

MOODY'S

INVESTORS SERVICE

COMPANY PROFILE

SNCF Mobilités

Paris, France

Table of Contents:

COMPANY OVERVIEW	1
BUSINESS DESCRIPTION	2
MANAGEMENT STRATEGY/PRIORITIES	3
FINANCIAL HIGHLIGHTS	5
CAPITAL STRUCTURE AND DEBT	
MATURITY SCHEDULE	7
COMPANY MANAGEMENT	8
SECTOR/INDUSTRY PEER GROUP	11
RELATED WEBSITES AND INFORMATION	
SOURCES	11
MOODY'S RELATED RESEARCH	11

Analyst Contacts:

MILAN +39.02.9148.1100

Lorenzo Re +39.02.9148.1123
Vice President - Senior Analyst
lorenzo.re@moodys.com

Giuliana Cirrincione +39.02.9148.1126
Associate Analyst
giuliana.cirrincione@moodys.com

LONDON +44.20.7772.5454

Marina Albo +44.20.7772.5365
Managing Director - Corporate Finance
marina.albo@moodys.com

Company Overview

SNCF Mobilités is a transportation group owned by the French state. Having been established with a special status as an "Etablissement Public à Caractère Industriel et Commercial" (EPIC), SNCF Mobilités is a French public corporation with autonomous management.

SNCF Mobilités operates in 120 countries worldwide. In the financial year ended 31 December 2015 (2015), it reported revenue of €29.3 billion.

The company originated as Société Nationale des Chemins de Fer Français in 1937 as a semi-public, limited-liability company. In January 1983, it was established as a wholly French-state-owned industrial and commercial institution. Under the rail reform law that took effect on 1 January 2015, the company changed its name to SNCF Mobilités. The French state remains the firm's sole shareholder.

Source: *Company Report (financial report Dec 2015), Company data, Moody's research, Moody's Financial Metrics*

This report, exclusively provided to you by Moody's, presents a convenient summary of as reported, publicly available information. The information, with the exception of financial data, is not adjusted for Moody's analytic purposes. For Moody's Ratings, Opinion and Analytics on this company, please [\[Click here\]](#). To access the latest Moody's Credit Opinion on this company, please [\[Click here\]](#).

Business Description

Transport operator SNCF Mobilités was founded in 1937 as a semi-public, limited-liability company for a period of 45 years. In 1955, however, it was incorporated for an unlimited duration. In January 1983, it became a wholly French-state-owned industrial and commercial institution in accordance with the French Orientation Law on Domestic Transport (30 December 1982). The Reform Law 1997 extensively revised the company's objectives and business, separating the management of France's railway operations from that of its infrastructure. Ownership of the national railway network was transferred to Réseau Ferré de France (RFF), while SNCF Mobilités retained the responsibility for network management.

Historically, the company has expanded through acquisitions. In 2008, SNCF Mobilités acquired all the outstanding shares of the transport and logistics group Geodis. In 2009, SNCF Mobilités entered Italy's high-speed rail market by acquiring a 20% stake in Italian railway operator Nuovo Trasporto Viaggiatori (NTV) for €80 million. In 2012, SNCF Mobilités increased its stake in Keolis, an international subsidiary operating bus, subway and tramway services, to 70% from 56%.

In October 2013, the French transportation minister presented to the French Council of Ministers a series of legislative proposals to reform the French railway system. On 4 August 2014, a law was passed by the President of the French Republic to reorganise the country's railways. With effect from 1 January 2015, a new state-owned group was established with the following entities:

- » **SNCF Mobilités:** The former EPIC Société Nationale des Chemins de Fer Français was renamed SNCF Mobilités. It manages all freight and passenger railway operations and will continue to include the activities of the former SNCF Proximités, SNCF Voyages and SNCF Logistics divisions. SNCF Mobilités is also responsible for the management of all national network railway stations under the Gares & Connexions division.
- » **SNCF Réseau:** RFF merged with SNCF Infra to create SNCF Réseau.
- » **SNCF:** The new holding company SNCF was established to strategically coordinate group activities.

SNCF Mobilités operates in 120 countries worldwide through the following three business units: SNCF Voyageurs; SNCF Logistics; and Keolis. Within the SNCF Voyageurs business unit, the company provides its services through the following segments: Transilien, Régions and Intercités; Voyages SNCF (TGV); Gares & Connexions.

