

ISSUER IN-DEPTH

6 September 2017

Rate this Research



TABLE OF CONTENTS

Summary	2
Credit drivers	2
Rating outlook	2
Factors that could lead to an upgrade	2
Factors that could lead to a downgrade	2
Mexico City New International Airport	3
Transaction overview	3
Detailed Credit Considerations	6
Financial profile	7
Liquidity analysis and structural protections	8
Government related issuer analysis framework	8
Rating methodology and scorecard factors	9
Peer comparison	10
	10
Moody's related research	11

Contacts

Adrian Garza, CFA 52-55-1253-5709
VP- Senior Analyst
adrianjavier.garza@moodys.com

Alejandro Olivo 52-55-1253-5742 Associate Managing Director alejandro.olivo@moodys.com

Michael Mulvaney 212-553-3665
Managing Director
Project Finance
michael.mulvaney@moodys.com

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077
Japan 81-3-5408-4100

Mexico City Airport Trust NAFIN F/80460

Pre Sale Report

- The Baa1 rating of the Senior Secured Notes ("2017 Notes") to be issued by Mexico City Airport Trust NAFIN F/80460 ("Mexico City Airport Trust" or "Issuing Trust") reflects the solid cash flow generation capacity of Mexico City's International Airport. The airport is a key, essential, government asset serving as the primary international gateway for a 20 million population city with very solid fundamentals, such as a strong growth trend of passengers and a diverse mix of airlines. The rating also takes into account the pledge of the Passenger Charges for debt service payment and the transaction structure involving special purpose vehicles to service debt and manage cash flows. The rating is supported by our assessment of a very high likelihood of implied government support in the case of financial distress.
- » Mexico City Airport Trust is the special purpose vehicle that issued \$1 billion 4.250% Senior Secured Notes due 2026 and \$1 billion 5.500% Senior Secured Notes due 2046 in 2016 (together the "2016 Notes") and will issue up to a consolidated total of \$6 billion, considering the \$2 billion 2016 Notes, backed by the Passenger Charges or the Airport Usage Fee ("TUA") from the current Mexico City International Airport and the Mexico City New International Airport ("NAICM") upon commencement of operations, expected in 2020. The transaction also considers a payment guarantee trust ("Security Trust") that under a defined cash waterfall will service the debt.
- » The debt issued under Mexico City Airport Trust will complement the Government of Mexico's (A3 negative) funding for the construction of the NAICM. The total expected debt under the trust of \$6 billion will finance approximately 40% of the total construction costs of the first stage of the NAICM, which will have an initial capacity of 57 million passengers. Future expansions are expected to increase capacity up to 125 million passengers by the year 2065.
- » We expect relatively weak financial metrics over the first few years of the transaction resulting from the high leverage of the airport's current operation. Nevertheless, we acknowledge the significant upside stemming from a growing passenger demand and the eventual opening of NAICM.
- » The Baa1 rating on the 2017 Notes is based upon the assumption that the final transaction and financing documents will be in accordance with Moody's current understanding of the transaction based on documentation reviewed as of the date of this report.

Summary

The rating assigned to the Notes to be issued by Mexico City Airport Trust of Baa1 reflects the application of Moody's joint default analysis (JDA) framework for government related issuers (GRIs), which takes into account the following four input factors: i) a baseline credit assessment (BCA) of ba1 as a measure for the rated entity's standalone creditworthiness, ii) the A3 rating of the Mexican government as the support provider, as well as iii) a high default dependence between the airport and the Mexican government and iv) our estimates of a very high degree of implied government support in the case of financial distress.

Credit drivers

- » Cash flow generation supported by a unique, essential infrastructure airport serving a 20 million metropolitan area and as the primary international gateway of the country
- » Strong passenger growth trends expected to continue in the near term in light of the airport's proven resiliency under periods of stress
- » Bondholder protections embedded in the structure, including a defined cash waterfall managed by a trust, a pledge of Passenger Charges, a 6-month debt service reserve account, and indebtedness and restricted payment tests
- » Assumptions of "High Dependence" and "Very High Support" from the Government of Mexico provide rating uplift
- » Relatively weak projected financial metrics over the first few years of the transaction resulting from the high leverage for the airport's current operation; notwithstanding the current operating airport would be expected to cover the \$6 billion of debt without relying on the opening of the new airport

Rating outlook

The negative outlook reflects the negative outlook on the rating of the Government of Mexico, the support provider, which contributes with a rating uplift under our analytical framework for Government Related Issuers.

