# MOODY'S INVESTORS SERVICE

# **Credit Opinion: Barry Callebaut AG**

Global Credit Research - 08 Jan 2016

Switzerland

#### Ratings

<b>Category</b> Outlook Corporate Family Rating <b>Barry Callebaut Services N.V.</b> Outlook Senior Unsecured -Dom Curr	Moody's Rating Stable Ba1 Stable Ba1/LGD4				
Contacts					
<b>Analyst</b> Ernesto Bisagno/London Lola Cavanilles/London Michael J. Mulvaney/London	Phone 44.20.7772.5454				
Key Indicators					
[1]Barry Callebaut AG	8/31/2015	8/31/2014	8/31/2013	8/31/2012	8/31/2011
Total Sales (USD Billion) CFO / Net Debt Debt / EBITDA EBITA / Interest Expense	\$6.6 7.7% 4.4x 3.6x	\$6.5 0.6% 4.4x 3.8x	\$5.2 17.0% 4.3x 4.4x	\$5.2 13.9% 2.9x 5.2x	\$4.9 16.4% 2.3x 6.0x

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics

56.2%

53.7%

51.2%

50.1%

Note: For definitions of Moody's most common ratio terms please see the accompanying User's Guide.

56.7%

# Opinion

#### **Rating Drivers**

Debt / Book Capitalization

- Leading market position as a manufacturer of both chocolate and cocoa products
- Steady growth rate in the chocolate segment, ahead of the market but weak global cocoa business
- Cocoa supply disruption risks inherent to the industry
- Hedging strategy and cost-control initiatives underpin margin predictability
- Cocoa leadership project and `smart' growth to support profitability in the mid term
- Current weak credit metrics for the rating, but expectation that Barry Callebaut will continue to achieve steady

earnings growth in the medium term

#### **Corporate Profile**

Headquartered in Zurich, Switzerland, Barry Callebaut AG is the world's leading supplier of premium cocoa and chocolate products by sales volume, according to the company, servicing customers across the global food industry. Barry Callebaut is fully integrated, from the sourcing of raw material through the production of semi-finished products to the production of industrial chocolate products. The company is divided into three strategic business units: (1) Cocoa Products, which sources cocoa beans and processes semi-finished cocoa products, representing 30% of total sales in value for the financial year (FY) 2014-15; (2) Food Manufacturers, which produces industrial chocolate products for consumer companies or Fast-moving consumer goods (FMCG), accounting for 55% of sales; and (3) Gourmet & Specialties, supplying restaurants, bakeries and hotels, and amounting to slightly less than 15% of sales.

Barry Callebaut reported annual sales of CHF6.2 billion (around EUR6.7 billion) for the FY ended 31 August (FYE) 2015. As of 31 August 2015, the company was selling products to 131 countries, operated 53 production facilities and employed 9,430 people.

#### SUMMARY RATING RATIONALE

Barry Callebaut's Ba1 rating reflects the fact that recent acquisitions, infrastructure investments and costs associated with outsourcing contracts have weakened the company's key credit metrics and that we expect the rating to remain in high-yield territory for the foreseeable future. Barry Callebaut is reliant on countries with a history of political instability, such as Ivory Coast (Ba3 stable), for the sourcing of cocoa beans. While we recognise that the political situation in Ivory Coast has stabilised since the turmoil in 2011 and that Barry Callebaut has begun diversifying into countries with a more stable political environment, such as Malaysia, Indonesia and Brazil through the Petra acquisition completed in FY 2012-13, the company remains significantly exposed to political instability. As a result of the geographic concentration of cocoa production in politically unstable areas, supply disruption risks are inherent to the industry.

Cocoa prices remain high, and close to peak levels, continuing to affect Barry Callebaut's working capital needs. However, in the medium term, the ICCO expects a more balanced situation with cocoa supply matching grinding capacity, which could result in a stabilisation or slow decline of cocoa prices.

More positively, the rating also reflects Barry Callebaut's leading market position as a manufacturer of both chocolate and cocoa products, with an established presence in all major global markets and a growing contribution from the emerging markets, which typically display higher growth prospects. Through the Petra acquisition, Barry Callebaut enhanced its vertical integration in the cocoa business and further expanded operations in the world's fastest growing markets, particularly South East Asia and South America.

The company's rating also reflects the resilience of its hedging policy to volatile cocoa bean prices. Barry Callebaut's cost-plus business model, which covers the majority of its sales volume, has proved successful in recent years and has enabled it to sustain fairly stable, albeit declining, operating margins levels, despite volatile cocoa bean prices.

