



CREDIT OPINION

27 March 2017

Update

Rate this Research »

RATINGS

Corporacion Nacional del Cobre de Chile

Domicile	Chile
Long Term Rating	A3
Type	Senior Unsecured - Fgn Curr
Outlook	Negative

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

Barbara Mattos, CFA VP-Sr Credit Officer barbara.mattos@moodys.com	55-11-3043-7357
Marianna Waltz, CFA MD-Corporate Finance marianna.waltz@moodys.com	55-11-3043-7309

Corporacion Nacional del Cobre de Chile

Annual Update

Summary Rating Rationale

As a government related Issuer ("GRI"), CODELCO's A3 foreign currency rating is based upon the following inputs: (i) the company's baseline credit assessment (BCA) at ba2, a measure of its intrinsic risk regardless of its controlling entity; (ii) the Chilean Government's Aa3 bond rating; and (iii) our assumptions of high support from the government of Chile and high dependence between CODELCO and the government. The government support provides five notches of uplift to CODELCO's BCA.

The BCA incorporates the large investment requirements to increase production and improve falling ore grades, which we anticipate will continue to require that the company issue debt to fund the capital spending over the next several years -- even considering the law enacted in October 2014 by the Chilean Congress that allows for a USD 4 billion capitalization plan of CODELCO. We estimate capital expenditures for major projects identified as under construction or in the feasibility stage, such as Chuquicamata, El Teniente and Andina, to be between USD 3-4 billion over 2017-18. Nonetheless, we also see the company's investment plans, combined with the aforementioned competitive cost position and production levels, as important supporters of performance over the medium to longer-term, despite ongoing pressures.

CODELCO's adjusted leverage as measured by the debt/EBITDA ratio was at 10.1x for the twelve months ended September 2016 -- the increase being largely explained by a still weak pricing environment during the period, but by higher debt levels as well. We expect performance through 2017 to continue at lower EBITDA levels and a more elevated leverage position in comparison to previous years (2011-2014). The execution of the capital increases by the Chilean government and the allowance for profit retention will be an important factor to reduce the need for further debt issuances.

CODELCO's ba2 BCA also reflects its position as the world's largest copper producer (approximately 1.72 million metric tons in the last twelve months ended in September 30, 2016, excluding its share of El Abra and Anglo American Sur) and the second largest molybdenum producer, its competitive cost position (currently positioned at the second industry quartile) and its substantial reserve base of approximately 70 years at current production levels. The company's multiple mine operating profile, which reduces the degree of operational risk, together with its vertical integration, which encompasses SX/EW and conventional smelting facilities, further support its BCA ranking. This footprint contributes to robust operating performance in a strong copper market and acceptable performance during cyclical downturns.

Credit Strengths

- » Strong business profile, as the largest copper producer globally, significant molybdenum production, long lived reserve base
- » Multiple mine profile diversifies risk of operating problems

Credit Challenges

- » Margins pressured by weaker copper prices compared to historical periods
- » Significant debt increases to fund strategic growth partly mitigated by owner's capitalization and profit retention

Rating Outlook

The negative outlook reflects our expectations for reduced earnings and tightening debt protection metrics (compared to historical periods) as a result of slowing growth rates in China, a major copper consumer, and in developed countries. The weaker demand levels and economic concerns contributed to average copper prices falling about 20% in 2015, a trend that continues since 2011-12. Despite the recovery observed in late 2016/early 2017, prices remain well below levels observed in 2012-14. Moreover, the lower earnings expectations come at a time when CODELCO's capital expenditures are expected to remain at high levels and will be partly covered with increased debt issuances.

Factors that Could Lead to an Upgrade

Upside adjustment to the rating is unlikely due to the company's ongoing reinvestment requirements and the expectation for increased leverage in a business that will continue to exhibit variability in copper supply and demand balances, copper price volatility and input cost challenges. Still, upward pressure on the ratings or outlook could be considered if copper prices improve significantly, easing existing pressure on metrics. An upward rating movement would require that CODELCO maintains a strong liquidity position, reduce debt levels, with interest coverage metrics (EBIT/interest expense) staying above 3.5x times, at a minimum.

Factors that Could Lead to a Downgrade

The ratings could suffer negative pressure should earnings contract for a prolonged period, causing a sustainable period of EBIT margins below 7%, and CODELCO is not able to maintain costs at the levels currently observed. A downgrade could be considered if leverage ratio (total adjusted debt to Ebitda) does not evidence a trend back to 3.5x on a sustainable basis over the long-term. A marked deterioration in the company's liquidity position could also precipitate a downgrade. Any indication of a decline in the level of support from the government of Chile would also put downward pressure on the company's ratings.

