

## CREDIT OPINION

30 May 2018

### Update

Rate this Research >>

#### RATINGS

##### Thames Water (Kemble) Finance PLC

Domicile	United Kingdom
Long Term Rating	B1
Type	Senior Secured - Dom Curr
Outlook	Negative

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

Graham W Taylor +44.20.7772.5206  
 VP-Sr Credit Officer  
[graham.taylor@moodys.com](mailto:graham.taylor@moodys.com)

Velina Karadzova +44.20.7772.5478  
 Analyst  
[velina.karadzova@moodys.com](mailto:velina.karadzova@moodys.com)

Matthew Brown +44.20.7772.1043  
 Associate Analyst  
[matthew.brown@moodys.com](mailto:matthew.brown@moodys.com)

Neil Griffiths-Lambeth +44.20.7772.5543  
 Associate Managing Director  
[neil.griffiths-lambeth@moodys.com](mailto:neil.griffiths-lambeth@moodys.com)

## Thames Water (Kemble) Finance PLC

Update following rating affirmation with negative outlook

### Summary

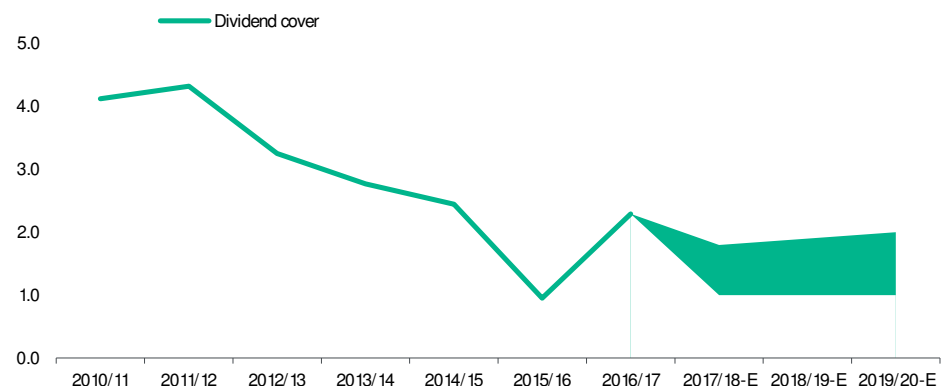
The credit quality of Thames Water (Kemble) Finance PLC (Kemble), the finance subsidiary of Kemble Water Finance Limited, is supported by the low business risk profile of the group's main operating subsidiary, [Thames Water Utilities Limited](#) (Thames Water, CFR Baa1 negative), as the monopoly provider of water and wastewater services in its area, and the stable and transparent regulatory framework for the water sector in England and Wales. It is constrained by (1) the high level of gearing at Thames Water and other debt in the group including the Kemble notes; (2) the terms of the financing structure of Thames Water (the Thames Water Programme) which include various cash-trapping provisions; and (3) the likelihood that Thames Water's ability to pay dividends to Kemble will be constrained by significantly lower baseline returns from April 2020.

We consider the expected loss for the Kemble notes to be very high given their subordinated position towards cash flows as well as security granted to lenders of Thames Water.

While dividend cover has been reducing in the current regulatory period, we expect liquidity at the holding company to provide back-stop cover for debt service over a period of at least 12-18 months. Moody's expects that dividend distributions from Thames Water will largely be limited to amounts needed to cover the debt service of the Kemble notes and other external debt as well as administrative costs over the current regulatory period to March 2020 (AMP6).

Exhibit 1

#### Kemble's dividend cover has declined with lower returns in current regulatory period 2015-20



Note: 2010/11-2013/14 based on UK GAAP financials, from 2014/15 on IFRS accounts  
 Source: Thames Water and Kemble Water Finance Limited annual reports, Moody's forecast

## Credit Strengths

- » Key operating subsidiary Thames Water generates stable cash flows from the provision of monopoly water and wastewater services under a well-established, transparent and predictable regulatory regime.

