MOODY'S PUBLIC SECTOR EUROPE

SECTOR IN-DEPTH

12 August 2019



Contacts

Edward Demetry +44.20.7772.1720

Analyst

edward.demetry@moodys.com

Sebastien Hay +34.91.768.8222

Senior Vice President/Manager sebastien.hay@moodys.com

Jeanne Harrison +44.20.7772.1751

VP-Senior Analyst

jeanne.harrison@moodys.com

CLIENT SERVICES

EMEA

Americas 1-212-553-1653 Asia Pacific 852-3551-3077 Japan 81-3-5408-4100

44-20-7772-5454

Higher Education – United Kingdom

FAQ on sector resilience in the face of a challenging operating environment

Rated UK universities have demonstrated resilience in the face of a challenging operating environment. In this report, we answer a number of investor questions on the key credit challenges facing the UK higher education sector, and rated universities' ability to mitigate these risks.

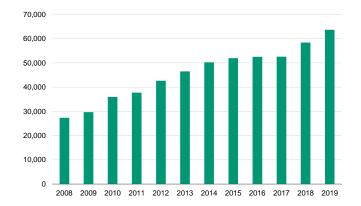
- » Why have the outlooks on most rated universities been changed to stable if the operating environment remains challenging? Rated universities have performed well despite adverse demographics, rising costs, policy uncertainty and Brexit-related risks. While the sector continues to face performance pressures, most rated universities have exercised effective cost management to maintain positive operating margins.
- Why do the University of Manchester and Cardiff University have negative outlooks on their ratings? The negative outlooks on <u>Cardiff University (Cardiff, Aa3 negative)</u> and <u>The University of Manchester (Manchester, Aa2 negative)</u> reflect idiosyncratic risks, resulting in weaker operating cash flows and profitability compared to peers. The relative underperformance makes them more vulnerable to sector-wide pressures.
- » How would the Post-18 Education and Funding Review likely affect university credit quality over the next few years? The funding review recommends that policy changes should not leave universities worse off in cash terms. The recommendation to freeze tuition levels up to 2022/23 would place additional financial pressure, however, risks are not immediate as the scope of implementation is currently unclear.
- What would be the credit impact of a no-deal Brexit on UK universities? The key credit risks for universities related to a no-deal Brexit continue to be a reduction in international students, and any impact from a potentially weaker sovereign environment. As a no-deal Brexit would be credit negative for the United Kingdom (UK, Aa2 stable), there would be implications for universities, which have strong links to the sovereign through funding channels, policy setting, and regulation and oversight.
- » Are there credit risks related to universities' increasing reliance on international students? UK universities increasing reliance on international (non-EU) student fees exposes universities to external risks, including currency fluctuations, geo-political risks and immigration policy. There are plans to increase international student numbers to mitigate pressures from lower domestic tuition, funding shortfalls, and rising staff and pension costs.

Why have the outlooks on most rated universities been changed to stable if the operating environment remains challenging?

We changed the outlook to stable from negative for five universities in May 2019¹, reflecting our expectation that rated universities will remain resilient despite the ongoing challenging operating environment. Since affirming the negative outlook on the sector in September 2017, rated universities have performed well in the face of adverse demographics, rising costs, policy uncertainty and Brexit-related risks, with most rated universities meeting income and student targets. We decided to stabilise the outlooks on most rated universities to reflect this resilience. Following the UK's vote to leave the European Union (EU, Aaa stable), we had identified a reduction in international students – who pay tuition fees that are multiples higher than those paid by domestic students – to be a key risk facing the sector. However, application numbers from international students have remained strong as the depreciation of sterling has made UK study more affordable (see Exhibit 1). Despite the sector still facing an adverse domestic demographic trend – with the number of 18 year olds forecast to continue declining until 2022 – the government revised student forecasts upwards in March 2019, based on higher-than-expected participation rates (see Exhibit 2).