Factors that could lead to an upgrade

» Given the strong linkages of Mexico City Airport Trust with the Government of Mexico (A3 negative) we do not expect upward pressure in the near term.

Factors that could lead to a downgrade

» Downward pressure on the rating could develop if Cash Interest Coverage and FFO/Debt average levels below 1.6x and 3.5% respectively on a sustained basis as a result of lower than expected passenger traffic or higher leverage. Material delays in the construction of NAICM or a downgrade of the Government of Mexico could also exert downward pressure on the assigned rating. Changes in our appreciation of the implied support assumption from the government of Mexico could also exert downward pressure.

Mexico City New International Airport

The development and construction of Mexico City New International Airport ("NAICM") was announced in September 2014. The new airport is designed to meet the long-term demand of air travel in Mexico City and provide a long-standing solution to the capacity constraints of the current airport. The existing airport is about to reach its maximum runway capacity and by 2020 estimated total passengers would reach 44.8 million.

The first phase of the new airport is expected to start operations in 2020 and it will have an initial capacity of 57 million passengers per year. The new airport will be one of the major airports in Latin America, with three simultaneous runways and over 100 boarding gates (first phase). Future expansions are expected to increase capacity up to 125 million passengers by the year 2065.

The total cost of the first phase of the airport is estimated at \$13.3 billion and close to 60% of the investment will be funded directly by the federal government. The remaining 40% will be funded by debt issued from the Mexico City Airport Trust.

Transaction overview

Financing structure

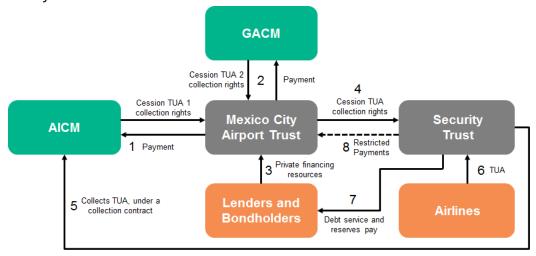
The debt financing of the first phase of the NAICM is structured as a securitization of receivables of passenger charges from the current Mexico City Airport and the NAICM, upon commencement of operations expected in 2020. The transaction involves the Nacional Financiera S.N.C. Fideicomiso 80460 trust ("Issuing Trust" or "Mexico City Airport Trust") and the guarantee and payment trust No. 2172 in Banco Invex, S.A., Institución de Banca Múltiple, Invex Grupo Financiero ("Security Trust").

Under the structure (Exhibit 1), Grupo Aeroportuario de la Ciudad de México, S.A. de C.V. ("GACM", unrated) and Aeropuerto Internacional de la Ciudad de México S.A. de C.V. ("AICM", unrated; together the "Sponsors") assigned the rights of the Passenger Charges or the Airport Usage Fee ("TUA") from the current Mexico City International Airport and, upon commencement of operations, from NAICM to the Mexico City Airport Trust. Mexico City Airport Trust then assigned the rights to the collection to the Security Trust. The Sponsors, GACM and AICM, are wholly-owned and controlled by the Government of Mexico.

TUA is a dollar denominated fee that is adjusted by US inflation on a yearly basis and charged to national and international departing passengers. The TUA is the sole source of payment for debt service issued by the Issuing Trust. TUA is set by Mexico's Ministry of Finance (Secretaría de Hacienda y Crédito Público) and collected by airlines via ticket sales on behalf of the airport.

