

CREDIT OPINION

1 December 2022

Update



RATINGS

JAB Holding Company S.a r.l.

Domicile	Luxembourg
Long Term Rating	Baa1
Туре	LT Issuer Rating - Fgn 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

Martin Kohlhase +49.69.70730.719 VP-Sr Credit Officer martin.kohlhase@moodys.com

Vasileios Lagoutis +49.69.70730.958 Associate Analyst vasileios.lagoutis@moodys.com

Christian Hendker, +49.69.70730.735 CFA

Associate Managing Director christian.hendker@moodys.com

CLIENT SERVICES

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

JAB Holding Company S.a r.l.

Update following upgrade to Baa1

Summary

On 23 November 2022 we upgraded JAB to Baa1 stable from Baa2 stable reflecting improvements of the company's business and financial profiles as well as its strengthened governance. While investment valuations have recently somewhat weakened amid increased market volatility, we anticipate a relatively robust operating performance of JAB's consumer product core holdings even in a weaker macroeconomic environment, which should support robust investment valuations of the medium term.

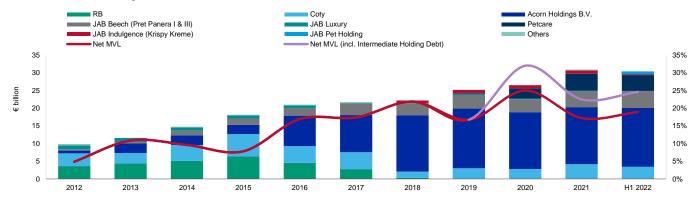
The Baa1 rating of JAB Holding Company S.a.r.l (Baa1 stable) reflects the company's strong investment portfolio that comprises cash-generative and typically defensive global consumer goods and services. Its investments in Acorn Holdings B.V., including JDE Peet's and Keurig Dr Pepper Inc. (KDP), which accounted for around 45% (including direct shares) of JAB's portfolio value as of June 2022, should continue to protect the group's credit quality. Considering the pricing power of these assets, we expect their performance to be stronger than that of other sectors in view of a weaker macroeconomical environment with notable inflationary pressure. JAB has simplified its corporate structure over the past three years through the complete repayment of its preferred shares and warrants, and an around 50% debt reduction at the Acorn Holdings B.V. level, which now comprises only bank debt. JAB has also eliminated redeemable shares from its capital structure.

JAB's capital structure is within its own financial policy target of net market value-based leverage (MVL) of 15%-20% (on a JAB standalone basis when excluding debt at the intermediate holding company level). JAB's net MVL increased in the first half of 2022 as a result of weakening economic sentiment because of persistent inflationary pressure and tight monetary policies, combined with geopolitical and macroeconomic risks. The group's net MVL increased slightly to 18.9% on a standalone basis (24.6% when including debt at the intermediate holding company level) in H1 2022 from 17.2% (22.5% when including debt at the intermediate holding company level) in 2021. We expect further equity price volatility from the impact of the inflationary pressure on global economic sentiment and the Russia-Ukraine conflict. However, we expect JAB to continue to operate within the leverage requirements of 15%-20% net MVL through the cycle, which is commensurate with the Baa1 rating category.

Exhibit 1

Net MVL increased slightly in H1 2022 as a result of the deteriorating valuations of its assets

Net MVL and total assets of JAB



2017 and 2018 values are pro forma the disposal of two-thirds of Bally's Corporation; 2018 is pro forma the tender offer for Coty (301 million shares at \$11.65 per share); Others include other investments; Acorn Holdings B.V. includes investments in JDE Peet's N.V. and Keurig Dr Pepper Inc.

Sources: Company and Moody's Investors Service

Credit strengths

- » Clearly defined and largely successful investment strategy
- » Investments in the defensive global consumer businesses, limiting market value volatility to a certain extent
- » Highly experienced management
- » Good liquidity

Credit challenges

- » Volatility in MVL resulting from listed assets
- » Presence of debt at intermediate holding companies despite the simplification of the structure

Rating outlook

The outlook is stable and reflects the relative stability of the operating performance of JAB's core investments and management's conservative financial policy. It also takes into consideration further simplification of the structure, either by increasing the transparency through stock market listings of currently private investments or further steps to simplify the complex organizational structure.

Factors that could lead to an upgrade

- » Net MVL dropping sustainably to below 20% including intermediate holding company debt (equivalent to 15% on a standalone basis when excluding debt at the intermediate holding company level)
- » Interest cover of around 3.0x on a sustained basis supported by higher dividend and interest income

Further transparency on the corporate structure could support positive rating pressure over time if coupled with stronger credit metrics.

