at more advantageous interest rates, a credit positive.

Pohjola Bank plc will be renamed OP Corporate Bank Plc in April 2016.

IMPROVING PROFITABILITY TREND COULD REVERSE AS FUNCTIONS ARE TRANSFERRED AWAY FROM THE BANK

We expect Pohjola Bank's profitability to remain strong, owing to the bank's corporate banking focus which is a higher return/risk business compared to household mortgage lending. The bank's Moody's-calculated net income to tangible assets ratio stood at 1.14% at end-September 2015, compared to 1.10% in 2014. That said, we expect profits, in absolute terms, to drop as the wealth management and other businesses are transferred away from the bank. This decrease would be significant if non-life operations are eventually moved out of the bank, because they accounted for 42% of Pohjola Bank's earnings before tax for Q1-Q3 2015, after an 18% growth year-on-year.

Pohjola Bank has a track-record of strengthening its efficiency over many years. Its Moody's-calculated cost-to-income ratio was 38.67% at end-September 2015, down from approximately 60% three years earlier. It is unlikely that this ratio will decrease much further, based on trends at other Nordic banks.

However, in 2012 the bank launched a cost-savings programme aiming to save EUR50 million by the end of 2015. This is part of the wider OP Cooperative cost-efficiency programme that targets EUR150 million annual savings by the end of 2015, and which is very close to completion; 75% of the savings target had been reached in 2013 and 2014. Pohjola Bank expects to keep total expenses at end-2015 at the levels reported in 2012.

We are assessing the longer term impact of Pohjola's de-merger as they are announced and implemented.

Our assigned Profitability score has been adjusted downwards to baa2 to reflect the bank's earnings volatility as a corporate bank and to reflect the expected negative impact on bottom-line profitability as a result of the transfer of wealth management and other businesses away from the bank. The adjustment does not incorporate the impact on the bank's profitability if non-life operations are also transferred.

POHJOLA BANK'S RATINGS ARE SUPPORTED BY FINLAND'S STRONG + MACRO PROFILE

OP Financial Group's activity is focused in Finland, which is powered by an innovation-driven economy, characterised by high living standards and a predictable economic policy framework. Post-crisis, the country's public finances are in much better shape than those of many other advanced economies, despite similar struggles to revive economic growth and increasing debt. While this stable framework benefits the Finnish banking sector, it exhibits significant reliance on wholesale funding, exposing banks to swings in investor sentiment. This risk is more pronounced in Finland compared to its Nordic peers because the country benefits to a lesser extent from an established, captive, investor community compared to countries like Sweden (Aaa stable) and Denmark (Aaa stable).

HIGH RELIANCE ON SHORT-TERM WHOLESALF FUNDING MITIGATED BY LIQUIDITY BUFFER

Pohjola Bank currently plays the role of central bank for OP Financial Group. Among other things, the bank is

responsible for issuing senior unsecured debt and short-term debt as well as managing the group's liquidity buffer.

The bank is reliant on market funding, which exposes it to swings in investor sentiment. Market funds accounted for 59% of tangible banking assets at year-end 2014 and 55% at end-September 2015. More than half were short term in nature, including commercial paper. While reliance on market funding is a credit weakness, we note positively that the bank has taken steps to lengthen its debt maturity profile. However, the current reorganisation of functions within OP Financial Group could result in the bank losing its central bank role, and may therefore change the bank's funding profile. A decision to strip Pohjola Bank of its central bank role has not been taken nor has another suitable entity been identified by the group.

The bank maintains a large, high quality liquidity buffer, which is common for Nordic banks. The buffer (at market value and after haircuts) amounted to EUR18.7 billion, or 74% of market funding, at end-September 2015. Most securities are eligible for Central Bank repo transactions, which gives the bank some flexibility in a currently unlikely stress scenario.

The bank's high exposure to short-term funding and its large liquidity buffer is captured in the baa2 Combined Liquidity Score.

ASSET QUALITY IS STABLE IN SPITE OF ECONOMIC RECESSION AND SECTOR CONCENTRATION

Pohjola Bank has a track record of strong asset quality for a corporate bank: its Moody's-calculated problem loans ratio stood at 2.8% at the end-September 2015, down from 3.1% at year-end 2014. The decline is driven by increased recoveries. This ratio is slightly higher compared to large Swedish banks and mainly explained by the fact that Pohjola Bank is focused more exclusively on corporate lending. Nordic banks with a high share of household mortgage lending tend to benefit from a lower level of problem loans.

Real GDP growth has been negative in Finland for the last three years and we forecast another year of contraction (-0.5%) for 2015. We expect the persistent absence of economic growth to weigh on banks' asset quality.

Pohjola Bank's asset quality is constrained by its high sector concentration. At end-September 2015, the most significant industries included energy 11.5%, renting and operating of residential real-estate 9.5%, wholesale and retail trade 9.3%. In mitigation, a total of 44% of exposures within renting and operating of real estate were guaranteed by the government of Finland.

The bank's Asset Risk at baa2 score reflects the above-mentioned constraints.

GOOD CAPITAL POSITION LIKELY TO STRENGTHEN FURTHER

We consider Pohjola Bank to be well capitalised. The bank reported a CET1 ratio of 13.7% at end-September 2015 compared to 12.4% at year-end 2014. During Q1, the bank updated its probability of default assumptions for corporate exposures that had a 0.7 percentage point positive impact on the bank's CET1 ratio.

In March 2014, the bank announced a CET1 ratio target of 15%, which it intends to reach by year-end 2016. On top of this, the bank is subject to a 13% return on equity target. Pohjola Bank will not pay out more than 30% of profits in dividends before the CET1 target is reached. The pay-out ratio target will be at least 50% once the bank has achieved a 15% CET1 ratio.