Transilien, Régions and Intercités: Accounting for 27.2% of the company's revenue in 2015, this segment comprises the group's local transport activities, including medium-distance links (Trains d'Équilibre du Territoire - Intercités), rail transport regulated services (TER, Transilien) and other B2B services dedicated to passenger transport (Itiremia, Ritmx).

Voyages SNCF: Accounting for 23.3% of the company's revenue in 2015, this segment provides door-to-door passenger transport services in France and Europe (including TGV, Ouigo, Eurostar, Thalys, Lyria, Ouicar, Ouibus and iDVroom) and distributes travel-related products.

Gares & Connexions: Accounting for 1.2% of the company's revenue in 2015, this segment develops and operates all national network railway stations, and is responsible for the activities of its subsidiaries AREP group (architecture and urban planning) and A2C group (commercial station development). Gares & Connexions provides impartial services to all rail operators.

SNCF Logistics: Accounting for 31.3% of SNCF Mobilités' revenue in 2015, this segment is the company's freight and logistics arm. Its activities include rail freight, port shipping, rail and port

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.

logistics, and combined railroad transport services through its subsidiaries Geodis, STVA, Naviland Cargo, Lorry Rail, Captrain, VFLI and Ermewa Group.

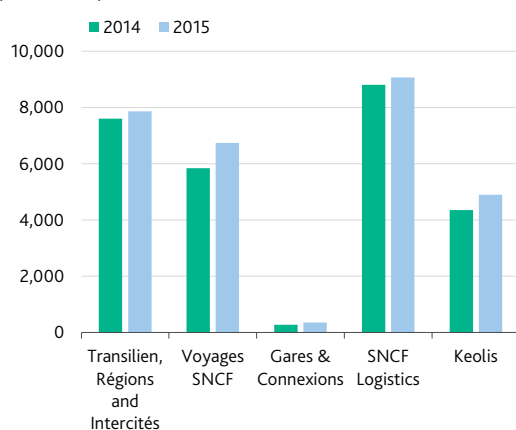
Keolis: Accounting for 17.0% of the company's revenue in 2015, this segment provides a range of transport solutions to meet the needs of local authorities and passengers across all modes, including train, bus, car, metro, tramway, ferries and bicycles. The segment also provides parking solutions through its subsidiary Effia. As of 31 December 2015, Keolis operated in 15 countries – Australia, Belgium, Canada, China, Denmark, France, Germany, India, Luxembourg, Norway, the Netherlands, Portugal, Sweden, the US and the UK.

Source: Company Report (financial report Dec 2015), Company data, Moody's research, Moody's Financial Metrics

EXHIBIT 1

Revenue by Segment

(in € Million)



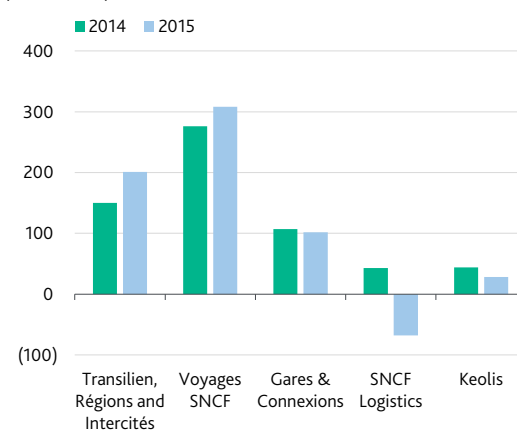
Note: Excluding "Corporate" and "Inter-segment"

Source: Company Report (financial report Dec 2015)

EXHIBIT 2

Operating Profit by Segment

(in € Million)



Note: Excluding "Corporate" and SNCF Infra

Source: Company Report (financial report Dec 2015)

Management Strategy/Priorities

In October 2013, the company launched its EXCELLENCE 2020 corporate plan, which aims to offer the highest-quality, most efficient mobility and logistics services in Europe by 2020. Operationally, the company is focused on the following objectives:

- » Prioritising commuter services
- » Offering customised services to passenger, freight and logistics clients
- » Focusing on international growth in specific regions through acquisitions and partnerships
- » Additionally, SNCF Mobilités has announced the following business-specific strategies:

Transilien, Régions and Intercités

- » Focus on meeting demand for quality transport services under the new contract between Transilien and Syndicat des Transports d'Ile de France for 2016–19
- » Intensify commercial and marketing efforts to expand the Intercités customer base

Voyages SNCF

- » Expand the company's low-price policy to generate traffic and add clients for new offerings
- » Strengthen current products and services, increase responsiveness to changes in demand and improve customer experiences at Ouibus

Gares & Connexions

- » Invest in the development of multimodal exchange hubs, and regulatory and service programmes, including accessibility and passenger information
- » Keep customer stores open at 12 major stations in France
- » Re-design this segment's business model to improve profitability

SNCF Logistics

- » Improve efficiency in client services
- » Pursue worldwide profitable development and growth, leveraging particularly the recent acquisition of OHL in the US (completed at the end of 2015)
- » Undertake initial investments in the Calais-Orbassano rolling highway and launch the Calais-Le Boulou rolling highway

Keolis

- » Improve efficiency in client services (both segments of local authorities and passengers)
- » Enhance the business profile in France
- » Pursue continued worldwide profitable development and growth
- » Expand coverage in Île-de-France and strengthen this segment's position in future projects involving the Grand Paris Express by acquiring Transports Daniel Meyer, a major French bus and coach transport operator

Source: Company Report (financial report Dec 2015), Company data

Financial Highlights

Overview

Company Type: Private
 Fiscal Year End: 31 December
 Auditor: PricewaterhouseCoopers and Ernst & Young

Note: The financials presented below have been adjusted for Moody's analytic purposes. To see how adjustments have been made, please see [Moody's Financial Metrics](#), a fundamental financial data and analytics platform that offers insight into the drivers of Moody's Corporate ratings.

EXHIBIT 3

Selected Adjusted Financial Data

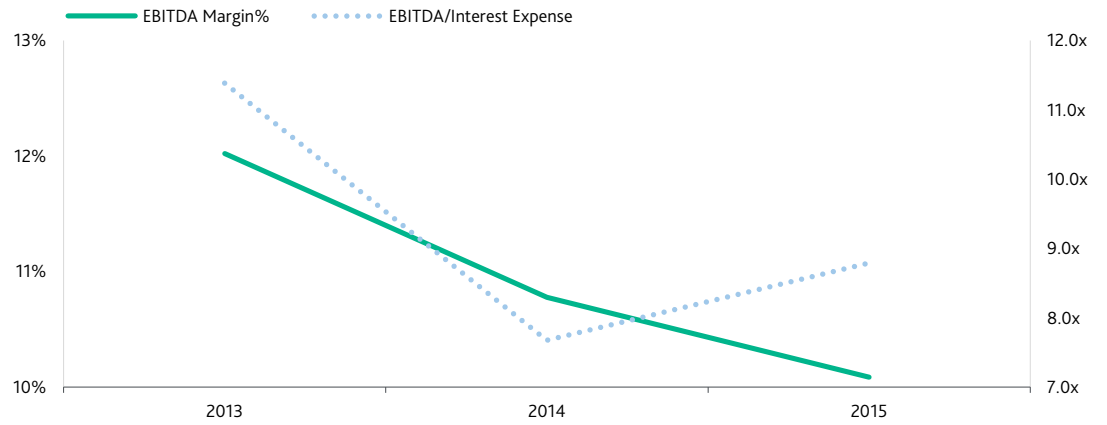
SNCF Mobilités

(in € Million)	31-Dec-15	31-Dec-14	31-Dec-13
INCOME STATEMENT			
Revenue/Sales	29,296	27,243	27,030
EBITDA	2,954	2,936	3,249
EBIT	637	645	720
Interest Expense	336	383	285
Net Income	(377)	521	(182)
BALANCE SHEET			
Cash and Cash Equivalents	4,024	5,408	5,316
Current Assets	12,560	13,374	14,688
Net Property, Plant and Equipment (PP&E)	14,317	16,635	17,299
Total Assets	39,541	44,513	42,115
Current Liabilities	15,574	15,991	16,314
Total Debt	16,618	17,903	17,871
Total Liabilities	31,903	35,615	33,759
Shareholders' Equity	7,638	8,898	8,356
CASH FLOW			
Funds from Operations (FFO)	2,317	2,675	2,928
Cash Flow from Operations (CFO)	2,312	2,834	2,618
Capital Expenditure	(2,352)	(2,553)	(2,549)
Cash from Investing Activities	(2,483)	(2,317)	(2,201)
Dividends	(86)	(184)	(236)
Retained Cash Flow (RCF)	2,231	2,491	2,692
Share Repurchases	–	–	–
Cash from Financing Activities	(1,331)	(106)	(797)

