

CREDIT OPINION

7 July 2016

Update

Rate this Research



RATINGS

Redefine Properties Limited

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

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

Contacts

Dion Bate 27-11-217-5472 VP-Senior Analyst dion.bate@moodys.com

David G. Staples 971-4-237-9562 MD-Corporate Finance david.staples@moodys.com

Redefine Properties Limited

Update to Discussion of Key Credit Factors

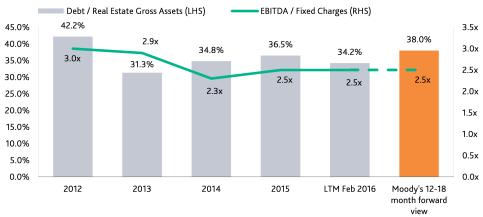
Summary Rating Rationale

Redefine Properties Limited's ("Redefine" or the company) Baa3/Aa2.za rating is underpinned by a material growth of its property portfolio over the past 18 months within South Africa as well as more recently into Europe and Australia. The sizable portfolio of predominantly directly held South African properties (80% of property assets) has moderate and relatively stable occupancy rates of 94.3%, that produced high EBITDA margins of around 87%. The rating is also supported by a well-diversified property portfolio across key sectors in office, industrial and retail with local and offshore property (direct and indirect) exposures in South Africa, United Kingdom, Germany and Australia.

The rating is however constrained by the more complex organisational and reporting structure, a low fixed charge cover of 2.5x and increasing total debt to gross assets ratio (leverage) of 34.2%, which is anticipated to increase towards 38%. Further key constraints on the ratings include the large proportion of secured debt in the company's capital structure, which represents 67% of total debt; and the high level of encumbered assets to gross assets equal to 62.8%. All data points and credit metrics are as of last twelve months to 29 February 2016 (LTM 2016) and are according to Moody's standard definitions and adjustments.

Exhibit 1

Key credit metrics expected to weaken but remain within rating guidance



Source: Redefine and Moody's Financial Metrics

Credit Strengths

- » Diversified property portfolio across key sectors in South Africa, with growing exposure to Europe and Australia
- » Stable cash flows supported by moderate vacancy rates and relatively stable operating margins
- » Liquidity is sufficient to meet obligations during the next 12-18 months

Credit Challenges

- » Debt funded acquisitions to weaken credit metrics but remain within Baa3 tolerance levels
- » Limited track record of managing direct property exposures offshore

Rating Outlook

The rating outlook reflects Moody's view that Redefine will continue to produce steady rental income, make well-conceived investments and produce good operating returns. The stable outlook assumes the absence of large transformational acquisitions and that management will maintain an adequate liquidity profile at all times.

Factors that Could Lead to an Upgrade

- » Portfolio size and diversification materially improves
- » Good track record as a rated entity
- » Consistent credit metrics, maintaining leverage, defined as adjusted total debt/gross assets, sustainably below 35% and fixed charge coverage above 3.0x on a sustained basis
- » Ratio of secured debt/property assets falls below 25%

Any future upward pressure will also have to be considered in the context of the South African sovereign rating, currently Baa2 with a negative outlook, which may constrain Redefine ratings.

Factors that Could Lead to a Downgrade

- » Adjusted total debt/gross assets exceeds 40% on a sustained basis
- » Fixed charge coverage trends below 2.5x
- » Ratio of secured debt/property assets remains above 30%
- » Unexpected difficulties integrating acquisitions arise, having a negative impact on the operational performance or cash flows of the company
- » Deterioration of Redefine's liquidity risk profile