Key Indicators

Exhibit 1

Corporacion Nacional del Cobre de Chile

	9/30/2016(L)	12/31/2015	12/31/2014	12/31/2013	12/31/2012
Revenues (USD Billion)	\$11.1	\$11.7	\$13.8	\$15.0	\$15.9
EBIT Margin	-6.0%	-2.0%	14.1%	19.4%	44.5%
Return on Average Tangible Assets	-1.8%	-0.7%	5.5%	8.6%	26.0%
EBIT / Interest Expense	-1.0x	-0.4x	4.2x	6.3x	15.4x
Debt / EBITDA	10.1x	8.2x	3.7x	2.8x	1.3x
Debt / Total Capital	58.5%	56.9%	49.7%	46.3%	43.1%
(CFO - Dividends) / Debt	15.2%	17.8%	16.2%	15.4%	13.6%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

Detailed Rating Considerations

LARGEST GLOBAL COPPER PRODUCER WITH LONG-LIVED RESERVE BASE

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.

With reserves of approximately 51.0 million tons of fine copper - representing roughly 7% of reserves globally - CODELCO has about 30 years of productive capacity at current levels, which is seen as an important determinant in a company's ongoing operating profile and ability to continue to perform. Considering the reserve position held and the various projects in process and under evaluation, CODELCO is expected to maintain production going forward offsetting the impact of declining grades and relatively flat production levels by maintaining its investment program to develop these reserves.

Codelco produced 1.7 million tons in the 12 months through September 2016, excluding its shares of joint ventures with El Abra and Anglo American Sur, and was also the world's second-largest molybdenum producer. The company has a 10% share in the global copper production and reported net revenues of USD 11.1 billion in the 12 months through September 2016.

In addition to its wholly-owned mines, the company, through a joint venture with Mitsui & Co. Ltd (Mitsui, (P)A3, Negative), owns a 29.5% interest in Anglo American plc's (Anglo American, Ba1, Positive) subsidiary Anglo American Sur (Anglo Sur, Unrated); Mitsubishi Corporation (Mitsubishi, A2, Negative) also has an interest in Anglo Sur. Besides, CODELCO has a 49% interest in El Abra, a joint venture with Cyprus El Abra Corporation (Cyprus, Unrated), a subsidiary from Freeport-McMoRan Inc. (Freeport, B1, Positive).

WEAK CREDIT METRICS DUE TO LOW COPPER PRICES AND HIGH CAPEX REQUIREMENTS

Weakening economic conditions, which have been evident since late 2012, continue to constrain copper prices and, consequently, the operating performance of copper mining companies such as CODELCO. For the 12 months ending September 30, 2016, CODELCO's EBIT (including Moody's standard accounting adjustments) was negative (USD 664 million) - versus USD 7 billion during fiscal-year 2012. Mitigating the weaker price environment and lower molybdenum prices which serve as a by-product cost credit, are declining production, fuel, and labor costs. The company's average cash cost of USD 1.27/lb through September 2016 is down 7.7% from prior year due to lower input prices and intensification of cost control programs. We expect cash costs to remain stable or slightly increase in 2017, as fuel and energy costs will likely be higher compared to 2016.

Even though we believe that the extreme price deterioration for base metals has likely bottomed, we don't expect a material improvement over the next 12-18 months as there has been no material change in supply-demand fundamentals. Spot LME prices for copper averaged USD 2.21/lb in 2016, roughly a 39% decline over 2012 average levels. During 2017, average copper prices reached USD 2.65/lb, a 20% increase over 2016's average levels. However, we see no broad based catalyst for material improvement and believe price risk remains to the downside given the slower economic growth in China - we expect GDP growth in China to decline from 6.7% in 2016 to 6.3% in 2017 and 6% in 2018. Accounting for roughly 40% of global copper demand, China remains a key driver in the behavior of prices in the copper markets. Metal price recent improvements from the lows reflect the favorable impact of various Chinese government stimulus actions taken to offset the decelerating GDP trajectory, including easing of credit, reduction in reserve requirements, and increased infrastructure spending. Supply disruptions caused by strikes have helped support copper prices.

