# MOODY'S INVESTORS SERVICE

# **CREDIT OPINION**

29 August 2019

# New Issue

# Rate this Research

#### RATINGS

Wirecard AG
-------------

Domicile	Germany
Long Term Rating	Baa3
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

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

#### Contacts

Dirk Goedde AVP-Analyst dirk.goedde@moodys.co	+49.69.70730.702
Moritz Mayer Associate Analyst moritz.mayer@moodys.c	+49.69.70730.951 om
Christian Hendker, CFA Associate Managing Direc	+49.69.70730.735 tor

christian.hendker@moodys.com

#### **CLIENT SERVICES**

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

# Wirecard AG

New issuer

#### Summary

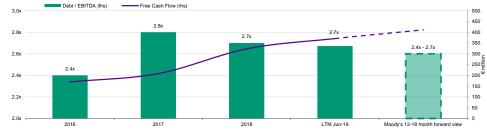
The Baa3 ratings reflects as positives: (1) Wirecard's strong market position in Asia and Europe in the strongly growing industry of cashless payment solutions; (2) a well-diversified business profile in terms of customers, geographies and products; (3) its scalable software platform with comprehensive value adding services to serve convenience to its customer base; (4) its sound financial profile with very high margins driving strong cash flow generation which allows for a swift deleveraging of the slightly elevated gross debt including the planned issuance of the convertible bond; and (5) a financial policy committed to preserve a capital structure in line with the requirements for an investment grade rating, even in a scenario of accelerated M&A activity as well as a good liquidity profile, characterized by a high cash position.

At the same time, the rating is constrained by (1) Wirecard's smaller scale than that of the leading US payment processors in a highly competitive market, although it is expected to increase over the coming years; (2) the company's strong growth in a dynamic market, especially in foreign countries, which requires a high degree of governance and risk control; (3) a constant threat of hidden competition from new market entrants or new technologies that might emerge quickly; (4) the inherent risk of changes in regulation and technology, which might affect the business negatively; and (5) the ongoing commoditization of payment processing and related pricing pressure.

#### Exhibit 1

Leverage likely to come down towards 2.5x within the next 12-18 months based on strong free cash flow

Moody's-adjusted debt/EBITDA and free cash flow development



Sources: Moody's Financial Metrics™, Moody's estimate

# **Credit strengths**

- » Leading market share in the Asia-Pacific (APAC) region and strong market share in Europe, with revenue growth at a compound annual growth rate of 35% between 2014 and 2018
- » High and stable Moody's-adjusted EBITA margin of 27%
- » Strong cash generation because of its asset-light business model and moderate shareholder distributions
- » Well-diversified customer base, with more than 300,000 merchants and 40 million consumers using the payments products issued by Wirecard
- » Strong underlying global market growth of around 14% per annum until 2021, with high growth in Wirecard's core region, APAC, propelled by the ongoing shift toward electronic payments

#### **Credit challenges**

- » Fragmented market, with generally low switching costs for merchants and pockets of hidden competition or new market entrants
- » Highly competitive market environment with consolidation trends
- » Inherent threat of changes in regulation or technology, which can affect business
- » Risks of contracting volumes during an economic downturn
- » Commoditization of payment processing and related pricing pressure

#### **Rating outlook**

The stable outlook reflects our expectation that Wirecard will generate adjusted EBITDA growth of high-teens to mid-twenties in percentage terms over the next 12-18 months while not exceeding Moody's adjusted debt to EBITDA of 3.0x including the envisaged  $\notin$ 900 million convertible bond (Softbank) as well as the  $\notin$ 500 million planned bond issuance which will predominantly be used for repayment of existing debt. The  $\notin$ 900m convertible bond (Softbank) will be used for investments in growth, repayment of existing debt and potential share buyback. The company will be able to generate high free cash flow of around  $\notin$ 400 million in the next 12-18 months which yields in decent deleveraging capacity. Additionally, we expect the company to maintain its prudent financial policy with no elevated shareholder distributions or no major share buybacks as well as a conservative financial profile, even in a scenario of intensified M&A activity.

#### Factors that could lead to an upgrade

» Moody's could upgrade Wirecard if Moody's adjusted debt to EBITDA is sustainably near to 2x while showing a sustained track record of profitable above market growth and maintaining a strong liquidity as well as free cash flow to debt close to 20%, including the absence of major M&A activity.