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

KEY INDICATORS [1]				
Redefine Pro	perties Limited			

	2/29/2016(L)	8/31/2015	8/31/2014	8/31/2013	8/31/2012
FFO Payout	119.0%	104.1%	68.7%	136.3%	116.8%
Amount of Unencumbered Assets	37.2%	44.8%	41.8%	47.6%	32.0%
Debt / Gross Assets [2]	34.2%	36.5%	34.8%	31.3%	42.2%
Net Debt / EBITDA	5.3x	5.7x	5.3x	5.0x	8.1x
Secured Debt / Gross Assets	22.9%	27.5%	28.7%	24.8%	38.0%
Gross Assets (ZAR Billion)	74.7	73.2	57.7	49.2	47.2
Development Pipeline	3.9%	4.5%	6.1%	6.9%	1.7%
EBITDA Margin (YTD)	87.0%	88.0%	79.2%	84.3%	79.3%
EBITDA Margin Volatility	5.3%	4.9%	3.6%	4.9%	5.6%
EBITDA / Fixed Charges (YTD) [3]	2.5x	2.5x	2.3x	2.9x	3.0x
Joint Venture Exposure (YTD)	6.7%	6.8%	3.5%	2.2%	0.2%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] Debt includes a portion of hybrid securities considered to have debt like features as explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2010. [3] Fixed Charges includes capitalized interests explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2010.

(L) Last twelve months

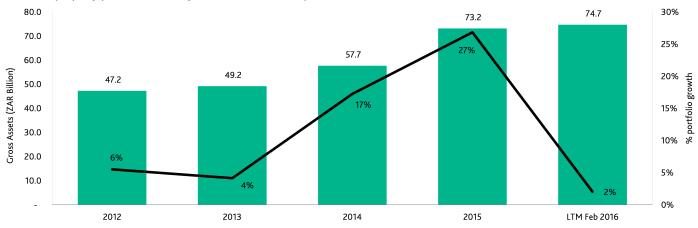
Source: Moody's Financial Metrics™

Detailed Rating Considerations

SIZABLE PORTFOLIO DIVERSIFIED ACROSS SECTORS

The value of Redefine's direct and indirect property portfolio has grown materially over the past 2 years to ZAR65.5 billion from ZAR36.9 billion as a result of a number of moderately sized property portfolio acquisitions. We expect the property portfolio will increase further to ZAR69 billion, following the acquisition of 49.9% stake in Echo Prime Properties (Echo). Redefine's direct property portfolio totals ZAR52.7 billion comprising mostly of South African properties and a small direct exposure in Germany and Australia. Its other investments include sizable strategic holdings of listed REIT securities totalling ZAR13 billion, comprising of a 30.1% stake in Redefine International Plc, a 25.9% stake in Cromwell, 11.5% in Emira Property Fund and 2.4% in Arrowhead Properties Ltd. We consider Redefines total property portfolio to be sizable and comfortably positioned within the Baa rating category.

Exhibit 3
Growth of property portfolio driven by local and offshore acquisitions



Source: Redefine financials and Moody's Financial Metrics

Redefine property exposure in South Africa is diversified across the retail, industrial and office sectors. However, due to its exposures to the office and industrial sectors (30% and 41% of gross lettable area or GLA) it faces risks from the current weak local economic environment. Redefine has taken the necessary steps to increase its exposure in the retail sector, which we view as a less risky and a more resilient sector, most notably through the completion of the Fountainhead Property Trust (Fountainhead) acquisition and the acquisition of Annuity Properties. Redefine is also looking to pursue new opportunities in less traditional sectors such as student accommodation, however this is currently a relatively small exposure.

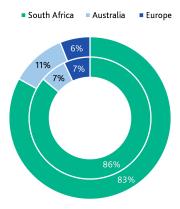
We anticipate only marginal capital growth on Redefine's South African property portfolio in the next 12 to 18 months; driven by uncertainties in global markets, weak local demand and slowing consumer confidence, which all restrict capital growth in the South African property market. While it is not our expectations, negative property value growth could weaken the debt to gross assets ratio beyond the levels for the current rating.

