

CREDIT OPINION

16 November 2018

Update

✓ Rate this Research

Analyst Contacts

Swen Metzler, CFA +49.69.70730.762
 VP-Sr Credit Officer
 swen.metzler@moodys.com

Alexander Hendricks, +49.69.70730.779
 CFA
 Associate Managing Director
 alexander.hendricks@moodys.com

Carola Schuler +49.69.70730.766
 MD-Banking
 carola.schuler@moodys.com

Sparkassen-Finanzgruppe

Update to credit analysis

Summary

[Sparkassen-Finanzgruppe's](#) (S-Finanzgruppe) Corporate Family Rating (CFR) is Aa2 (stable). Further, we assign a Baseline Credit Assessment (BCA) and Adjusted BCA of a2 to Germany's largest banking group.

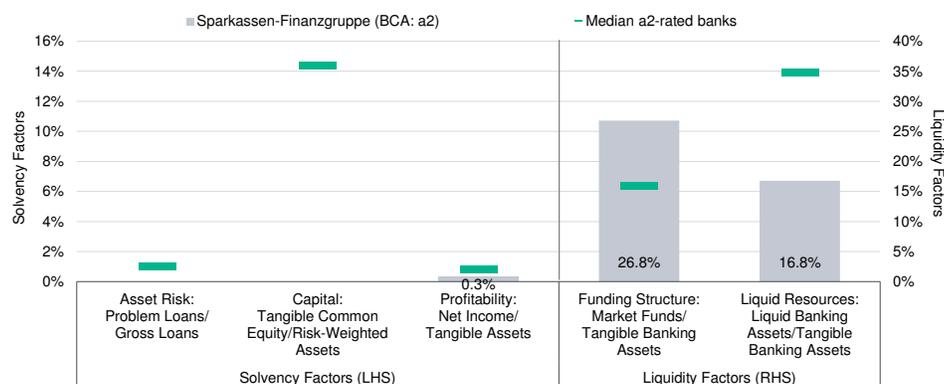
S-Finanzgruppe's Aa2 CFR reflects (1) its a2 BCA; (2) the results of our Advanced Loss Given Failure analysis, providing two notches of rating uplift; and (3) our moderate government support assumptions that result in one notch of rating uplift.

S-Finanzgruppe's BCA reflects our expectation of sustained moderate economic growth in Germany which should keep credit risk at benign levels and allows for moderately increasing capitalization from already strong levels. At the same time, it reflects sustained challenges from the low interest rate environment, mostly pressuring the group's smaller member banks' profitability.

In assigning the BCA and CFR to S-Finanzgruppe, we assess the group as if it operates as a single entity. This approach takes into consideration the cohesion and solidarity within S-Finanzgruppe, particularly between the savings banks, as well as the high level of co-operation among the members. However, the members of S-Finanzgruppe do not constitute a single economic entity that functions with centralised management and control at the group level. The BCA and CFR apply only to the creditworthiness of the group as a whole rather than to individual members of the group.

Exhibit 1

Rating Scorecard - Key financial ratios



Source: Moody's Financial Metrics

Credit strengths

- » S-Finanzgruppe's strong capital provides an increasing cushion for downside shocks.
- » The group's liquidity benefits from strong access to the German depositor base and a balanced loan-to-deposit ratio of 97.5% at end-2017.
- » The ongoing de-risking of Landesbanks has reduced concentration risks for the group.

Credit challenges

- » S-Finanzgruppe's profitability is under pressure from low interest rates, with cost controls a key issue.
- » Despite a more balanced risk profile within the group, tail risks from the Landesbanken's international exposures persists, such as commercial real estate and ship finance.

Outlook

- » The outlook on the Aa2 CFR is stable, based on our expectation of a stable fundamental credit profile.

Factors that could lead to an upgrade

- » Upward pressure on S-Finanzgruppe's CFR could arise from upward pressure on its BCA driven by a significantly and sustainably higher profitability of the sector together with improvements of its asset risk profile through reduced concentration risks.

Factors that could lead to a downgrade

- » Downward pressure on S-Finanzgruppe's CFR could originate from pressure on its BCA, in particular if the funding and liquidity situation of the S-Finanzgruppe weakens.
- » A support scenario for a number of member banks, in which necessary funds significantly compress the sector's overall capitalisation, could exert downward pressure on the rating. Additionally, a deterioration in Germany's Macro Profile could lead to downward rating pressure.

