

## CREDIT OPINION

10 July 2023

## **Update**



Send Your Feedback

#### **RATINGS**

#### Banco de Bogota S.A.

Domicile	Bogota, Distrito Capital, Colombia
Long Term CRR	Baa2
Туре	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Baa2
Туре	Senior Unsecured - Fgn Curr
Outlook	Stable
Long Term Deposit	Baa2
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.

#### **Contacts**

Marcelo De Gruttola +54.11.5129.2624 VP-Senior Analyst

marcelo.degruttola@moodys.com

Luis Fernando Baza +52.55.1253.5735

Associate Analyst

Associate Analyst luis.baza@moodys.com

+55.11.3043.7356

Albuquerque VP-Senior Analyst

Alexandre

alexandre.albuquerque@moodys.com

» Contacts continued on last page

# Banco de Bogota S.A.

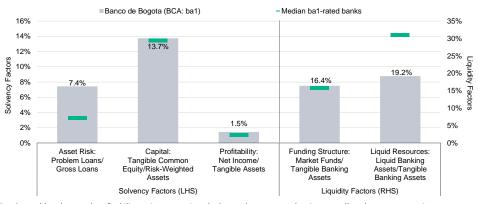
Update following rating affirmation

## Summary

<u>Banco de Bogotá S.A.</u>'s (Banco de Bogotá) ratings -including its Baa2 deposit and senior unsecured debt ratings- are underpinned by the bank's ba1 Baseline Credit Assessment (BCA) and incorporate Moody's assessment of a very high likelihood of government support from the <u>Government of Colombia</u> (Baa2 stable), resulting in a two-notch uplift from its BCA.

The bank's BCA reflects its strong and resilient earnings generation, its stable access to domestic deposits -which limits refinancing risks and benefits margins- and the recent reduction of its exposure to riskier operating environments in Central America after BAC Holding International Corp.'s spinoff. These strengths are partially offset by the bank's moderate liquidity buffers and tangible common equity levels, relatively weak asset quality and below-peers loan loss reserve coverage.

Exhibit 1
Rating Scorecard - Key financial ratios
As of March 2023



For the problem loan and profitability ratios, we review the latest three year-end ratios, as well as the most recent intra-year ratio, where applicable, and base our starting point ratio on the weaker of the average of this period and the latest figure. For the capital ratio, we use the latest figure. For the funding structure and liquid asset ratios, we use the latest year-end figures. Source: Moody's Financial Metrics

## **Credit strengths**

- » Good access to core deposit funding
- » Strong earnings generation
- » Spinoff of part of the bank's Central American operations reduced exposure to riskier operating environments

## **Credit challenges**

- » Moderate liquidity buffers
- » Asset quality pressures stemming from persistent inflation, high interest rates and moderation in economic growth
- » Relatively modest capital metrics by regional and global standards

## **Outlook**

The stable outlook on Banco de Bogotá's ratings reflect both the stable outlook on the ratings of the Government of Colombia, and our expectation that the bank's intrinsic credit fundamentals will remain in line with its ba1 BCA over the outlook horizon.

## Factors that could lead to an upgrade

Banco de Bogotá's Baa2 supported ratings for deposits and senior unsecured debt are positioned at the same level of sovereign bond rating for the Government of Colombia. Therefore, the ratings could face upward pressure if Colombia's government bond rating were upgraded. In turn, the bank's BCA could be upgraded if it achieved and sustained a significant improvement in asset quality, coupled with continued strong earnings, in turn reducing potential pressure on capital.

## Factors that could lead to a downgrade

Conversely, the ratings of Banco de Bogota would face downward pressure if Colombia's government bond rating were downgraded. In addition, negative rating pressure would arise if the issuer's intrinsic credit fundamentals deteriorate unexpectedly, for example if current weaker operating conditions led to a rapid deterioration in asset quality ratios that impaired the bank's earnings and capital.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on https://ratings.moodys.com for the most updated credit rating action information and rating history.