Source: Moody's Financial Metrics

EXHIBIT 4

EBITDA Margin and EBITDA/Interest Expense (Adjusted)

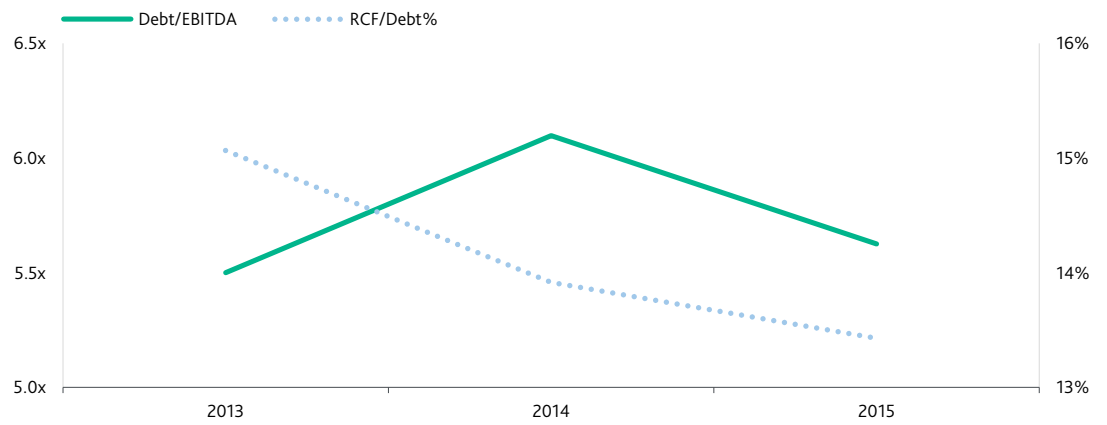


As of 31 Dec 2015

Source: Moody's Financial Metrics

EXHIBIT 5

Debt/EBITDA and RCF/Debt (Adjusted)



As of 31 Dec 2015

Source: Moody's Financial Metrics

Capital Structure and Debt Maturity Schedule

Note: Some financials presented below have been adjusted for Moody's analytic purposes. To see how adjustments have been made, please see [Moody's Financial Metrics](#), a fundamental financial data and analytics platform that offers insight into the drivers of Moody's Corporate ratings.

EXHIBIT 6

Capital Structure

SNCF Mobilités

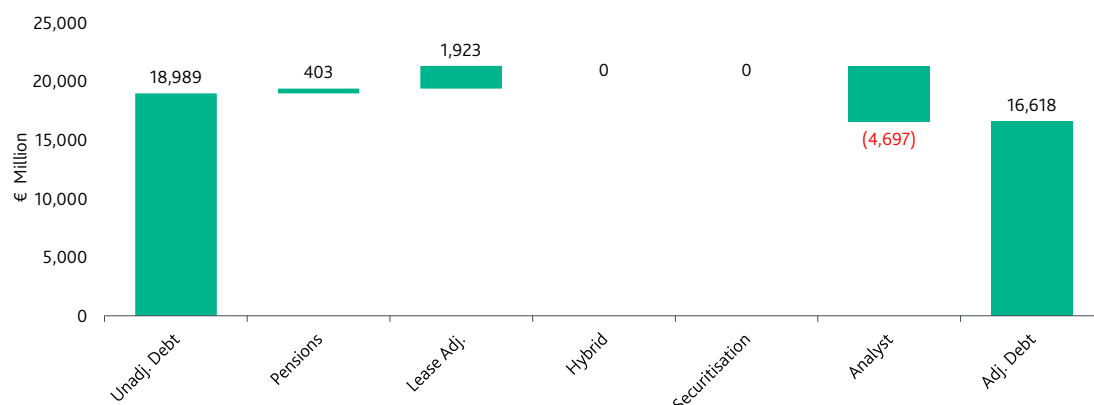
(in € Million)

