

CREDIT OPINION

29 June 2021

New Issue



Rate this Research

RATINGS

BRB-Banco de Brasilia S.A.

Domicile	Brasilia, Distrito Federal, Brazil
Long Term CRR	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	Ba3
Туре	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Analyst Contacts

Alexandre +55.11.3043.7356 Albuquerque VP-Senior Analyst alexandre.albuquerque@moodys.com

Farooq Khan +55.11.3043.6087 AVP-Analyst

farooq.khan@moodys.com

Igor Melo +55.11.3043.6065 Associate Analyst igor.melo@moodys.com

Marianna Waltz, CFA +55.11.3043.7309

MD-Corporate Finance

marianna.waltz@moodys.com

BRB-Banco de Brasilia S.A.

Credit analysis following rating assignment

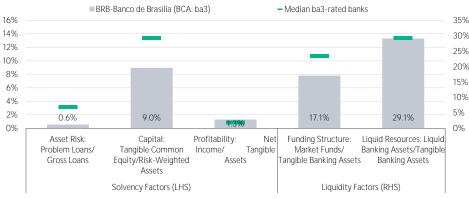
Summary

On 23 June, we assigned a ba3 Baseline Credit Assessment (BCA) to <u>BRB-Banco de Brasilia S.A.</u> (BRB). BRB's BCA reflects the bank's consistent profitability metrics and good asset quality, which benefits from the large participation of low-risk payroll loans in its loan book. In addition, the BCA also benefits from the bank's access to a low-cost granular retail deposit base, reflecting the bank's regional franchise in the Federal District (Distrito Federal, DF) area.

Conversely, the BCA is constrained by the intense loan growth the bank has reported in the last five quarters and by a business operation that is focused mostly in the DF area, which, in turn, results in earnings that are largely associated with the performance of the local economy. BRB's modest capitalization also limits the bank's ba3 BCA. As a government-owned bank, BRB is also subject to political influence since its CEO is appointed by the governor of the DF. In order to mitigate that risk, BRB has strengthened its corporate governance practices in the past five years.

We also assigned long- and short-term local- and foreign-currency deposit ratings of Ba3 and Not Prime to BRB. The bank's long-term deposit ratings do not benefit from government support uplift because of its modest share of deposits within the system.

Exhibit 1
Rating scorecard - Key financial ratios
As of March 2021



Source: Moody's Financial Metrics

Credit strengths

- » High participation of low-risk payroll loans and rising volume of mortgage financing in loan portfolio mitigates credit risk
- » Steady profitability metrics reflect well-established market position in the DF region and low-cost funding structure
- » Funding profile supported by ample access to low-cost retail deposits originated from a client base comprised mainly of public employees and government-related entities

Credit challenges

- » High business concentration in the DF region increases risk of earnings becoming more volatile because of competition or economic downturn in the region
- » Strong loan growth, combined with a new loan holiday program, may weaken asset quality in the next 12 to 18 months
- » Capital and liquidity metrics are modest compared with regional bank peers
- » There is risk of political influence as the bank's CEO is appointed by the governor of the DF

Rating outlook

The stable outlook reflects our expectation that BRB's credit profile will remain consistent with its current ratings over the next 12-18 months.

Factors that could lead to an upgrade

- » BRB's standalone BCA could benefit if the bank reports consistent improvement in its capital position, backed by asset quality metrics that remain in line with good levels reported in recent years
- » BRB's BCA would also benefit from the bank reporting consistent and strong profitability ratios over the next 12 to 18 months

Factors that could lead to a downgrade

- » BRB's standalone BCA could be lowered if its asset quality weakens in the next 12 months because of intense loan growth
- » The BCA could also be lowered if BRB's profitability deteriorates because of a need for additional provision expenses, as new loans season over the next 12 to 18 months
- » A decline in capitalization could also drive BRB's BCA down

Key Indicators

Exhibit 2
BRB-Banco de Brasilia S.A. (Consolidated Financials) [1]

