

CREDIT OPINION

23 June 2026

Update



Send Your Feedback

RATINGS

Sterling Bank Limited

Domicile	Lagos, Nigeria
Long Term CRR	B2
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	B3
Type	LT Bank Deposits - Fgn Curr
Outlook	Stable

Please see the [ratings section](#) at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

Analyst Contacts

Robyn MacLennan +44.20.7772.1307
AVP-Analyst
robyn.maclennan@moodys.com

David Ciporins +44.20.7772.5575
Ratings Associate
david.ciporins@moodys.com

Constantinos +357.2569.3009
Kypreos
Senior Vice President
constantinos.kypreos@moodys.com

Henry MacNevin +44.20.7772.1635
Associate Managing Director
henry.macnevin@moodys.com

Sterling Bank Limited

Update following affirmation, outlook stable

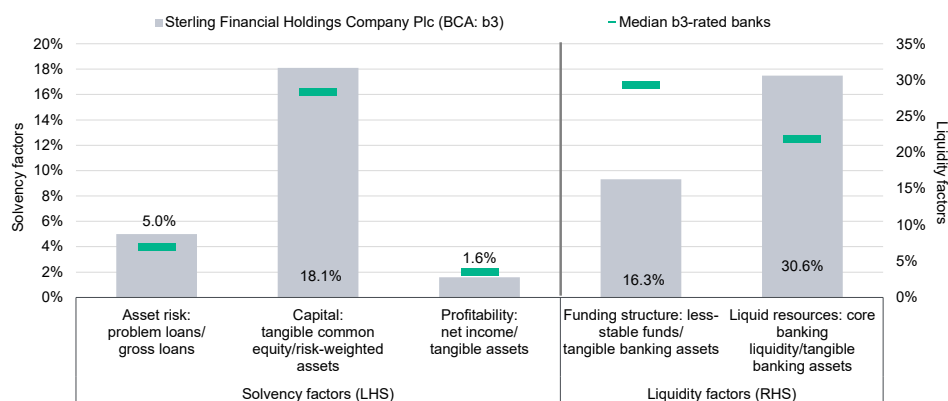
Summary

[Sterling Bank Limited's](#) (Sterling) B3 deposit rating is aligned with its b3 Baseline Credit Assessment (BCA). Although we believe that there is a high probability that the [Government of Nigeria](#) (B3 stable) would support the bank's senior liabilities in case of need, this does not benefit the ratings as the bank's b3 BCA is aligned with the government's B3 issuer rating.

Sterling's b3 BCA reflects the bank's lower-than-peers exposure to foreign currency loans, capital on an improving trend driven by capital raising, as well as stable deposit-based funding and high local currency liquidity. These strengths are balanced by the bank's: (1) track record of modest profitability; (2) still-elevated credit risks with material stage 2 loans; (3) exposure to the still challenging (but noticeably improving) operating environment in Nigeria and (4) the high interlinkages between the sovereign's creditworthiness and the bank's balance sheet.

Exhibit 1

Rating Scorecard - Key Financial Ratios



The problem loan and profitability ratios (in this exhibit and the scorecard on page 7) are the weaker of the average of three-year ratios and the latest reported quarterly ratio. The capital ratio is the latest reported figure. The funding and liquid assets ratios are the latest year-end figures.

Source: Moody's Ratings

Credit strengths

- » Capital raise exercise has strengthened the bank's capital buffers
- » Solid deposit-based funding and high levels of local currency liquidity
- » High probability of government support in case need

Credit challenges

- » Challenging (but noticeably improving) operating environment in Nigeria
- » Still elevated inflation and interest rates pose risks to the bank's asset quality
- » Modest profitability
- » Sovereign exposure creates interlinkages between the sovereign's creditworthiness and the bank's balance sheet

Outlook

The stable outlook on the long-term deposit and issuer ratings mirrors the stable outlook on Nigeria and reflects our expectation that improved profitability and retained earnings will continue to support capital. Similarly strong liquidity and stable deposit funding will remain key credit strengths, while asset quality risks will gradually subside but remain elevated.

