

CREDIT OPINION

29 May 2025

Update



Send Your Feedback

RATINGS

National Bank of Umm Al-Qaiwain (PSC)

Domicile	United Arab Emirates
Long Term CRR	Baa1
Type	LT Counterparty Risk Rating - Fgn Curr
Outlook	Not Assigned
Long Term Debt	Not Assigned
Long Term Deposit	Baa2
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.

Contacts

Vladlen Kuznetsov, +971.4.237.9500
CFA
AVP-Analyst
vladlen.kuznetsov@moodys.com

Rodolphe Khaled +971.4.237.9535
Ratings Associate
rodolphe.khaled@moodys.com

Nondas Nicolaides +357.25.693.006
VP-Sr Credit Officer
nondas.nicolaides@moodys.com

Nitish Bhojnagarwala +971.4.237.9563
Associate Managing Director
nitish.bhojnagarwala@moodys.com

CLIENT SERVICES

Americas 1-212-553-1653
Asia Pacific 852-3551-3077

National Bank of Umm Al-Qaiwain (PSC)

Update to credit analysis

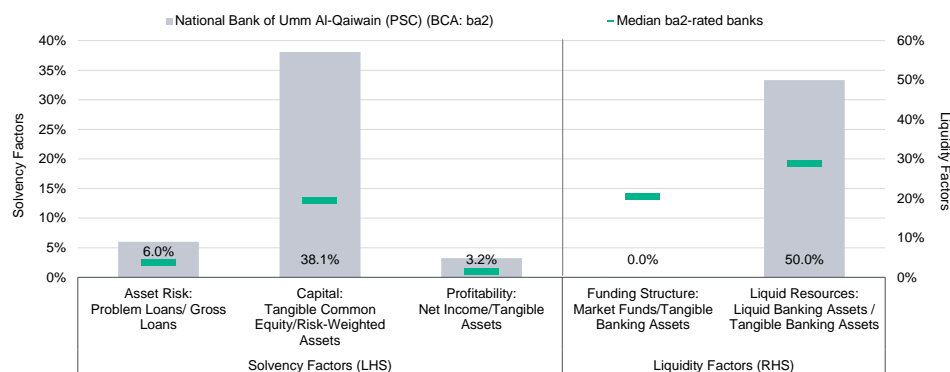
Summary

National Bank of Umm Al-Qaiwain (PSC)'s (NBQ) Baa2 long-term deposit ratings reflect the bank's ba2 Baseline Credit Assessment (BCA) and three notches of government support uplift from the [Government of the United Arab Emirates](#) (Aa2 stable) based on our expectation of a very high probability of government support. Our assessment reflects the Government of Umm Al Qaiwain's 34% stake in NBQ and the UAE authorities' track record of support for the country's banks in case of need.

NBQ's ba2 BCA reflects the bank's sound core profitability, which reflects its corporate franchise, and strong capital and liquidity buffers. These strengths are partially offset by the bank's modest asset quality, which, although improving, is potentially vulnerable to economic cycles. The bank faces challenges because of high exposure to sector and borrower concentrations, low loan loss reserves, a concentrated funding profile, limited business diversification and the execution risks associated with the bank's medium-term growth plan.

Exhibit 1

Rating Scorecard - Key financial ratios



The problem loan and profitability ratios are the weaker of the three-year averages and the latest reported figures; the capital ratio is the latest reported figure; and the funding structure and liquid assets ratios are the latest year-end figures.

Source: Moody's Ratings

Credit strengths

- » Capital buffers are likely to remain strong
- » Profitability benefits from solid margins
- » High liquidity buffers and low reliance on market funding
- » Very high probability of support from the UAE government in case of need

Credit challenges

- » Modest asset quality exposed to high borrower and sector concentrations
- » Concentrated funding book
- » Limited business diversification
- » Medium-term growth plan entails execution risks

Outlook

The stable outlook on NBQ's long-term deposit ratings reflects our expectation that the bank's key credit metrics will not change significantly over the next 12-18 months.

Factors that could lead to an upgrade

Upward pressure on NBQ's long-term ratings could result from achieving diversification of its revenue from less volatile segments, while maintaining strong capital and liquidity buffers. Upward pressure could also result from the bank building a track record in terms of management executing a consistent growth strategy and/or an improvement in the risk management and control framework.

Factors that could lead to a downgrade

Downward pressure on NBQ's long-term ratings could materialise if there is a significant deterioration in operating conditions, leading to a weakening of the bank's asset quality, profitability and/or capitalisation. Downward pressure on NBQ's ratings could also materialise if the bank fails to upgrade its risk management framework while implementing its growth strategy.

Key indicators

Exhibit 2

National Bank of Umm Al-Qaiwain (PSC) (Consolidated Financials) [1]

	03-25 ²	12-24 ²	12-23 ²	12-22 ²	12-21 ²	CAGR/Avg. ³
Total Assets (AED Million)	18,642.2	17,880.5	14,777.2	13,605.1	13,142.0	11.4 ⁴
Total Assets (USD Million)	5,075.4	4,868.0	4,023.5	3,704.4	3,578.0	11.4 ⁴
Tangible Common Equity (AED Million)	5,296.6	5,470.8	5,252.7	4,943.3	4,678.1	3.9 ⁴
Tangible Common Equity (USD Million)	1,442.0	1,489.4	1,430.2	1,346.0	1,273.6	3.9 ⁴
Problem Loans / Gross Loans (%)	3.7	4.0	6.8	9.5	8.6	6.5 ⁵
Tangible Common Equity / Risk Weighted Assets (%)	38.1	39.9	45.5	46.5	42.0	42.4 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	5.7	5.7	9.0	11.8	11.9	8.8 ⁵
Net Interest Margin (%)	3.3	4.2	4.3	3.0	2.1	3.4 ⁵
PPI / Average RWA (%)	5.6	4.8	5.1	3.1	2.0	4.1 ⁶
Net Income / Tangible Assets (%)	4.0	2.8	3.4	2.7	2.0	3.0 ⁵
Cost / Income Ratio (%)	19.1	23.4	23.1	31.6	37.5	26.9 ⁵
Market Funds / Tangible Banking Assets (%)	0.3	0.0	0.0	0.0	0.0	0.1 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	47.3	50.0	46.3	47.3	44.7	47.1 ⁵
Gross Loans / Due to Customers (%)	69.0	69.8	82.2	83.7	89.5	78.8 ⁵