	03-21 ²	12-20 ²	12-19 ²	12-18 ²	12-17 ²	CAGR/Avg. ³
Total Assets (BRL Million)	28,240.5	25,374.4	17,021.2	15,225.0	14,121.7	23.8 ⁴
Total Assets (USD Million)	5,004.5	4,885.1	4,231.3	3,928.3	4,257.2	5.1 ⁴
Tangible Common Equity (BRL Million)	1,865.5	1,774.3	1,352.6	906.4	786.2	30.5 ⁴
Tangible Common Equity (USD Million)	330.6	341.6	336.3	233.9	237.0	10.84
Problem Loans / Gross Loans (%)	0.5	0.6	0.5	0.6	0.9	0.65
Tangible Common Equity / Risk Weighted Assets (%)	8.9	10.2	10.0	7.8	7.7	8.9 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	3.8	4.2	3.3	3.9	6.7	4.45
Net Interest Margin (%)	9.8	12.9	14.3	15.3	15.8	13.6 ⁵

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.

PPI / Average RWA (%)	5.0	7.0	6.9	7.2	7.5	6.7 ⁶
Net Income / Tangible Assets (%)	1.3	1.8	2.4	1.6	1.8	1.8 ⁵
Cost / Income Ratio (%)	67.9	63.3	65.3	66.5	66.2	65.9 ⁵
Market Funds / Tangible Banking Assets (%)	15.4	17.1	6.0	5.7	4.2	9.7 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	32.4	29.1	26.9	30.3	22.8	28.3 ⁵
Gross Loans / Due to Customers (%)	92.6	101.6	92.7	85.8	96.6	93.9 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; LOCAL GAAP. [3] May include rounding differences because of the scale of reported amounts. [4] Compound annual growth rate (%) based on the periods for the latest accounting regime. [5] Simple average of periods for the latest accounting regime. [6] Simple average of Basel III periods.

Sources: Moody's Investors Service and company filings

Profile

Founded in 1964, BRB-Banco de Brasilia S.A. (BRB) is controlled by the government of the Federal District, in Brasilia, which holds 80.3% of the bank's total shares, while Instituto de Previdência dos Servidores do Distrito Federal (IPREV-DF), the pension fund of public employees from the government of the DF, holds 16.5% and the remaining 3.2% are free float. Although the bank also has operations in seven other different Brazilian states, its presence is concentrated in the DF region, with a focus on providing banking services to the federal public servants as well as to local companies.

As of end-March, BRB had a national market share of 0.2% of assets, 0.4% loans and 0.5% deposits.

Detailed credit considerations

Asset quality benefits from large volume of low-risk payroll loans to public employees

We assign an Asset Risk score of ba2 to BRB, which takes into consideration the large participation of low-risk payroll loans and mortgage financing in the bank's loan portfolio. As of March, payroll loans accounted for 49% of total loans, followed by mortgage financing at 17%, consumer finance at 17% and credit cards at 5%. Credit operations with companies, mainly in the form of secured loans to small and midsized firms, represented just 11% of total loans as of the same date.

The ba2 score also reflects BRB's business concentration in the DF region, which constrains the bank's ability to diversify geographically the risks of its loan book. The strong loan growth that BRB reported in the past five quarters is also incorporated in the score for asset risk. In the last twelve months ended March 2021, BRB's loan book expanded 42%, with mortgage growing 144% and corporate loans 137% in the same period. Payroll loans grew 26% annually in the same period.

BRB's exposure to asset risk is lowered by a track record of low ratios of problem loans¹ to gross loans. In March, the ratio was 0.51%, slightly lower than 0.57% one year prior and well below the 2.17% average 90-day past due loan ratio in the Brazilian banking system. In addition, during the last four years, the bank's problem loan ratio has remained under 1%. Asset risk is also mitigated by the high volume of loan loss reserves the bank has created, representing 2.57% of gross loans and comfortably covering 509.68% of problem loans as of March.

The high granularity of BRB's loan book is also positive for asset quality. The 60 largest borrowers accounted for 63% of tangible common equity (TCE), while the largest credit exposure to an economic segment, i.e. construction, was 26% of TCE in Q1 2021.

In 2020, similar to several Brazilian banks, BRB granted loan deferrals of up to 180 days to support households and companies to alleviate short-term financial pressure caused by social distancing because of the coronavirus pandemic. In 2021, the bank renewed its support to the regional economy by launching a new program of loan payment deferrals or renegotiations, or both. As of March, loan deferrals represented around 11% of total loans, of which 90% were granted to households and 10% to companies.