Factors that could lead to an upgrade

The ratings could be upgraded following a material improvement in the sovereign's credit profile and the operating environment, and provided that the bank maintains a resilient financial performance.

Factors that could lead to a downgrade

The ratings could be downgraded in the event of a deterioration in the sovereign's credit profile accompanied by a significant weakening in the operating environment in Nigeria, and/or a material deterioration in the bank's solvency or liquidity.

Key indicators

Exhibit 2

Sterling Financial Holdings Company Plc (Consolidated Financials) [1]

	03-26 ²	12-25 ²	12-24 ²	12-23 ²	12-22 ²	CAGR/Avg. ³
Total Assets (NGN Million)	4,070,583.0	3,911,642.0	3,541,940.0	2,531,092.0	1,857,992.0	27.3 ⁴
Total Assets (USD Million)	2,938.2	2,703.7	2,294.0	2,820.2	4,032.5	(9.3) ⁴
Tangible Common Equity (NGN Million)	499,860.0	382,022.0	272,749.4	163,847.0	146,353.0	45.9 ⁴
Tangible Common Equity (USD Million)	360.8	264.1	176.7	182.6	317.6	4.0 ⁴
Problem Loans / Gross Loans (%)	4.9	4.7	5.4	5.1	3.9	4.8 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	--	18.1	16.4	9.2	10.9	13.7 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	13.2	15.8	19.9	24.1	17.7	18.1 ⁵
Net Interest Margin (%)	7.1	6.0	4.7	--	4.8	5.7 ⁵
PPI / Average RWA (%)	--	6.3	3.3	2.2	2.1	3.5 ⁶
Net Income / Tangible Assets (%)	2.3	2.0	1.2	0.9	1.0	1.5 ⁵
Cost / Income Ratio (%)	60.3	61.7	72.2	75.5	76.4	69.2 ⁵
Gross Loans / Due to Customers (%)	51.2	49.2	45.3	50.3	57.1	50.6 ⁵
Core Banking Liquidity (Non-HQLA) / Tangible Banking Assets (%)	29.6	30.6	33.6	--	--	31.3 ⁵
Less-stable Funds (Non-LCR) / Tangible Banking Assets (%)	17.6	16.3	16.9	--	--	16.9 ⁵

[1] All figures and ratios are adjusted using Moody's standard adjustments. [2] Basel II; 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 II periods. Further to the publication of our revised methodology in November 2025, only ratios from annual 2024 onwards included in this report apply reported risk weights for all exposures, discontinuing our previously applied standard adjustment for certain government securities. Sources: Moody's Ratings and company filings

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.moody's.com> for the most updated credit rating action information and rating history.

Profile

Sterling Bank Limited (Sterling) is a full-service Nigerian commercial bank based in Lagos. It provides commercial, retail and corporate banking services to the government, individuals, businesses, institutions and non-profit organisations. As of March 2026, Sterling Bank reported total consolidated assets of around \$2.9 billion, held a market share of 2% of total banking system assets and operated a network of around 160 branches.

Sterling was established in 1960 as a private liability company, NAL Bank Plc. As part of consolidation reforms introduced by the Central Bank of Nigeria in 2004, NAL Bank Plc merged with Indo-Nigeria Merchant Bank, Magnum Trust Bank, NBM Bank Limited and Trust Bank of Africa Limited in 2006 to form Sterling Bank Plc. In 2011, Sterling Bank acquired Equitorial Trust Bank, which helped to enhance its franchise and grow its market share.

In April 2023, Sterling Bank announced a change in its operating structure through the establishment of Sterling Financial Holdings whose shares have been listed on the Nigerian Stock Exchange (NGX). As of December 2025, the bank's largest shareholder was Cardinal Stone Asset Management Limited, which owned 30.5% of its total capital, followed by Silverlake Investments Limited owning 24.3%.

