

CREDIT OPINION

4 July 2016

Update

Rate this Research >>

RATINGS

OP Insurance Ltd	
Domicile	Finland
Long Term Rating	A3
Type	Insurance Financial Strength
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

Dominic Simpson 44-20-7772-1647
VP-Sr Credit Officer
dominic.simpson@moody's.com

Nicolò Squercina 44-20-7772-1541
Associate Analyst
nicolo.squercina@moody's.com

Giovanni Meloni 44-20-7772-1089
Analyst
giovanni.meloni@moody's.com

Antonello Aquino 44-20-7772-1582
Associate Managing Director
antonello.aquino@moody's.com

CLIENT SERVICES

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

OP Insurance Ltd

Semi-Annual Update

Summary Rating Rationale

Moody's A3 (stable outlook) insurance financial strength rating (IFSR) on OP Insurance Ltd (OPIL) reflects OP Insurance's strong non-life market position in Finland, as well as its good financial fundamentals with consistent profitability and relatively low, though increased financial leverage. These strengths are off-set by its relative lack of brand reach and geographic diversification, a relatively high proportion of high risk assets in recent years, and a relatively low target Solvency II ratio. The A3 IFSR of OPIL, which represents the vast majority of OP's non-life insurance business (OPNLI), receives no uplift as a result of its ownership by the Finnish cooperative banking group, OP Financial Group, given the a3 BCA of the banking operation.

The vast majority of OPNLI is accounted for by OPIL which is a separate legal entity to the other smaller Non-Life operation, A-Insurance Ltd, which provides insurance for commercial truckers and taxi service branches, although all employees are employed by OPIL. Since it has acquired the minority shares in OP Corporate Bank, which currently owns OPIL, OP Cooperative intends transferring ownership of the Non-life Insurance directly to itself in the future, while it has already transferred the Wealth Management segment at the end of 2015.

As part of the re-organisation process, starting from 1 January 2015, OP-Pohjola Group has been renamed as OP Financial Group. From 4 April 2016, the business names of OP Financial Group's main operating companies have also been renamed under the OP brand. Therefore the Banking, Non-Life insurance, Wealth Management and Property Management businesses have been renamed respectively OP Corporate Bank plc, OP Insurance Ltd, OP Asset Management Ltd and OP Property Management Ltd. As part of the reorganization of the banking activities the Group decided to abandon the plan to merge the two banking operations, OP Corporate Bank plc and Helsinki OP Bank Ltd. Helsinki OP Bank Ltd has been converted from a limited liability company to a cooperative bank effective from 1 April 2016 and it has been renamed Helsinki Area Cooperative Bank (OP Helsinki).

On June 10 2016 OP Financial Group announced an updated long-term strategy aimed at transforming the group from a plain financial services provider into a diversified services company with a strong financial services expertise. The business diversification will involve expanding the Health and Wellbeing business which is intended to become the Group's fourth business line alongside Banking, Non-Life Insurance and Wealth Management.

At Q1 2016, OPNLI's business, which is almost exclusively conducted in Finland, was split, in terms of net earned premiums, 54% private customers, 42% corporate customers, with the remaining 4% from the Baltic States.

On 15 May 2015, OPIL's IFSR was affirmed with a stable outlook. Prior to that in May 2012, the IFSR was downgraded to A3 with a stable outlook assigned, driven primarily by the wider downgrade of the OP Financial Group (please see relevant press release for further details).

Credit Strengths

- » Strong market position in Finland
- » Very good profitability, with relatively low combined ratio, although reliance on realised gains
- » Relatively low, though increased financial leverage
- » Importance to OP Financial Group in light of cross-selling opportunities

Credit Challenges

- » At least 90% of premiums come from a single country, namely Finland
- » Relatively high proportion of high risk assets has been a feature of recent years
- » Relatively low target Solvency II ratio, with meaningful dividend payments to parent a recent feature

Rating Outlook

The rating outlook is stable.