While the current metrics are weak for the rating, we expect that Barry Callebaut will continue to achieve stable earnings growth, driven by rising volumes and the implementation of the profitability enhancement strategy. We also expect free cash flow to strengthen over 2015-17, driven by steady earnings growth combined with lower capex and an increased focus on working capital reduction. As a result, we anticipate a positive impact on leverage, which we forecast to decline to below 4.0x, with retained cash flow (RCF) to net debt to strengthen to the mid-teen level by FY 2016-17.

Refinancing risk in FY 2015-16 is manageable, with CHF288 million maturing over June (CHF188 million) and August 2016 (CHF100 million). In addition, the company needs to roll over its CHF162 million bank overdrafts. In FY 2016-17, the company has additional maturities of CHF524 million including a CHF374 million bond.

# **DETAILED RATING CONSIDERATIONS**

#### LEADING MARKET POSITION AS A MANUFACTURER OF BOTH CHOCOLATE AND COCOA PRODUCTS

Barry Callebaut is a fully-integrated business, sourcing cocoa beans direct from the farmers, converting them into cocoa ingredients (butter, liquor and powder) and manufacturing chocolate, chocolate fillings, decorations and compounds, and nut-based products. In a highly concentrated market, the company is the market leader in both

industrial chocolate and cocoa grinding capacity, ahead of Cargill Incorporated (A2 stable) and Olam International Limited (unrated). Cargill is the second-largest player with less than half of Barry Callebaut's market share.

# STEADY GROWTH RATE IN THE CHOCOLATE SEGMENT, AHEAD OF THE MARKET BUT WEAK GLOBAL COCOA BUSINESS

Barry Callebaut achieved 4.5% volume growth in FY 2014-15, compared to a decline of 2.7% for the total market (according to Nielsen data). This growth in volumes was driven by a positive contribution from (1) the emerging markets, with volumes up 5.1%, representing 33% of the group's total sales in volume; (2) long-term outsourcing agreements, driving volumes up 6.6% and representing 32% of total group sales; and (3) the Gourmet and Specialties, with volumes rising by 6.0%, representing 10% of total group sales.

Europe remains Barry Callebaut's biggest source of revenues with a contribution to sales volumes of 42%, in line with the previous year. The company's operating performance in the global cocoa segment weakened as a result of challenging market conditions; the combination of the high price of cocoa beans and weak prices for cocoa butter and cocoa powder resulted in a very low combined ratio, which expresses the combined sales prices for cocoa butter and cocoa powder in relation to the cocoa bean price and the cost structure.

Profitability was also negatively impacted by adverse foreign-exchange (FX) movements, as the company had to translate its profits generated from outside Switzerland and in other currencies into Swiss francs at a lower exchange rate. As a result, the company's total reported EBIT was stable at CHF415 million (up 7.4% excluding FX); EBIT per ton increased to CHF279 (excluding FX) from CHF274.

#### COCOA SUPPLY DISRUPTION RISKS INHERENT TO THE INDUSTRY

The main cocoa-growing areas are West Africa, representing approximately 72% of world supply, according to the International Cocoa Organization (ICCO) 2014, followed by South America and South East Asia. The cocoa market is very concentrated, with the Ivory Coast accounting for 40% of the global cocoa bean output. In addition to the risk of plant disease epidemics and unfavourable climate, which can negatively affect crop yield, the political risk in the main producing countries is a consideration when assessing the credit strength of manufacturers of cocoa and chocolate products.

Despite Barry Callebaut's efforts to diversify its sources and to build strong business relations with cocoa farmers, the company's reliance on politically unstable countries for cocoa beans supply is credit negative, although we recognise that it is an industry-wide, rather than a company-specific, issue. The acquisition of Petra has helped to diversify Barry Callebaut's sourcing of cocoa beans into Asia and Brazil, but we expect that the business and industry in general will remain reliant on the Ivory Coast.

#### HEDGING STRATEGY AND COST-CONTROL INITIATIVES UNDERPIN MARGIN PREDICTABILITY

Barry Callebaut's rating is supported by the company's track record in terms of operating margin predictability, despite volatile cocoa bean prices. The company hedges cocoa price risks via physical beans or futures contracts from the time the customer has signed the contract. The selling price established for the client at the delivery date is based on the forward price at the order date, thereby eliminating risks associated with cocoa price volatility.

Barry Callebaut's cost-plus business model, which covers of the majority its sales volumes, enables the company to pass raw material price increases onto its clients and therefore limits its exposure to raw material cost volatility. In addition, we view positively Barry Callebaut's constant focus on reducing operation costs. Although the company has proven its ability to sustain stable operating profits through periods of cocoa price volatility, its business remains vulnerable to supply shortages. However, we note that so far the company has managed supply disruptions well.