## Credit Challenges

- » Very high financial leverage, up to around 90% of Thames Water's regulatory capital value (RCV).
- » Cut in allowed returns from 2020 will likely negatively affect operating company's ability to upstream dividends, on which Kemble relies for its debt service.
- » Cash flows are subject to distribution lock-up covenants at the operating company level, which increases the probability of default for Kemble.
- » Deeply subordinated nature of Kemble's creditors' claims against operating cash flows reduces recovery prospects.

## Rating Outlook

As Kemble is wholly reliant on dividend distributions from Thames Water to Kemble Water Finance Limited to service its debts, the negative outlook reflects the negative outlook assigned to Thames Water.

It further takes into account Ofwat's proposal that the regulator should in future assess operating companies' dividend policies and its indication that dividend yields above the level it regards as "reasonable" would not be acceptable in the absence of outperformance or explicit customer support. New measures that restrict the group's flexibility to move cash between operating and holding companies would deepen Kemble's subordinated position.

## Factors that Could Lead to an Upgrade

Given the negative outlook, we do not currently envisage a rating upgrade. Kemble's outlook could be stabilised if we conclude that Thames Water's exposure to the lower return environment is adequately mitigated by a combination of a favourable price determination outcome, strong outperformance ability and/or balance sheet strengthening measures, and if regulatory changes do not materially increase Kemble's subordination relative to the operating company.

## Factors that Could Lead to a Downgrade

There would be negative ratings pressure if there were a material deterioration in the Kemble group's financial metrics, or this appeared probable, such that dividend lock-ups at the Thames Water level were more likely to be breached. Under the terms of the Thames Water Programme, there is a distribution lock-up at the operating company if (1) Class A RCV gearing or Senior (Class A and Class B) RCV gearing exceeds 75% or 85% respectively; or (2) Class A Adjusted Interest Cover Ratio or Senior Adjusted Interest Cover Ratio falls below 1.30x or 1.10x, respectively. Negative funding conditions, which could increase refinancing risk, adverse changes in the regulatory framework or structure of the water sector in England and Wales, or the implementation of regulatory measures which further restrict Kemble's access to Thames Water's cash flows may also cause downward rating pressure at Kemble.

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.moody's.com](http://www.moody's.com) for the most updated credit rating action information and rating history.

## Key Indicators

Exhibit 2

Highly leveraged capital structure with limited financial flexibility

Financial metrics based on consolidated accounts of Kemble Water Finance Limited

	Mar-15	Mar-16	Mar-17
Adjusted Interest Coverage Ratio	1.9x	1.7x	1.7x
Net Debt / Regulated Asset Base	88.6%	88.0%	89.2%
FFO / Net Debt	8.9%	8.1%	7.2%
RCF / Net Debt	5.1%	4.2%	3.2%

Note: All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. For definitions of Moody's most common ratio terms please see the accompanying [User's Guide](#).