Exhibit 1

In the transaction structure, the TUA is pledged to the Security Trust as a guarantee and source of debt payment, directly flowing into the Security Trust from airlines



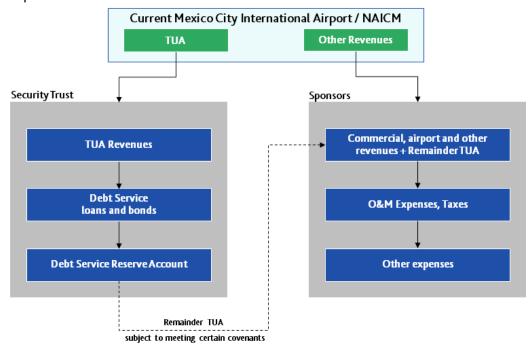
- 1.AICM pledges collection rights of TUA of current Mexico City International Airport (TUA 1) in favor of Mexico City Airport Trust; in exchange receives remuneration in cash
- 2.GACM pledges collection rights of TUA of Mexico City New International Airport (TUA 2) in favor of Mexico City Airport Trust; in exchange receives remuneration in cash
- 3. Mexico City Airport Trust obtains private financing (loans and bonds) to pay remunerations in exchange of TUA 1 and TUA 2
- 4.Mexico City Airport Trust pledges TUA collection rights to Security Trust, as a guarantee and source of payment of debt
- 5.AICM collects TUA, under a collection contract with the Security Trust
- 6. Airlines transfer TUA collections into the Security Trust
- 7. Security Trust pays debt service, and funds accounts and reserves
- 8. Once tests are met, remaining cash flows from Security Trust are transferred to Mexico City Airport Trust which then transfers remaining cash flows to Sponsors

On October 2015, Mexico City Airport Trust obtained a \$3 billion revolving credit facility from a syndicate of banks. The credit facility and Notes issued by Mexico City Airport Trust will rank pari-passu and are backed by the TUA cash flows. The Notes issued by Mexico City Airport Trust initially supplement the loans, but we expect that long-term bonds will eventually refinance any outstanding amount under the credit facility. Once the \$6 billion of long term Notes are issued, the revolving credit facility will be terminated.

Cash waterfall

The TUA collected by the airlines, flows directly into the Security Trust for debt service payments. After debt service payments, meeting debt service reserve requirements and a restricted payment test, the remaining cash flows are transferred to the Sponsors for Operation and Maintenance ("O&M") and other expenses (Exhibit 2).

Exhibit 2
In the cash waterfall, remaining TUA flows are subject to a debt service reserve requirement and a restricted payments test before flowing to Sponsors



Source: Sponsors; Simplified version of cash waterfall

Detailed Credit Considerations

Concession framework

Concessions for both airports are granted by the Government of Mexico (A3 negative) through the Ministry of Communications and Transportation (Secretaría de Comunicaciones y Transportes). The Mexico City International Airport concession was granted to AICM for 50 years on November 1, 1998. The concession for NAICM was granted to GACM in 2014 for 50 years, beginning when the NAICM starts operations. Both concessions can be extended by an additional 50-year period upon request by the Sponsors and as long as they meet the requirements established by the Ministry of Communications and Transportation.

The concession agreements could be revoked for the following reasons:

- » Failing to operate, manage or exploit the airport according to the concession contract
- » Failing to maintain insurances
- » Cede rights or obligations stemming from the concession (except TUA, which has been expressly approved by the Ministry of Communications and Transportation)
- » Allowing not permitted aircrafts
- » Interrupting the operation of the airport without a justified reason
- » Charge tariffs that exceed permitted tariffs

Given the long track record of operations of the current airport and that both Sponsors are wholly-owned by the Government of Mexico, in Moody's view a unilateral termination seems extremely unlikely.

The concessions allow the airports to charge tariffs as authorized by the Ministry of Finance. TUA for domestic and international passengers are expressed in United States Dollars, and the equivalent in Mexican Pesos is determined according to the monthly average exchange rate published by Mexico's Central Bank (Banco de México). TUA is updated every year considering the annual increase of the "Consumer Price Index for All Urban Consumers: All Items" published by the US Federal Reserve.

TUA rates for 2017 were set at \$22.74 for domestic passengers and \$35.35 for international passengers. In 2014, the Ministry of Finance determined an extraordinary increase of 38% (domestic) and 74% (international). In our Base Case Scenario, TUA only increases by US inflation on a yearly basis.

Market position

Mexico City International Airport provides an essential service for the greater area of Mexico City and the country. The airport handled 41.7 million passengers in 2016 or more than a third of total air passengers in Mexico, and approximately 55% of air cargo. It also serves as the primary international gateway of the country.