What to Watch for:

- » Potential for market value losses on the investment portfolio due to the relatively higher risk investment portfolio
- » Seasonality of losses (particularly in Q1 due to winter related claims)
- » Transfer of ownership of OPIL to OP Cooperative from OP Corporate Bank
- » Potential for reserve volatility with OPNLI's reserves vulnerable to longevity risk and a lowering of the discount rate
- » Profitability and investment portfolio mix trends against the background of very low interest rates and equity market volatility
- » Weakening of Finland's economy with a potential negative impact on growth prospects and profitability for Non-Life insurance products
- » Evolution of Finnish Competition and Consumer Authority's investigation on OP Financial Group's market position in retail banking services and pricing of non-life insurance products

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.

Factors that Could Lead to an Upgrade

In the medium term, positive rating pressure could arise from the following:

- » An upgrade of OP Financial Group's BCA
- » A material reduction in high risk assets
- » Meaningful geographic and product line diversification without sacrificing profitability

Factors that Could Lead to a Downgrade

Negative pressure could arise from:

- » A downgrading of OP Financial Group's BCA
- » Material weakening of market position
- » Failure to produce a combined ratio, on a cross-cycle and IFRS basis, of below 95%
- » A weakening of capital adequacy

Key Indicators

Exhibit 1

OP Insurance Ltd. [1] [2]	2015	2014	2013	2012	2011
As Reported (Euro Millions)					
Total Assets	3,710	3,454	3,205	3,054	2,847
Total Shareholders' Equity	563	441	392	372	256
Net income (loss) attributable to common shareholders'	197	228	150	216	23
Gross Premiums Written	1,257	1,259	1,149	1,033	949
Net Premiums Written	1,209	1,205	1,093	984	895
Moody's Adjusted Ratios					
High Risk Assets % Shareholders' Equity	129.0%	142.7%	163.1%	150.1%	180.9%
Reinsurance Recoverable % Shareholders' Equity	13.9%	16.1%	15.4%	15.7%	23.7%
Goodwill & Intangibles % Shareholders' Equity	9.5%	9.6%	10.6%	10.5%	8.5%
Gross Underwriting Leverage	5.5x	6.6x	6.5x	6.0x	6.6x
Return on avg. Capital (1 yr. avg ROC)	26.0%	35.7%	24.2%	36.8%	4.0%
Sharpe Ratio of ROC (5 yr. avg)	192.0%	181.3%	182.0%	NA	NA
Adv./ (Fav.) Loss Dev. % Beg. Reserves (1 yr. avg)	0.4%	-0.2%	1.8%	-0.2%	0.8%
Financial Leverage	15.1%	9.4%	9.3%	9.3%	9.9%
Total Leverage	15.1%	9.4%	9.3%	9.3%	9.9%
Earnings Coverage (1 yr.)	42.3x	73.8x	50.7x	66.8x	6.8x
Cash Flow Coverage (1 yr.)	NA	NA	NA	NA	NA

[1] Information based on IFRS financial statements as of Fiscal YE December 31

[2] Certain items may have been relabeled and/or reclassified for global consistency

Source: Company reports, Moody's Investors Service

Notching Considerations

Not applicable.

Detailed Rating Considerations

Moody's rates OPIL A3 for insurance financial strength which is consistent with the adjusted rating indicated by the Moody's insurance financial strength rating scorecard. The scorecard and associated text below are based on OP Insurance Limited on an unconsolidated basis unless otherwise stated.

Insurance Financial Strength Rating

The key factors currently influencing the rating and outlook are:

Market Position, Brand and Distribution: A - LARGE MARKET SHARE BUT CONCENTRATION IN RELATIVELY SMALL MARKET (FINLAND)

With its strong market position in Finland, in which it is currently the largest non-life player with around a 32% market share at YE2015, OPNLI's relative market share metric (of which OPIL is the vast majority) remains very good. Whilst the OP Financial Group connection helps to enhance its customer base and to consolidate its market position, Moody's believes that a challenge for OPNLI will be to increase its market share meaningfully without compromising profitability. Notwithstanding its strong market position, OPNLI operates almost exclusively in the relatively small Finnish market which means it lacks the franchise strength and brand reach which characterises a number of other European P&C operations including some Nordic peers.

Furthermore Moody's notes that underwriting expense as percentage of net written premiums has slightly increased in 2015 for the first time since 2010 to 16.1% from 15.5% in 2014, driven mainly by higher acquisition costs.

Overall, we consider the market position, brand and distribution to be consistent with an A rated company.