## **Key indicators**

Exhibit 2
Banco de Bogota S.A. (Consolidated Financials) [1]

	03-23 <sup>2</sup>	12-22 <sup>2</sup>	12-21 <sup>2</sup>	12-20 <sup>2</sup>	12-19 <sup>2</sup>	CAGR/Avg.3
Total Assets (COP Billion)	137,490.4	137,793.1	232,335.5	208,082.4	174,834.1	(7.1) <sup>4</sup>
Total Assets (USD Million)	29,508.7	28,417.5	57,722.4	60,833.9	53,278.7	(16.6)4
Tangible Common Equity (COP Billion)	14,909.6	15,510.8	17,569.9	13,539.7	13,873.7	2.24
Tangible Common Equity (USD Million)	3,200.0	3,198.8	4,365.1	3,958.4	4,227.8	(8.2)4
Problem Loans / Gross Loans (%)	7.4	7.4	6.0	6.0	5.2	6.4 <sup>5</sup>
Tangible Common Equity / Risk Weighted Assets (%)	13.7	14.3	10.4	8.5	9.4	11.3 <sup>6</sup>
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	35.4	34.3	37.0	38.8	32.1	35.5 <sup>5</sup>
Net Interest Margin (%)	4.1	3.4	2.0	4.3	4.8	3.7 <sup>5</sup>
PPI / Average RWA (%)	2.7	2.4	1.6		4.4	2.8 <sup>6</sup>
Net Income / Tangible Assets (%)	1.5	2.0	1.6	1.2	1.8	1.6 <sup>5</sup>
Cost / Income Ratio (%)	55.0	54.3	52.1	53.5	53.6	53.7 <sup>5</sup>
Market Funds / Tangible Banking Assets (%)	16.1	16.4	13.3	13.7	14.5	14.8 <sup>5</sup>
Liquid Banking Assets / Tangible Banking Assets (%)	17.4	19.2	25.0	28.3	26.0	23.2 <sup>5</sup>
Gross Loans / Due to Customers (%)	108.3	109.1	95.4	92.2	98.9	100.8 <sup>5</sup>

<sup>[1]</sup> All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel III - fully loaded or transitional phase-in; IFRS. [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**

Banco de Bogotá S.A. (Banco de Bogotá) is a privately owned universal bank in Colombia. It provides individuals and corporate customers with deposit and lending, financing, foreign-exchange, private banking, pension fund administration, fiduciary, and treasury products and services. As of March 2023, it reported consolidated assets of COP137 trillion.<sup>1</sup>

Banco de Bogotá's main shareholder is <u>Grupo Aval Acciones y Valores S.A</u>. (Ba2 negative), Colombia's largest financial conglomerate, which owns about 69% of its total share capital.

## **Recent developements**

On March 2022, Banco de Bogotá and Grupo Aval completed the spinoff transaction of 75% of it subsidiary BAC Holding International Corp. ("BHI"), which is the parent of <u>BAC International Bank, Inc</u> (BAC, Ba1 stable), ceding control and majority stake of the entity to the group's ultimate shareholder. Banco de Bogotá subsequently sold its outstanding stake on BHI between December 2022 and March 2023. BAC is the largest bank in Central America, with main operations in Costa Rica, Panama, Guatemala, Honduras, El Salvador and Nicaragua, and used to represent close to 45% of Banco de Bogotá's consolidated assets. The transaction has therefore led to a reduction in the size of Banco de Bogotá's consolidated operations and more limited business diversification, but it also led to positive credit implications for the bank due to the i) derisking from weaker operating environments in Central America; ii) reduction in foreign exchange volatility that has impacted its consolidated earnings in the past and iii) greater financial flexibility by easing capital allocation and allowing the group to redirect strategic focus to its core Colombian market.