The legal entity that we rate is Sterling Bank Limited (the bank), a wholly owned subsidiary of Sterling Financial Holdings Company (the holding company). Given that Sterling Bank Limited stopped publishing its financial statements following the transition to a holding company structure, we use the financial statements of the holding company for the purpose of our analysis in this report. We consider that these financial statements are an appropriate proxy for those of the bank, given that the bank's assets represent the vast majority of the holding company's assets.

Detailed credit considerations

Asset quality continues to face some risks

As of December 2025, Sterling's problem loans ratio stood at 4.7%, down from 5.4% as of December 2024 and below the 7.0% reported average for the Nigerian banking sector. While Stage 2 loans also declined notably, they remained elevated at 24% of gross loans as of December 2025. Sterling's problem loans coverage (loan loss reserves to problem loans) stood at 80% as of December 2025. Problem loans rose slightly to 4.9% in the three months to March 2026 and problem loan coverage rose to 87.4%.

Going forward, we expect asset quality to remain under some pressure despite an improving macro backdrop. Inflation and interest rates have declined materially from recent peaks, which is supportive of borrowers' repayment capacity; however, both remain elevated, and there are residual risks of renewed imported inflation—particularly in the context of geopolitical tensions in the Middle East—which could slow the easing trajectory. In addition, the bank's rapid loan growth and expansion into relatively higher-risk segments, including SMEs/retail and agriculture, could introduce incremental asset quality pressures, particularly as these portfolios season. The bank also maintains a high exposure to the oil and gas sector (26% of total loans as of December 2025) which is sensitive to oil price volatility.

Similar to other banks, the proportion of foreign currency loans in Sterling's loan book had increased in recent years as a result of the material naira devaluation; this declined during 2025 but remained substantial at 26% of loans (FY 2024: 32%). The risk from foreign currency loans at Sterling is partly mitigated by (a) the bank's smaller exposure to those loans than peers (the average for Nigerian rated banks at around 50%), and (b) our understanding that the large majority of the bank's clients borrowing in foreign currency have foreign currency receivables.

Capital raise exercise has strengthened the bank's capital buffers

As of December 2025, the bank's shareholders' equity-to-total assets ratio increased to 11.0%, compared to 8.6% as of December 2024. Sterling's reported Tier 1 ratio decreased slightly to 13.5% as of December 2025, from 13.8% as of December 2024. Sterling's tangible common equity to risk weighted assets ratio was 18.1% as of December 2025, compared to 16.4% as of end-2024.

The holding company completed a NGN75 billion private placement in December 2024, raising NGN73.9 billion in net proceeds, of which NGN68.8 billion was injected into Sterling Bank and NGN5.0 billion into The Alternative Bank. This was followed by a NGN28.8 billion rights issue, for which regulatory approvals in May 2025 allowed the allotment of NGN26.6 billion, with the oversubscription restructured into a private placement that supported The Alternative Bank's capital requirements. Sterling HoldCo then completed a

NGN88 billion public offer in October 2025, with NGN96.7 billion recognised as additional capital. Following final regulatory approvals received in January 2026, the group confirmed in February 2026 that Sterling Bank and The Alternative Bank were fully recapitalised in line with the revised minimum capital requirements, strengthening Sterling Bank's capital position into 2026.

Going forward, we expect the bank to maintain capital buffers above minimum regulatory requirements, although part of the recently injected capital will likely be deployed to support balance-sheet growth and potential acquisitions, which may temper further material improvement in capital ratios through 2026.

