

CREDIT OPINION

29 November 2016

New Issue

Rate this Research >>

Contacts

Marcia Van Wagner 212-553-2952
 VP-Sr Credit Officer
 marcia.vanwagner@moodys.com

Genevieve Nolan 212-553-3912
 VP-Senior Analyst
 genevieve.nolan@moodys.com

Connecticut (State of)

New Issue - Moody's Assigns Aa3 to Connecticut GO Bonds; Outlook Negative

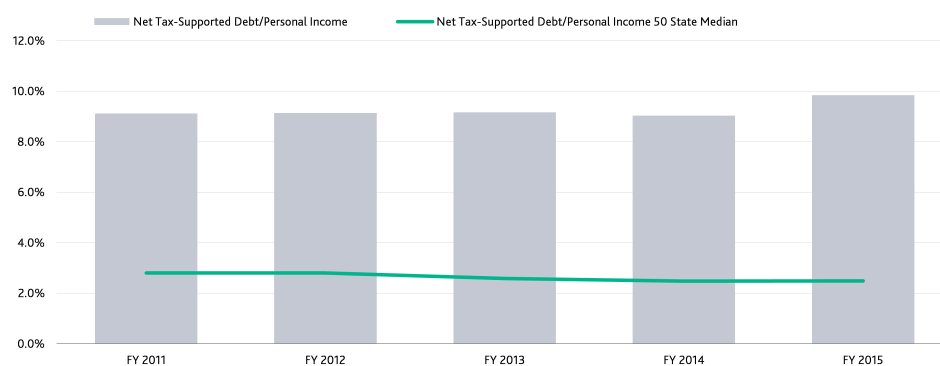
Summary Rating Rationale

Moody's Investors Service has assigned a Aa3 rating to approximately \$320 million of State of Connecticut General Obligation Refunding Bonds (2016 Series G). The bonds are expected to price on December 6.

The Aa3 state GO rating reflects Connecticut's high income levels, strong governance, and healthy liquidity, offset by high fixed costs for debt service, pension, and post employment benefits relative to the state's budget; unfunded pension liabilities and debt outstanding that are among the highest, relative to revenues, of any state in the country; and minimal reserve levels as well as a lagging economy and recent population loss.

Exhibit 1

Connecticut Net Tax-Supported Debt Far Exceeds State Median High debt stems from borrowing for local governments



Source: Connecticut audited financial statements; Moody's Investors Service

Credit Strengths

- » Legislated support for application of operating surpluses to the Budget Reserve Fund (BRF)
- » Wealthiest state in the nation with per capita personal income levels well above national levels
- » Strong governance with the ability to make mid-year budget adjustments

Credit Challenges

- » Fixed costs for debt, pension and other post-employment benefits (OPEB) relative to budget are among the highest in the nation
- » Vulnerability to financial market fluctuations due to effect on capital gains for very high -wealth residents and employment in the financial services sector
- » General fund balance sheet will remain negative over near term and rainy day fund modest due to state's slower recovery from the recession

Rating Outlook

Connecticut's outlook is negative, which reflects a lagging economy and weakening demographics that have led to budgetary strain as fixed costs have risen. While we expect the state to solve the budgetary gaps with recurring solutions, we believe that economic trends will place negative pressure on the state's finances in the next few years, while the very high fixed costs reduce flexibility.

Factors that Could Lead to an Upgrade

- » Achievement and maintenance of higher GAAP-basis combined available reserve levels
- » Established trend of structural budget balance
- » Evidence of sustained stronger economic performance
- » Reduced debt ratios relative to Moody's 50-state median and lower fixed annual costs
- » Significantly improved funding of pension and post-retirement liabilities

Factors that Could Lead to a Downgrade

- » Lack of improvement in available reserve levels
- » Reversion to significant one-time budget solutions, including deficit financings
- » Revenue weakness driven by delayed economic recovery
- » Cash flow strain stemming from reduced liquidity
- » Significant increase in fixed costs as percent of budget