#### Factors that could lead to a downgrade

» Vice versa, Moody's might downgrade Wirecard when the criteria for a stable outlook are not met. Additionally, we will review the rating positioning in case the company misses the above mentioned expected growth or if there are any signs of deteriorating liquidity.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

# **Key indicators**

# Exhibit 2

# Wirecard AG [1]

#### WIRECARD AG

US MIIIions	Dec-16	Dec-17	Dec-18	LTM (Jun-19)	Moody's 12-18 month forward view [2]
Revenue	1,137.8	1,681.9	2,381.0	2,667.1	\$2,900 - \$3,500
EBITA Margin %	27.7%	26.5%	27.2%	27.1%	27% - 28%
Debt / EBITDA	2.4x	2.8x	2.7x	2.7x	2.4x - 2.7x
EBITA / Interest Expense	17.9x	20.2x	15.5x	17.7x	17x - 24x
RCF / Net Debt	-291%	93%	109%	366%	50% - 100%

[1] All quantitative credit metrics incorporate Moody's standard adjustments to the financial statements for non-financial corporations.

[2] 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™

# Profile

Headquartered in Aschheim, Germany, Wirecard AG is an international payment solution provider covering the whole payment value chain including payment processing and risk management (71% of revenues and 86% of EBITDA as per FY 2018) as well as acquiring and issuing (29% of revenues and 14% of EBITDA). Key operating areas are Europe (45% of revenues as per FY 2018) as well as Asia Pacific (47%). Wirecard employs more than 5,600 employees of whom 48% are located in Asia Pacific, 28% in Germany and 13% in Rest of Europe as per June 30th, 2019. Around 46% of the employees are within research & development and IT followed by 22% customer service staff as per June 30th, 2019. The company has processed a transaction volume of €146 billion in the last twelve months ended in June 2019 and provided its products to more than 300,000 merchants.

Wirecard generated €2,338 million revenues and a Moody's adjusted EBITDA of €680 million in the last twelve months ending in June 2019. The company is listed in the German DAX and no shareholder exceeding 10% ownership with the CEO of Wirecard, Dr. Markus Braun, holding 7.05% of shares.

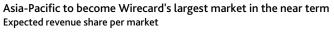
# **Detailed credit considerations**

#### Strong market positions in Europe and the swiftly growing Asian market

With revenue of €2 billion in 2018, Wirecard is a leading merchant acquirer and payment processors in its core markets Europe and Asia, a key credit strength that is reflected in its Baa3 rating. Europe is Wirecard's biggest market yet, but will be superseded by the APAC region soon as the growth in the market is significantly stronger than in the more mature European market. The American market is yet underrepresented as Wirecard started operations there just in 2016 and is currently focusing on select large customers to enter the market. In total, Wirecard is currently active in around 50 countries, partially via licensing agreements.

Exhibit 3

Europe (incl. Germany) Asia Pacific America and Africa 100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0% 2017 2018 2019 2020 202 2022



Sources: Company information, Moody's estimate

The expected market growth is based on a combination of an increasing penetration of fully digitized payment transactions, which are currently estimated at just around 8%-10%, the ongoing convergence of all sales channels and the emergence of monetization of data analytics, which is propelled by the proliferation of the internet and mobile phones. Additionally, merchants as well as customers increasingly do business across countries and demand a seamless purchase experience. Furthermore, there is an increasing demand from the yet unbanked share of population, especially in emerging markets.

The above-mentioned factors are the primary reason for the expected underlying global market growth for cashless payments of 14%, with emerging Asia being the strongest contributor in terms of growth, while more mature markets, such as the US and Europe, will grow in the single-digit range in percentage terms.

While Wirecard will benefit from this strong momentum, we see some negatives related to this in terms of governance and risk. The company's strong and swift expansion has led to some instances in its Asian operations where a lack of corporate control was misused. Management has immediately taken meaningful measures to avoid such issues in the future. Considering the opinion of external auditors, we assume that these events have been isolated, regionally concentrated events. We see improvements in processes and control, but given the ongoing strong growth, we also consider the related risks as ongoing. Furthermore, we see some risks related to corporate structures in terms of risk control and compliance, which should grow alongside the company and be focused on the growth regions.