Source: Moody's Financial Metrics™

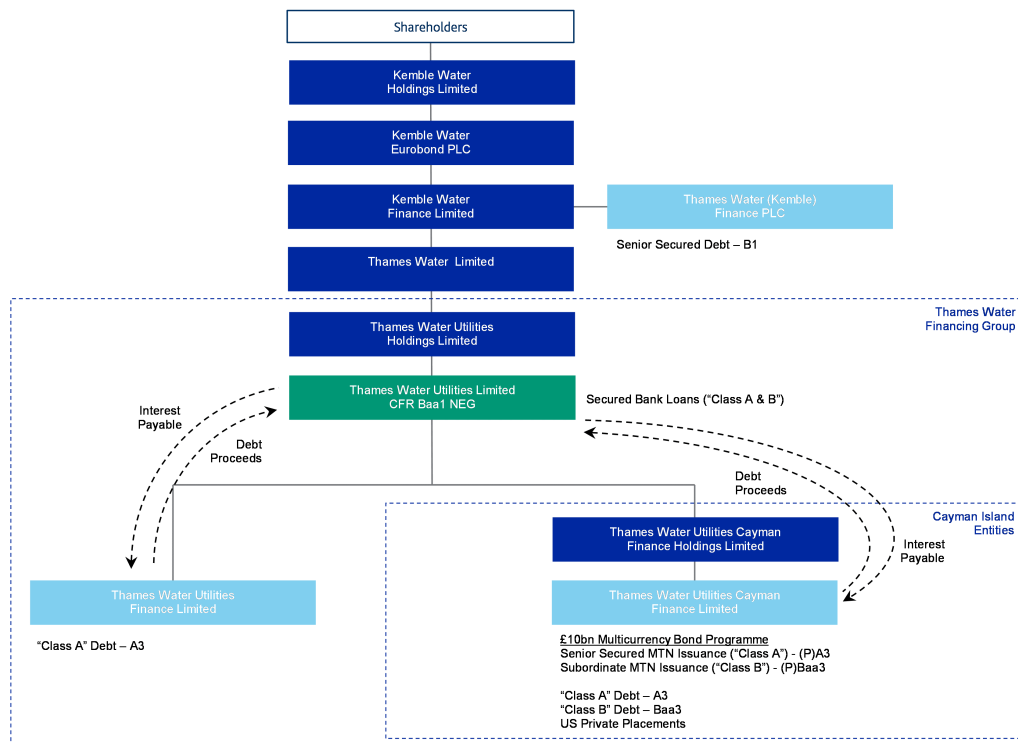
## Profile

Thames Water (Kemble) Finance PLC is the financing subsidiary of Kemble Water Finance Limited, the company owning Thames Water Limited. The principal operating subsidiary in the group is Thames Water Utilities Limited (Thames Water), a regulated water and sewerage company operating in London and the Thames Valley area.

Thames Water is the largest of the ten water and sewerage companies in England and Wales by both RCV and number of customers served. It provides drinking water to around 9 million customers and sewerage services to around 15 million customers in London and the Thames Valley.

Exhibit 3

### Thames Water's group structure



Note: Thames Water is currently in the process of removing its Cayman Island entities.

Source: Moody's

Kemble is ultimately owned by a consortium of national and international infrastructure and pension funds, with the largest single shareholders being OMERS (27.4%) and the Universities Superannuation Scheme (10.9%).

## Detailed Credit Considerations

### Credit quality of operating subsidiary, Thames Water, key credit driver

Kemble's credit quality is a function of (1) the low business risk profile of its key operating subsidiary, Thames Water; (2) the very high leverage of up to 90% of Thames Water's RCV at Kemble group level; and (3) the priority position in relation to operating cash flows as well as recovery proceeds in a default scenario pertaining to creditors at Thames Water, resulting in the deeply subordinated position for the Kemble noteholders.

In its final methodology consultation for the 2019 price review, published in December 2017, Ofwat indicated a significant cut in allowed returns for the water companies under an assumption that the current low interest-rate environment continues to persist, albeit partially offset by the switch in indexation measures. Furthermore, efficiency challenges will increase, particularly for average performers, which could put a further strain on companies' cash flows.

Companies will benefit from the low interest rate environment over time as they raise new debt. However, companies, such as Thames Water, with debt tenors beyond that assumed by the regulator may be exposed as allowed returns will converge to market rates, unless historical funding costs have been below average. The latter has been the case for Thames Water, so the immediate risk is reduced. Nevertheless, a significant cut in future allowed returns will pressure interest cover ratios and companies may need to reduce gearing if they are to maintain credit quality. This, in turn, will reduce cash flows available for distribution, increasing the risk for the holding company of receiving cash flows insufficient to service the Kemble notes.