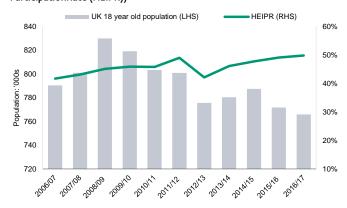
While the sector continues to face performance pressures – due to the ongoing cap on domestic tuition fees during a period of growing staff numbers, pay increases agreed with unions, and increasing pension obligations – most rated universities have exercised effective cost management, and forecast continued positive performances. While the recommendations of the post-18 Education and Funding Review (published in May 2019) present potential financial risks for the sector, the scope of the adoption of these recommendations remains to be determined.

Exhibit 1
Applications from international (non-EU) students have remained strong, supporting resiliency of rated universities
(Applications from international [non-EU] students, 2008-2019)



Source: UCAS 2019

Exhibit 2
Growing participation rates despite demographic dip show continued domestic demand for higher education (UK population of 18 year olds, and Higher Education Initial ParticipationRate (HEIPR))



Source: ONS, Department for Education, Moody's Investors Service

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.

Why do Manchester and Cardiff have negative outlooks on their ratings?

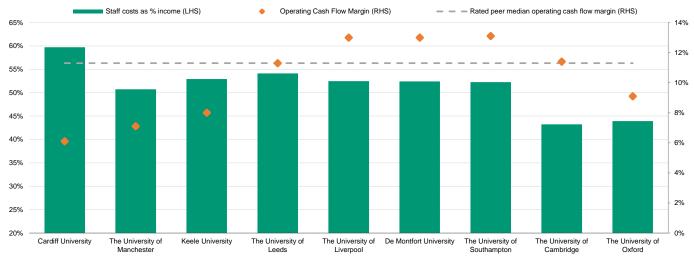
The negative outlooks on Cardiff and Manchester reflect the idiosyncratic risks for these institutions, which have resulted in weaker operating cash flows and higher vulnerability to sector-wide pressures. Both Cardiff and Manchester underperformed relative to peers in fiscal year 2018, reporting the lowest operating cash flow margins of rated universities, at 6.1% and 7.1% respectively, compared to a rated peer median of 11.3% (see Exhibit 3). The weaker performances of both universities were driven by rising staff costs outpacing growth in revenue. Going forward, Manchester expects its operating cash flow to remain weak compared both to its historical performance and that of rated peers, which is a key driver behind the current negative outlook.

In fiscal year 2018, Cardiff's staff costs increased to 60% of turnover – the highest percentage of rated universities. Growth in costs have outpaced income growth over the last three years, leading to the university falling into an operating deficit in fiscal years 2017 and 2018. In response to the rise in staff costs, Cardiff implemented university-wide recruitment controls and a voluntary severance scheme. These measures aim to reduce headcount by a net 380 personnel over a five-year period, to realise £22 million in savings and to return to an operating surplus post fiscal 2020. Moreover, domestic rankings have been on a downward trend driven by weaker student satisfaction. The university has developed its new "Transforming Cardiff" programme, which aims to address shortcomings of the current "Way Forward" strategy by implementing wide-ranging changes that we consider to be challenging to deliver.

Given their declining operating cash flow generation, both Cardiff and Manchester's debt to operating cash flow metrics will remain weaker than peers'. The outlooks on these universities could be stabilised if they improve their operating performances resulting in an improvement in debt to cash flow metrics. Cardiff's outlook could also be stabilised if it is able to demonstrate the benefits from implementation of its revised strategy. For Manchester, a structural improvement in wealth and liquidity would also exert positive pressure on the rating.

Exhibit 3

Manchester and Cardiff have weaker operating cash flow margins, while Cardiff has the largest exposure to rising staff costs (Staff costs as a proportion of income, and operating cash flow margins [%], 2018)



Source: Moody's Investors Service

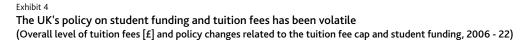
How would the Post-18 Education and Funding Review likely affect university credit quality over the next few years?