Product risk and Diversification: Baa - COMMERCIAL ACCOUNT AND LIABILITY ORIENTATION, AND CONCENTRATION IN FINLAND

With a Commercial account (43%) and Liability orientation (57%), Moody's views the portfolio as potentially more volatile than, for example, some of its Nordic peers. Product diversification is considered good with four distinct lines of business - Motor, Workers Compensation, Accident and Health and Property- producing at least 10% of premium each. However, this is off-set by the concentration in Finland, which itself is highly concentrated, and in three business lines - Statutory Workers' Compensation, Property and Motor which together account for 72% of gross written premiums. Overall, we consider the product focus and diversification to be consistent with a Baa rated company.

Asset Quality: A - HIGH RISK ASSETS SOMEWHAT PRESSURISE ASSET QUALITY

Moody's considers OPIL's overall asset quality to be good, albeit high risk assets remain elevated at OPIL. At YE 2015, goodwill/intangibles and reinsurance recoverables only represented around 9%/14%, respectively, of equity. However, the proportion of high risk assets to equity remains significant, particularly at the OPIL level, at 129% as at YE 2015 (YE 2014: 143%). Within OPIL's high risk assets, the largest holdings are equities (46%), not rated/non-investment grade fixed income securities (21%), real estate (18%) and investments in associates (17%). The improvement in asset quality metrics is driven by the 28% increase in reported shareholders' equity which does not deduct, compared to previous years, the proposed dividend for 2015. After deducting the dividend, high risk assets, reinsurance recoverables and goodwill/intangibles increase respectively to 157%, 17% and 12% of equity.

Furthermore, at the OPNLI level Moody's notes the historically high equities concentration in the Finnish market, and the meaningful exposure to financials, including banks subordinated debt, in the corporate bond portfolio which has increased further in 2015 and 2016 YTD and represented at Q1 2016 36% of the total investment portfolio at fair value. More positively, we note that in recent years the overall direct exposure to sovereign debt in peripheral countries has materially reduced and at Q1 2016 equities exposure was stable at 7% of the total investment portfolio at fair value. Overall, invested asset risk remains higher than for most of OPIL's Nordic insurance peers. However, at the OPNLI level, invested asset risk (as a % of Solvency Capital) was somewhat stronger (albeit still significant) at approximately 99% as at YE 2015 (98% at YE2014).

Capital Adequacy: Baa - RELATIVELY LOW TARGET SOLVENCY II RATIO, WITH MEANINGFUL DIVIDEND PAYMENTS TO PARENT A RECENT FEATURE

OPNLI is targeting a long term solvency ratio of 120% on a Solvency II basis (excluding transitional provisions) which Moody's views as relatively low. At YE 2015, the Solvency II ratio (excluding the effect of transitional provisions and including OVY Insurance Ltd) increased to 146%, after falling below the target level at YE 2014 to 117%, due to the combined impact of lower interest rates and a higher dividend payment. Including the effect of transitional provisions Solvency II ratio at YE 2015 was 165%.