The copper downturn hit Codelco's credit metrics harder also given the company's aggressive growth strategy. For the 12 months through September 2016, Codelco's adjusted EBITDA declined to USD 1.7 billion—which compares to USD 4.1 billion in 2014. Persistently low copper prices, and the fact that Codelco pays 100% of its net income to the Chilean treasury through dividends, income and export taxes and royalties have forced it to continuously raise debt to fund its capital spending. Adjusted leverage, in turn, went from 1.3x in 2012 to 10.1x in September 2016. We do expect leverage to moderate to levels around 6x-7x in 2017-18, considering copper prices around Moody's medium-term range of USD2.15-\$2.40/lb.

DEBT BALANCES WILL CONTINUE TO INCREASE TO SUPPORT SUBSTANTIAL CAPITAL SPENDING

CODELCO has relatively aggressive spending plans over the next several years to maintain and improve its production profile, reverse falling ore grades, and consequently maintain a solid profitability profile. Spending figures are expected to remain relatively high in the coming years. We estimate capital expenditures for major projects to be around USD 3.5 billion per year over the 2017-2018 period. Over the next several years, spending will be prioritized towards developing the company's key structural projects.

The Chuquicamata Underground project construction advances (about 41% completed) and it is expected to be operating in 2019, while the Andina Reallocation, which is key to enable future expansion, is about 30% completed and expected to be under operation in 2020. The El Teniente project will likely be completed by 2023, and incremental production levels will offset declining production.

CODELCO is also investing and adapting its operation to the new emission standards for smelters, required to be completed by the end of 2018. In late 2016, CODELCO has announced changes in its capital spending strategy, with a budget of USD 18 billion for (2016-2020), down from USD 25 billion, and moving to a sequential development strategy, rather than a simultaneous project development strategy.

These investments remain necessary to strengthen the longer term viability of the company's mining assets. As CODELCO's cash flows available for investment is effectively limited to depreciation and other non-cash add backs due to the paying out of its income to the Chilean Treasury, further increases in debt are likely to support the capital investments over the next several years, but the required amounts will depend upon what levels of profit retention the government agrees and the implementation of the capitalization.

This is in line with the recent trend of higher leverage ratios, with total adjusted debt to EBITDA reaching 10.1x for the 12 months ending September 30, 2016 from 1.3x in 2012, and interest coverage (measured by EBIT to interest) declining to -1.0x from 15.4x in the same period. Our metrics include a roughly USD 743.7 million non-recourse loan with Japan's Mitsui, which Codelco received a loan from Mitsui to finance the acquisition of the Anglo Sur stake. The Mitsui loan is non-recourse to Codelco. As per Moody's methodologies, this amount is reflected in Moody's credit metrics as it is consolidated in CODELCO's financial statements. We view the investment in Anglo Sur as providing CODELCO with an interest in low cost, long-lived mines with attractive cash cost positions and development growth potential with no incremental increase in debt.

LIMITED FREE CASH FLOW FOR DEBT REDUCTION

CODELCO's free cash flow generation is limited because of the high dividend payout required to the Chilean Treasury and the relatively high level of capital expenditures to fund strategic growth initiatives. The company essentially pays 100% of its net income to the Chilean treasury through dividends, income and export taxes and royalties. The importance of CODELCO to the Chilean economy and the requirement that the annual budget presented include interest and debt payment requirements are key elements mitigating the negative free cash flow as a consequence of the large government take, dividends and large capital expenditures.

The Chilean government has consistently demonstrated its support to CODELCO, having done so usually by direct capital injections or by allowing for profit retention. Profit retentions in the amount of USD 200 mm and USD 225 million have been approved in June 2014 and 2015, respectively. In October 2014, Congress approved a USD 4 billion multi-year (2014-2018) capitalization bill (Law nº 20.790), which further reinforces CODELCO's importance to the Chilean economy and the company's significant needs for capital investments, besides easing the pressure from weaker copper prices on its credit metrics. In October 2015, the government authorized USD 600 million in capital increase as part of the capitalization. On December 1, 2016, the Chilean government announced a USD 975 million capitalization. Part of the proceeds (USD 500 million) had already been authorized by the capitalization law, whereas about USD 475 million would come from the resources of Chile's Copper Reserve Law (Ley Reservada del Cobre nº 13.196). In January 2017, President Michelle Bachelet enacted the authorization to proceed with USD 475 million transfer, which will likely be available to CODELCO during 1H17.

Although Government support for CODELCO's financing requirements helps mitigate the degree of direct financing that CODELCO will need to raise and demonstrates the importance of the development of these projects to the strategic growth of CODELCO over the medium to longer term, we still expect CODELCO to need to fund part of its capital spending requirements with debt in the next years.