We also note that the low-yield environment may have eroded equity buffers. Taking into account the fair value of existing borrowings and derivatives, Thames Water had gearing (including Moody's standard adjustments) around 110% as at March 2016, and closer to 120% for March 2017 (adding Kemble's debt, fair value leverage would have been closer to 120-130%). A visible erosion of the equity value could weaken incentives for shareholders to provide further funding.

We continue to view the overall developments as credit negative for the sector, with increased risk of cash flow volatility likely from 2020 (please see '[UK Water Sector: Ofwat signals challenging price review](#)', July 2017).

On 26 April 2018, Ofwat published a consultation on proposals for companies' business plan submissions for PR19. The consultation includes proposals intended to bolster companies' financial resilience and address concerns around the sector's legitimacy, including a sharing of financing outperformance and additional restrictions on dividend payments. These measures mark a change in direction for the regulator in reaction to mounting political and public pressure on the sector. Ofwat's proposal that the regulator should in future assess operating companies' dividend policies and its indication that dividend yields above the level it regards as "reasonable" would not be acceptable in the absence of outperformance or explicit customer support is reflected in the negative outlook for Kemble.

In our view, the measures further evidence increasing regulatory risk, and Moody's has recently revised its scoring for the stability and predictability of the regulatory regime to Aa from Aaa (please see '[Regulated Water Utilities - UK: Regulator's proposals undermine the stability and predictability of the regime](#)', May 2018).

Please refer to the Credit Opinion for Thames Water for further details of the rating and rationale.

### Terms and conditions of the Kemble Notes ring-fence Kemble from additional shareholder claims

There is a distribution lock-up at Kemble if consolidated total net debt to RCV exceeds 92.5%. This mechanism potentially traps cash at the holding company, for the benefit of lenders, if the financial condition of the group is deteriorating. Moody's notes, however, that this arrangement may be of limited value as the occurrence of a dividend lock-up, or a trigger event, at Thames Water would result in there being no dividend payments to be trapped at Kemble.

Actual leverage at Kemble level has historically been below the distribution lock-up level at around 88% consolidated net debt to Thames Water's RCV. This is primarily due to the financial policies implemented by the group and a restriction in absolute debt amounts allowed to be raised at Kemble, which is currently limited to £900 million (net of cash held in accounts, but excluding debt subordinated to the Kemble notes). Regardless of the current cap, the rating on the Kemble Finance Notes reflects our expectation that consolidated gearing would remain at or below 90% of net debt to Thames Water RCV, providing some headroom against financial covenants. Moody's understands that it is management's intention to maintain at least a £65 million facility at Kemble to provide

liquidity to meet interest payments in the event that there are no dividend payments by Thames Water but there is no contractual requirement to maintain any form of debt service reserve. Drawings under this facility will result in a dividend lock-up at Kemble.

Noteholders and bank lenders to Kemble benefit from security granted by the Issuer and Guarantor, including over the shares held by Kemble in Thames Water Limited. Moody's notes, however, that lenders under the Thames Water Programme also benefit from security over the shares in Thames Water held by its immediate parent. If security granted under the Thames Water Programme were to be enforced then the security at Kemble may have little or no value and, for this reason, the expected loss for lenders to Kemble is very high.

Whilst we consider the above creditor protections of the Kemble Finance Programme as sufficient to effectively ring-fence the Kemble group, we do not believe they warrant any ratings uplift.

#### **Dividend distributions constrained to preserve credit quality of Thames Water**

Moody's expects that dividend distributions from Thames Water will largely be limited to amounts needed to cover the debt service of the Kemble notes and other external debt as well as administrative costs, i.e. the cash dividend cover will likely average 1.0-2.0x over the current regulatory period to March 2020 (AMP6). This reflects management's strategy to increase financial flexibility within the operating company to address challenges of lower allowed returns and high investment requirements. While Thames Water's final determination includes scope for outperforming total expenditure allowances, which could see cash dividend coverage increasing beyond 2.0x in the later years of AMP6, the operating company has also faced performance set-backs and will focus on additional investments to rectify these. The additional cash maintained within the Kemble group (around £93 million at March 2017), together with a £65 million revolving credit facility also provides adequate back-stop liquidity at current rating levels.