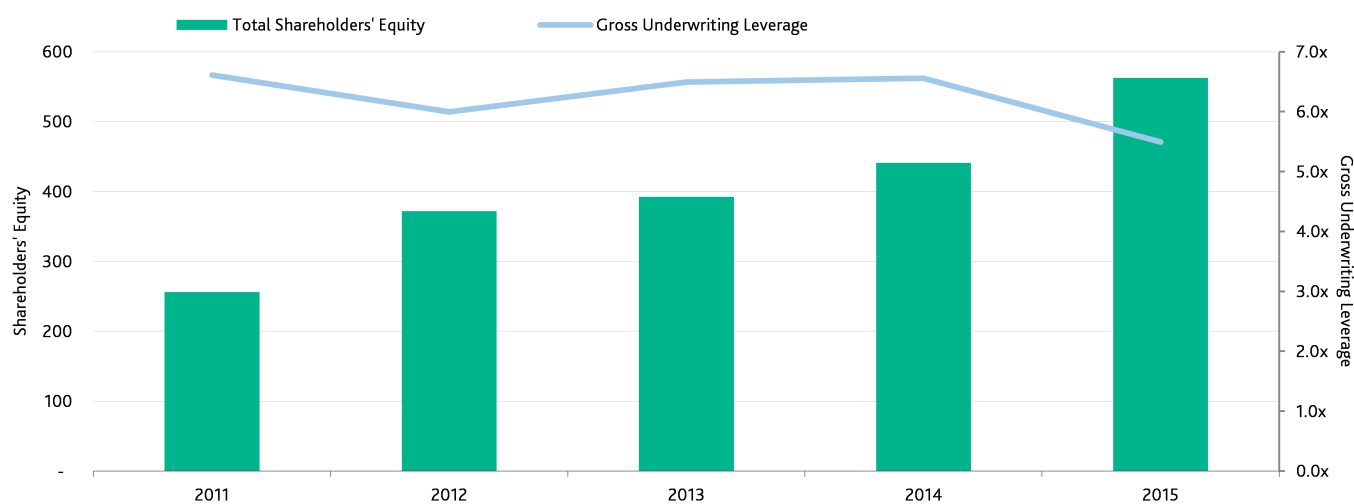
Excluding OVY Insurance Ltd, on a like for like basis compared to YE 2014, the Solvency II ratio increased at YE 2015 to 139% without the effect of transitional provisions (158% including transitional provisions), driven mainly by an increase in the capital base, which in turn benefitted from the improvement in the technical account. The overall capital base includes the new Tier II subordinated loans issued in Q2 2015 of Eur 85 million. At Q1 2016 the Solvency II ratio was 144% excluding the effect of transitional provisions and including OVY Insurance Ltd (166% including transitional provisions). Excluding OVY Insurance Ltd, at Q1 2016 the Solvency II ratio was 137% without the effect of transitional provisions (160% including transitional provisions).

Meaningful dividend payments to its parent have been a recent feature for OPIL representing around 66%, 79% and 87% of 2015, 2014 and 2013 net income respectively, in contrast to capital injections provided to OPNLI during 2008. Moody's notes that for the 2015 results OPIL's board of directors proposes to distribute a dividend of Eur 130 million which, in contrast to previous years, was not deducted from shareholders' equity at YE 2015; on a like for like basis shareholders' equity declined by 2% attributable to the repayment of equity capital of Eur 75 million following the issuance of the Tier II subordinated debt. Including the equity repayment the total payout ratio in 2015 was 104%.

OPIL's gross underwriting leverage (GUL) despite remaining relatively high at around 5.5x improved in 2015 compared to the YE2014 level of 6.6x. After deducting the dividend from shareholders' equity, GUL increased at YE 2015 to 6.9x, although it reduces back to around 5.5x if the difference between fair value and carrying amount of investments is added to equity. This difference is reflected in OPNLI's other reported solvency ratio (solvency capital as a % of net earned premium) which decreased to 70% at YE2015 (75% at YE2014).

Exhibit 2

Shareholders' Equity and Gross Underwriting Leverage



Source: Company reports, Moody's Investors Service

Moody's also considers OPIL's business to be higher risk than some of its Nordic peers in view of the liability and commercial account orientation, although notes that OPIL has consistently delivered bottom-line profits and has meaningful reinsurance cover.

Profitability: A - VERY GOOD PROFITABILITY AND UNDERWRITING PERFORMANCE, ALTHOUGH RELATIVELY LOW SHARPE RATIO

OPIL's 2015 five year average return on capital (excluding fair value gains/losses) is an excellent 25% although this is off-set by a relatively low Sharpe ratio (192%), which considers volatility, in the Baa range. Investment gains and losses have caused meaningful levels of volatility in net income, for example in 2011 and 2012; the ROC in 2011 was a low 4% impacted by fair value investment losses. Furthermore, the underwriting environment for Nordic P&C players in recent years has been very favourable. Notwithstanding this, OPNLI's recent underwriting performance has been very good with at YE 2015 a reported operating combined ratio of 87.3% (2014: 89.4%). The overall combined ratio, which includes changes in reserving basis and amortization on intangible assets arising from the corporate acquisition, improved slightly to 88.8% (91% at YE2014). Moody's notes that at the beginning of 2015 OP Financial

Group introduced a new model to calculate operating combined ratio, which now also reflects changes in the discount rate. 2014 figures have been restated accordingly.

