

CREDIT OPINION

8 September 2017

Update

Rate this Research >>

Contacts

Nicole Serrano 212-553-4143
VP-Senior Analyst
 nicole.serrano@moodys.com

Orlie Prince 212-553-7738
*VP-Sr Credit Officer/
 Manager*
 orlie.prince@moodys.com

Christopher Coviello 212-553-0575
VP-Senior Analyst
 christopher.coviello@moodys.com

CLIENT SERVICES

Americas 1-212-553-1653

Asia Pacific 852-3551-3077

Japan 81-3-5408-4100

EMEA 44-20-7772-5454

Philadelphia School District

Update - Moody's Upgrades Philadelphia School District, PA's Rating to Ba2; Outlook Positive

Summary Rating Rationale

Moody's Investors Service has upgraded Philadelphia School District's underlying GO and Lease Revenue Bond ratings to Ba2 from the current Ba3. Approximately \$3.0 billion of debt outstanding is affected.

The upgrade of the underlying rating to Ba2 speaks to considerable improvement in the district's still strained financial position. Management is experienced, and though some are new to the district, the team has developed a detailed understanding not only of the district's finances but also of charter pressures and the complexities of managing a highly dynamic, large, urban school district. The rating upgrade is also informed by the positive relationship with the City of Philadelphia, stabilized charter enrollment, and a return to investment in district classrooms after years of austerity operations. The Ba2 rating also reflects the district's relatively high debt burden, narrow reserves, substantial fixed costs, continued charter pressure, and its projections for operating deficits in future years.

Moody's maintains its A2 enhanced rating on all of the district's direct general obligation debt. The A2 enhanced rating reflects our current assessment of the Pennsylvania School District Fiscal Agent Agreement Intercept Program, which provides for the pre-default intercept of state aid in the event of a payment failure by the district. The A2 enhanced rating on all of the GO-secured debt issued through the SPSBA, reflects our current assessment of the SPSBA Lease Intercept Program, through which the State Treasurer withholds appropriated state aid and makes payments directly to the bond trustee.

Credit Strengths

- » Charter enrollment has been stable for the past three years at 33% - 35% of overall enrollment; a continued flat trend for the 2017 - 2018 school year is expected
- » Structural balance and operating surpluses for last three years show a significant improvement over years of deficits
- » Experienced management brings strong control of finances and detailed management of daily school operations
- » City demographics are improving, albeit slowly
- » GO debt is secured by a lock box agreement that has never been tripped (since inception in 1982) with debt service coverage of 5.2xs as of fiscal 2016 YE

Credit Challenges

- » Charter costs continue to be a large, relatively fixed budget expenditure
- » Conservative future projections show a return to deficits in 2018 and beyond assuming no new revenue growth
- » Fund balance and liquidity cushion is narrow versus peers at less than 4%
- » No ability to raise revenues independently; reliance on the state and city for revenue generation is a substantial limiting factor to the district's overall credit profile

Rating Outlook

The outlook is positive given our expectation of continued charter stabilization and management's solid governance over school operations and finances. The positive outlook also reflects our expectation that finances will be maintained within the range of structural balance going forward.

Factors that Could Lead to an Upgrade

- » Permanent new revenue source or growth that ensures structurally balanced operations
- » Further evidence of charter stabilization and improved district school operations

Factors that Could Lead to a Downgrade

- » Structurally imbalanced operations for a prolonged period leading to fund balance depletion
- » Further expansion of charters; deterioration of district enrollment not coupled with significant expenditure cuts

Key Indicators

Exhibit 1

Philadelphia School District, PA	2012	2013	2014	2015	2016
Economy/Tax Base					
Total Full Value (\$000)	\$ 58,895,425	\$ 42,734,769	\$ 43,297,732	\$ 42,299,104	\$ 46,327,695
Full Value Per Capita	\$ 38,599	\$ 27,809	\$ 27,990	\$ 27,201	\$ 29,565
Median Family Income (% of USMedian)	71.9%	71.6%	71.0%	71.0%	71.0%
Finances					
Operating Revenue (\$000)	\$ 2,142,766	\$ 2,209,808	\$ 2,366,315	\$ 2,505,565	\$ 2,603,284
Fund Balance as a % of Revenues	-5.2%	-1.8%	-4.1%	0.2%	3.6%
Cash Balance as a % of Revenues	0.9%	3.5%	0.8%	1.7%	7.4%
Debt/Pensions					
Net Direct Debt (\$000)	\$ 3,144,227	\$ 3,295,018	\$ 3,177,579	\$ 3,099,555	\$ 2,989,333
Net Direct Debt / Operating Revenues (x)	1.5x	1.5x	1.3x	1.2x	1.1x
Net Direct Debt / Full Value (%)	5.3%	7.7%	7.3%	7.3%	6.5%
Moody's - adjusted Net Pension Liability (3-yr average) to Revenues (x)	N/A	0.8x	0.8x	0.8x	0.9x
Moody's - adjusted Net Pension Liability (3-yr average) to Full Value (%)	N/A	4.1%	4.3%	4.8%	4.8%

Source: Moody's Investors Service and Philadelphia School District CAFR

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 for the most updated credit rating action information and rating history.