INCREASING OFFSHORE PROPERTY EXPOSURE DIVERSIFIES PROPERTY EXPOSURE AND CASH FLOWS

Geographically, Redefine's directly held South African properties which represent 78.5% of group property assets are highly concentrated in two provinces: Gauteng and the Western Cape (66% and 18% of GLA respectively). However, these two provinces are also the wealthiest and the most economically active, as measured by contribution to the South African gross domestic product (GDP) of 34% and 14% respectively and should be more resilient to a weakening economy. Furthermore, the concentration risk is partially offset by its exposure to European and Australian properties representing 19.9% of group property assets and 21.2% of group net distributable income. During the 2015 financial year end Redefine completed a direct property investment in Germany, and increased its investment in Cromwell to 25.9% from 12.8%. We anticipate Redefine to pursue direct investment opportunities outside of South Africa (particularly in Europe and Australia) up to around 25% of total property assets providing the company with a Rand hedge exposure. This has been demonstrated by the recent acquisition of Echo which will result in Redefine achieving its stated asset value target of 25% of total portfolio value and will further diversify Redefine's property portfolio in a stronger growth market relative to South Africa. We view Redefine's diversity as good, consistent with a Baa rating factor.

Exhibit 4

Moderate but growing offshore property exposure
by property value (inner circle) and by income distribution (outer circle)



Source: Redefine financials

STRATEGIC FOCUS ON IMPROVING THE QUALITY OF THE PROPERTY PORTFOLIO

Management's strategy has been to upgrade the core property portfolio in South Africa through disposals of non-core holdings, and reinvesting the proceeds, through redevelopments and acquisitions, in larger, well-located and higher grade properties. In executing this strategic focus, over the six months to 29 February 2016 Redefine disposed of around ZAR2.9 billion smaller and older properties and continues to identify non-core properties to be sold over time. Furthermore, Redefine has made targeted acquisitions over the period totalling ZAR1.0 billion which include a 50.0% stake in Respublica Student Living, its first entry into student accommodation.

Over the past three years Redefine has improved the size and quality of its portfolio, with average property values increasing to ZAR156 million as of 29 February 2016 from ZAR95 million (financial year ended (FYE) 2013) with a higher proportion of A and B-grade tenants. 63% (54%: H2 2012) of its tenants were A-grade, 26% (29%: H2 2012) B-grade and 11% (17%: H2 2012) C-grade. Tenant classifications are as follows: A-grade: National, provincial and local government departments, parastatal entities, national retailers and large listed companies; B-grade: Professional firms and medium-sized companies; C-grade: other. We consider Redefine to have a moderately diversified tenant base, with the top ten tenants representing 32% of total gross monthly rental, with the South African government being the largest tenant at 9% of gross monthly income. We understand that management intends to continue to dispose of non-core assets which include its government tenanted office portfolio and older properties outside the main three economic hubs (Johannesburg, Cape Town and Durban) in South Africa, contributing to the improvement of its portfolio quality. Redefine has been successful in reducing its exposure to government tenanted properties and has sold 15 office properties to Delta Property Fund (Delta) in exchange for Delta shares, reducing its direct exposure to government tenant from 12% to 8% of GLA. However, while this does not remove Redefine's overall exposure to government tenanted properties, it has effectively transferred the properties to a more niche property operator who are in a better position to extract value from the portfolio.

In addition to the above steps Redefine continues to invest in redevelopments and new developments of approximately ZAR2.3 billion. We view the company's approach to development risk as conservative, expanding its portfolio and quality through low risk, purpose-driven developments, with speculative developments not exceeding 3% of its property assets. As of 29 February 2016, development property assets plus planned expenditure represented 3.9% of gross assets, consisting of primarily tenant driven and prelet developments. Furthermore, Redefine's refurbishment capital expenditure are seen as lower-risk extensions being made to existing successful properties ensuring its property portfolio remains current.