#### **Liquidity Analysis**

Thames Water demonstrates a solid liquidity profile. Liquidity at Kemble is driven by the dividends upstreamed by Thames Water to the holding company, which we expect to cover at least the interest payments at Kemble Finance and other administrative holding company costs over the next 12-18 months. As discussed above, we expect the dividend cover to remain subdued over AMP6 leaving less financial flexibility for the holding company. Whilst there is no requirement to maintain liquidity to meet debt service at Kemble Finance, the group has a track record of a prudent cash management policy by maintaining cash reserves and/or liquidity facilities, and we expect these sources to cover at least 12-18 months of Kemble's debt service requirements.

We also note Kemble's issuance, in July 2015, of £175 million 5.875% senior secured notes, with the proceeds applied to refinance existing bank facilities, which illustrates the company's good access to funding in the current market environment. We understand the use of proceeds also included the closeout of £200m long dated fixed interest rate swaps with breaks, reducing the group's exposure to future adverse mark-to-market movements.

#### **Structural Considerations**

In general terms, creditors of holding companies are structurally subordinated to creditors at the operating company level, as they are further removed from the operational cash flows that are generated at the operating company level and which will first and foremost serve the operating company debt. Holding companies have to rely exclusively on the operating company's ability to pay dividend distributions from excess cash available after operating company debt service.

Such simple structural subordination can be amplified where the operating company's ability to pay distributions is further restricted.

In the case of Thames Water, the operating company has a highly-covenanted financing structure, which restricts management's ability to alter the business and financial risk profile of the operating company to the detriment of its creditors.

As part of these restrictions, the operating company is subject to financial covenants, including cash lock-up triggers. Whilst preventing distributions, such trigger events also allow creditors at the operating company level additional oversight by appointing an independent advisor to provide a remedial plan or discuss remedial measures with the regulator.

Whilst Thames Water's covenant and security package provides additional protection for creditors at the operating company level, it is detrimental to the credit quality at the holding company. The holding company relies exclusively on distributions from the operating

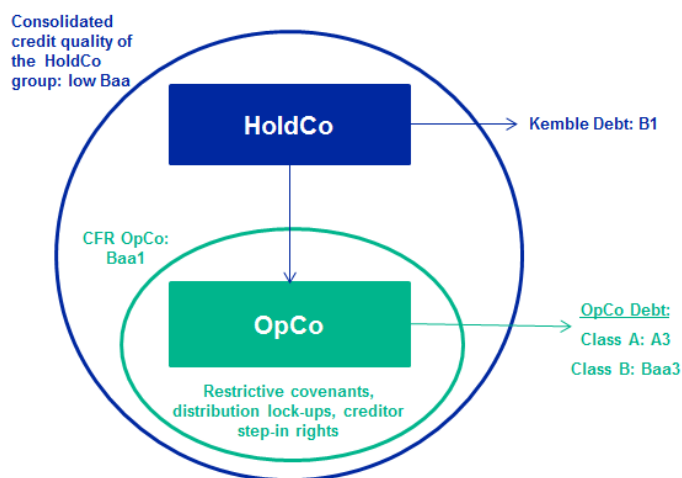
company to service its debt, and the distribution lock-up covenants at the operating company increase the risk of limited or no dividends being paid to the holding company.

When assessing the credit risk for the holding company creditors, we first evaluate the credit quality of the overall consolidated group. The approach is similar to assigning a corporate family rating at the highly-leveraged operating company, with the exception that here we also take into account the holding company debt, assuming the entire group's debt is raised in one single class and at one single entity.

However, the consolidated credit quality of the holding company group does not take into account (1) the higher probability of default that creditors at the holding company level are facing; and (2) the higher severity of loss in an actual default scenario because of holding company creditors' structural and contractual subordination to operating company creditors.