# COCOA LEADERSHIP PROJECT AND `SMART' GROWTH TO SUPPORT PROFITABILITY IN THE MID TERM

In response to the challenging cocoa market environment, Barry Callebaut's management announced that it had started the "Cocoa Leadership Project", which will help to leverage the company's global scale and expertise in cocoa, and to improve the profitability of the global cocoa segment. Under the project, the company aims (1) to reduce the commodity product offering and focus more on differentiation and premiumisation of the cocoa powder range; (2) to centralise some key strategic activities and decision making, such as the management of the combined ratio, which is currently done regionally; and (3) to optimise the cocoa manufacturing footprint and the global products flow with the objective of having the lowest global cost position.

Barry Callebaut also revised its mid-term average sales volume growth forecast down to 4%-6% per annum until 2017-18, down from 6%-8% previously. The reduction in the mid-term growth rate reflects management's increased focused on a more selective ("SMART") growth to enhance profitability. Volume expansion will continue to be driven by (1) increasing demand for chocolate products in emerging markets; (2) continued growth in its Gourmet and Specialties product range; and to a lesser extent from (3) additional outsourcing agreements and strategic partnerships. Particularly with regard to the last point, the company targets more selective, profitable growth, mainly coming from partnerships with regional players in the emerging markets. Management also outlined a project to reduce its working capital by CHF300 million in the next three years, mainly through a reduction in inventories both in terms of beans and cocoa products, as well as through better planning for the chocolate inventories.

#### WEAK CREDIT METRICS FOR THE RATING

Despite the stable operating performance, the company's Moody's-adjusted leverage (adjusted gross debt to EBITDA) remains high at 4.4x at FY2014-15, and the company's adjusted RCF/net debt deteriorated slightly to 10.6% from 11.7%. Free cash flow remained constrained by high working capital needs driven by high cocoa prices, which were partially mitigated by positive FX movements. The company's capex remained high at CHF250 million, in line with FY 2013-14 and reflecting the company's investment in additional capacity in the chocolate business, particularly in Europe.

# WEAK MARKET CONDITIONS IN THE COCOA SEGMENT TO PERSIT IN FY2015-16 BUT EXPECTATION THAT BARRY CALLEBAUT WILL CONTINUE TO ACHIEVE STEADY EARNINGS GROWTH IN THE MEDIUM TERM

We expect Barry Callebaut's operating performance to remain broadly stable in FY 2015-16, driven by the steady growth of the chocolate business partially offset by the weak market conditions in the global cocoa segment due to the low combined ratio, with management guiding another negative impact of approximately CHF40 million in H1 2015-16. Additional pressure on profitability would reflect further appreciation of the Swiss franc from the current level, as Barry Callebaut derives most of its earnings outside Switzerland.

We expect EBIT to increase in the mid-single digit rate over 2016-17, driven by a volumes increase of 4%, with EBIT growth accelerating in 2017-18 as a result of the company's implementation of the profitability enhancement strategy.

We expect free cash flow to strengthen over 2015-17 driven by (1) steady earnings growth; (2) lower capex, as the company guides CHF200 million in FY 2015-16 vs CHF250 million in FY 2014-15; and (3) an increased focus on working capital reduction, with a CHF300 million reduction planned over 3 years. As a result, we expect a positive impact on leverage, which we expect to decline below 4.0x and RCF to net debt to strengthen to the midteen level by FY 2016-17. We also note that the company has some leeway to curtail its capex if required, because approximately 50% relates to growth projects.

#### **Liquidity Profile**

Barry Callebaut's liquidity requirements are significant and difficult to predict because of the volatility of cocoa prices, which can be affected by weather conditions, investor speculation and political events. A material and sharp increase in cocoa prices, as experienced over 2013-15, results in unfavourable swings in working capital, requiring credit facilities to cover variable and unpredictable needs.

Short term maturities at FY 2014-15 amounted to CHF646 million including CHF196 million drawings under the EUR600 million Commercial Paper programme; CHF162 million bank overdrafts, and CHF288 million related to long-term debt maturing in FY 2015-16.

The company uses the CP programme and bank overdrafts to fund working capital needs and has a EUR600 million revolving credit facility (fully undrawn as at FY 2014-15), which provides alternate liquidity covering the CP programme. In addition, it has a EUR350 million in asset-backed securitisation programme; the programme was upsized in FY 2014-15 from EUR275 million and was quasi fully utilised as at FY 2014-15. In order to diversify its short-term funding sources and reduce its reliance on the CP market, in FY 2014-15 the company entered into two term senior, unsecured loans of CHF100 million and CHF150 million with its main shareholder Jacobs Holding AG (unrated), with the two loans maturing in August 2016 and June 2017 respectively.