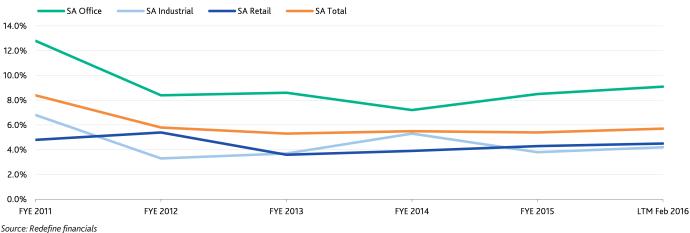
MODERATE VACANCIES, ABOVE INFLATION CONTRACTUAL RENTAL ESCALATIONS AND MANAGEABLE ANNUAL LEASE EXPIRIES SUPPORT STABLE CASH FLOWS

Redefine's ratings are underpinned by recurring, contractual rental income. Reported income comprised of 96.6% income from property portfolio, 1.3% income from the listed securities of commercial property investment companies and 2.1% from trading and other fee income. EBITDA margins for Redefine of 87.0% is viewed as relatively high for its rating position and in line with other South African REITs rated by Moody's.

Above-inflation price increases of local utilities, electricity concerns and the weak South African economic environment (Moody's GDP growth forecast is 0.5% for 2016 and 1.5% for 2017) will continue to put pressure on tenants. We anticipate that this will continue to be reflected in either higher vacancy levels or lower renewal rental escalations translating into lower operating margins. We expect the office and Industrial sectors to feel the effect more relative to the more defensive retail sector. In order to retain existing tenants and keep vacancy rates low, we anticipate higher tenant incentives which will increase costs and below-inflation rent renewals which will pressure revenue growth and operating margins. Redefine will continue to manage its cost structure through ongoing cost efficiency programmes.

Redefine's overall vacancy rates remained stable at 5.7%; broken down by offices at 9.1% (8.5%: FYE 2015), retail at 4.5% (4.3%: FYE2015) and industrial at 4.2% (3.8%: FYE2015). Redefine's office vacancies are lower than the South African market average of around 11% (Independent Property Database - IPD), while its retail and industrial vacancies were broadly in line with the South African market. We consider Redefine's overall vacancy rate to be broadly in line its domestic rated peers: Growthpoint Properties Limited (4.9%: 31 December 2015) and Fortress Income Fund (6.2%: 31 December 2015).





Over the next 2 years, approximately 15% of Redefine's leases expires each year which we view as manageable. Furthermore, the South African portfolio has a weighted average lease expiry (WALE) of 6.9 years which is higher than the average in South Africa but lower compared to Europe and Australia. Tenant renewal retention (percentage of leases expiring that are successfully renewed) over the past year was high at 83%, which was due to successful retention strategies employed over the period. Going forward we expect retention rates to remain above Redefine's historical average of around 80%. However, new and renewal rental growth rates of around 4.6% for 29 February 2016 are likely to remain under pressure and well below inflation (April 2016 CPI: 6.2% year-on-year growth). This will however be offset by the annual rent escalation clauses from existing tenant contracts of between 7% and 8%.

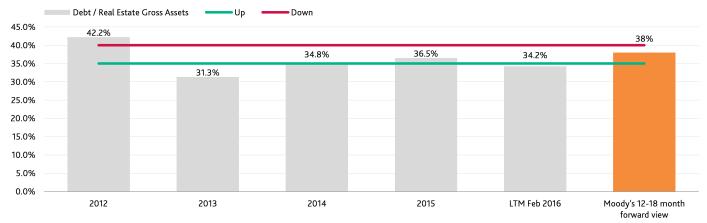
Redefine's rent arrears levels remain well controlled at ZAR34 million (ZAR42 million: FYE 2015), representing only 1.0% of contractual rental income. With the current weak economic environment and above inflationary cost pressures on tenants we anticipate some upward pressure in the near term, however we do not expect it to be material given the diversity of Redefine's property portfolio.