## **Detailed credit considerations**

## Asset risk pressured by weaker economic growth and persistently high interest rates and inflation

Banco de Bogotá's loan asset quality is relatively weak, evidenced by a level of problem loans that has remained above peers in recent years. The bank's stage 3 loans under IFRS standards were high at 7.4% of gross loans as of March 2023. In turn, the bank's reserve coverage of stage 3 loans was lower than peers at 75% as of the same date, which provides a more limited cushion for profits and capital, especially if operating conditions in Colombia prove to be weaker than expected in the remainder of 2023. Considering the steep economic deceleration that Colombia is expected to experience in 2023, coupled with the bank's substantial loan growth in the last two years and still high inflation, asset quality will likely continue to be pressured through this year, albeit we expect it will remain manageable and consistent with the positioning of the bank's BCA. We assign a b1 asset risk score to Banco de Bogotá, one notch below its ba3 initial score, negatively adjusted to reflect the aforementioned pressure on loan asset quality.

The bank's non performing loan formation had improved in the first quarters of 2022, with 90-day past due loans reaching 3.4% as of September 2022 from the 4.8% peak in June 2021 (excluding BHI). This was supported by the strong economic growth and labor markets recovery in Colombia, where GDP grew 11% in 2021 and 7.3% in 2022. The latter led to stronger than expected borrowers' payment performance and allowed the bank to successfully manage the unwinding of the large relief programs implemented in 2020 and 2021 as a response to the pandemic -both in Colombia and Panama- which had affected close to 40% of the bank's total loans as of mid-2020. The improvement was in turn widespread among all the main segments in Colombia, while non performing loans in Panama -measured as 90-day past due loans- continued to increase as relief measures lasted longer.

However, the continued high interest rate environment coupled with a deceleration in the Colombian economy, which is expected to grow only 1.5% this year, has led to an increased in 90-day past due loans to 3.8% as of March 2023. Moreover, the increase in 30-day past due loans was even steeper, at 5.3% of gross loans on March 2023 from 4.6% in December 2022. This situation is affecting most bank's in Colombia and is mainly related to an increase in delinquencies on unsecured consumer loan portfolios. The impact of this situation on Banco de Bogota's overall asset quality has been more limited due to the bank's exposure to commercial loans and mortgages, which represented 65% and 12% of gros loans as of December 2022, respectively, which delinquencies have remained roughly stable. The bank's consumer loan portfolio, which accounts for 23% of total loans, is in turn 35% focused on payroll loans, which performance has also been relatively stronger than the remainder unsecured consumer loans.

Banco de Bogotá's loan loss reserves (LLR) were 5.6% of gross loans as of March 2023, representing a moderate 75% coverage of stage 3 loans. The metric fell from 82% as of 2021 year-end, although in part driven by BHI's spinoff considering the latter's higher stage 3 loans reserve coverage. Moreover, Banco de Bogotá's LLR coverage of 90-day past due loans was 148% as of March 2023, below the 157% after BHI's spin-off.

# Reduced goodwill after BHI spinoff supports capital metrics, offset by large balances of investments in unconsolidated subsidiaries

Banco de Bogotá's Moody's adjusted tangible common equity (TCE)/risk-weighted assets (RWA) metric stood at a high 13.7% as of March 2023, increasing significantly from the 10.4% before BHI's spin off but with a negative trend since the first quarter of 2022 when the ratio stood at 15.2%. The increase in the bank's TCE was mainly driven by the spinoff of BHI, as the reduction in RWAs related to the transaction and the goodwill that was booked at BHI more than compensated the decline in common equity. In particular, the large balances of goodwill and intangibles that BHI has -and are no longer consolidated by Banco de Bogotá- used to negatively affect Banco de Bogotá's tangible capital metrics. The benefit in terms of capitalization from the BHI transaction was however offset by capital consumption arising from the bank's recent strong asset growth. The bank's common equity tier 1 ratio stood at 9.7% as of March 2023, from 10.1% and 10.2% as of 2022 and 2021 year-end, respectively. We expect the bank's capitalization will be supported by more subdued asset growth in 2023 and still adequate earnings.