Liquidity Analysis

CODELCO's adequate liquidity is supported by internally generated funds and an average cash balance of USD 1 billion in the past few years. In the end of September 2016, cash balance was USD 576 million, reflecting the company's weaker cash generation amid challenging market conditions, but still high capex requirements, which led to persistent negative free cash flow generation.

The company has no committed revolving credit facilities that would provide alternative liquidity, but solid access to bank debt and capital markets. In 2015, CODELCO issued USD 2 billion 10-year bonds as part of the company's liability management strategy. In October 2015 the company received USD 600 million from a total of USD 4 billion multiyear (2014-2018) capitalization approved in 2014, partially reducing the need of additional debt. On August 2016, CODELCO raised approximately USD 406 million in local

notes in Chile, and proceeds were partially directed for liability management. Both issuances helped lengthened CODELCO's debt amortization schedule and improve its liquidity profile.

Besides, the USD 4 billion multi-year 2014-2018 capitalization bill, approved by Congress in October 2014, continues to further reinforce CODELCO's liquidity. To date, CODELCO has received USD 1.1 billion in proceeds from the capitalization program (2015-16). CODELCO will also receive USD 475 million out of the resources of Chile's Copper Reserve Law (*Ley Reservada del Cobre*) in 2017, supported by an authorization enacted by President Bachelet.

Profile

Headquartered in Santiago, Chile, Corporacion Nacional del Cobre de Chile (CODELCO) is 100% owned by the Chilean State and is the largest producer of copper globally, holding an approximate 10% share of mined copper production. The company also ranks as one of the top two global molybdenum (moly) producers (as a by-product of copper production) with a market share of approximately 10%. Operating through seven mining divisions, Chuquicamata, Radomiro Tomic, Ministro Hales, Andina, El Teniente, Salvador, Gabriela Mistral, and Ventanas (refinery), CODELCO's operations include several world class mines from a reserve, production capacity, and cost perspective, as well as smelting and refining capability. In addition, CODELCO owns 49% of the El Abra mining operation in Chile and is part of a joint venture with Mitsui & Co. Ltd that owns a 29.5% interest in Anglo American Sur - and CODELCO owns, through this joint venture, 20% of Anglo American Sur. Revenues for the 12 months ending September 30, 2016 were around USD 11.1 billion.

Rating Methodology and Scorecard Factors

MAPPING TO RATING METHODOLOGY GRID

CODELCO's ownership by the Chilean State and the required 100% payout of net income, together with the export, royalty and income taxes paid results in the company's financial profile not being directly reflected in Moody's rating methodology grid for the global mining industry.

Exhibit 2

Corporacion Nacional del Cobre de Chile

Mining Industry Grid [1][2]		Current LTM 9/30/2016		Moody's 12-18 Month Forward View As of 3/23/2017 [3]	
Factor	Measure	Score	Measure	Score	
Factor 1 : Scale (20%)					
a) Revenues (USD Billion)	\$11.1	Baa			
Factor 2 : Business Profile (20%)					
a) Business Profile	Ba	Ba			
Factor 3 : Profitability and Efficiency (15%)					
a) EBIT Margin (3 Year Avg)	7.1%	Ba			
b) Return on Average Tangible Assets (3 Year Avg)	2.5%	B			
Factor 4 : Leverage and Coverage (35%)					
a) EBIT / Interest Expense (3 Year Avg)	1.7x	B			
b) Debt / EBITDA (3 Year Avg)	5.3x	B			
c) Debt / Total Capital	58.5%	Ba			
d) (CFO - Dividends) / Debt (3 Year Avg)	13.5%	B			
Factor 5 : Financial Policy (10%)					
a) Financial Policy	Ba	Ba			
Rating:					
a) Indicated Rating from Grid		Ba2			
b) Actual Rating Assigned					
Government-Related Issuer	Factor				
a) Baseline Credit Assessment	ba2				
b) Government Local Currency Rating	Aa3				
c) Default Dependence	High				
d) Support	High				
e) Final Rating Outcome	A3				

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.

Source: Moody's Financial Metrics™

Ratings

Exhibit 3

Category	Moody's Rating
CORPORACION NACIONAL DEL COBRE DE CHILE	
Outlook	Negative
Senior Unsecured	A3

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 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 1065674

Contacts

Barbara Mattos, CFA
VP-Sr Credit Officer
barbara.mattos@moodys.com

55-11-3043-7357

Felipe P Oliveira
Associate Analyst
felipe.oliveira@moodys.com

55-11-3043-6080

CLIENT SERVICES

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