WEAKENING CREDIT METRICS LIMIT FINANCIAL FLEXIBILITY BUT REMAIN WITHIN THE Baa3 RATING GUIDANCE

Given the number of sizable acquisitions and investments in new developments made during FYE2014 and FYE2015, we have seen a weakening trend in credit metrics, despite Redefine balanced approach to funding the growth. Leverage, defined as gross debt to gross assets, increased to 34.2% from 31.2% (FYE2013). We expect leverage to increase to around 38% following the debt funded Polish acquisition. While this remains within the Baa rating range, it reduces Redefine's financial flexibility to pursue debt funded acquisitions or accommodate weaker performance.

Exhibit 6

Debt /Gross Assets expected to trend towards 38% following Polish acquisition

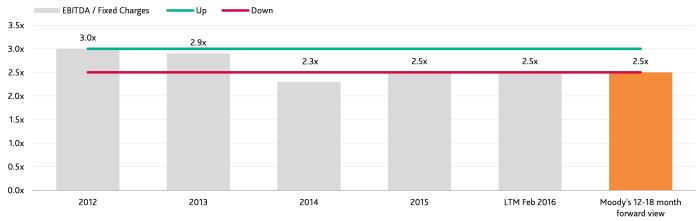


Source: Redefine and Moody's Financial Metrics

We note that the organisational and financial complexity of Redefine makes it difficult to fully capture Redefine's strategic equity accounted property exposures from consolidated financials, which tend to have higher leverage than Redefine. On a full look through basis (as of 29 February 2016), which includes the proportionate consolidation of material equity accounted investments of Redefine International Plc and Cromwell, the debt/gross asset ratio is around 38% compared to 34.2% based on reported financials. Factoring the proposed acquisition of Echo will increase the full look through leverage to around 41%. Further material leveraging of these investments which are not fully reflected in Redefine's consolidated financials may have a negative impact on the credit profile of Redefine.

Redefine's fixed charge ratio remain weakly positioned at 2.5x. We expect to see continued improvement in Redefine's fixed charge cover ratio, as acquisitions and developments contribute for the full 12 months to cash flows.

Exhibit 7
Fixed charge cover to remain weakly positioned



Source: Redefine and Moody's Financial Metrics

Management has hedged 79% of its floating interest rate debt to fixed interest rates with average expiry of 2.4 years at an average cost of borrowing of 8.5% (FYE2015 was 8.4%). This compares to a minimum hedging target of 75% of outstanding debt to be fixed and provides a high level of protection against rising interest rates, which would otherwise place downward pressure on the fixed charge ratio.

Redefine's high level of secured debt to gross assets at 22.9% and level of unencumbered assets of 37.2% of gross assets (equivalent to a Ba and B rating category, respectively), are considered weak for its ratings category. We recognize that management has an ongoing

strategy to shift its financing from secured debt towards unsecured borrowings and improve the level of unencumbered assets, which would be positive for the rating positioning.

Liquidity Analysis

Redefine's liquidity is deemed sufficient to meet its obligations over the next 12-18 months, supported by positive and stable cash flow from operations, available credit facilities of ZAR2.7 billion and listed property investments totalling ZAR11.6 billion. In addition, Redefine has introduced a distribution reinvestment plan which, at the option of the investor electing to take units/shares instead of dividends, will free up additional liquidity sources for Redefine.

The Fund's current credit facilities are provided by a variety of leading South African banks and are subject to covenants and material adverse change (MAC) clauses. At present, these covenants have good headroom.

Moody's rates Redefine's access to diversified sources of funding as good, consistent with a Baa rating.

Corporate Profile

Redefine Properties Limited is the second largest commercial real estate investment trust (REIT) listed on the Johannesburg Stock Exchange (JSE) in South Africa by total assets, ZAR74.7 billion (\$4.7 billion) as at 29 February 2016. Its activities include direct investments in property assets (ZAR54.8 billion or \$3.4 billion), as well as investments in the listed securities of other commercial property investment companies totalling ZAR13 billion (\$0.8 billion). Redefine's offshore property exposure is held through its investments in Redefine International Plc (RI Plc, 30.1%) in the UK; Cromwell Property Group (Cromwell, 25.9%) and Northpoint Tower (50% joint venture) in Australia; and its German portfolio (50% joint venture).