Modest but improving profitability

Sterling's profitability and earnings generating capacity remains modest but has shown improvement. The bank reported a net income-to-tangible assets ratio of 1.95% during FY 2025, compared to 1.2% during FY 2024, mainly driven by higher margins and lower provisioning costs. The bank's net interest margin increased to 6.0% in FY 2025 from 4.7% in FY 2024, driven by (a) faster repricing of assets than of liabilities in a high interest rate environment and (b) the high rate of nominal loan growth. Non-interest income, mainly from net fees and commissions, contributed 17% of total operating income in 2025, providing some diversification to earnings. Provisioning costs equalled 13% of the bank's pre-provision income in FY 2025. At the same time, the bank's cost-to-income ratio remained high at 62% in FY 2025, although this improved from 72% in FY 2024, with the relatively high cost base reflecting the bank's continued investment in its branch network, digital platforms and various retail products.

Overall, the improvement in profitability indicates better earnings absorption capacity than in the prior year, although absolute profitability remains modest relative to higher-rated peers. Going forward, profitability should continue to benefit from a still-supportive yield environment, continued business growth and gradually lower credit costs, but these positives are likely to be partly offset by still-elevated operating costs, competitive funding conditions and the risk that faster expansion into higher-yielding segments could generate more volatile credit costs over time.

Systemic foreign currency liquidity pressures have eased following Nigeria's FX market reforms, but risks remain for banks

We expect foreign currency liquidity to continue to improve in the country. This will reflect the reform of the country's foreign exchange management, the increase in remittances, the repayment of central banks swaps and the clearing of a significant portion of unsettled central bank foreign exchange forward contracts. It also shows that the expanded funding capacity built by international banks over the last decade (to support Nigerian banks' financing of import transactions during foreign currency shortages) remains in place, even though the system's need for this funding has materially declined.

We expect Sterling's balance sheet to remain predominantly deposit-funded, with limited reliance on market funding. The less-stable funds to tangible banking assets ratio declining to 16.3% in FY 2025 (from 16.9% a year earlier), reflecting reduced reliance on more confidence-sensitive funding sources. Customer deposits continued to provide the bulk of non-equity funding, while the funding mix also remained supportive, with current and savings accounts together accounting for around 78% of total deposits as of December 2025. However, similar to most Nigerian banks, a large share of Sterling's deposits are sourced from corporates, which tend to be more price- and confidence-sensitive than retail deposits.

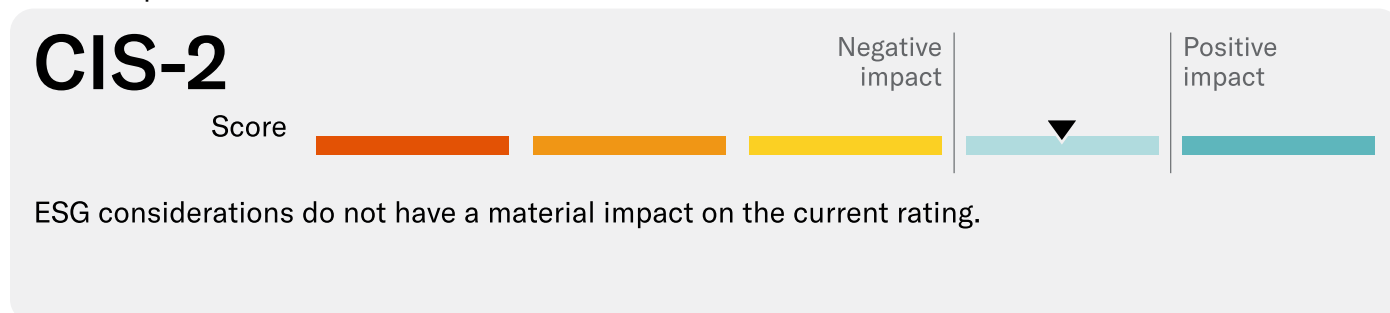
We expect Sterling's liquidity to remain sound. Sterling's core banking liquidity ratio was 30.6% as of December 2025 and 29.6% as of March 2026, indicating solid local currency liquidity buffers. Foreign currency liquid assets (including cash, interbank assets and investment securities) covered 53% of its total foreign currency liabilities (including debt, interbank liabilities and deposits) as of December 2025. Sterling's foreign currency liquidity position benefits from the bank's requirement for the majority of trade transactions with clients to be cash-backed, thereby reducing the foreign currency risk before opening letters of credit. In addition, the bank has expanded its sources of foreign currency by increasing its exposure to exports volumes, and by attracting more inflows from international banks and NGOs.