Factors that could lead to a downgrade

» Net MVL approaches the high twenties (%) including proportional intermediate holding company assets and debt (increases to above 20% on a standalone basis when excluding debt at the intermediate holding company level)

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

- » Interest cover falling below 2.0x on a sustained basis
- » Weakening liquidity
- » More aggressive financial policy

Profile

JAB Holding Company S.a r.l. (the guarantor) together with JAB Holdings B.V. (the issuer) and four wholly owned holding companies (JAB Luxury S.a r.l, JAB Forest B.V., JAB Investments S.a r.l and JAB Holding Sao Paulo Ltda.) form the JAB Group (JAB). JAB is majority owned by Agnaten SE and Joh. A. Benckiser B.V. (together the family office).

JAB is a privately held investment holding company focused on long-term investments in consumer goods and retail companies with premium brands. JAB's key investments in terms of market value as of June 2022 include:

- » <u>JDE Peet's N.V.</u> (Baa3 stable, with a stake of around 57%) and <u>Keurig Dr Pepper Inc.</u> (Baa2 stable, about 33%), which are held via Acorn Holdings B.V. (100%);
- » Coty Inc. (B1 stable, around 54%), a global leader in fragrances with an expanding position in cosmetics and body care, held through Cottage Holdco B.V. (100%);
- » Pret A Manger, Panera Bread Company, Caribou Coffee Company and Espresso House, which are all held via Pret Panera III GP (about 99% indirect voting rights in Pret Panera); and
- » Krispy Kreme Doughnuts, Inc. (Krispy Kreme, about 45%) and Petcare GP (about 40%).

Detailed credit considerations

Clearly defined and successful investment strategy; investments in defensive global consumer businesses

JAB's strategy is focused on long-term investments in companies with premium brands in the consumer goods and retail sectors such as Coty, JDE Peet's, Krispy Kreme and Keurig Dr Pepper. According to the company, it has strong working knowledge and networking advantage in the consumer goods and retail sectors. These sectors are deemed less cyclical and more cash generative than other industries and they tend to benefit from product portfolio breadth and strong market positions. These advantages tend to limit the impact from customers switching products in a downturn or changes in customer preferences. Most of JAB's investees have relatively strong pricing power, which should protect margins in the current high inflationary environment.

JAB acquires and integrates companies or brands in a particular subsector, as shown by its past acquisitions in household goods, cosmetics and coffee brands, with a view of listing them once operations have been sufficiently consolidated and optimised. Recent examples of this strategy is the integration of Keurig into Dr Pepper, and the IPOs of JDE Peet's and Krispy Kreme. Sales and cost synergies are achieved through R&D, scaling of factories and development of distribution channels. Ultimately, management intends to replicate Reckitt Benckiser Group Plc's (A3 stable) success in cosmetics through Coty and in nonalcoholic beverages via JDE Peet's and Keurig Dr Pepper.

The global diversification of JAB's investments also adds a greater degree of stability to performance and market values. However, because of JAB's strategy of acquiring businesses domiciled in the US and Europe and then expanding into emerging markets, there is a greater concentration in Western markets.

JAB in 2019 created the Petcare Investment Platform and has since acquired veterinary clinics as well as pet insurance businesses. This has resulted in greater business diversity as we have added business and consumer services (veterinary clinics) and insurances (pet insurance) as distinct sectors to our business diversity score. The investments have also contributed to a sizeable increase of JAB's portfolio value. We expect JAB to continue to make investments into its Petcare platform, foremost in Europe and in pet insurance where the markets so far are less consolidated and at a lower pace in veterinary clinics in the US. This is due to antitrust restrictions imposed by the US Fair Trade Commission (FTC), which remain in place for a duration of ten years.

We continue to positively view the growth in the value of the overall portfolio, notwithstanding the fact that valuation multiples have expanded alongside market multiples for comparable peers in recent years. The expansion in multiples is mitigated by the "low beta

nature" of JAB's investments, which would ensure a lower retreat in valuation in case of a severe market correction than for more cyclical investments.