Key Indicators

Exhibit 2

Connecticut	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Operating Fund Revenues (000s)	13,935,599	16,378,765	16,909,327	16,880,411	17,187,461
Balances as % of Operating Fund Revenues	-12.5%	-6.4%	-7.2%	-1.2%	-2.3%
Net Tax-Supported Debt (000s)	18,247,554	18,615,067	19,623,311	20,272,617	22,103,517
Net Tax-Supported Debt/Personal Income	9.1%	9.1%	9.2%	9.0%	9.8%
Net Tax-Supported Debt/Personal Income 50 State Median	2.8%	2.8%	2.6%	2.5%	2.5%
Debt/All Governmental Funds Revenue	83.2%	78.9%	80.1%	81.4%	84.5%
Debt/All Governmental Funds Revenue 50 State Median*	22.5%	23.8%	23.5%	23.0%	20.4%
Adjusted Net Pension Liability/All Govt Funds Revenue	189.7%	243.4%	236.0%	213.3%	202.3%
Adjusted Net Pension Liability/All Govt Funds Revenue 50 State Median	48.7%	63.9%	60.3%	59.2%	50.4%
Total Non-Farm Employment Change (CY)	1.1%	0.9%	0.9%	0.7%	0.7%
Per Capita Income as a % of US (CY)	150.4%	146.9%	144.2%	143.7%	142.8%

Source: Moody's investors Service; Connecticut state audited financial reports

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.

Recent Developments

Recent developments are incorporated in the detailed rating considerations below.

Detailed Rating Considerations

Economy: High Income State Lags US Recovery

Connecticut is a wealthy state, with per capita personal income exceeding 140% of the US. However, the state's economy continues to lag that of the nation. While the state's unemployment rate as of October is only slightly elevated compared to the nation, at 5.1% versus 4.9% nationwide, the state's job count is still less than the peak prior to the recession. Job gains have been concentrated in education and health services, leisure and hospitality, transportation and utilities and professional and business services and have yielded slower wage growth than in the past: the state has experienced only 7.2% growth in average annual wages from calendar year 2011-2015 versus 14.5% in calendar 2004-2008.

Economic headwinds include lackluster performance in the state's high-paid financial activities sector. While the US has recovered nearly all the financial activities jobs lost in the recession, Connecticut continued to lose finance jobs into 2014 and has since recovered only about one quarter of those lost. To compound the sluggish recovery, job growth has been concentrated in low-wage sectors such as retail and service jobs.

In another blow to the state's recovery, [General Electric Company](#) (GE, A1 stable) announced in January that it will move its corporate headquarters to [Boston, MA](#) (Aaa stable) from [Fairfield, CT](#) (Aaa stable), although the company has stated that most jobs will stay in Connecticut. According to Moody's Analytics, GE is the 20th-largest employer in Connecticut in terms of employees (4,300 with about 800 in the Fairfield headquarters). The state has played defense and in recent months has announced some deals to retain existing employers, such as a recent agreement with [Lockheed Martin Corp.](#) (Baa1 stable) to produce CH-53K helicopters in the state. The state has had deteriorating demographics with two years of population loss since 2013, contributing to an underperforming housing market.

Finances and Liquidity: State Struggles to Close Gaps

The executive's Office of Policy and Management (OPM) and the General Assembly's Office of Fiscal Analysis (OFA) released a new consensus revenue forecast on November 10, followed by fiscal accountability reports authored by each body. The revenue forecast resulted in a reduction in personal income tax (PIT) revenues of almost \$67 million compared to the enacted budget and also reflected underperforming sales taxes. With higher expenditures, the new forecast resulted in a \$90 million swing in the projected operating results from a \$22 million surplus to a nearly \$68 million deficit according to OPM's forecast, despite the state's receipt of \$80 million more than originally expected from a legal settlement with the [Royal Bank of Scotland](#) (A3 positive).

According to the forecast, revenue will grow at a slow 1.2% annual average pace through 2020, based on average nominal US GDP growth of about 4.25%. The OFA projects that fixed costs (including debt service, OPEB contributions, pension contributions and entitlements such as Medicaid) will grow \$900 million in fiscal 2018 and would require \$1.2 billion in cuts in other spending to achieve budget balance. The revenue forecast is reasonable based on the state's recent performance but is subject to the risk of a national recession during the forecast period.