Key indicators

Exhibit 2

Sparkassen-Finanzgruppe (Consolidated Financials) [1]

	12-17 ²	12-16 ²	12-15 ²	12-14 ²	12-13 ³	CAGR/Avg. ⁴
Total Assets (EUR billion)	2,129	2,119	2,158	2,252	2,264	-1.5 ⁵
Total Assets (USD billion)	2,557	2,235	2,344	2,725	3,120	-4.9 ⁵
Net Interest Margin (%)	-	-	1.5	1.5	1.4	1.5 ⁶
PPI / Average RWA (%)	1.3	1.4	1.3	1.3	1.4	1.3 ⁷
Net Income / Tangible Assets (%)	0.4	0.3	0.3	0.2	0.1	0.3 ⁶
Cost / Income Ratio (%)	68.8	66.8	69.2	69.7	66.1	68.1 ⁶
Market Funds / Tangible Banking Assets (%)	26.8	27.1	28.4	31.1	33.2	29.3 ⁶
Liquid Banking Assets / Tangible Banking Assets (%)	16.8	14.9	15.1	16.2	17.4	16.1 ⁶

[1] All figures and ratios are adjusted using Moody's standard adjustments [2] Basel III - fully-loaded or transitional phase-in; LOCAL GAAP [3] Basel II; LOCAL GAAP [4] May include rounding differences due to scale of reported amounts [5] Compound Annual Growth Rate (%) based on time period presented for the latest accounting regime [6] Simple average of periods presented for the latest accounting regime. [7] Simple average of Basel III periods presented

Source: Moody's Financial Metrics

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.

Profile

The Sparkassen-Finanzgruppe is a German banking group that consisted of around 540 independent enterprises, including 390¹ savings banks, six Landesbank groups, the asset manager [DekaBank Deutsche Girozentrale](#) (DekaBank, Aa2 stable, Aa2 stable, baa2)², eight Landesbausparkassen (regional building societies) and 11 primary insurance groups as of end-2017. Germany's largest banking group the held domestic market shares of 28.6% in terms of business volume (excluding derivative financial instruments in the trading portfolio and own bond issues repurchased), 41.9% in terms of corporate lending, 36.9% in terms of private housing construction loans, 21.6% in terms of consumer lending, 39.2% in terms of deposits from private individuals (excluding term deposits for a period of over two years) and 28.2% in terms of deposits from domestic enterprises. As of 31 December 2017, S-Finanzgruppe reported total aggregated assets of €2.1 trillion.

The German Savings Banks Association (DSGV) is the umbrella organisation of S-Finanzgruppe. Entities of S-Finanzgruppe are independent and managed on a decentralised basis. Most of the group's savings banks are institutions incorporated under public law and operated under municipal trusteeship.³

Macro Profile supports S-Finanzgruppe's credit strength

S-Finanzgruppe's BCA is supported by its Very Strong- macro profile, which is derived from the group's weighted average, reflecting around 78% exposure to Germany, 17% to the European Union, and 5% worldwide. S-Finanzgruppe's weighted average macro profile matches the assigned macro profile to Germany, which is largely determined by the country's very high economic, institutional and government financial strength and very low susceptibility to event risk. However, operating conditions for the German banking system are constrained by high fragmentation in an oversaturated market, low fee income generation and intensifying competition for domestic business.

Detailed credit considerations

Strong capital complemented by additional buffers

Our assigned aa2 Capital score for S-Finanzgruppe reflects the group's solid capitalization which provides substantial buffer against a severe economic downturn. Our assessment takes into account additional capital-equivalent reserves and limitations around capital fungibility within members of the group. At end-2017, S-Finanzgruppe's reported Tier 1 ratio was 16.3%, compared with 15.6% in 2016. The positive development reflects improvements for savings banks, as well as Landesbanks.

At end-2017, German savings banks, accounting for 56% of S-Finanzgruppe's aggregate assets (2016: 55%), reported strong Tier 1 and Total Capital ratios at 15.9% and 17.4% (2016: 15.2% and 16.9%). Based on aggregate 2017 financials, we estimate these institutions' leverage, defined as equity compared to assets, at 8.8% in 2017 (2016: 8.6%). We further believe that German savings banks are able to absorb considerable adverse market developments because of sizeable and fully taxed reserves. These reserves are undisclosed and exist in accordance with local accounting rules (Handelgesetzbuch, HGB).

At end-2017, German Landesbanks (excluding DekaBank), representing 43% of the group's aggregate assets (2016: 44%), also reported improving capital, as demonstrated by a Tier 1 ratio of 17.5%, compared with 16.5% in 2016. The improvement reflects higher earnings and a moderate decline in assets.

Our favorable capital assessment for S-Finanzgruppe considers certain privileges which arise from the group's institutional protection scheme (IPS).⁴ These privileges reduce regulatory capital requirements because intragroup exposures benefit from a zero percent risk weight. A loss of these sector privileges, for example triggered by the absence of support for a troubled member bank, may have negative repercussions for S-Finanzgruppe's overall regulatory capital levels. Although we regard such a scenario unlikely, the impact would be credit negative.