We will monitor BRB's portfolio of loan payment deferrals and renegotiations closely as it evolves through the next three to four quarters, since a potential increase in delinquency would weaken the bank's asset quality metrics.

Capital buffers are adequate to absorb potential losses

BRB has a b2 score for Capital. The bank's capital ratio, measured as TCE to risk-weighted assets (RWA)², was 8.95% in March, down 44 basis points from a year earlier, because of strong loan growth and increase in volume of liquid assets, mostly in the form of government securities. Despite the relatively modest level of TCE/RWA ratio when compared with the ratio of peer banks, BRB reported

good capital ratios on a regulatory basis. In March, the bank's Common Equity Tier 1 (CET1) ratio was 12.58% and total capital was 14.56%, both above regulatory minimums of 5.75% and 9.25%, respectively.

The bank's continued strategy to expand its loan book intensively will likely strain its capital ratios in the next three to four quarters. However, this strain will likely be counterbalanced by the bank's plan to increase the participation of listed shares to 30% from 3.2% through a follow-on process intended for this year.

BRB has a dividend policy to pay a minimum of 25% of its adjusted net income to a maximum of 40%. As of March, BRB paid dividends of about 30% of its net income.

Profitability has been resilient despite high level of loan loss provisions

We score BRB's Profitability as ba2, reflecting the bank's good profitability metrics, which benefits from the large share of revenue originated from low-risk lending operations and the bank's access to low-cost funding. As of March, BRB's net income to tangible assets ratio was 1.3%, down from 1.78% one year prior. At the same date, net interest income (NII) increased 15.21% year-over-year mostly because of a 15.1% rise in revenue from loan operations and a 15.08% drop in loan loss provisions. The increased NII was counterbalanced by an 8.76% increase in interest expenses and an increase of 19.46% in operating expenses. As a result, BRB's net income grew 8.99% in the period.

The Profitability score also reflects the bank's established presence in the DF region and its large client base of public servants. However, BRB's predominant focus on a geographic region may reduce its capacity to originate revenue relative to banks with a nationwide distribution footprint, as its performance remains highly correlated to a local economy. For the next 12 to 18 months, we expect BRB's profitability will face pressure from the heightened competition for loan origination in the bank's niche market and the persistence of above-trend credit costs.

BRB reported a net interest margin (NIM) of 9.77% in Q1 2021, although the ratio has declined gradually from 15.79% since December 2017, affected in part by the reduction in the benchmark policy rate. The heightened competition for payroll lending during the past 18 months and the large position of liquid assets also help explain the recent decline in BRB's NIM.

BRB has less flexibility to reduce operating expenses than privately-owned banks because of its status as a government-owned bank. Despite that, the bank has invested continuously in technology during the past two years to expand services through digital channels and improve efficiency. As of March, investment in technology increased 19% from a year earlier and represented almost one-third of total administrative expenses. BRB's cost to income ratio was 67.92% in March, compared with 63.46% one year prior.

Low reliance in market funds is positive for the bank's funding structure

As of March, BRB's total funding comprised mostly of time deposits, with 62.8% of total funding. Saving deposits were 10.8% of total funding and demand deposits were 5.1%. Individuals accounted for 28% of the total investors in time deposits, while government-related entities were 32%, steady and low-cost judicial deposits were 19% and companies represented 18%. The bank's funding structure was complemented by domestic bank notes (including subordinated bank notes) and on-lending.

BRB has reported low reliance on market funds, which accounted for 15.4% of tangible banking assets (TBA) in March, up from 10.4% a year earlier. The ba1 score for liquid resources reflects the bank's good access to core deposits and historically low use of market funds.

The rise in market funds in the twelve-month period up to March 2021 reflected the issuance of special deposits guaranteed by Brazil's deposit insurance fund (DPGE) and guaranteed bank notes (Letra Financeira Garantida), as a result of government measures to improve liquidity in the banking system during the pandemic. However, the bank's ratio of market funds to TBA still compares well to the Brazilian average ratio of 28.0% as of the same date.

Above-trend liquidity levels will likely decline with loan growth

We score BRB's liquidity as ba1, which incorporates the bank's consolidated access to core deposits, although the bank's liquidity position is lower when compared with that of other regional banks. In March, BRB's liquid banking assets were 32.4% of TBA, an increase from 24.5% one year prior. The rise in liquidity was also a result of government measures to support banks during the pandemic. Despite the recent rise, BRB's ratio was below the average ratio of 37.0% for all Brazilian rated banks in March.