The difference between the CET1 and Moody's TCE ratio is mainly driven by the bank's large balance of investments in unconsolidated subsidiaries, which are partially deducted from CET1 but are included in Moody's TCE. Investments in unconsolidated subsidiaries represented 6.4% of Banco de Bogotá's total assets as of March 2023, from 3.6% as of December 2021. However, we do incorporate the lower loss absorption capacity that the latter would have as a qualitative adjustment to the capital score, which leads to a ba3 assigned score for capital.

The bank's capital metrics had benefited from the initial implementation of Basel III in 2021 -which led to a significant reduction on the density of the bank's RWAs- and subdued loan growth in 2020 and 2021. After the implementation of Basel-III in Colombia minimum regulatory capital requirements have and will continue to increase gradually until 2024, when minimum regulatory total capital is expected to be 11.5%, including conservation and systemic risk buffers (Banco de Bogotá's total capital ratio was 12.6% as of March 2023).

## Profitability has remained strong despite the increase in funding costs

Banco de Bogota's profitability is strong and is one of its main credit strengths, and remained higher than peers since 2020. During the first quarter of 2023, Banco de Bogota's net income as a percentage of tangible banking assets (NI/TA) stood at a an annualized 1.5%, below the 2.0% in 2022, although the latter benefitted from extraordinary income related to the BHI's spinoff. Banco de Bogotá's earnings generation was sustained even as conditions shifted rapidly in recent years, including the outset of the pandemic and more

recently the rapid increase in inflation and interest rates. Banco de Bogota's profitability has benefited during the last 4 quarters by strong margins and contained loan loss provision.

The bank's net interest margin stood at an annalized 4.1% as of March 2023, which is above the metric in 2022 although it is still below those of 2021 and previous years. However, the drop in 2022 is in part explained by spinoff of BHI, as its subsidiary BAC has historically reported higher margins than Banco de Bogotá's operation in Colombia. Banco de Bogotá's interest income almost doubled in the first quarter of 2023 in relation to the same period of 2022 and increased 16% vs. the previous quarter, reflecting the rapid repricing of the bank's loan book amid the high level of interest rates in Colombia. However, the increase in funding costs was even steeper, increasing about 230% in the first quarter of 2023 year on year and 26% quarter on quarter, also as a consequence of high interest rates as the bank continued to reprice its liabilities, and interest-bearing time deposits increased as a share of total funding, amid increasing competition between banks for longer term deposits in the local market.

We expect the bank's earnings generation will continue to be strong, albeit in the short term it could be pressured by increasing credit costs as weaker economic conditions lead to higher delinquencies, and high funding costs prevent margins from improving.

## Good access to core funding, while liquidity buffers remain moderate

The scores assigned to Banco de Bogotá's funding structure and liquid resources are baa2 and ba2, respectively, and are in line with the initial scores consistent with the most recent liquidity and market funding dependence metrics. The bank continues to be deposit funded at 76% of total funding as of March 2023, which limits refinancing risks amid challenging conditions for market access globally and especially for Colombian issuers. Moreover, the bank has recently been able to tap alternative funding sources such as interbank lending and loans from multilateral institutions to refinance its cross border debt maturities.

Banco de Bogotá's funding is largely based on core deposits, benefitting from its important presence as one of the largest banks in the Colombian banking system, with a 11.8% deposit market share. The bank's reliance on market funds remained broadly stable at 16.1% of tangible banking assets as of March 2023, even after BHI's spinoff, which has a lower reliance on market funds. On the other hand, liquid banking assets stood at a moderate 17.4% of tangible banking assets as of March 2023 from 19.2% on December 2022, well below the 25% in 2021. The reduction in 2022 was however related to BHI's spinoff, as the latter held larger liquidity buffers, and not to a reduction of liquid assets at Banco de Bogotá. The bank's liquid assets are largely composed of Colombian government securities, cash and cash equivalents.