	31-Dec-15	31-Dec-14	31-Dec-13
SHORT-TERM DEBT			
Short-Term Debt	2,130	2,752	1,966
Current Portion of Long-Term Debt	1,707	2,220	1,637
Total Short-Term Debt	3,837	4,972	3,603
LONG-TERM DEBT			
Secured Debt	-	-	-
Senior Debt	15,759	14,878	14,263
Subordinated Debt	-	-	-
Financial Liabilities – Non-Current	-	-	-
Capitalised Leases	1,100	1,153	1,606
Gross Long-Term Debt	16,859	16,031	15,869
Less Current Maturities	(1,707)	(2,220)	(1,637)
Net Long-Term Debt	15,152	13,811	14,232
Total Debt	18,989	18,783	17,835
Total Adjusted Debt	16,618	17,903	17,871
SHAREHOLDERS' EQUITY			
Preferred Stock	-	-	-
Common Stock and Paid-In Capital	6,502	6,274	6,850
Retained Earnings	(2,178)	604	(180)
Accumulated Other Comprehensive Income	-	-	-
Total Equity	4,324	6,878	6,670
Total Adjusted Equity	7,638	8,898	8,356
Adjusted Book Capitalisation	24,862	27,391	26,589
Adjusted Market Capitalisation	-	-	-
Adjusted Debt/Adjusted Book Capital (%)	66.84	65.36	67.21
Holding Company Debt/Total Debt (%)	-	-	-
Secured Debt/Total Debt (%)	-	-	-

Source: Moody's Financial Metrics

Of SNCF Mobilités' total adjusted debt in 2015, the largest components were those related to lease and analyst adjustments.

EXHIBIT 7

Components of Debt

As of 31 Dec 2015

Source: Moody's Financial Metrics

EXHIBIT 8

Upcoming Long-Term Debt Maturities

SNCF Mobilités

Year of Maturity	Amount (in € Million)
2016	1,542
2017–22	3,465
Beyond 2022	8,412

Source: Company data (financial report Dec 2015)

Company Management

Company Management	Current Title	Previous Roles
Guillaume Pepy	Chairman and Chief Executive Officer	SNCF Mobilités: Group Chief Operating Officer; SNCF Mobilités: Chairman, Voyages-sncf.com; SNCF Mobilités: Director, Passenger Activities
Mathias Emmerich	Deputy Chief Executive Officer	SNCF Mobilités: Executive Vice President, Finance, Purchasing and Information Systems; Publicis Group: Senior Vice President, Secretary General and Executive Board Member; Cour des Comptes: Referendary Counselor
Florence Parly	Chief Executive Officer, SNCF Voyageurs	SNCF Mobilités: Head, SNCF Voyages
Rachel Picard	Managing Director, Voyages SNCF	SNCF Mobilités: Managing Director; SNCF Mobilités: Chief Executive Officer, Voyages-sncf.com; SNCF Mobilités: Head, Sales and Marketing, Voyages-sncf.com
Alain Krakovitch	Managing Director, Transilien	SNCF Mobilités: Managing Director, Railway Service Safety and Quality; SNCF Mobilités: Head, RER lines D and R and Regional Director, South-Eastern Paris; SNCF Mobilités: Chief of Staff to Chief Executive Officer
Patrick Ropert	Managing Director, Gares & Connexions	SNCF Mobilités: Group Communications Director; SNCF Mobilités: Group Operational Communications Director; SNCF Mobilités: Station Master

Company Management	Current Title	Previous Roles
Frank Lacroix	Chief Executive Officer, TER	EDF: Director, Europe; Dalkia: Chairman and Chief Executive Officer; Dalkia: Chief Executive Officer, France
Jean-Pierre Farandou	Chairman of the Executive Board, Keolis	SNCF Mobilités: Director, SNCF Proximités; Keolis Lyon: Managing Director; SNCF Rhone Alpes: Regional Director
Alain Picard	Chief Executive Officer, SNCF Logistics	SNCF Mobilités: Head, Geodis; SNCF Group: Executive Vice President, Finance, Purchasing and Information Systems; SNCF Mobilités: Finance Director, Geodis
Marie-Christine Lombard	Chair of the Executive Board, Geodis	SNCF Mobilités: Chief Executive Officer, Geodis; TNT Express NV: Chairwoman and Chief Executive Officer; TNT Group: Managing Director, Express division
Sylvie Charles	Chief Executive Officer, Rail and Multimodal Freight Transport Head, Fret SNCF and In charge of the SNCF Logistics' Business and Rail Service Providers	STVA: Chair, Executive Board; Société Générale de Transport et d'Industrie: Deputy General Manager; Cariane Group: General Manager