The assigned score reflects Pohjola bank's more recent regulatory capital ratios as well as the evolution of leverage metrics which have been more stable during the current year.

NOTCHING CONSIDERATIONS

LOSS GIVEN FAILURE AND ADDITIONAL NOTCHING

Finland is subject to the EU Bank Resolution and Recovery Directive (BRRD), which we consider to be an Operational Resolution Regime. We assume residual tangible common equity of 3% and losses post-failure of 8% of tangible banking assets, a 25% run-off in "junior" wholesale deposits, a 5% run-off in preferred deposits, and assign a 25% probability to deposits being preferred to senior unsecured debt. In line with large European banks, we assume 26% of deposits are junior. These are in line with our standard assumptions.

The confirmation of Pohjola Bank's Aa3 deposit and senior unsecured debt ratings considers (1) Pohjola Bank's a3 adjusted BCA; (2) a very low loss-given-failure for these instruments under our advanced LGF framework, resulting in a two-notch advanced LGF uplift; and (3) a moderate probability of government support, translating into

an additional notch of uplift. The reduction of our government support assumptions, reflecting the introduction of an operational resolution regime in Finland, is balanced by the two-notch benefit that deposit and senior unsecured ratings receive as a result of our advanced LGF analysis.

Our advanced LGF analysis is based on the balance sheet of the entire OP Financial Group (including Pohjola Bank), because all member credit institutions in OP Financial Group (excluding insurance companies and some other group companies) guarantee each other's liabilities, in accordance with the Amalgamations Act.

For junior securities issued by Pohjola Bank, our advanced LGF analysis confirms a high loss-given-failure, given the small volume of debt and limited protection from more subordinated instruments and residual equity. We also incorporate additional notching for junior subordinated and preference share instruments reflecting the coupon features.

GOVERNMENT SUPPORT

The implementation of an operational resolution regime in Finland has caused us to reconsider the potential for government support to benefit certain creditors. Following the introduction of BRRD, we believe the probability of government support for Pohjola Bank's long-term and deposits ratings to be moderate, translating into one notch of uplift from its unsupported rating level. This reflects Pohjola Bank's profile as one of the leading financial institutions in Finland. For other junior securities, we continue to assume that potential government support is low and as such these ratings do not include any related uplift.

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 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 (e.g., swaps), letters of credit, guarantees and liquidity facilities.

Pohjola Bank's CR Assessment is positioned at Aa2(cr)/Prime-1(cr). The CR Assessment takes into account three notches of uplift on the Adjusted BCA of a3, based on the substantial cushion against default provided to the senior obligations represented by the CR Assessment by subordinated instruments. The main difference with our Advanced LGF approach used to determine instrument ratings is that the CR Assessment captures the probability of default on certain senior obligations, rather than expected loss, therefore we focus purely on subordination and take no account of the volume of the instrument class.

The CR Assessment also benefits from a low assessment of government support, translating into an additional notch of uplift. This reflects our view that any support provided by governmental authorities to a bank which benefits senior unsecured debt or deposits is very likely to benefit operating activities and obligations reflected by the CR Assessment as well, consistent with our belief that governments are likely to maintain such operations as a going-concern in order to reduce contagion and preserve a 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.

NOTE ON DATA

The financial data in the following sections are sourced from Pohjola Bank's financial statements unless otherwise stated.

Rating Factors

Pohjola Bank plc

Macro Factors	
Weighted Macro Profile	Strong +

Financial Profile						
Factor	Historic Ratio	Macro Adjusted Score	Credit Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
<i>Problem Loans / Gross Loans</i>	2.9%	a2	↓	baa2	Single name concentration	Sector concentration
Capital						
<i>TCE / RWA</i>	12.5%	a3	← →	baa1	Expected trend	
Profitability						
<i>Net Income / Tangible Assets</i>	1.0%	a3	↓	baa2	Earnings quality	
Combined Solvency Score		a3		baa2		
Liquidity						
Funding Structure						
<i>Market Funds / Tangible Banking Assets</i>	58.9%	b3	← →	ba3	Market funding quality	
Liquid Resources						
<i>Liquid Banking Assets / Tangible Banking Assets</i>	55.0%	aa2	← →	aa2	Stock of liquid assets	
Combined Liquidity Score		baa3		baa2		

Financial Profile	baa2
--------------------------	-------------

Qualitative Adjustments	Adjustment
Business Diversification	0
Opacity and Complexity	0
Corporate Behavior	0
Total Qualitative Adjustments	0

Sovereign or Affiliate constraint	Aaa
-----------------------------------	-----

Scorecard Calculated BCA range	baa1 - baa3
--------------------------------	-------------

Assigned BCA	baa2
---------------------	-------------

Affiliate Support notching	2
----------------------------	---

Adjusted BCA	a3
---------------------	-----------

Instrument Class	Loss Given Failure	Additional notching	Preliminary Rating	Government Support	Local Currency	Foreign Currency
-------------------------	---------------------------	----------------------------	---------------------------	---------------------------	-----------------------	-------------------------

	notching		Assessment	notching	rating	rating
Deposits	2	0	a1	1	Aa3	Aa3
Senior unsecured bank debt	2	0	a1	1	Aa3	Aa3
Dated subordinated bank debt	0	-1	baa1	0	Baa1	Baa1
Non-cumulative bank preference shares	-1	-2	baa3	0	Baa3(hyb)	Baa3(hyb)

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 <http://www.moodys.com> for the most updated credit rating action information and rating history.



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

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

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

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

cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's Publications.

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

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

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

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