Lower share price valuations due to weaker economic sentiment result in decrease of net MVL

In H1 2022, significantly lower equity valuations as a result of weakening economic sentiment from persistent inflationary pressure and tight monetary policies, combined with geopolitical and macroeconomic risks, had a negative effect on JAB's net MVL. Net MVL increased slightly to 18.9% on a JAB standalone basis (24.6% when including debt at the intermediate holding company level) in H1 2022 from 17.2% on a JAB standalone basis (22.5% when including debt at the intermediate holding company level) in December 2021. We expect continued equity price volatility resulting from the impact of the inflationary pressure on global economic sentiment and the Russia-Ukraine conflict. However, we expect JAB to continue to operate within the leverage requirements of 15%-20% net MVL (on a JAB standalone basis when excluding debt at the intermediate holding company level) through the cycle, which is commensurate with the Baa1 rating category. JAB is currently solidly positioned in the Baa1 rating category based ond our expectation that JAB will maintain metrics in line with the current rating level. The relative financial performance of JAB's portfolio, -11.4% against the MSCI World Index of -20.2% in H1 2022, also illustrates the defensiveness of its investments.

Management has also demonstrated that it remains committed to publicly list shares of its holdings. JAB has additionally flagged Panera Brands as a company to list on the stock market. Whilst the decision and readiness to go public are positive, capital markets currently are not receptive for listings. However, we expect the Panera Brands listing once markets have opened to listings again.

In addition, the credit quality of investments has improved with Coty Inc. upgraded by three notches since September 2021 and the one-notch upgrade of JDE Peet's in April 2021.

Exhibit 2
Credit quality of rated investments has materially improved
Recent rating actions for Coty, JDE Peet's and KDP

Company	ompany Rating Action		Date
Coty	▲ Upgrade to B1 / Stable	B2 / Stable	24-May-2022
Coty	▲ Upgrade to B2 / Stable	Caa1 / Negative	21-Sep-2021
JDE Peet's	▲ Upgrade to Baa3 / Stable	Ba1 / Positive	26-Apr-2021
Keuring Dr Pepper	Baa2 affirmation / Outlook changed to stable	Baa2 / Negative	26-Feb-2021
JDE Peet's	Assign Ba1 / Positive	NEW	7-Jul-2020
Coty	▼ Downgrade to Caa1 / Negative	B2 / Negative	9-Apr-2020
Keuring Dr Pepper	Baa2 affirmation / Outlook remains negative	Baa2 / Negative	7-Apr-2020

Source: Moody's Investors Service

Underlying investments are held through intermediate holding companies

Given that JAB Holding Company S.a.r.l. holds its stakes through intermediate holding companies, which are co-owned by JAB Holding and JAB Consumer Partners, it is important to assess the credit quality of the intermediate holding companies. Excessive leverage at the intermediate holding company level would impair JAB Holding's ability to recover the value of the underlying investments. Hence, the analysis of the net MVL at the JAB Holding level is not sufficient to assess its credit quality.

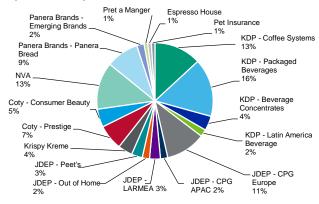
JAB Coffee & Beverages B.V. is JAB Holding's largest intermediate holding company. JAB Coffee & Beverages B.V. owns around 33% in Keurig Dr Pepper and 57% in JDE Peet's. JAB Coffee & Beverages B.V. is 76% owned, with 100% voting rights, by JAB Holdings B.V. In September 2020, JAB Holdings contributed all its shares in Acorn Holdings B.V. (€17.2 billion) to the newly created entity JAB Coffee & Beverages B.V. Acorn Holding B.V. was levered, especially if we included preferred shares and equity warrants on its balance sheet in its leverage calculation. Acorn Holding B.V. has reduced its debt liabilities by around 20% in 2021 to €3.3 billion and eliminated its contingent liabilities maintaining only bank debt in the structure.

As a mitigant to the remaining unsecured liabilities, the intermediate structures also have some equity buffer from JAB Consumer Partners SCA SICAR (JCP), an investment fund managed by partners of JAB. JCP invests alongside JAB Holding in most of its investments. As of 30 June 2022, JCP had \$16 billion of invested capital and distributed more than \$12 billion to its limited partners since 2019.

Successful IPO of JDE Peet's and Krispy Kreme improved investment transparency and liquidity of the investment portfolio

The successful IPO of JDE Peet's in a very difficult market environment in 2020 along with the IPO of Krispy Kreme in July 2021 led to an improvement in portfolio transparency. Around 54% of JAB's portfolio is currently publicly listed. JAB's investment portfolio is now much more liquid, with around €24 billion of the portfolio value invested in large cap and liquid investments. Additionally, JAB has increased the free float of KDP, leading to a more liquid stock.