#### Comprehensive product portfolio, along the payment value chain

Wirecard is the link between merchants and consumers, and is active in the B2B as well as the B2C and the B2B2C segments. With merchant acquiring being the core of the product suite, the company has expanded its offering significantly over time. Wirecard sustains a comprehensive product portfolio to cover the whole payment value chain including banking services via its subsidiary Wirecard Bank or partnerships in countries without an own banking license. This includes the issuance of debit and credit cards, as well as a wide range of value-adding services ranging from risk management, data analytics, loyalty programs, mobile wallets and peer-to-peer lending to cash advance, fraud prevention and call center services. Acquiring and issuing are provided either under Wirecard's own brands, for example, boon, or via white label or co-branding agreements. Wirecard's product offering embeds the company deeply into the processes of the merchants and leads to quite a sticky customer base in our view, as the cost of service usually represents a fraction of the total cost base of its customers. Additionally, we consider Wirecard's ability to constantly innovate its product offering another credit strength.

Wirecard's above-market growth was also a result of its focus on defined industry verticals, that is, consumer goods, digital goods, and travel and mobility, with additional white label issuing solutions to banks and fintechs. These verticals have compelling growth characteristics and a naturally high online purchase rate. The company offers tailored solutions to these verticals and was able to sign contracts with a range of large merchants during the last year. Historically, Wirecard was focused on small and medium-sized

companies, but has meanwhile a balanced customer portfolio, with its top 16 merchants accounting for 26.8% of total processed transactions in 2018, which nevertheless entails some concentration risk.

The envisaged partnership with SoftBank Group is positive in our view because Wirecard will get access not only to the Japanese and South Korean markets, but also to the comprehensive portfolio of technology firms where SoftBank is invested in. Therefore, we consider SoftBank as a business complementor to Wirecard, which will vice versa benefit from the company's access to the European market.

#### Payment services is a highly competitive industry and technology risks are high

Wirecard operates in a highly competitive industry that is also characterized by rapid technology-driven innovation. The large size of the industry and its attractive growth profile generate significant interest among a variety of nontraditional companies, including vendors in the mobility value chain and social media networks. On a global scale, Wirecard competes with non-bank operators such as <u>Global Payments Inc.</u> (Ba2, ratings under review for upgrade), Worldpay (recently acquired by Fidelity National), <u>Total Systems</u> (Baa3, stable, currently in the process of being acquired by Global Payments) and First Data (recently acquired by Fiserv), as well as financial institutions that offer merchants acquiring and issuing solutions. Competition has intensified in recent years as the more recent entrants, such as Stripe, Square or Adyen, which offer technology-enabled payment services and, in certain cases, also offer short-term financing, continue to scale rapidly. Wirecard's comprehensive product offering including a full suite of value-adding services and its strong distribution capabilities in Europe and Asia provide competitive advantage. However, the standalone payment processing services are increasingly commoditized and face pricing pressure. In Europe, the market is less fragmented and competitive as opposed to the US and is still dominated by financial institutions that provide in-house acquiring and payment processing services. Asia is also quite fragmented, and we cannot deny pockets of hidden competition at least in local markets. The margin levels are yet quite stable, but will deteriorate in line with the commoditization of the core service. Especially in maturing markets, we expect an ongoing decline, whereas emerging markets are still stable. The Baa3 ratings have been assigned based on our expectation that Wirecard will be able to defend its profitability levels, supported nonetheless by the company's ongoing ability to innovate its product offering.

The payment card industry is inherently susceptible to information security breaches, which could have a material impact on business. We expect the insurance policy against business disruptions from cybersecurity events, the company's technological skill set, and its focus and investments in risk management to mitigate the potential financial impact on its business to some degree.

#### Strong EBITDA growth and high free cash flow generation provide good deleveraging capacity

Wirecard's EBITDA grew by 37% in 2018, mostly organically, but the company also benefited from an acquired customer portfolio in the APAC region, which contributed 2.7% to the overall growth. The company's asset-light business model with manageable capital spending requirements, a low interest burden and moderate shareholder distribution provided for a Moody's-adjusted free cash flow of €323 million in 2018, representing a growth of 55% compared with 2017.

In line with the strong market growth, especially in the Asian market, the company's EBITDA is likely to grow at high-teens to mid-20s in percentage terms in the next few years being a push in absolute EBITDA terms to close to €1.0 billion. Provided an unchanged margin level and free cash flow generation, the company will have a fairly strong capacity to de-lever, a key driver of the assigned Baa3 ratings.