The airport's service area is one of the most densely populated urban areas in the world. Mexico City holds a population of 8.8 million of inhabitants but considering the greater metropolitan area of the city, it is estimated around 20 million, roughly 16% of the country's total population. In Moody's view, the airport has a virtual monopoly of air travel within its geographical area, with very little competition from airports nearby Mexico City's metropolitan area.

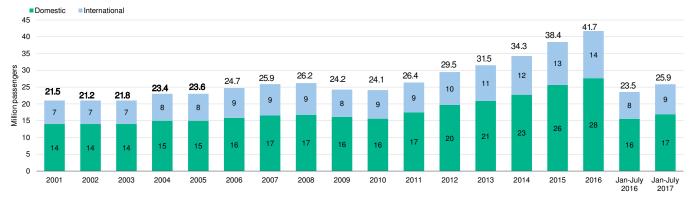
Service offering

The airport also exhibits a solid historic passenger performance that Moody's expects will continue in the near term in light of the airport's proven resiliency under periods of stress.

In 2009 passenger traffic sharply declined as a result of the economic downturn and the H1N1 outbreak. In 2010 the second major airline in the country, Mexicana de Aviación, filed for bankruptcy and stopped operations. By 2011 passenger traffic had fully recovered from these events and reached its 2008 levels. Since then it has shown very solid growth trends; average passenger traffic growth rate for the period 2012-2016 was 9.6% and as of July 2017, passengers are growing by 9.9% with respect to the same period in 2016 (Exhibit 3). Independent traffic consultants estimated that by 2020 traffic on the existing airport would reach 44.8 million passengers

and operate very close to or at its maximum runway capacity. Given the recent traffic trends the airport could reach 45 million passengers as soon as 2017.

Exhibit 3
Strong passenger traffic growth at the Mexico City International Airport underpins TUA collections for debt service



Source: Secretaría de Comunicaciones y Transportes, AICM

Origin and destination travelers amount to approximately 80% of total passengers which limits the airports exposure to airline business performance. The primary carrier Aeroméxico together with its regional carrier Aeroméxico Connect accounted for approximately 40% of total market share in 2016 and the rest of the traffic is shared among a wide number of carriers, which is an adequate level of diversification.

Financial profile

The solid passenger trends that translate into strong cash flow generation are partially compensated by the high expected leverage for the current airport's operation. Thus, the financial metrics will be relatively weak over the first five to 10 years but will strengthen over time as passenger traffic grows and eventually, when the new airport start operations. Moody's also recognizes that the current airport would be expected to cover the \$6 billion of debt without relying on the opening of the new airport.

As shown in Exhibit 4, in Moody's Base Case, Cash Interest Coverage Ratio (cash flow available for debt service to interests) is expected to average 1.7x and Funds From Operations (cash flow available for principal payments) to Debt estimated to average 3.7%, over the period 2017-2026.

Exhibit 4
Projected Average Financial Metrics under Issuer's Base Case and Moody's Base Case

	Issuer's Base Case	Moody's Base Case
	2017-2026	2017-2026
Total Passengers (millions)	50.5	47.4
(FFO + Cash Int.Exp.) / (Cash Int.Exp.)	2.0x	1.7x
FFO/Debt	4.7%	3.7%
Moody's DSCR	2.0x	1.7x
RCF/Debt	4.7%	3.7%

Amounts in table represent averages over the 10-year period Source: Moody's Investors Service; Mexico City New International Airport

Liquidity analysis and structural protections

The rating considers a one-notch uplift to the grid indicated rating to incorporate the bondholder protections embedded in the structure. The key structural protections taken into account are the defined cash waterfall managed by a dedicated trust (Security Trust) to which the TUA generated by the airports is pledged, a 6-month debt service reserve fund, cash funded with proceeds or with a letter of credit provided by a financial institution with a rating of the bond or higher, a restricted payment test (distributions to the Sponsors) of debt service coverage of 1.15x, an additional indebtedness test of 1.2x of debt service coverage or concession life coverage ratio.