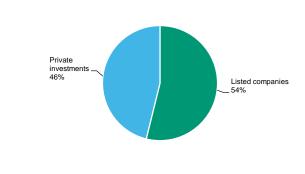
Exhibit 3 JAB's portfolio composition as of June 2022



Percentages do not add up to 100% due to rounding Source: JAB's H1 2022 report

Sources: Company and Moody's Investors Service

Exhibit 4 Proportion of listed and unlisted assets as of June 2022



Sources: Company and Moody's Investors Service

Long-term incentive plan has been restructured into equity

In December 2020, JAB Holding restructured its long-term incentive plan (LTIP). As a result, its redeemable shares worth €1.6 billion were eliminated and reclassified as equity. However, €1.2 billion of shares were redeemed for cash, which has increased JAB's net debt. The reclassification as equity followed the restructuring of the contractual terms of the LTIP, such that JAB Holding no longer has the obligation to repurchase shares or otherwise settle the LTIP agreements in cash. In addition, the share option schemes have been amended so that options can only be settled by issuing shares.

LTIP liabilities were excluded from our leverage metric calculations but were always considered qualitatively in our analysis and were taken into account for our leverage tolerance at the JAB Holding level. The conversion of the LTIP into equity-like instruments with no potential cash calls for JAB Holding is a credit positive.

ESG considerations

The environmental risks for JAB Holding are mainly centered on its underlying assets. JAB Holding is focused on improving the sustainability of its underlying businesses with a focus on the coffee value chain, where improvements can probably still be made.

JAB has eliminated complexity at its intermediate holding Acorn Holding B.V. by simplifying its capital structure and legal structure. With the stock market listings of Krispy Kreme Doughnuts, Inc. in 2020 and JDE Peet's N.V. in 2021, the transparency of the portfolio has also further enhanced as the valuation of these assets can now be derived from stock markets rather than less frequently available book values. At the same time management has demonstrated that it remains committed to publicly list shares of its holdings. JAB has additionally flagged Panera Brands as a company to list on the stock market. Whilst the decision and readiness to go public are positive, capital markets currently are not receptive for share listings. Moody's, however, expects the Panera Brands listing once capital markets open up again. JAB also appointed Mr. Creus as Vice Chairman and designated successor to Chairman Mr. Harf, thereby reducing keyperson risk. Still, a degree of complexity of its organizational structure - foremost the private ownership and the presence of JCP as a co-investor - and opacity, for instance limited financial disclosure of JAB's private investments, remain.

The Baa1 rating takes into account JAB's commitment to a conservative financial policy, a higher share of publicly-listed investments that increases the portfolio transparency and a more diverse (by business sector) portfolio with core investments in the consumer

packaged goods, soft beverage, foods & beverage, soft drinks, pet care and pet insurance. While the addition of third party investors increases overall financial flexibility to implement larger scale acquisitions, the presence of an intermediate holding company with debt adds organizational complexity.

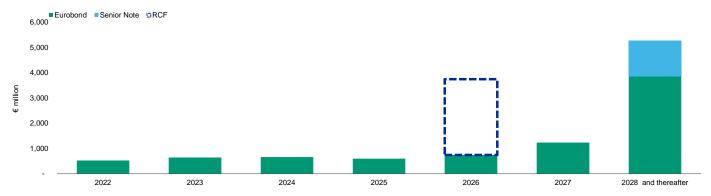
Liquidity analysis

JAB's liquidity is solid. As of 30 June 2022 the investment holding company held around \$4.1 billion of cash and cash equivalents and had access to an undrawn €3.0 billion revolving credit facility maturing in 2026.

JAB has a well-spread maturity profile. The next sizeable maturity is the company's Eurobond due in May 2023, of which €642 million were outstanding as of 30 June 2022. Since 2020 JAB has lengthened its average debt maturity profile by issuing longer-dated debt. These include three \$-denominated bonds totaling \$1.5 billion due 2030, 2051 and 2052 as well as three €-denominated bonds totaling €1.5 billion due 2031, 2032 and 2035. We expect that higher future refinancing costs will be offset by stable to increasing dividend and interest income. JAB's access to listed investments (around 54% of its total asset value as of 30 June 2022) further supports the company's financial flexibility in the short and medium term.