Rating Methodology and Scorecard Factors

The principal methodology used in rating Redefine was Moody's Approach for REITs and Other Commercial Property Firms, published 30 July 2010. Based on the LTM ended 29 February 2016, Redefine's overall performance measurements from the rating grid indicate a rating outcome of Baa2, one notch higher than the long-term issuer rating. We note that the grid implied rating is based on historic financial information while the rating is factoring our expectation of future performance and more complex organisational and financial structure.

Exhibit 8

Rating Factors				
Redefine Properties Limited				
REITs and Other Commercial Property Firms Industry Grid [1][2] Current LTM 2/29/2016		Moody's 12-18 Month Forward View As of 6/24/2016 [3]		
Factor 1: Liquidity and Funding (24.5%)	Measure	Score	Measure	Score
a) Liquidity Coverage	Ва	Ва	Ва	Ba
b) Debt Maturities	Ва	Ва	Ва	Ва
c) FFO Payout	119.0%	Caa	90% - 100%	Ва
d) Amount of Unencumbered Assets	37.2%	В	40% - 45%	Ва
Factor 2: Leverage and Capital Structure (30.5%)				
a) Debt / Gross Assets [4]	34.2%	Baa	37% - 40%	Baa
b) Net Debt / EBITDA	5.3x	Baa	6x - 6.5x	Ва
c) Secured Debt / Gross Assets	22.9%	Ba	20% - 25%	Ва
d) Access to Capital	Baa	Baa	Ваа	Baa
Factor 3: Market Position and Asset Quality (22%)				
a) Franchise / Brand Name	Α	Α	A	Α
b) Gross Assets(USD Million)	\$4,730.1	Baa	\$5250 - \$5500	Baa
c) Diversity: Location / Tenant / Industry / Economic	Baa	Baa	Baa	Baa
d) Development Pipeline	3.9%	Aa	4% - 6%	Α
e) Asset Quality	Baa	Baa	Baa	Ваа
Factor 4: Cash Flows and Earnings (23%)				
a) EBITDA Margin (YTD)	87.0%	Aa	75% - 80%	Aa
b) EBITDA Margin Volatility	5.3%	Baa	3% - 5%	Ваа
c) EBITDA / Fixed Charges (YTD) [5]	2.5x	Baa	2.5x - 2.8x	Baa
d) Joint Venture Exposure (YTD)	5.4%	A	4% - 6%	Α
Rating:				
a) Indicated Rating from Grid		Baa2		Baa2
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 2/29/2016(L). [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. [4] Debt includes a portion of hybrid securities considered to have debt like features as explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2010. [5] Fixed Charges includes capitalized interests explained in Moody's Approach to Global Standard Adjustments in the Analysis of Financial Statements for Non-Financial Corporations revised December 2010. Source: Source: Moody's Financial MetricsTM

Ratings

Exhibit 9

Category	Moody's Rating
REDEFINE PROPERTIES LIMITED	
Outlook	Stable
Issuer Rating -Dom Curr	Baa3
Senior Unsecured MTN -Dom Curr	(P)Baa3
Other Short Term -Dom Curr	(P)P-3
NSR Senior Unsecured MTN	Aa2.za
NSR LT Issuer Rating	Aa2.za
NSR ST Issuer Rating	P-1.za
NSR Other Short Term	P-1.za
Source: 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 PUBLICATIONS AND MOODY'S PUBLICATIONS AND MOODY'S PUBLICATIONS AND MOODY'S PUBLICATIONS AND TO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS AND NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

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

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

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

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

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

REPORT NUMBER 1025286