Detailed Rating Considerations

Pennsylvania School Enhancement Program

All of the district's debt is enhanced by the commonwealth through two enhancement programs. Under Act 150, the commonwealth agrees to remit to bondholders any appropriations due to a school district to cover debt service in the event of a missed payment post-default. The district has converted this post-default enhancement into a pre-default enhancement by establishing sinking fund payments with its fiscal agent ahead of debt service due dates. If the district misses a sinking fund payment 15 days prior to a debt service due date, the fiscal agent, Bank of New York Mellon Trust Company N.A. (Aa2 stable), agrees to notify the commonwealth and initiate the intercept mechanisms.

In addition, under Section 785, the commonwealth, through a direct intercept, remits to bondholders appropriations due to a school district equal to the lease payments due to the Pennsylvania State Public School Building Authority (SPSBA). The base payments under the sublease are due 15 days prior to debt service.

Favorably for both programs, Pennsylvania passed Act 85 in July 2016, which provides for state funds to be intercepted and diverted to bondholders on or before debt service payment debt even without appropriations due to school districts. Coverage of the district's debt service by commonwealth aid appropriations, net of pension and charter costs, represented a moderate 1.51x in fiscal 2016.

Economy and Tax Base

Philadelphia School District's ("PSD", the district) bounds are co-terminous with the city of Philadelphia (A2 negative). PSD is the largest of the 500 school districts in the commonwealth, employing over 16,900 full time employees as of June 2016, and educating roughly 12% of the state's 1.7 million public school students. It is the 9th largest school district in the nation based on student enrollment.

The city of Philadelphia is the 6th largest in the US in terms of population. The city has always maintained a very strong "eds & meds" concentration; a substantial mix of universities, hospitals, and other employers, which has provided bouyancy to the economy even through fiscal downturns. Of the ten largest employers in the city, eight are either higher education or healthcare entities, most prominently the University of Pennsylvania (Aa1 stable) and the University of Pennsylvania Health System (Aa3 stable). The city is home to about 30 hospitals, including Thomas Jefferson University Hospital and the Children's Hospital of Philadelphia (Aa2 stable).

Though the city has seen a significant increase in new development and indicators that point to favorable economic growth - like an increased population of millennials (20 - 34 year olds) and increased transfer tax income - the city continues to struggle with weak demographics. Poverty is stubbornly high at 26%, unchanged since 2010. Population has been growing post-recession, but MFI and median home values have been stagnant for at least the past 5 years, at 71% and 81% of the US, respectively. As of YE16, the city's fund balance is just 3.3% of revenues, with projections that, while conservative, suggest a further narrowing of reserves in the near term.

The school district has been grappling with the challenges of charter pressure since 2002, but enrollment seems to have stabilized at roughly 33% - 35% of total enrollment over the past three years. As of December 2016, total enrollment in the city was 204,594, with more than 70,000 students attending charter schools (34%), and 4,200 students in other alternative schools (2%). The district manages the daily operations of more than 200 school buildings throughout the city and over 130,000 students in district schools.

This is a substantial undertaking for management, particularly given the complexity of demographics in a dynamic city like Philadelphia. Some district schools are overflowing with students, while others have lost significant enrollment to charters. Charter pressure poses a marked operational challenge, as students do not migrate to charter schools in any uniform way. School closures and consolidation, even for under-enrolled and under-performing district schools, are difficult to accomplish. This somewhat limits the district's opportunity to realize efficiencies, despite the fact that more than 30% of students currently attend non-district schools.

Perhaps the biggest challenge of charters is that per-pupil costs for charter students are determined at the beginning of the fiscal year and outside of district control. While the district does monitor enrollment on a daily basis, which increases the accuracy of its monthly payments to charters, it cannot control the per-pupil cost it pays out. The charter expenditure of \$711 million in 2016 was 35% of PSD's general fund budget - this is a substantial fixed cost, and when coupled with the district's ordinary fixed costs of debt service and pensions, severely limits the district's financial flexibility.

Financial Operations and Reserves: Structural Balance and Surpluses for Last Three Years

After years of deficits and structural imbalance, the district posted three consecutive years (2015 - 2017) of healthy surpluses and has added sufficiently to fund balance. PSD ended fiscal 2016 with a general fund surplus of \$88.7 million, which increased fund balance to \$93.4 million (3.6% of revenue). PSD reports expected, unaudited, fund balance of \$104 million for fiscal 2017 (3.7% of revenue) after a rather hefty accounting adjustment. The projected operating surplus for fiscal 2017 is \$79 million (2.8% of revenue).