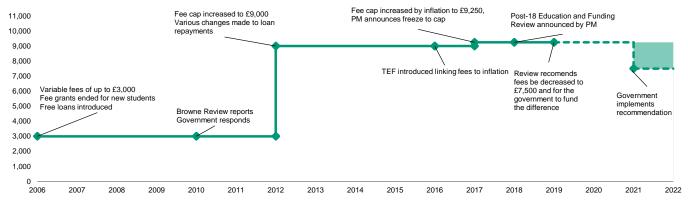
The Post-18 Education and Funding Review recommended that tuition fees be lowered for domestic undergraduate students in England to £7,500 from £9,250 starting in 2021-22, and that the UK government should compensate the loss of funding through increased teaching grants, such that universities are no worse off in cash terms. Additionally, the review recommends a tuition fee freeze until 2022-23. While this policy change could have an adverse impact on university financial performance, as tuition is the dominant source of income for the sector, the risks are not immediate as the timing of implementation is unlikely to take place until after 2020-21, and the scope of implementation is currently unclear. Nevertheless, domestic undergraduate tuition fees and funding are set by the central government, and policy direction uncertainty and volatility are key credit challenges for rated universities (see Exhibit 4).

In October 2017, the UK government abandoned plans to allow universities to increase student fees at the rate of inflation. The extension of the freeze until 2022-23 would mean a funding reduction per student of 11% in real terms compared with 2018-19² The panel's recommendation to freeze student funding levels would place additional financial pressure on rated universities. With the current fee freeze, we expect the median operating cash flow margin to decline to 9.2% in fiscal year 2019 from 11.5% in fiscal year 2017.

While the review recommends that the government fully compensate universities for funding losses, to ensure that the overall level of funding per student remains unchanged in cash terms, the required increase in teaching grants would result in considerable fiscal spending for the UK. The credit impact of this recommendation would therefore depend on whether the government adopts it, as well as the scale of compensation towards funding losses it would provide³. The effect of the proposed measure to lower domestic tuition fee levels would vary by university – those with more diverse revenue sources and which are less reliant on the domestic student market would be more resilient to a lower tuition fee cap.

In addition, the review recommends that the government should adjust teaching grants to more accurately reflect the reasonable costs of delivering courses and the "social and economic value" to students and taxpayers. This recommendation would divert additional funding away from subjects (for example, the arts, humanities, and social sciences) that cost less to deliver and receive higher taxpayer subsidies due to their lower post-graduation earning potential. This would negatively impact universities specialising in these subjects.





Source: Moody's Investors Service

MOODY'S PUBLIC SECTOR EUROPE SUB-SOVEREIGN

What would be the credit impact of a no-deal Brexit on UK universities?

The key credit risks for universities related to a no-deal Brexit continue to be from a reduction in international students as well as any impact from a potentially weaker sovereign environment. While there are other Brexit-related risks, such as reduced EU research funding and potentially fewer EU students and staff, we believe these are less material, with some mitigations already in place over the medium term. So far, international student numbers have remained strong, particularly for our rated portfolio, buoyed by the depreciation in sterling. Additionally, to support overall international student numbers post-Brexit, an amendment to the UK immigration bill was tabled in April 2019. This was to further extend post-study residency for a period of at least two years from one year, and prevent government capping international student numbers without parliamentary approval, which received cross party support. Nonetheless, the UK leaving the EU without any agreement (a "no-deal Brexit") would be credit negative for the UK sovereign, with implications for an array of sectors, including universities⁴. UK universities have strong links to the sovereign through: channels of funding for both teaching and research; policy setting, which influences tuition fee levels and immigration policies; and regulation and oversight. The risk of a no-deal Brexit has increased with the election of Boris Johnson as Conservative Party leader and new Prime Minister⁵.

Are there credit risks related to universities' increasing reliance on international students?

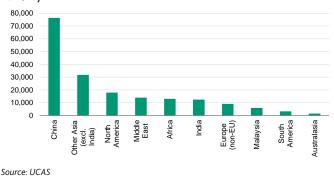
UK universities are increasingly reliant on income from international student fees, which exposes them to external risks, such as currency fluctuations, geopolitical risks and immigration policy. The median proportion of international (non-EU) students in rated universities is 19% (14% across the wider sector), and UK universities are planning to increase international student numbers as a means of mitigating pressures from lower domestic tuition fees, funding shortfalls, and rising staff and pension costs. This active recruitment of international students, coupled with sterling's recent depreciation, has led to international student enrollment increasing by 3.8% in 2017-18, more than enrollment from the EU (3.2%) and the UK (0.5%) students.