Exhibit 5

Debt maturity profile
As of June 2022



Blue dashed line indicates (currently undrawn) revolving credit facility Source: JAB's H1 2022 report

Structural considerations

Excluding the guarantor, the intermediate holding companies within the JAB Group and JAB's investments do not provide guarantees to the issuer of the bonds. The payment of interest and debt at the issuer is therefore dependent on the timely receipt of dividends from its investments, which are mostly controlled and give JAB the ability to declare the dividend levels; the ability to monetise its investments via a disposal or an IPO; and, where possible, the upstreaming of cash from majority-owned investments. All debt is held and raised by the issuer.

Methodology and scorecard

In assessing the credit quality of JAB, we apply our <u>Investment Holding Companies and Conglomerates</u> rating methodology, published in July 2018. Our forward-looking scorecard-indicated outcome is in line with the currently assigned rating of Baa1.

The scorecard-indicated outcome is mainly weighed down by JAB's relatively high asset concentration, low business diversity, although this is mitigated by JAB's exposure to defensive end industries, and relatively complex group structure. The current rating is supported by a net MVL of less than 25% ('A' scorecard indication) on a JAB standalone basis when excluding debt at the intermediate holding company level.

Exhibit 6
Rating factors
JAB Holding Company S.a r.l.

Investment Holding Companies Industry [1][2]	LTM 6/30/2022		
Factor 1 : Investment Strategy (10%)	Measure	Score	
a) Investment Strategy	Baa	Baa	
Factor 2 : Asset Quality (40%)	·		
a) Asset Concentration	В	В	
b) Geographic Diversity	А	Α	
c) Business Diversity	Baa	Baa	
d) Investment Portfolio Transparency	A	Α	
Factor 3 : Financial Policy (10%)			
a) Financial Policy	Baa	Baa	
Factor 4 : Estimated Market Value-based Leverage (MVL) (20%)			
a) Estimated Market Value-Based Leverage	A	Α	
Factor 5 : Debt Coverage and Liquidity (20%)			
a) (FFO + Interest Expense) / Interest Expense	3.0x	Ва	
b) Liquidity	A	Α	
Rating:		-	
a) Scorecard-Indicated Outcome		Baa1	
b) Actual Rating Assigned			

Moody's 12-18 Month Forward View As of 10/12/2022 [3]		
Measure	Score	
Baa	Baa	
В	В	
A	Α	
Baa	Baa	
A	Α	
Baa	Baa	
A	Α	
3x - 3.5x	Baa	
A	Α	
	Baa1	
	Baa1	

Ratings

Exhibit 7

Category	Moody's Rating	
JAB HOLDING COMPANY S.A R.L.		
Outlook	Stable	
Issuer Rating	Baa1	
JAB HOLDINGS B.V.		
Outlook	Stable	
Bkd Senior Unsecured	Baa1	
Source: Moody's Investors Service		

^[1] All ratios are based on adjusted financial data and incorporate our Global Standard Adjustments for Non-Financial Corporations.

^[2] As of 06/30/2022.

^[3] This represents our forward view, not the view of the issuer, and unless noted in the text, does not incorporate significant acquisitions and divestitures. Source: Moody's Investors Service

Appendix

Exhibit 8

Peer comparison

INVESTMENT HOLDING COMPANIES PEER GROUP

	JAB Holding S.a.r.l	Investor AB	Groupe Bruxelles Lambert	Criteria Caixa	Wendel SE
Rating & Outlook	Baa1 Stable	Aa3 Stable	A1 Stable	Baa2 Stable	Baa2 Stable
Country of Domicile	Luxembourg	Sweden	Belgium	Spain	France
	As of June 2022	As of September 2022	As of March 2022	As of June 2022	As of June 2022
Total Portfolio Value (in €m)	45,007	52,313	22,551	24,083	7,968
Cash (in €m)	3,877	2,189	2,012	649	789
Asset Concentration (Top 3 Assets)	70%	39%	43%	66%	69%
Proportion of Listed Assets	54%	81%	71%	85%	61%
Company Guidance / Financial Target	MVL in the range of 15% - 20% in mid/long term	MVL in the range of 0% - 10%	MVL below 10%	Target MVL ~20%	To retain an investment grade profile
Net Market Value Leverage (MVL)	19%	3%	6%	17%	8%
(FFO + Interest Expense) / Interest Expense	3.0x	8.5x	25.7x	7.9x	-0.2x

Sources: Company and Moody's Investors Service

Endnotes

1 A low beta value means that the security is theoretically less volatile than the equity market.

© 2022 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 CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. 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 APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES, MOODY'S CREDIT RATINGS. ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its 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, ASSESSMENT, 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service 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 credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY100,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1345618

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