Moody's acknowledges that the restricted payment test in the 2017 Notes is less strict compared to the test in the 2016 Notes. Based on our projections, we believe that the change does not have credit implications. Under the 2017 Notes restricted payment test, distributions can only be made if the DSCR test of 1.15x is met over the previous 12 months. Under the 2016 Notes definition, distributions can only be made if the test is met for the previous 12 months but also if it is met in the most recent quarter. As such, the test for the 2016 Notes is stronger since it would limit distributions if a material decline in TUA revenues occurred in the preceding quarter, even if the test is met for the previous 12-month period. As stated, we believe that a sudden significant drop of in TUA revenues is a relatively remote scenario. We also note that the debt service payments are semiannual (there would be 6 months of cash flows) and there is a 6-month debt service reserve fund also available to prevent a default. Finally, given that the 2017 and 2016 Notes rank pari-passu, we understand that the stricter one prevails unless it's modified at some point in the future.

Government related issuer analysis framework

The Baa1 rating assigned reflects the application of Moody's joint default analysis (JDA) framework for government related issuers (GRIs), which takes into account the following four input factors: i) a baseline credit assessment (BCA) of ba1 as a measure for the rated entity's stand-alone creditworthiness, ii) the A3 rating of the Mexican government as the support provider, as well as iii) our estimates of a very high degree of implied government support in the case of financial distress and iv) a high default dependence between Mexico City Airport Trust and the Mexican government.

Very high implied support from the Government of Mexico

While the Mexican government does not provide an explicit guarantee for Mexico City Airport Trust debt obligations, we believe that there is a "very high" likelihood of government support in the case of financial distress for several reasons including: the sponsors are wholly government-owned entities; government officials serve as board members; and its strategic importance to the country's economy overall.

Our assumption also reflects the involvement of the Government of Mexico in the construction of the NAICM, providing directly 60% of the funds. Furthermore, the recent TUA increases approved by the Ministry of Finance ahead of undertaking of the project also corroborates our view of the Government's very high implied support.

High default dependence

Our estimate of "high" default correlation - an additional input to Moody's joint default analysis framework for GRIs besides implied government support - mainly reflects the expectation that there is an elevated likelihood that the government and Mexico City Airport Trust would default simultaneously due to common risk factors. While the cash flows to pay debt service are not linked to the government and have a strong international component, there are common risk factors, including the administrative and operational linkages with the government and exposure to the overall economic performance and political event risks.

Rating methodology and scorecard factors

The principal methodologies used in this rating were the Privately Managed Airports and Related Issuers Rating Methodology published in December 2014 and Government Related Issuers Rating Methodology published in August 2017. Please see the Credit Policy page on www.moodys.com for a copy of these methodologies.

Exhibit 5
Privately Managed Airports and Related Issuers Methodology Scorecard Factors

Factor	Subfactor	Score	Metric 2017-2026
1. Concession and Regulatory Framework	a) Ability to Increase Tariffs	A	
	b) Nature of Ownership / Control	Aa	
2. Market Position	a) Size of Service Area	Aa	
	b) Economic Strength and Diversity of Service Area	Aa	
	c) Competition for Travel	Aa	
3. Service Offering	a) Passenger Mix	Aa	
	b) Stability of Traffic Performance	Α	
	c) Carrier Base	Baa	
4. Capacity and Capital	a) Ability to Accommodate Expected Traffic Growth	Ba	
5. Financial Policy	a) Financial Policy	Ba	
6. Leverage and Coverage	a) (FFO + Cash Interest Expense) / (Cash Interest Expense)	В	1.7x
	b) FFO / Debt	В	3.7%
	c) Moody's Debt Service Coverage Ratio	В	1.7x
	d) PCF/ Debt	В	3.7%
Not ching Considerations		Notch	
	Uplift for Structural Considerations	1	
Scorecard Indicated BCA		ba1	
Rating after GRI framework		Baa1	