Capital cannot be freely allocated to single members within S-Finanzgruppe, and the risk of new cases of distress as a result of capital shortfalls cannot be ruled out. Although the Landesbanks have improved their regulatory and economic capitalisation, they exhibit riskier business profiles and higher leverage, rendering them more vulnerable to event risk or to renewed market disruption.

Moderate profitability which is challenged by low interest rates and cost pressures

S-Finanzgruppe's assigned ba2 Profitability score is positioned in-line with its Macro-Adjusted score. Our assessment reflects the group's moderate but stable profits, and its good ability to build capital reserves. For 2018 and beyond, we expect persistent pressure on interest income, driven by the low interest-rate environment. As the savings banks continue to operate through an extensive branch network, and as their organizational structure remains fragmented, the potential for achieving economies of scale is somewhat limited in the absence of decisive moves at local levels.

S-Finanzgruppe reported almost unchanged pre-tax profits at €5.7 billion in 2017, compared with €5.6 billion in 2016 (2015: €6.6 billion; 2014: €3.6 billion), according to local accounting rules (HGB). Stable pre-provision income at €12.4 billion, compared with €12.6 billion in 2016 underpins the group's ability to absorb loan-loss provisions. As in 2016, the sector continued to build €5.0 billion capital reserves (§340g reserves; 2016: €4.5 billion).

In 2017, S-Finanzgruppe's net interest income declined by 5.4% to €29.5 billion, and the net interest margin (calculated as net interest income as a proportion of loans and advances to non-banks) declined slightly to 2.4% from 2.6%. The sector's efficiency metrics compare less favorably with those of its international peers; however, administrative expenses recorded a marginally 0.6% increase from the year earlier, with cost containment a key challenge for the group on back of the low interest-rate environment.

For a detailed analysis of the savings banks' 2017 combined financial results please refer to [Sparkassen-Finanzgruppe: Ample capital permits loan growth, offsetting pressure from low rates](#), published 2 May 2018.

Asset risks reflect the medium-term challenges to Germany's economy

S-Finanzgruppe's Asset Risk score of a3 primarily reflects the average risk profile of German households and the corporate sector throughout the economic cycle. Risk concentrations in export-driven industries, such as the automotive sector, as well as the cyclical construction sector, are a function of Germany's economic structure, with the overall size and diversification of the loan book providing a positive effect. Credit conditions currently remain relatively benign, supported by expectations of robust economic growth in 2018 and beyond, accompanied with low unemployment rates, supporting the retail and corporate clients capacity to service its debts.

In addition, a high proportion of the savings banks' loan book is backed by conservatively valued residential properties. However, German residential real estate prices continue to accelerate, with indications of price growth outpacing fundamentals, particularly in large metropolitan areas. The savings banks' high and increasing exposure to residential property finance could impose future risks to asset quality and profitability. Significant price corrections, if paired with a higher share of above 100% loan/value mortgages, would significantly increase loan-loss charges in case of problem loan additions.

S-Finanzgruppe is vulnerable because of its sizeable commercial real estate and ship-financing exposures at some of the Landesbanks; the latter may cause earnings volatility because of fluctuating credit losses. The Landesbanks are also exposed to diverse international lending and asset-based finance activities, as well as large — although declining — investment portfolios, which led to major valuation and credit losses during the global financial crisis, even if exposures have been reduced significantly in the meantime.

Further, we identify a rising importance of interest rate risks — which are catching regulatory attention as reflected by the introduction of separate capital buffers (see also our publication [New Interest Rate-Related Capital Buffers are Credit Positive](#)) — that may hurt more than half of the savings banks.

Strong funding profile due to sizeable deposits

S-Finanzgruppe's credit strength is strongly supported by its sizeable and well diversified deposits. This view is reflected in our assigned a1 Funding Structure score which is four notches above the group's baa2 Macro-Adjusted score. The positive adjustments take into account (1) S-Finanzgruppe's high deposits granularity, reflecting its market leadership across Germany; and (2) the significant potential of savings banks to use their substantial mortgage books for secured funding in the capital market, if needed. However, our assessment also reflects a moderate degree of wholesale funding dependence for German Landesbanks.

At end-2017, savings banks reported aggregate deposits of €911 billion (2016: €890 billion), compared with aggregate loans of €794 billion (2016: €769 billion), resulting in a loan-to-deposit ratio of 87% (2016: 86%).

German Landesbanks deleveraging efforts have helped to reduced their dependence on wholesale funding. This trend is supported by declining interbank exposures, which declined to €238 billion as of year-end 2017, compared with €542 billion in 2008. Over the same time, securitised liabilities declined to €187 billion from €440 billion. Excess funds from the savings banks are shared within the group, supporting the Landesbanks' funding profile. At end-2017, about 26% of savings banks' €118 billion excess funds are transferred to Landesbanks (2016: 21%, €121 billion). This helps to the Landesbanks €108 billion funding gap (2016: €134 billion), which we define as the difference between €282 billion in deposits and €390 billion in loans (2016: €273 billion, €408 billion).