At Q1 2016 OPNLI's operating combined ratio deteriorated to 88.6% (87.2% at Q1 2015), and the overall combined ratio deteriorated to 90.2% (88.8% at Q1 2015). At YE 2015, OPIL reported an improved overall combined ratio of 90.2% (2014: 93.2%) which reduces to 87.4% (90.1%) excluding the unwinding of discount.

At YE 2015, OPNLI reported improved earnings before tax of Eur 259m (YE 2014: Eur 223m), benefiting from a stronger technical result notwithstanding a slightly lower investment result and a Eur 62m (YE 2014: Eur 62m) charge as a result of reducing the discount rate for pension liabilities from 2.5% to 2.22% (YE 2014: from 2.8% to 2.5%). OP Financial Group changed the valuation model for non-life insurance liability in Q1 2015 in such a way that it takes account of a change in the discount rate as one continuously updated variable of an accounting estimate. Earnings before tax at fair value decreased to Eur 171m (Eur 272m at YE 2014) impacted by a Eur 87 m negative change in fair value reserves.

At Q1 2016, OPNLI reported lower earnings before tax of Eur 59m (Eur 66m at Q1 2015), driven by a deterioration of the combined ratio and lower investment result.

Overall, Moody's considers profitability to be consistent with an A rated company, and going forward, Moody's expects OP Insurance to continue to benefit from the relatively stable market conditions in Finland, despite some weakening of its growth prospects, and its underwriting performance to remain good.

Reserve Adequacy: A - RELATIVELY PREDICTABLE RESERVING ALTHOUGH EXPOSURE TO LONGER-TAIL LINES OF BUSINESS

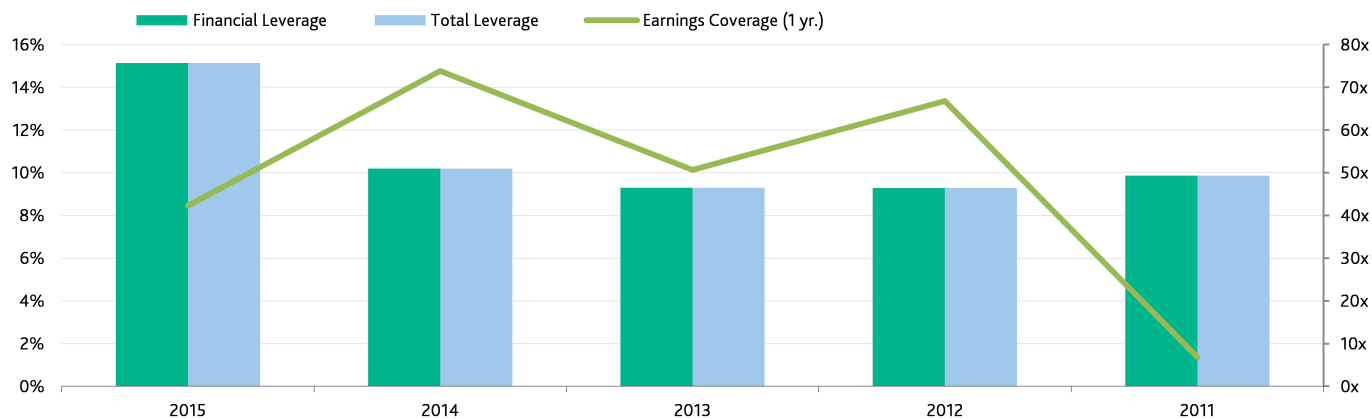
The reserve adequacy metric is good, driven by a small net reserve deterioration on a weighted average basis of 0.5% of opening net reserves over the last five years, based on IFRS reserve triangles for the 2006-2015 accident years. We note that in 2015 claims development was negative with a reserve strengthening of Eur 9m after recording in 2014 a small reserve release of Eur 4m. However, Moody's notes the presence of longer-tail lines which presents the challenge of associated reserving risk. Moody's also notes that there were methodological changes in the reserving process during 2010 which affected the 2009 vs. 2010 comparative figures. As has been seen in recent years, PNLI's reserves are vulnerable to longevity risk and a lowering of the discount rate, the former for example negatively impacting the 2010 combined ratio by 3% points. In light of the low interest rate environment, we expect further discount rate reductions following the progressive reductions from 3.0% to 2.8%, 2.8% to 2.5%, 2.5% to 2.22% and 2.22% to 2.15% in 2013, 2014, 2015 and Q1 2016 respectively which led to Eur 38m, Eur 62m, Eur 62m and Eur 13m pre-tax charges.