ESG considerations

Sterling Bank Limited's ESG credit impact score is CIS-2

Exhibit 3

ESG credit impact score

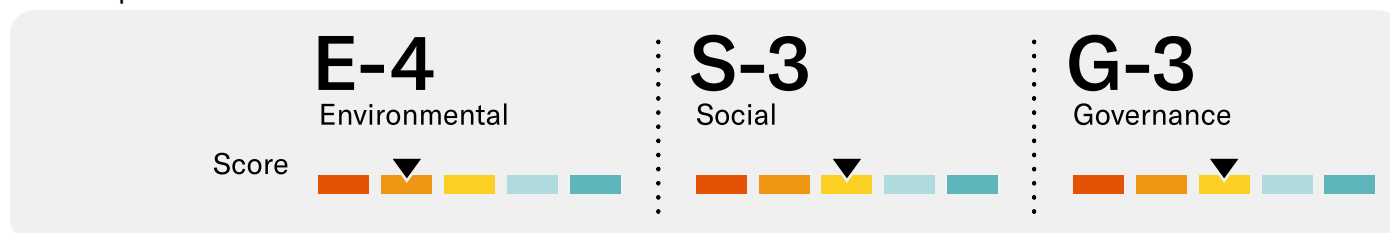


Source: Moody's Ratings

Sterling Bank's **CIS-2** indicates that the high probability of government support in case of need mitigates the potential risk that environmental, social and governance factors pose to the bank's credit profile.

Exhibit 4

ESG issuer profile scores



Source: Moody's Ratings

Environmental

Sterling Bank faces high environmental risks. Carbon transition risks reflect the bank's exposure to oil and gas lending, and to holdings of Nigerian government securities. Moreover, the important role played by hydrocarbons for the Nigerian economy and government revenue increases the vulnerability to carbon transition risks, potentially more broadly affecting the creditworthiness of the bank's counterparties. In line with peers, the bank is facing mounting business risks and stakeholder pressure to meet broader carbon transition goals. The bank also faces moderate portfolio exposure to physical climate risk, water management, and waste and pollution risks. Mitigants to environment risks include Sterling Bank's loan book diversification and exposure to the affluent portion of the population.

Social

Sterling Bank faces moderate social risks. Customer relations risk exposure is lower than the banking industry average, reflecting the fact that Nigerian banks have historically faced limited legal and regulatory actions related to mis-selling or mis-representation. Personal data risks are high. Risks related to societal and demographic trends are also lower than those for global peers, with the bank benefitting from Nigeria's young population and an increase in digitalisation and financial inclusion.

Governance

Sterling Bank's governance risks are moderate. The financial strategy and risk management risks reflect the constraints resulting from operating in a country with widespread corruption.

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 [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Government support

The absence of government support uplift for the bank's deposit ratings, despite our assessment of a 'high' likelihood of government support in case of need, reflects the positioning of the bank's BCA at the same level as the rating of the Government of Nigeria (B3 stable). The Nigerian government demonstrated a strong willingness to support banks in the recent past through recapitalisations and balance-sheet cleanups via outright purchases of NPLs by the Asset Management Corporation of Nigeria.

National scale rating (NSR)

Sterling's national scale ratings (NSRs) of Baa2.ng/NG-3 for deposits are generated from the bank's global scale ratings through maps specific to each country. NSRs are not intended to rank credits across multiple countries; instead, they provide a measure of relative creditworthiness within a single country (Nigeria in the case of Sterling). Our NSRs are given a two-letter suffix to distinguish them from the global scale ratings. For example, NSRs in Nigeria have the country abbreviation "ng."