## Banco de Bogotá's ratings are supported by Colombia's Moderate+ Macro Profile

Banco de Bogotá's weighted macro profile is Moderate+, in line with Colombia's macro profile as close to 80% of the bank's loan book is currently concentrated in that country, with the remainder being allocated in Panama (Moderate macro profile)

Colombia's Moderate+ Macro Profile is supported by the country's generally favorable growth dynamics, a track record of effective inflation targeting and the government's ability to effectively implement policies. The country's overall fiscal and monetary policy frameworks enable it to weather shocks because of its focus on macroeconomic stability. These strengths are partially counterbalanced by the country's modest income levels, the moderate quality of its institutions and the fact that the country still lags its peers in terms of controlling corruption. External risks are limited due to adequate external financial buffers and strong coverage of current account deficits by foreign direct investment, while rising social tensions due to comparatively high levels of income inequality contribute to political risks.

Credit to GDP is moderate in Colombia, although risks arise from banks' relatively large loan concentrations. Colombian banks' funding profiles benefit from a stable deposit base, which limits the system's reliance on more fickle market funding. However, institutional deposits, mainly related to pension and mutual funds, comprise a significant share of banks' deposits, leading to a more concentrated funding base. The Colombian banking system is relatively concentrated, with the five largest banks accounting for a combined 70% of the consolidated system's total loans, which supports banks' strong pricing power.

## Support and structural considerations

## **Government support considerations**

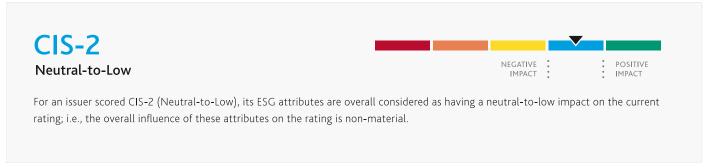
Banco de Bogotá's Baa2 deposit and senior unsecured debt ratings incorporate our assessment of a very high likelihood of government support, given the bank's systemic importance in Colombia, which results in a two-notch uplift from its ba1 BCA.

## **ESG** considerations

Banco de Bogota S.A.'s ESG Credit Impact Score is Neutral-to-Low CIS-2

Exhibit 3

#### **ESG Credit Impact Score**



Source: Moody's Investors Service

Banco de Bogota's **CIS-2** indicates that ESG considerations do not have a material impact on the rating to date. The bank's sound risk management track record and continuous delivery of strong financial results offset governance risks stemming from a concentrated ownership, a rather complex corporate structure and extensive M&A activity. Environmental and social factors have a limited impact on the bank's credit profile to date.

Exhibit 4
ESG Issuer Profile Scores



Source: Moody's Investors Service

## **Environmental**

Banco de Bogota faces moderate exposure to environmental risks primarily due to its portfolio exposure to carbon transition risk as a diversified and one of the largest banks in Colombia. In line with its peers, the bank is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals.

#### **Social**

Banco de Bogota faces high industrywide social risks related to regulatory and litigation risk, requiring the bank to meet high compliance standards. Opportunities from financial inclusion are reflected in a better-than-industry-average exposure to demographic and societal trends. High cyber and personal data risks are mitigated by technology solutions and organizational measures to prevent data breaches.

#### Governance

Banco de Bogota faces moderate governance risks. The bank has adequate corporate governance and risk management practices, further supported by the track record of its management team in terms of delivering on strategic goals. This mitigates risks arising from the bank's concentrated ownership structure, which leads to key-man risk, its limited board independence, and a rather complex group structure, at the bank and holding company level. The bank has historically been active in acquisitions, which points to a more aggressive financial strategy. However, it has succeeded in absorbing new operations without straining its financial fundamentals.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click <a href="here">here</a> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

## Foreign-currency subordinated debt rating

We assign a Ba2 long-term foreign-currency subordinated debt rating to the 10-year \$1.1 billion subordinated debt issuance due 12 May 2026.<sup>2</sup>

## Counterparty Risk (CR) Assessment

## Banco de Bogotá's long- and short-term CR Assessments are positioned at Baa2(cr)/Prime-2(cr)

The CR Assessment is positioned at Baa2(cr), which is two notches above its Adjusted BCA of ba1 and, therefore, aligned with its senior unsecured and deposit ratings.