The district had been operating in "austerity mode" since 2012. It closed 24 schools, eliminated non-core programs, and laid off teachers, nurses, and staff. In an effort to aid the district in 2015, the commonwealth implemented a new \$2 per-pack cigarette tax on sales in the city of Philadelphia and extended a 1% sales tax (state and city approved, state levied) with the first \$120 million of revenue dedicated to Philadelphia schools.

Together, these two tax streams generated close to \$180 million in 2016, or 7% of revenues, resulting in a strong operating surplus and fund balance growth. These new revenue streams also allowed the district to begin to reinvest in its classrooms, implementing a 5-year, \$440 million program that includes goals for literacy, college and career readiness, and talent / workforce investment, plus capital improvements. We view this type of district spending as a strong credit positive - improvement in district classrooms should enable schools to be more competitive with charters. This type of investment, along with the ratification of a long-awaited teachers' contract, also improves the overall perception of the district as a viable provider of education services to city residents and tax-payers.

The district cannot independently levy taxes; it is the only school district in Pennsylvania with this limitation. The district thus necessarily relies on the state and city to levy taxes on its behalf. This is a considerable limitation for the district, particularly given continued rising costs. This lack of flexibility in revenue raising ability makes maintaining structural balance a significant challenge.

Positively, the state cigarette tax will not sunset in 2019 as originally expected, and PSD expects to receive at least \$58 million from this tax annually. For fiscal 2016, state grants and subsidies contributed 51% of total general fund revenue, while local taxes contributed 43%. The school real estate tax is by far the largest tax source at \$669 million, or 26% of total general fund revenue. The district also received revenue from a liquor tax (\$66 million) the cigarette sales tax (\$59 million), the general sales tax (\$120 million), and a \$104 million grant from the city during 2016.

Despite these positive changes to fiscal operations, the district anticipates operating deficits beginning in 2018 and negative fund balance by 2019, largely due to projected growth in charter costs (+8% over five years) and growth in instruction costs for district-operated schools (+2.5% for five years, assumes the new teacher's contract), which would result in structural imbalance relative to expected flat revenues.

Though charter enrollment is expected to be stable for the coming school year, district spending - including spending on teacher salaries and pensions - is passed to charters in subsequent years, so continued growth in charter payments remains likely. We expect that current budget estimates are conservative, and note that the district has a proven history of very conservative budgeting, but without a new revenue source or considerable revenue growth, a return to structural imbalance is possible.

LIQUIDITY

General fund cash was a satisfactory 7.4% of revenue for 2016, a considerable improvement over prior years' liquidity, but well below the median for US school districts at 21%.

The district issues Tax and Revenue Anticipation Notes annually to bolster liquidity during the year. The 2017 - 2018 TRAN was issued for \$400 million, with an additional draw of \$175 million if needed. The \$400 million was fixed rate and privately placed.

Debt and Pensions

The district's debt profile is expected to modestly increase in the near term due to a sizable capital plan. The district's debt portfolio currently consists of \$1.9 billion of GO bonds and \$1 billion of lease revenue bonds issued through the SPSBA. The total debt is equal to 3.1% of full value and 1.3 times revenues, a relatively moderate debt burden. However, the district's facilities are old and the district plans to invest heavily in its capital assets over the next several years, largely through additional debt issuance.

Debt service amounted to \$261 million at YE16, or close to 9.8% of operating expenses, a considerable fixed cost especially when coupled with the district's pension burden and the relatively "fixed" cost of charters in any given fiscal year.

DEBT STRUCTURE

The district's General Obligation bonds benefit from a lock-box structure, originally established in 1982. Through various credit cycles over the past 35 years, the lock box mechanism has never been tripped, and a sinking fund payment never been missed. The City of Philadelphia, as tax collector for the district's local taxes (property, business use and occupancy, liquor, and non-business income taxes), remits the revenues on a daily basis directly to the fiscal agent. If a given day's revenues are insufficient to meet the daily deposit requirement, the shortfall is added to the subsequent day's requirement until current. Only once the daily deposit requirement has been met do remaining local tax revenues flow to the district's operating account. These four dedicated local taxes provided debt service coverage of 5.18xs in fiscal 2016. Over the past ten years, coverage has never dropped below 3.5xs, even during the last recession.