Liquidity benefits from prime access to German depositors

S-Finanzgruppe's assign Liquid Resources score of a2 is four notches above the group's baa2 Macro-Adjusted score. Our assessment considers (1) the high quality of liquid assets available; (2) additional, ECB eligible securities held in savings banks' held-to-maturity portfolios; and (3) asset encumbrance, which arises for example from intra-group exposures.

S-Finanzgruppe's maintains sufficient liquid assets within the sector to balance the market funding dependence of Landesbanks and enjoys a strong covered bond franchise. At end-2017, liquid assets were €688 billion and included €86 billion in cash, €271 billion due from banks and a €331 billion securities portfolio (2016: combined €671 billion).

Support and structural considerations

Notching for Corporate Family Rating (CFR)

S-Finanzgruppe represents a conglomerate of diverse financial institutions in Germany. As such, it is not considered a banking group in the context of the European Capital Requirement Regulation. S-Finanzgruppe is, therefore, not a regulated group, but all of its affiliated institutions are subject to applicable regulation for banks or other financial institutions. As a result, the EU's Bank Recovery and Resolution Directive, which we consider to be an operational resolution regime, does not apply to S-Finanzgruppe but only to its member banking institutions individually. Thus, our CFR on S-Finanzgruppe represents the risk characteristics of a notional single class of debt assumed to fund its aggregate balance sheet.

Our Advanced Loss Given Failure analysis suggests that this notional instrument would face very low losses in resolution. This results in two notches of uplift to the CFR compared with S-Finanzgruppe's BCA of a2, and hence, a Preliminary Rating Assessment of aa3.

Government support considerations

We expect a moderate probability of government support, resulting in a one-notch rating uplift for S-Finanzgruppe. Our government support assumption reflects the size and high systemic relevance of S-Finanzgruppe at the domestic level.

Methodology and Scorecard

Methodology

The principal methodology we use in rating S-Finanzgruppe is [Banks](#), published in August 2018.

About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgement. When read in conjunction with our research, a fulsome presentation of our judgement is expressed. As a result, the output of our scorecard may materially differ from that suggested by raw data alone (though it has been calibrated to avoid the frequent need for strong divergence). The scorecard output and the individual scores are discussed in rating committees and may be adjusted up or down to reflect conditions specific to each rated entity.

Rating methodology and scorecard factors

Exhibit 3

Sparkassen-Finanzgruppe

Macro Factors

Weighted Macro Profile	Very Strong -	100%
-------------------------------	----------------------	-------------

Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2
Solvency						
Asset Risk						
Problem Loans / Gross Loans	--	--	--	a3	Quality of assets	Sector concentration
Capital						
TCE / RWA	--	--	--	aa2	Risk-weighted capitalisation	Expected trend
Profitability						
Net Income / Tangible Assets	0.3%	ba2	← →	ba2	Loan loss charge coverage	Earnings quality
Combined Solvency Score		a2		a3		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	26.8%	baa2	← →	a1	Market funding quality	Deposit quality
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	16.8%	baa2	← →	a2	Quality of liquid assets	Additional liquidity resources
Combined Liquidity Score		baa2		a1		
Financial Profile				a2		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint:				Aaa		
Scorecard Calculated BCA range				a1-a3		
Assigned BCA				a2		
Affiliate Support notching				0		
Adjusted BCA				a2		

Balance Sheet is not applicable.

Instrument class	Loss Given Failure notching	Additional Notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Corporate Family Rating	2	0	aa3	1	Aa2	--

[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information.

Source: Moody's Financial Metrics

Ratings

Exhibit 4

Category	Moody's Rating
SPARKASSEN-FINANZGRUPPE	
Outlook	Stable
Baseline Credit Assessment	a2
Adjusted Baseline Credit Assessment	a2
Corporate Family Rating -Dom Curr	Aa2

Source: Moody's Investors Service

Endnotes

- [1](#) As of 15 June 2018, the total number of German savings banks has declined to 385.
- [2](#) The ratings shown are DekaBank's Long-term Deposit ratings, Long-term Senior Unsecured rating and outlook, as well as its Baseline Credit Assessment
- [3](#) For further details, please refer to [S-Finanzgruppe's Company profile](#) and the [German Banking System Profile](#).
- [4](#) This scheme includes rules for mutual support within groups of banks in order to ensure the liquidity and solvency of their member institutions.

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

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

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

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

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

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

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

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

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moody.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 1145420