## **Counterparty Risk Ratings (CRRs)**

## The CRRs for Banco de Bogotá and its rated at Baa2/P-2

The CRRs are positioned at Baa2, which is two notches above its Adjusted BCA of ba1 and, therefore, aligned with its senior unsecured and deposit ratings.

## 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 5

Banco de Bogota S.A.

Macro Factors
Weighted Macro Profile Moderate 100%
+

Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	7.4%	ba3	$\leftrightarrow$	b1	Expected trend		
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	13.7%	baa1	$\leftrightarrow$	ba3			
Profitability							
Net Income / Tangible Assets	1.5%	baa1	$\leftrightarrow$	baa2	Expected trend		
Combined Solvency Score		baa3		ba2			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	16.4%	baa2	$\leftrightarrow$	baa2	Expected trend		
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	19.2%	ba2	$\leftrightarrow$	ba2	Expected trend		
Combined Liquidity Score		baa3		baa3			
Financial Profile				ba1			
Qualitative Adjustments				Adjustment			
Business Diversification	0						
Opacity and Complexity	0						
Corporate Behavior	0						
Total Qualitative Adjustments	0						
Sovereign or Affiliate constraint	Baa2						
BCA Scorecard-indicated Outcome - Range	baa3 - ba2						
Assigned BCA	ba1						
Affiliate Support notching	0						
Adjusted BCA	ba1						

Instrument Class	Loss Given Failure notching	Additional notching	Preliminary Rating Assessment	Government Support notching	Local Currency Rating	Foreign Currency Rating
Counterparty Risk Rating	1	0	baa3	1	Baa2	Baa2
Counterparty Risk Assessment	1	0	baa3 (cr)	1	Baa2(cr)	
Deposits	0	0	ba1	2	Baa2	Baa2
Senior unsecured bank debt	0	0	ba1	2		Baa2
Dated subordinated bank debt	-1	0	ba2	0		Ba2

<sup>[1]</sup> 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 6

Category	Moody's Rating
BANCO DE BOGOTA S.A.	
Outlook	Stable
Counterparty Risk Rating	Baa2/P-2
Bank Deposits	Baa2/P-2
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	ba1
Counterparty Risk Assessment	Baa2(cr)/P-2(cr)
Senior Unsecured	Baa2
Subordinate	Ba2
PARENT: GRUPO AVAL ACCIONES Y VALORES S.A.	
Outlook	Negative
Issuer Rating	Ba2
ST Issuer Rating	NP
MULTIBANK, INC.	
Outlook	Stable
Counterparty Risk Rating	Baa3/P-3
Bank Deposits	Ba1/NP
Baseline Credit Assessment	ba1
Adjusted Baseline Credit Assessment	ba1
Counterparty Risk Assessment	Baa3(cr)/P-3(cr)
Senior Unsecured	Ba1

Source: Moody's Investors Service

## **Endnotes**

1 Total assets in the key indicators chart differ because they are adjusted by deducting the goodwill attributed to the non-controlling interest; this is part of Moody's standard adjustments.

2 See our Press Releases titled Moody's assigns Ba2 to Banco de Bogotá's proposed subordinated debt; rating on review for downgrade, 2 May 2016, and Moody's continues to rate Banco de Bogotá's subordinated debt Ba2 following reopening, 1 November 2016.

© 2023 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 DO 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 DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES ITS 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 credit 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 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 TIMPLINESS. COMPLETENESS MERCHANTABILITY OR FITNESS FOR ANY PARTICILIAR PLIRPOSE OF ANY CRED.

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, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <a href="https://www.moodys.com">www.moodys.com</a> under the heading "Investor Relations — Corporate Governance — Charter Documents - 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 JPY100,000 to approximately JPY550,000,000.

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

REPORT NUMBER

1364490

## Contacts

Marcelo De Gruttola +54.11.5129.2624

VP-Senior Analyst

marcelo.degruttola@moodys.com

Alexandre Albuquerque +55.11.3043.7356

VP-Senior Analyst

alexandre.albuquerque@moodys.com

Luis Fernando Baza Associate Analyst luis.baza@moodys.com

+52.55.1253.5735