The state ended fiscal 2016 with a deficit of \$170 million, which is the state's second consecutive operating deficit. The deficit will be closed with a draw on the state's rainy day fund, resulting in a balance in that fund of \$235 million. The year-end position was an improvement from earlier deficit projections that were as high as \$316 million. There were two rounds of gap-closing programs during the year totaling more than \$500 million in actions.

The state passed an amended fiscal 2017 budget in May. The revised budget resulted in significant expenditure cuts of \$847.2 million to balance the 2017 budget. The revision also canceled a net \$642.3 million in bond authorizations. OPM has requested that agencies factor in a 10% reduction in their fiscal 2018 budget requests to help close a projected \$1.2 billion gap. The governor will release the mid-year budget adjustment and proposed budget for fiscal 2018 in February.

CLOSING GAAP DEFICIT INCREASES DEBT BURDEN

In fiscal 2013, the state implemented a plan to begin addressing Connecticut's sizeable \$1.2 billion cumulative GAAP deficit. The state issued \$560 million of general obligation bonds, which generated \$598.5 million in proceeds (of the \$750 million total authorized by legislature) amortizing the bonds over 15 years and reducing the accumulated GAAP deficit to \$618.5 million. The remaining portion of

the deficit will be amortized over 13 years starting in fiscal 2016, resulting in an annual payment of about \$47.5 million. These amounts will be "deemed appropriated", meaning no further legislative action is needed to make the payments.

The GAAP bond proceeds are not counted as General Fund revenues, and the proceeds cannot be used for any current or future budget appropriations. While the funding strategy enabled the state to begin addressing its longstanding sizeable GAAP deficit and injects discipline into the plan, the additional debt adds to the state's already high debt levels and fixed costs. Even with the plan, the unassigned General Fund balance will remain negative over the near term.

LIQUIDITY

Connecticut's liquidity remains healthy. The state did not have to borrow for cash flow purposes in calendar 2015 or fiscal 2016 and does not expect to do so in fiscal 2017. Cash balances averaged \$2 billion in fiscal 2016 and the state projects an average balance of \$1.8 billion in fiscal 2017.

Debt and Pensions: Large Liabilities Create High Fixed Costs

DEBT STRUCTURE

Connecticut is a frequent borrower and the state's debt per capita and debt-to-personal income ranked first and second, respectively, among the 50 states for Moody's 2015 debt medians. Net tax-supported debt equaled \$5,491 per capita and 9.8% of total state personal income, well above the 50-state median of \$1,054 in debt per capita and 2.5% for debt-to-personal income. These high debt ratios are partly due to substantial capital financing for K-12 school building construction that is carried out at the local level in many other states. However, with the \$2 billion POBs and the sale of \$560 million in GAAP Conversion bonds to address a portion of the state's sizeable cumulative GAAP deficit, on top of the state's normal sizeable annual debt issuances, Connecticut's debt ratios will likely remain among the highest in the country. Connecticut adheres to a 20-year level principal repayment schedule for its general obligation debt, with a declining debt service schedule that provides some flexibility.

DEBT-RELATED DERIVATIVES

The state has \$1.754 billion in variable rate debt, most of which is indexed to either SIFMA or CPI, or approximately 11% of the state's total GO debt. Only \$40 million of the state's variable rate debt is swapped to fixed, based on 60% of LIBOR or a percentage point above CPI, after a \$280 million swap was terminated at par on March 1, 2015. The swap counterparties are [JP Morgan Chase Bank, N.A.](#) (Aa2(cr)/P-1(cr)) and Morgan Stanley Capital Services Inc. As of September 30, 2016, the mark-to-market was minimal, at negative \$1.7 million against the state. In accordance with its swap guidelines, the state generally negotiates provisions that permit funding a required termination payment over a period of time to allow time for a refunding. Accordingly, the state would have 270 days to fund a termination payment for its general obligation swaps. The state has no plan to incorporate swaps into future GO bonds.