Sterling's NSRs capture the bank's predominantly deposit-funded base and improvements in the bank's IT infrastructure and risk management processes. These strengths are balanced by vulnerabilities in asset quality because of high credit concentration risks and relatively modest, but improving, capital levels.

Sources of facts and figures in this report

Unless noted otherwise, we have sourced data relating to systemwide trends and market shares from the central bank. Bank-specific figures originate from banks' reports and Moody's Banking Financial Metrics. All figures are based on our own chart of account and may be adjusted for analytical purposes. Please refer to the document [Financial Statement Adjustments in the Analysis of Financial Institutions](#), published on 29 April 2026.

Methodology and scorecard

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 (although 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

Rating Factors

MACRO FACTORS							
WEIGHTED MACRO PROFILE	VERY WEAK +	100%					
FACTOR	HISTORIC RATIO	INITIAL SCORE	EXPECTED TREND	ASSIGNED SCORE	KEY DRIVER #1	KEY DRIVER #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	5.0%	caa1	↔	caa1	Expected trend	Single name concentration	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel II)	18.1%	b1	↔	b3	Expected trend		
Profitability							
Net Income / Tangible Assets	1.6%	b2	↔	b2	Return on assets		
Combined Solvency Score		b2		b3			
Liquidity							
Funding Structure							
Less-stable Funds / Tangible Banking Assets	16.3%	b2	↔	b2			
Liquid Resources							
Core Banking Liquidity / Tangible Banking Assets	30.6%	b2	↔	b2			
Combined Liquidity Score		b2		b2			
Financial Profile		b2		b3			
Qualitative Adjustments				Adjustment			
Business and Geographic Diversification				0			
Complexity and Opacity				0			
Strategy, Risk Appetite and Governance				0			
Total Qualitative Adjustments				0			
Sovereign or Affiliate constraint				B3			
BCA Scorecard-indicated Outcome - Range				b2 - caa1			
Assigned BCA				b3			
Affiliate Support notching				0			
Adjusted BCA				b3			
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	b2	0	B2	B2	
Counterparty Risk Assessment	1	0	b2 (cr)	0	B2(cr)		
Deposits	0	0	b3	0	B3	B3	
Senior unsecured bank debt	-	-	-	0	B3	B3	

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

Source: Moody's Ratings

Ratings

Exhibit 6

Category	Moody's Rating
STERLING BANK LIMITED	
Outlook	Stable
Counterparty Risk Rating	B2/NP
Bank Deposits	B3/NP
Baseline Credit Assessment	b3
Adjusted Baseline Credit Assessment	b3
Counterparty Risk Assessment	B2(cr)/NP(cr)
Issuer Rating	B3
ST Issuer Rating	NP

Source: Moody's Ratings

© 2026 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 OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") 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 MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS 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 MATERIALS DO NOT CONSTITUTE OR PROVIDE LEGAL, COMPLIANCE, INVESTMENT, FINANCIAL OR OTHER PROFESSIONAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS 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 OR OTHERWISE MAKES AVAILABLE ITS MATERIALS 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 MATERIALS 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 MATERIALS 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. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS 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 or assessment 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 or assessment process or in preparing its Materials.

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 or assessment 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 Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' 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 ir.moody.com under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., Moody's Local PA Clasificadora de Riesgo S.A., Moody's Local CR Clasificadora de Riesgo S.A., Moody's Local ES S.A. de CV Clasificadora de Riesgo, Moody's Local RD Sociedad Clasificadora de Riesgo S.R.L. and Moody's Local GT S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

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.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore.

EU: In the European Union, each of Moody's Deutschland GmbH and Moody's France SAS provide services as an external reviewer in accordance with the applicable requirements of the EU Green Bond Regulation. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used

within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

REPORT NUMBER 1483965

CLIENT SERVICES

Americas	1-212-553-1653
Asia Pacific	852-3551-3077
Japan	81-3-5408-4100
EMEA	44-20-7772-5454