Source: Moody's Investors Service

INFRASTRUCTURE AND PROJECT FINANCE

Peer comparison

Exhibit 6
Selected Moody's Rated Privately Managed Airports

	Mexico City Airport Trust	Malaysia Airports Holdings Berhad	Aena, S.A.	Brussels Airport Company NV/SA	Manchester Airport Group Funding Plc	Grupo Aeroportuario del Pacifico, SAB de CV	Aeroporti di Roma S.p.A.	Copenhagen Airports A/S	Airports Company South Africa SOC Ltd	Princess Juliana Intl Airport Op Company N.V.	Aerostar Airport Holdings, LLC.	Aeris Holding Costa Rica S.A.	Heathrow Finance Plc
Main Country of Operation	Mexico	Malaysia	Spain	Belgium	United Kingdom	Mexico	Italy	Denmark	South Africa	Sint Maarten	Puerto Rico	Costa Rica	United Kingdom
Rating	Baa1	А3	Baa1	Baa1	Baa1	Baa1	Baa1	Baa2	Baa3	Baa2	Ba2	Ba2	Ba1
Outlook	Negative	Negative	Stable	Stable	Stable	Positive	Negative	Stable	Negative	Stable	Negative	Stable	Stable
BCA	ba1	baa3	baa1	baa1	baa1	N/A	N/A	baa2	baa3	baa3	N/A	N/A	N/A
Type of Airport	O&D	O&D	O&D	O&D	O&D	O&D	Hub	Hub	O&D	Hub	O&D	O&D	Hub
Airports	1	41	46	1	4	12	2	2	9	1	1	1	1
Total Passengers 2016 (million)	41.7	88.8	230.2	21.8	55.2	36.5	47.1	29.0	39.8	0.9	4.6	4.4	75.7
Passenger Annual Growth 2016 (%)	8.5%	6.0%	11.0%	-7.0%	12.8%	16.5%	1.8%	9.1%	3.2%	2.1%	3.3%	11.3%	1.0%
(FFO+Int.Exp)/(Int.Exp Non-cash Int)	1.7x	3.1x	16.8x	5.7x	5.1x	15.2x	11.2x	4.9x	4.5x	2.9x	3.0x	2.6x	2.3x
FFO / Debt	3.7%	9.2%	21.3%	14.2%	16.7%	51.6%	39.8%	15.8%	34.8%	15.7%	10.3%	7.3%	6.8%
Debt Service Coverage Ratio	1.7x	1.5x	5.3x	4.1x	4.5x	6.9x	7.1x	4.7x	4.5x	1.7x	2.1x	1.2x	1.9x
RCF/Debt	3.7%	7.7%	16.7%	5.0%	7.5%	30.1%	20.0%	7.2%	32.1%	15.7%	10.3%	7.3%	2.3%

Note: "Total Passengers" and "Passenger annual growth 2016" for Malaysia Airports Holdings Berhad is for the 39 Malaysian airports only; Mexico City Airport Trust metrics correspond to Moody's Base Case Scenario 2017 - 2026. Source: Moody's Investors Service, Selected Airports websites and airport provided information

Moody's related research

Credit Opinions:

- » Government of Mexico A3 Negative, June 2017 (1079746)
- » GRUPO AEROPORTUARIO DEL PACIFICO, S.A.B. DE C.V., July 2017 (1075946)

Sector In-Depths:

- » Successful NAFTA talks alone will not fix structural impediments to Mexico's growth, August 2017 (1083614)
- » Domestic political and economic concerns eclipse NAFTA risks, August 2017 (1085407)

Issuer Comments:

» Mexico's Economy Strengthens as NAFTA Renegotiation Becomes Clearer, August 2017 (196746)

Issuer-In-Depths:

» Mexico City Airport Trust NAFIN F/80460, September 2017 (1089381)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

© 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 ON TO 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.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.

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.

REPORT NUMBER

1089193

Contacts				CLIENT SERVICES	
Alejandro Olivo	52-55-1253-5742	Adrian Garza, CFA	52-55-1253-5709	Americas	1-212-553-1653
Associate Managing Director		VP- Senior Analyst adrianjavier.garza@moodys.co	m	Asia Pacific	852-3551-3077
alejandro.olivo@moodys.com				Japan	81-3-5408-4100
Calyn Gelinas Associate Analyst calyn.gelinas@moodys.com	212-553-5195	Roxana Munoz AVP-Analyst roxana.munoz@moodys.com	52-55-1253-5721	EMEA	44-20-7772-5454