Exhibit 4

#### Kemble - simplified group structure and ratings



Source: Moody's

To adequately reflect the deeply subordinated nature of the holding company debt obligations, we apply a wider notching than would normally be the case in a typical corporate OpCo-HoldCo structure, where the probability of default between the operating and holding companies is not materially different.

## Rating Methodology and Scorecard Factors

Moody's assessment of Kemble reflects the application of our rating methodology for [Regulated Water Utilities](#), published in December 2015.

We consider the consolidated credit quality of the Kemble group to be consistent with a rating at the bottom of the Baa range, broadly in line with the indicated rating under our rating methodology. Under the methodology, we assign the same scoring for Kemble and Thames Water in respect of the qualitative factors, while scoring for coverage and leverage reflects the consolidated metrics at the holding company level. Given the challenging price review, we expect financial metrics for the consolidated Kemble group to deteriorate slightly over the next 12-18 months horizon. Whilst the consolidated financial profile may not - absent additional economic pressures - weaken significantly, Kemble's dividend cover will fall over the next regulatory period.

The assigned B1 rating to the Kemble notes is notched down from Kemble's consolidated credit quality and reflects the deeply subordinated nature of creditor claims at Kemble level given the group's financial and contractual arrangements.

Exhibit 5

### Rating Factors Grid - Kemble Water Finance Limited

Regulated Water Utilities Industry Grid [1][2]			Current FY 31/03/2017		Moody's 12-18 Month Forward View As of May 2018 [3]	
Factor 1 : Business Profile(50%)	Measure	Score	Measure	Score	Measure	Score
a) Stability and Predictability of Regulatory Environment	Aaa	Aaa	Aa	Aa	Aa	Aa
b) Asset Ownership Model	Aa	Aa	Aa	Aa	Aa	Aa
c) Cost and Investment Recovery (Sufficiency & Timeliness)	A	A	A	A	A	A
d) Revenue Risk	A	A	A	A	A	A
e) Scale and Complexity of Capital Programme & Asset Condition Risk	Baa	Baa	Baa	Baa	Baa	Baa
Factor 2 : Financial Policy (10%)						
a) Financial Policy	Ba	Ba	Ba	Ba	Ba	Ba
Factor 3 : Leverage and Coverage (40%)						
a) Adjusted Interest Coverage Ratio (3 Year Avg)	1.7x	Baa	1.2x - 1.5x	Ba	1.2x - 1.5x	Ba
b) Net Debt / Regulated Asset Base (3 Year Avg)	88.6%	B	85% - 90%	B	85% - 90%	B
c) FFO / Net Debt (3 Year Avg)	8.1%	Ba	5% - 8%	Ba	5% - 8%	Ba
d) RCF / Net Debt (3 Year Avg)	4.1%	Ba	3% - 6%	Ba	3% - 6%	Ba
Rating:						
Indicated Rating from Grid Factors 1-3		Baa3		Baa3		Baa3
Rating Lift	0	0	0	0	0	0
a) Indicated Rating from Grid		Baa3		Baa3		Baa3
b) Actual Rating Assigned						B1

Note: (1) All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. (2) At at 31/03/2017. (3) This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate any significant acquisitions or divestitures.

Source: Moody's Financial Metrics™

## Ratings

Exhibit 6

Category	Moody's Rating
THAMES WATER (KEMBLE) FINANCE PLC	
Outlook	Negative
Bkd Senior Secured -Dom Curr	B1

Source: Moody's Investors Service



© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS 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 AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER. ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

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

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

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

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

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY 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.moody's.com](http://www.moody's.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 61 003 399 657 AFSL 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.



## Contacts

Graham W Taylor  
*VP-Sr Credit Officer*  
graham.taylor@moody's.com

+44.20.7772.5206

Matthew Brown  
*Associate Analyst*  
matthew.brown@moody's.com

+44.20.7772.1043

## CLIENT SERVICES

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