The EUR600 million revolving credit facility matures in 2019, and incorporates a EUR75 million swing-line facility for general corporate and working capital purposes. It also includes an "accordion" option (at the discretion of the

banks), potentially increasing the facility amount to EUR750 million. The revolving credit facility is subject to the following maintenance covenants (to be tested on a semi-annual basis) (1) an interest coverage ratio; (2) a profitability ratio; and (3) minimum tangible net worth. This set of covenants provides Barry Callebaut with greater flexibility given the absence of cash-based ratios, which can fluctuate with working capital cycles. As of the last testing date, end-August 2015, the company was in compliance with the covenants; the tightest headroom was 15.3% under its interest coverage ratio. Positively, the revolving credit facility does not include any leverage covenants, giving Barry Callebaut more flexibility to cope with unfavourable swings in working capital.

Refinancing risk in FY 2015-16 is manageable, with CHF288 million maturing over June (CHF188 million) and August 2016 (CHF100 million) and we understand that the company has started the refinancing process already. In addition, the company needs to roll over its CHF162 million bank overdrafts. In FY 2016-17, the company has additional maturities of CHF524 million including a CHF374 million bond.

# **Structural Considerations**

Barry Callebaut's Ba1 senior unsecured instrument ratings are in line with the corporate family rating. This reflects the lack of significant structural subordination and that they are fully guaranteed by Barry Callebaut. The company's probability of default rating of Ba1-PD reflects the use of a 50% family recovery rate, consistent with a bank and bond capital structure.

# **Rating Outlook**

The rating outlook is stable, reflecting Barry Callebaut's solid business profile and operating performance despite elevated leverage and the ongoing pressures of working capital needs on liquidity management. It reflects our expectation that the company's key credit metrics will gradually improve but also that the pace of improvement will be constrained by working capital needs.

# What Could Change the Rating - Up

Although not expected in the short term, positive rating pressure could develop if, in conjunction with improved liquidity, Barry Callebaut (1) improved its adjusted EBITDA margins towards double-digit levels in percentage terms; (2) further reduced its adjusted gross debt/EBITDA ratio towards 3.0x; and (3) increased its RCF/net debt ratio above 20%.

# What Could Change the Rating - Down

Negative pressure could be exerted on the ratings if (1) the company failed to maintain its adjusted EBITDA margins at high single-digit levels in percentage terms; (2) its credit metrics remained weak, with adjusted leverage not expected to return below 4.0x and RCF/net debt not returning in the mid-teens in percentage terms by the end of FY 2016-17, and with further progression thereafter; (3) supply risk were to renew; or (4) the company's liquidity deteriorates.

# **Other Considerations**

Methodology grid: In assessing the credit quality of Barry Callebaut, we apply the Global Protein and Agriculture Industry Methodology (last updated in May 2013). The methodology grid outcome for Barry Callebaut is Ba2, based on the company's last full year results to 31 August 2015. The rating from the grid is one notch below the final rating as the company's leverage at FY 2014-15 remains high for the rating category, owing to high working capital and capex needs which constrained free cash flow generation.

# **Rating Factors**

# Barry Callebaut AG

Protein and Agriculture Industry Grid [1][2]	Current FY 8/31/2015		[3]Moody's 12-18 Month Forward ViewAs of 01/08/2016	
Factor 1 : SCALE & DIVERSIFICATION (20%)	Measure	Score	Measure	Score
a) Total Sales (USD Billion)	\$6.6	Ba	\$6.6 - \$6.9	Ва
b) Geographic Diversification	Baa	Baa	Ваа	Baa

c) Segment Diversification	В	В	В	В
Factor 2 : BUSINESS POSITION (25%)				
a) Market Share	Baa	Baa	Baa	Baa
b) Product Portfolio Profile	Baa	Baa	Baa	Baa
c) Earnings Stability	Ва	Ba	Ва	Ba
Factor 3 : FINANCIAL POLICY (15%)				
a) Financial Policy	Ва	Ва	Ва	Ba
Factor 4 : LEVERAGE & COVERAGE (40%)				
a) CFO / Net Debt	7.7%	Caa	11% - 18%	В
b) Debt / EBITDA	4.4x	В	3.7x - 4.4x	В
c) EBITA / Interest Expense	3.6x	Ba	3.6x - 3.8x	Ba
d) Debt / Book Capitalization	56.7%	Ba	50% - 54%	Ba
Rating:				
a) Indicated Rating from Grid		Ba2		Ba2
b) Actual Rating Assigned				Ba1

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 08/31/2015; Source: Moody's Financial Metrics [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.

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 http://www.moodys.com for the most updated credit rating action information and rating history.

MOODY'S INVESTORS SERVICE

© 2016 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND CREDIT RATINGS AND RESEARCH PUBLICATIONS PUBLISHED BY MOODY'S ("MOODY'S PUBLICATIONS") MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS. INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR, MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL. WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR

#### PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS FOR RETAIL INVESTORS TO CONSIDER MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS IN MAKING ANY 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."

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 clients. It would be dangerous for "retail clients" to make any investment decision based on MOODY'S credit rating. If in doubt you should contact your financial or other professional adviser.

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.