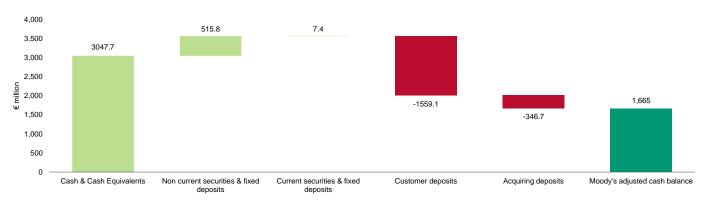
The envisaged issuance of the  $\notin$ 900 million convertible bond as well as the  $\notin$ 500 million public bond will, based on the strong expected EBITDA growth, increase Moody's-adjusted debt/EBITDA as of year-end 2019 to 3.0x from 2.7x in 2018. We see a deleveraging capacity of around 0.5x annually in the absence of additional debt issuance, elevated capital spending (including M&As) and a change in the conservative dividend policy.

#### Liquidity analysis

Wirecard's liquidity is strong. The company generated a high free cash flow of  $\in$ 371 million in the last twelve months ended in June 2019 on a Moody's adjusted basis, representing a cash conversion of 55% of Moody's adjusted EBITDA. In line with the envisaged growth of the company, we expected a further increase of free cash flow to the range of  $\in$ 400 million in the next 12-18 months. This is based on our assumption of a stable dividend policy (including no major share buybacks) as well as no major acquisition. The company further benefits from its high cash on balance sheet of in total  $\in$ 1,665 million in Moody's adjusted terms. From the total cash position of  $\in$ 3,048 million we exclude  $\in$ 1,559 million customer deposits from the banking operations,  $\in$ 347 million deposits from the acquiring

business as these are not freely available to Wirecard as per June 30th, 2019. We furthermore include €523 million interest bearing securities and fixed deposits.

#### Exhibit 4 Moody's-adjusted cash balance as of 30 June 2019 In € millions



Source: Moody's Investors Service

The company has access to a  $\leq 1,750$  million revolving credit facility due in 2024 that was drawn by  $\leq 1,570$  million as of end of June 2019. The documentation entails a leverage covenant with ample headroom. The planned bond issuance will be at least partially used to repay utilizations under the revolving credit facility and thus provide a further liquidity buffer.

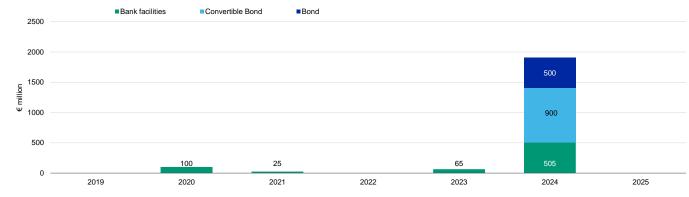
MarIn addition, Moody's favourably notes Wirecard's intention to diversify its funding structure, considering the planned convertible bond and target unsecured bond issuance, which reduces the reliance on bank funding sources going forward. Despite this improvement of diversification, Wirecard has now some refinancing risk in 2024.

# Structural considerations

The existing RCF and two minor debt positions are the only debt instruments of Wirecard, and are all unsecured and guaranteed by four wholly owned subsidiaries representing around 70%-80% of EBITDA. The envisaged €900 million convertible bond as well as the planned €500 million public bond are expected to rank pari passu with the existing debt. The planned public bond will have a tenor of five years.

We, therefore, rate the debt instruments in line with the assigned issuer rating category.

# Exhibit 5 Debt structure pro forma for the planned bond issuances (pro forma as of June 2019)



Source: Company information

#### **Rating methodology and scorecard factors**

The principal methodology used in rating Wirecard is the Business and Consumer Service Industry rating methodology, published in October 2016. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology. The assigned rating deviates from the scorecard-indicated outcome by two notches based on the company's comparably smaller scale relative to its peers, ongoing necessity to improve risk control as well as the inherent risks related to the very swift expansion of the business in emerging markets. A sustained growth track record, reflected in increasing scale, while defending its strong profitability levels and preserving adequate leverage, could gradually result in positive rating pressure over the medium term.