BRB's rating is supported by Brazil's Moderate- Macro Profile

Brazil's Moderate- Macro Profile incorporates the large-scale and high diversification of the country's economy, despite its modest growth prospects. The Macro Profile also reflects Brazil's favorable credit conditions until the unexpected coronavirus pandemic and the still record-low level of interest rates. We expect a moderate growth in bank lending in 2021 and 2022, supported by economic activity, which, however, will depend on the path of recovery. Private consumption and retail sales have been recovering gradually after being severely affected by the pandemic in March 2020. However, labor and wage conditions will likely be the last to improve, which could affect demand for credit and banks' risk appetite in the next six to eight quarters.

Private banks are regaining market share as state-run banks focus on their respective policy mandates. Record-low interest rates and low inflation will lead to a gradual increase in job creation, improving borrowers' repayment capacity and leading to a stabilization in asset quality.

ESG considerations

BRB's exposure to environmental risks is low, consistent with our general assessment for the global banking sector. See our <u>environmental risks heat map</u> for further information.

Overall, we believe banks face moderate social risks. The most relevant social risks for banks arise from the way they interact with their customers. Social risks are particularly high in the area of data security and customer privacy, which are mitigated by sizable technology investments and banks' long track record of handling sensitive client data. Fines and reputational damage because of product misselling or other types of misconduct are also a social risk. Social trends are also relevant in a number of areas, such as shifting customer preferences toward digital banking services increasing information technology costs, aging population concerns in several countries hurting the demand for financial services or socially driven policy agendas that may translate into regulations that affect banks' revenue base. See our social risks heat map for further information.

The rating assignment for BRB also incorporates the bank's governance as part of our environmental, social and governance (ESG) considerations. We expect BRB to maintain good corporate governance, deriving from improvements to governance practices implemented in the past five years that helps mitigate risks of political interference in the bank's operation. They include the strengthening of risk and operating committees and the adoption of an integrity program to enhance internal procedures.

Support and structural considerations

Notching considerations

In the absence of a bail-in resolution regime framework in Brazil, the ratings of subordinated debt, bank hybrids and contingent capital securities follow the additional notching guidelines, in accordance with our Banks rating methodology. In these cases, the approach takes into account other features specific to debt classes, resulting in additional notching from the Adjusted BCA of the issuer.

Government support

We believe there is a low likelihood of government support for BRB's ratings, which reflects the bank's small share of deposits and assets in Brazil's banking system.

Counterparty Risk (CR) Assessment

CR Assessments are opinions of how counterparty obligations are likely to be treated if a bank fails and are distinct from debt and deposit ratings in that they consider only the risk of default rather than both the likelihood of default and the expected financial loss suffered in the event of default; and apply to counterparty obligations and contractual commitments rather than debt or deposit instruments. The CR Assessment is an opinion of the counterparty risk related to a bank's covered bonds, contractual performance obligations (servicing), derivatives (for example, swaps), letters of credit, guarantees and liquidity facilities.

BRB's CR Assessments are positioned at Ba2(cr)/Not Prime(cr)

The CR Assessment of Ba2(cr) is placed one notch above the Adjusted BCA of ba3 based on our view that senior obligations represented by the CR Assessment will be more likely preserved than senior unsecured debt to minimize losses, avoid disruption of critical functions and limit contagion. This CR Assessment reflects an issuer's probability of defaulting on certain operating liabilities and other contractual commitments that are less likely to be subject to the application of a resolution tool to ensure the continuity of operations.

Counterparty Risk Ratings (CRRs)

Our CRRs are opinions of the ability of entities to honor the uncollateralized portion of non-debt counterparty financial liabilities (CRR liabilities) and also reflect the expected financial losses in the event such liabilities are not honored. CRR liabilities typically relate to transactions with unrelated parties. Examples of CRR liabilities include the uncollateralized portion of payables arising from derivatives transactions and the uncollateralized portion of liabilities under sale and repurchase agreements. CRRs are not applicable to funding commitments or other obligations associated with covered bonds, letters of credit, guarantees, servicer and trustee obligations, and other similar obligations that arise from a bank performing its essential operating functions.