Growing international student numbers will increase exposure to fluctuations in international student demand for UK higher education, as well as any geopolitical tensions between the UK and the nations that send students. Recent examples of the latter include: the political conflict between Saudi Arabia and Canada, which led to Saudi students being withdrawn from Canadian universities⁶; increasing diplomatic tension between Canada and China, posing credit risks for Canadian universities⁷; and the warning from the Chinese government (June 2019) of the risks involved in studying in the US amid ongoing trade tensions between the two nations.

The risks related to the UK's increasing reliance on international students is exacerbated by a growing concentration risk of Chinese students. They comprised 23% of non-EU students in the UK in 2017-18, and applications have risen by a compound annual growth rate of 17% since 2014. As international tuition fees can be up to three times domestic fees, international students, particularly Chinese students, have become a crucial source of income for UK universities. While UK higher education institutions have recognised the risks posed by this revenue concentration and are making efforts to diversify their international student populations, Chinese students continue to account for the vast majority of international students, at 76,400 in 2017-18, compared to 12,500 Indian students, the second largest international student cohort from a single country (see Exhibit 5).

Exhibit 5
Chinese students make up the lion's share of international students in UK universities...

(Largest group of first year international students by domicile, enrollment 2017/18)

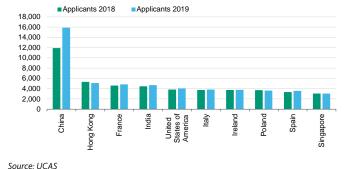


)[[0

...and the number of applications continue to grow and overshadow those from other groups

(Non-LIK countries with the highest 2019 January deadline appli

(Non-UK countries with the highest 2019 January deadline applicants, 2018/19)



Moody's related publications

Sector research

- » Higher Education Global: Demand underpins credit strength in the face of geopolitical and funding risks, May 2019
- » Higher Education UK: Proposed tuition fee cuts and freeze on student funding would be credit negative for UK universities, May 2019
- » Higher Education UK: Rising staff costs and pension contributions to exert financial pressures on universities, April 2019
- » Higher Education UK: Increase in international and EU student applications despite Brexit uncertainty is credit positive for UK universities, February 2019
- » Higher Education UK: Emergency loan to university supports our assumption of high extraordinary support, November 2018

Issuer research

- » Cardiff University: Update to credit analysis, May 2019
- » The University of Manchester: Update to credit analysis, May 2019
- » <u>University of Cambridge: Update to credit analysis</u>, May 2019
- » Keele University: Update to credit analysis, May 2019
- » University of Leeds: Update to credit analysis, May 2019
- » <u>University of Southampton: Update to credit analysis</u>, May 2019
- » De Montfort University: Update to credit analysis, May 2019
- » University of Oxford: Update to credit analysis, May 2019
- » The University of Liverpool: Update to credit analysis, May 2019

Endnotes

- 1 The five universities with stabilised outlooks are: University of Leeds; Keele University; De Montfort University; University of Southampton; and the University of Liverpool.
- 2 See Review of Post-18 Education and Funding, May 2019.
- 3 See Higher Education United Kingdom: Proposed tuition fee cuts and freeze on student funding would be credit negative for UK universities, May 2019
- 4 See Cross-Sector United Kingdom: Probability of a 'no-deal' Brexit has risen, and would be negative for an array of issuers, September 2018
- 5 See Cross-Sector United Kingdom: Risk of credit negative no-deal Brexit has increased, July 2019
- 6 See Withdrawal of Saudi students is credit negative for Canada's university sector, August 2018
- 7 See China-Canada diplomatic tensions pose credit risks for Canadian universities, February 2019

© 2019 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE MOODY'S RATINGS. CREDIT RATINGS BY 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 MAY ARINGS 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 AND MOODY'S PUBLICATIONS COMMENT ON THE SUITS AND PUBLISHES MOODY'S PUBLICATIONS COMMENT ON THE SUITS AND PUBLISHES MOODY'S PUBLICATIONS COMMENT ON THE SUITS AND PUBLISHES MOODY'S PUBLICATIONS COMMENT ON THE SUITS. HOLDING. OR SALE.

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

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

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

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

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

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

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$2,700,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

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

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

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY250,000,000.

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

REPORT NUMBER

1188036

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