Exhibit 6 Rating factors Wirecard AG

Business and Consumer Service Industry Grid [1][2]	LTM 6/30	)/2019	Moody's 12-18 Month Forward View As of 8/13/2019 [3]		
Factor 1 : Scale (20%)	Measure	Score	Measure	Score	
a) Revenue (USD Billion)	\$2.7	Ва	\$2.9 - \$3.5	Ba	
Factor 2 : Business Profile (20%)					
a) Demand Characteristics	Baa	Baa	Baa	Baa	
b) Competitive Profile	Baa	Baa	Baa	Baa	
Factor 3 : Profitability (10%)		<u> </u>			
a) EBITA Margin	27.1%	A	27% - 28%	А	
Factor 4 : Leverage and Coverage (40%)					
a) Debt / EBITDA	2.7x	Baa	2.4x - 2.7x	Baa	
b) EBITA / Interest	17.7x	Aa	17x - 24x	Aa	
c) RCF / Net Debt	365.5%	Aaa	50% - 100%	Aa	
Factor 5 : Financial Policy (10%)					
a) Financial Policy	Baa	Baa	Baa	Baa	
Rating:					
a) Scorecard-indicated outcome		Baa1		Baa1	
b) Actual Rating Assigned				Baa3	

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for non-financial Corporations.

[2] As of 6/30/2019.

[3] 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<sup>TM</sup>

# Appendix

#### Exhibit 7

Peer comparison

•	W	IRECARD AG			Fiserv, Inc.		Fidelity National	Information Serv	ices, Inc.	Total Sys	stem Services, Inc	
		Baa3 Stable		E	Baa2 Stable		E	Baa2 Stable		E	aa3 Stable	
(in US millions)	FYE Dec-17	FYE Dec-18	LTM Jun-19	FYE Dec-17	FYE Dec-18	LTM Jun-19	FYE Dec-17	FYE Dec-18	LTM Jun-19	FYE Dec-17	FYE Dec-18	LTM Jun-19
Revenue	\$1,682	\$2,381	\$2,667	\$5,696	\$5,823	\$5,977	\$8,668	\$8,423	\$8,420	\$4,928	\$4,028	\$4,103
EBITDA	\$488	\$700	\$776	\$2,114	\$2,209	\$2,290	\$3,145	\$3,288	\$3,177	\$1,341	\$1,451	\$1,457
Total Debt	\$1,465	\$1,851	\$2,069	\$5,292	\$6,370	\$14,289	\$9,305	\$9,578	\$18,869	\$3,656	\$4,309	\$4,294
Cash & Cash Equiv.	\$1,012	\$1,337	\$1,896	\$325	\$415	\$8,441	\$665	\$703	\$9,756	\$450	\$471	\$458
EBITA Margin	26.5%	27.2%	27.1%	30.1%	29.4%	29.7%	31.9%	34.0%	32.1%	22.4%	31.3%	31.4%
EBITA / Int. Exp.	20.2x	15.5x	17.7x	9.1x	8.2x	5.9x	7.4x	8.5x	8.0x	8.1x	6.9x	7.0x
Debt / EBITDA	2.8x	2.7x	2.7x	2.5x	2.9x	6.2x	3.0x	2.9x	5.9x	2.7x	3.0x	2.9x
RCF / Net Debt	92.9%	109.0%	365.5%	32.6%	30.6%	29.2%	19.3%	24.1%	23.4%	30.2%	29.6%	30.0%
FCF / Debt	17.1%	19.9%	20.4%	22.6%	18.7%	7.7%	8.0%	9.9%	5.1%	19.2%	19.3%	18.1%

All figures and ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months Source: Moody's Financial Metrics<sup>TM</sup>

Exhibit 8

#### Moody's-adjusted debt breakdown

(in EUD Millione)	FYE	FYE	FYE	LTM Ending
(in EUR Millions)	Dec-16	Dec-17	Dec-18	Jun-19
As Reported Debt	614.0	1,092.5	1,509.8	1,787.5
Operating Leases	47.2	67.7	77.6	0.0
Earn-out / Purchase Liabilities	77.2	59.4	31.5	29.7
Moody's-Adjusted Debt	738.4	1,219.6	1,618.9	1,817.2

Source: Moody's Financial Metrics™

# Ratings

#### Exhibit 9 Category WIRECARD AG Moody's Rating Outlook Stable Issuer Rating -Dom Curr Baa3 Senior Unsecured -Dom Curr Source: Moody's Investors Service Baa3

© 2019 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 OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S RATINGS. 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 ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS AND 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.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

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

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

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

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT 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 ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. 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.

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 ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

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

REPORT NUMBER 1188038

#### **CLIENT SERVICES**

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

# MOODY'S INVESTORS SERVICE