Favorably, the General Obligation bonds are also secured by the state intercept mechanism that would be triggered 15 days prior to the debt service due date if the sinking fund was not fully funded. The state intercept mechanics only require 10 days for payment, which would ensure debt service would be paid prior to a default. Furthermore, even if there was another state budget impasse, under Act 85, up to 50% of the district's prior year education appropriation (\$772 million) is available to be intercepted to pay for General Obligation debt service (\$195 million in fiscal 2017).

Debt service for the district's SPSBA bonds is paid directly from the State Treasurer to the Bond Trustee on specified dates scheduled at least 35 days prior to each debt service payment date under a direct-pay agreement. Act 85 applies to these bonds as well.

DEBT-RELATED DERIVATIVES

The district is party to two basis swaps associated with the Series 2003 and Series 2016A SPSBA bonds.

PENSIONS AND OPEB

The district contributes to the Pennsylvania State Public School Employees' Retirement System, a multi-employer, defined benefit retirement plan administered by the Commonwealth of Pennsylvania. The district's annual required contribution (ARC) for the plan was \$217 million in fiscal 2016, or roughly 11% of general fund expenditures. Half of this payment is reimbursed to the district by the state. The district's 2016 adjusted net pension liability, under Moody's methodology for adjusting reported pension data, is \$2.7 billion, or an average 1.04 times operating revenues. Moody's uses the adjusted net pension liability to improve comparability of reported pension liabilities. The adjustments are not intended to replace the district's reported liability information, but to improve comparability with contributions to the plan.

The district also provides Other Post-Employment Benefits (OPEB) to its employees. In fiscal 2016, the district's OPEB ARC was \$998,000. The total fixed cost for pension, OPEB and debt service was \$471 million for fiscal 2016, or 21% of operating expenditures, which is in line with the average for Pennsylvania school districts.

Management and Governance

This management team, some of whom are relatively new to the district, has developed a detailed understanding of the district's financial position as well as solid controls on managing charters and school operations. This is essential, as this is a dynamic district with a complex matrix of schools, neighborhoods, and demographics, and charters do indeed complicate planning. While the district has tight control on the charter issue today and a thorough understanding of the district's financial position, ongoing comprehensive management will be crucial given the district's fundamental complexities.

The Philadelphia School District is unique among Pennsylvania school districts in that it cannot levy its own taxes. It was also deemed a financially distressed district in 2001, and its management is ultimately governed by a five-member School Reform Commission (SRC). The governor is responsible for appointing three of the commission's members, while the Philadelphia mayor appoints the remaining two members. The district is required to publish five-year financial and capital plans, subject to SRC approval.

While the General Assembly has authorized the school district to levy 16.75 mills without city council approval, the district is not currently able to utilize this levy due stipulations included in House Bill 1857 that was enacted by the Pennsylvania legislature in 2012 in relation to the city's plans to reassess at market value in 2014. Under this bill, the district can only levy this tax if the estimated tax yield for the current year is less than the yield in the year prior to the reassessment. As a result, the district must rely solely on the city to levy property taxes on their behalf.

Favorably, while the district is distressed, the city is not allowed to lower the rate or amount of the tax as stipulated by the Maintenance of Effort provision in Section 696 of the Pennsylvania School Code.

Pennsylvania School Districts have an Institutional Framework score of A, which is moderate compared to the nation. Institutional Framework scores measure a sector's legal ability to increase revenues and decrease expenditures. Schools major revenue source, property taxes, are subject to a Act 1 cap, which limits property taxes above an Act 1 index subject to certain exceptions. The Act 1 index is based on inflation. However, the cap still allows for moderate revenue-raising ability. Philadelphia School District is not subject to Act 1.

Unpredictable revenue fluctuations tend to be moderate, or between 5-10% annually. Across the sector, fixed and mandated costs are generally less than 25% of expenditures. However, Pennsylvania has public sector unions, which can limit the ability to cut expenditures. Unpredictable expenditure fluctuations tend to be moderate, between 5-10% annually.

Legal Security

The district's GO bonds are secured by the district's full faith, credit and taxing power.

The district's SPSBA lease revenue bonds are secured by lease payments made by the district to the SPSBA. Under the lease agreement with SPSBA, the district covenants that the lease payments represent a full faith, credit and taxing power pledge, and therefore, we currently rate the lease revenue bonds on parity with the district's GO bonds.

Use of Proceeds

Not Applicable

Obligor Profile

Philadelphia School District is the largest public school district in Pennsylvania and the ninth-largest in the country. The district operates more than 200 schools with enrollment of 204,594 (includes 71,000 students in charters) as of December 2016.

Methodology

The principal methodology used in the underlying rating was US Local Government General Obligation Debt published in December 2016. An additional methodology used in the SPSBA underlying rating was Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments published in July 2016. Please see the Rating Methodologies page on www.moody.com for a copy of these methodologies.

© 2017 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.

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 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.

REPORT NUMBER

1088774

CLIENT SERVICES

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