As of 11 May 2016

Board of Directors	Affiliation
Guillaume Pepy	SNCF Mobilités: Chairman (Representative of the French State)
François-Régis Orizet	SNCF Mobilités: Director (Representative of the French State appointed by the Minister for Transport)
Nicole Gontier	SNCF Mobilités: Director (Representative of the French State appointed by the Minister for Sustainable Development)
Solenne Lepage	SNCF Mobilités: Director (Representative of the French State appointed by the Minister for the Economy)
Sophie Mantel	SNCF Mobilités: Director (Representative of the French State appointed by the Minister for the Budget)
Philippe Segretain	SNCF Mobilités: Director
Marc Debrincat	SNCF Mobilités: Director
Mercedes Erra	SNCF Mobilités: Director (Representative of SNCF Mobilités); BETC Communications Agency: Founder; Havas: Executive Director; National Museum of Immigration History: Chairman of the Board of Directors
Véronique Morali	SNCF Mobilités: Director (Representative of SNCF Mobilités); Fimalac Development: President; Webedia: Chairman of the Executive Board
Florence Parly	SNCF Mobilités: Director (Representative of SNCF Mobilités) and Chief Strategy and Finance Officer
Pierre Izard	SNCF Mobilités: Director (Representative of SNCF Mobilités) and Chief Rail System Officer
Yves Tyrode	SNCF Mobilités: Director (Representative of SNCF Mobilités) and Chief Digital Officer
Véronique Martin	SNCF Mobilités: Director, Employee representative (CGT)
Laurent Cooper	SNCF Mobilités: Director, Employee representative (CGT)
Xavier Portal	SNCF Mobilités: Director, Employee representative (CGT)
Nathalie Bonnet	SNCF Mobilités: Director, Employee representative (SUD Rail)
Thierry Marty	SNCF Mobilités: Director, Employee representative (UNSA)
Pascal Lanzillotti	SNCF Mobilités: Director, Employee representative (CFDT)

As of 26 Apr 2016

Source: Company data

Ownership Structure

SNCF Mobilités is wholly owned by the French state.

Source: Company Report (financial report Dec 2015)

Sector/Industry Peer Group

- » Deutsche Bahn AG
- » Ceske Dráhy, a.s.
- » Norges Statsbaner AS
- » MTS Corporation Limited

Related Websites and Information Sources

For additional information, please see:

The company's website:

- » www.sncf.com

MOODY'S has provided links or references to third party World Wide Websites or URLs ("Links or References") solely for your convenience in locating related information and services. The websites reached through these Links or References have not necessarily been reviewed by MOODY'S, and are maintained by a third party over which MOODY'S exercises no control. Accordingly, MOODY'S expressly disclaims any responsibility or liability for the content, the accuracy of the information, and/or quality of products or services provided by or advertised on any third party web site accessed via a Link or Reference. Moreover, a Link or Reference does not imply an endorsement of any third party, any website, or the products or services provided by any third party.

Moody's Related Research

Press Release

- » Announcement: [French plan to dispose of assets under the Florange law may be credit negative for GRIs](#)
- » Announcement: [Moody's affirms SNCF Mobilités Aa3 ratings and baa1 BCA, outlook stable](#)

Credit Opinion

- » [SNCF Mobilités](#)
- » [Deutsche Bahn AG](#)

Credit Focus

- » [SNCF: Frequently Asked Questions, November 2014 \(176455\)](#)
- » [Issuer Comment: SNCF's and RFF's ratings unaffected by French government's plan to reform railways system, 30 May 2013](#)

Rating Methodology

- » [Global Passenger Railways Rating Methodology, March 2013 \(136815\)](#)
- » [Application of Joint Default Analysis to Government-Related Issuers, April 2005](#)
- » [Government-Related Issuers, October 2014 \(173845\)](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available on the [issuer's page](#). All research may not be available to all clients.

Report Number: 189927

Author
Giuliana Cirrincione

Editor
Kamin Au

Production Associate
Sumesh Manoharan

© 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.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.