Financial Flexibility: A - EXCELLENT METRICS ALTHOUGH INCREASED LEVERAGE AND ACCESS TO CAPITAL MARKETS MORE RESTRICTED THAN LISTED PEERS

Overall financial flexibility is considered good. Financial leverage was relatively low although increased at around 15% at YE2015 (YE2014: 9%), with earnings coverage consequently excellent. Financial debt includes a Eur 50 million internal subordinated loan issued during 2008 to improve the solvency position and a new Eur 75 million Tier II subordinated loan issued during Q2 2015 which replaced equity for the same amount thus increasing leverage by 6% pts. Furthermore, by deducting the 2015 proposed dividend from shareholders' equity, financial leverage increased in 2015 to 18%.

Moody's notes that on a stand-alone basis, none of the OP Insurance non-life companies are listed in their own right. Therefore, access to capital is not viewed as comparable to larger European players.

Exhibit 3

Financial Leverage

Source: Company reports, Moody's Investors Service

Other considerations**Nature and Terms of Implicit Support**

The A3 IFSR of OPIL receives no uplift as a result of its ownership by OP Financial Group, given the a3 BCA of the banking operation. The adjusted a3 BCA of OP Corporate Bank (including cooperative support) and the a3 BCA of OP Cooperative, which is intended to directly own OP Insurance's non-life business in the future, are used as a reference point for the maximum rating of OPIL. The integration to-date of OP non-life insurance business into OP Corporate Bank and OP Financial Group has been successful and well-managed. However, OP Financial Group's support mechanism in which all the member banks provide each other with joint and several guarantees providing immediate and direct support in case of distress, does not cover, by law, insurance operations.

Rating Methodology and Scorecard Factors

Exhibit 4

Financial Strength Rating Scorecard [1][2]	Aaa	Aa	A	Baa	Ba	B	Caa	Score	Adjusted Score
Business Profile								A	Baa
Market Position and Brand (25%)								Aa	A
- Relative Market Share Ratio			X						
- Underwriting Expense Ratio % Net Premiums Written	16.1%								
Product Focus and Diversification (10%)								A	Baa
- Product Risk			X						
- P&C Insurance Product Diversification		X							
- Geographic Diversification						X			
Financial Profile								A	A
Asset Quality (10%)								Aa	A
- High Risk Assets % Shareholders' Equity				129.0%					
- Reinsurance Recoverable % Shareholders' Equity	13.9%								
- Goodwill & Intangibles % Shareholders' Equity	9.5%								
Capital Adequacy (15%)								Baa	Baa
- Gross Underwriting Leverage				5.5x					
Profitability (15%)								Aa	A
- Return on Capital (5 yr. avg)	25.3%								
- Sharpe Ratio of ROC (5 yr. avg)				192.0%					
Reserve Adequacy (10%)								A	A
- Adv./Fav.) Loss Dev. % Beg. Reserves (5 yr. wtd avg)			0.5%						
Financial Flexibility (15%)								Aaa	A
- Financial Leverage		15.1%							
- Total Leverage		15.1%							
- Earnings Coverage (5 yr. avg)	48.1x								
- Cash Flow Coverage (5 yr. avg)									
Operating Environment								Aaa - A	Aaa - A
Aggregate Profile								A1	A3

[1] Information based on IFRS financial statements as of Fiscal YE December 31

[2] The Scorecard is an important component of the company's published rating, reflecting the stand-alone financial strength before other considerations (discussed above) are incorporated into the analysis

Source: Company reports, Moody's Investors Service

Ratings

Exhibit 5

Category	Moody's Rating
OP INSURANCE LTD	
Rating Outlook	STA
Insurance Financial Strength	A3
OP FINANCIAL GROUP	
Rating Outlook	STA
OP CORPORATE BANK PLC	
Rating Outlook	STA
Senior Unsecured	Aa3
Senior Unsecured MTN	(P)Aa3
Subordinate	Baa1
Commercial Paper	P-1
LT Issuer Rating	Aa3
LT Bank Deposits	Aa3

Source: Moody's Investors Service

© 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's.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

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

REPORT NUMBER 1030266