PENSIONS AND OPEB

Connecticut's adjusted net pension liability (ANPL), our measure of the government's pension burden, is significantly above the 50-state median. As of the state's 2015 financial statements, ANPL was 288% of own-source governmental revenue, and 202% of total governmental revenue, the second highest among the states. The state participates in 3 pension systems, of which the most significant are the State Employees Retirement System (SERS) and the Teachers Retirement System (TRS). Connecticut is among the handful of states that take responsibility for directly funding teacher pensions. Moody's ANPL reflects certain adjustments made to improve comparability of reported pension liabilities.

The state contributes the full amount of its actuarially determined contribution, about \$2.2 billion in fiscal 2015. It is required via bond indenture to pay the full required contribution to the Teachers plan and by collective bargaining to do the same for the State Employees. Even so, its 2015 contributions would not have prevented its net pension liability (NPL) from growing even if investment returns all the actuarial assumptions associated with the plan had come to fruition, as the contributions were about 92% of our "tread water" benchmark, which is the payment covering the year's newly accrued service costs and interest on the NPL. Meeting this benchmark will become more costly since the assumed rate of investment return on the TRS fund assets, which also is used to discount the liabilities, was reduced to 8% from 8.5% starting with the 2016 valuation. The plan's unfunded liabilities rose more than 20% from June 30, 2014 to June 30, 2016 and will result in a significant increase in the required contribution in fiscal 2018.

Connecticut also has a very high OPEB liability. As of the 2015 valuation, the liability stood at \$18.9 billion. The state is responsible for the \$2.99 billion Teachers' OPEB liability as of the recently-released June 30 2016 valuation, a 23% increase in UAAL since the 2014 valuation. The OPEB trust fund contained \$229.6 million in net assets as of June 30, 2015.

The state's combined debt service, pension, and OPEB contributions in fiscal 2015 were nearly 30% of own-source governmental revenues, among the highest of the states. The high fixed costs are partly attributable to the state's absorption of certain costs covered by local governments in most other states. High fixed costs reduce the share of discretionary spending and the state's budgetary flexibility.

Governance: State Profile Features Strong Practices

The state has a constitutional balanced budget requirement, strong, binding consensus revenue process supported by nonpartisan and objective economic analysis that is conducted three times a year (January, April and November) or can be scheduled more frequently during times of revenue shortfalls or economic distress. There is a constitutional cap on spending, however, the Attorney General opined in November 2015 that it is not operative until the General Assembly adopts definitions. There is a statutory limit on debt payable from the general fund. The state is not subject to mandated initiatives or voter referenda. The Governor has limited executive authority to cut expenses by up to 5% of an individual appropriation, not to exceed 3% of any fund, without legislative approval, and if a deficit exceeds 1% of the general fund, there are requirements for a timely deficit mitigation plan to be developed. A supermajority is not required for tax increases or legislatively enacted budget adjustments. There is monthly budget reporting by both the Governor's budget office and the State Comptroller and budget adoption has been timely. The state does not conduct a debt affordability analysis, however, both the Governor's budget office and the Office of Fiscal Analysis prepare Fiscal Accountability reports that include multiple-year financial planning including projections of debt issuance, debt levels and debt cost. The state has frequently maintained a rainy day fund over the years, and there are statutory requirements that all budget surplus funds be deposited to the rainy day fund at year-end.

Legal Security

The bonds are secured by the full faith and credit of the state of Connecticut.

Use of Proceeds

The proceeds of the Series G bonds will be used to refund certain outstanding state general obligation bonds at the same maturity schedule of the refunded bonds for net present value savings of approximately \$29 million.

Obligor Profile

The State of Connecticut has a population of almost 3.6 million people. The state, located in the northeastern US, has a large and diverse economy with a gross state product of \$253 billion. It is the wealthiest state in the country with per capita income of 141% of the US average.

Methodology

The principal methodology used in this rating was US States Rating Methodology published in April 2013. Please see the Rating Methodologies page on www.moody's.com for a copy of this methodology.

Ratings

Exhibit 3

Connecticut (State of)

<u>Issue</u>	<u>Rating</u>
General Obligation Refunding Bonds (2016 Series G)	Aa3
Rating Type	Underlying LT
Sale Amount	\$320,000,000
Expected Sale Date	12/06/2016
Rating Description	General Obligation

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 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 1050945