BRB's CRRs are positioned at Ba2/Not Prime

BRB's global local- and foreign-currency CRRs are positioned at Ba2 and Not Prime, one notch above the bank's Adjusted BCA, reflecting the lower probability of default of CRR liabilities and our expectation of a normal level of loss given default. The CRRs of Ba2 are positioned at Brazil's foreign currency ceiling for deposits and debt obligations.

Methodology and scorecard

About Moody's Bank Scorecard

Our scorecard is designed to capture, express and explain in summary form our Rating Committee's judgment. When read in conjunction with our research, a fulsome presentation of our judgment 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

BRB-Banco de Brasilia S.A.

Macro Factors					
Weighted Macro Profile	Moderate	100%			
	-				

Factor	Historic	Initial	Expected	Assigned Score	Key driver #1	Key driver #2
	Ratio	Score	Trend			
Solvency						
Asset Risk						
Problem Loans / Gross Loans	0.5%	a3	\leftrightarrow	ba2	Geographical concentration	Loan growth
Capital						
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	8.9%	b2	\leftrightarrow	b3	Expected trend	
Profitability						
Net Income / Tangible Assets	1.3%	baa3	\leftrightarrow	ba2	Expected trend	
Combined Solvency Score		ba1		b1		
Liquidity						
Funding Structure						
Market Funds / Tangible Banking Assets	17.1%	ba1	\leftrightarrow	ba1	Deposit quality	
Liquid Resources						
Liquid Banking Assets / Tangible Banking Assets	29.1%	ba1	\leftrightarrow	ba1	Quality of liquid assets	
Combined Liquidity Score		ba1		ba1	·	
Financial Profile				ba3		
Qualitative Adjustments				Adjustment		
Business Diversification				0		
Opacity and Complexity				0		
Corporate Behavior				0		
Total Qualitative Adjustments				0		
Sovereign or Affiliate constraint				Ba2		
BCA Scorecard-indicated Outcome - Range				ba2 - b1		
Assigned BCA				ba3		
Affiliate Support notching				0		
Adjusted BCA				ba3		

^[1] Where dashes are shown for a particular factor (or sub-factor), the score is based on non-public information. Source: Moody's Investors Service

Ratings

Exhibit 4

Category	Moody's Rating
BRB-BANCO DE BRASILIA S.A.	
Outlook	Stable
Counterparty Risk Rating	Ba2/NP
Bank Deposits	Ba3/NP
Baseline Credit Assessment	ba3
Adjusted Baseline Credit Assessment	ba3
Counterparty Risk Assessment	Ba2(cr)/NP(cr)
Source: Moody's Investors Service	

Endnotes

1 We consider problem loans the loans overdue and rated between E and H under Brazilian Central Bank's resolution 2,682/99. According to this resolution, loans in Brazil are classified on a risk scale from AA to H with the corresponding minimum provisioning levels: AA - 0%, A - 0.5%, B - 1%, C - 3%, D - 10%, E - 30%, F - 50%, G - 70% and H - 100%.

2 Our preferred measure of capitalization, which deducts from capital the intangible assets and a significant portion of deferred tax assets that do not provide significant loss absorption, and we adjust the bank's RWA by applying a risk factor of 100% to its significant holdings of the Brazilian government securities, weighted 0% by local regulations.

© 2021 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 CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED BY MOODY'S (COLLECTIVELY, "PUBLICATIONS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER 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. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ON NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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, ASSESSMENTS, OTHER OPINIONS, AND 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, ASSESSMENTS, OTHER OPINIONS OR 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.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND 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 its Publications.

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

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

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, 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 credit rating, agreed to pay to Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it fees ranging from \$1,000 to approximately \$5,000,000. MCO and Moody's Investors Service also maintain policies and procedures to address the independence of Moody's Investors Service credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at www.moodys.com under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

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

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

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any credit rating, agreed to pay to MJKK or MSFJ (as applicable) for credit ratings opinions and services rendered by it fees ranging from JPY125,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1255555

CLIENT SERVICES

 Americas
 1-212-553-1653

 Asia Pacific
 852-3551-3077

 Japan
 81-3-5408-4100

 EMEA
 44-20-7772-5454