[1] 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 Ratings and company filings

Profile

National Bank of Umm Al-Qaiwain (NBQ) is a public shareholding company incorporated in the Emirate of Umm Al Qaiwain in the UAE in 1982. The bank is engaged in providing retail, corporate and Islamic banking services through a network of 10 branches, ATMs, CCDMs, mobile banking and online banking in the UAE.

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.

As of March 2025, the bank reported AED18.6 billion of total assets (\$5.1 billion). NBQ's domestic market share was 0.3% as of December 2024. The bank's largest shareholder is the Government of Umm Al Qaiwain, which owns 34% of its total shares.

Detailed credit considerations

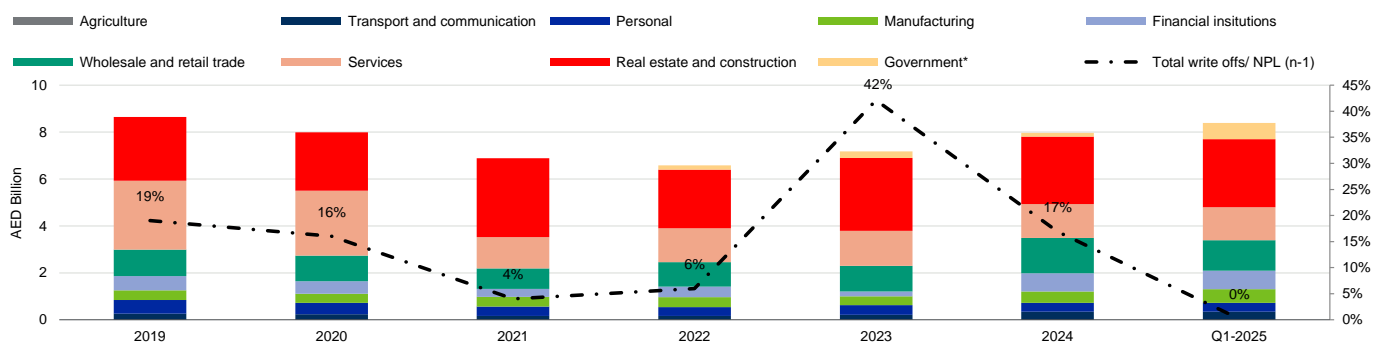
Modest asset quality exposed to high borrower and sector concentrations

We expect the bank's borrower and sector concentration to continue to pose risks to its asset quality. Furthermore, growth plans could further increase asset risk, creating a new unseasoned portion in the loan book.

NBQ has significant exposure to the cyclical real estate and construction sectors, with combined loans accounting for 35% of total loans as of March 2025, one of the highest reported among the UAE banks. This exposes NBQ to the potentially volatile real estate market in the UAE. We expect the bank to limit its exposure to real estate and construction in the future to remain compliant with updated real estate regulation from the central bank¹. Borrower concentration is also high, with the top 10 borrowers accounting for more than 43% of the gross loan book (more than two-thirds of the bank's equity) as of the end of the third quarter of 2024. NBQ faces additional pressure on asset quality and capital due to borrower concentration, particularly given its limited exposure to stronger counterparties such as large corporates, government entities and GREs.

Exhibit 3

Loan book breakdown and write-off evolution



*Before 2022, government loans were categorised under financial institutions loans.

Source: Bank's financial statements

Starting in 2023, NBQ resumed growth in its loan book, reporting a 9% increase, followed by an 11% increase in 2024 and a 5% increase in Q1 2025. The loan book growth was driven mainly by exposure to the real estate, construction and government sectors. The bank's write-off activity has declined to 17% of the previous year's non-performing loans (NPLs) in 2024 from 42% in 2023, and falling further to below 1% in Q1 2025.

The bank's problem loans/gross loans has been improving, at 3.7% as of March 2025, down from 4.0% as of year-end 2024 and 6.8% as of year-end 2023. This improvement was driven mainly by write-offs, some recoveries and a denominator effect, because gross loans grew by 11% in full-year 2024 and 5% in the first three months of 2025. The ratio is still a bit higher than that of its UAE peers (average NPL ratio is 3.4% for UAE banks).

NBQ's loan loss reserves/problem loans was 57% as of March 2025, significantly lower than that of its peers. This reduces the bank's additional buffers to absorb potential losses. The bank uses a collateral-based approach to provisioning, which is not prudent in case of economic downturns.

Capital buffers likely to remain strong

We expect NBQ's capitalisation to remain strong, but to gradually decline, as the bank implements its growth strategy to diversify from its real estate sector concentration, including through lending to SME sectors.

As of March 2025, its tangible common equity (TCE)/risk-weighted assets was a high 38.1% (43.8% as of March 2024), and its capitalisation comfortably covers unexpected asset losses. In the next 12-18 months, NBQ will continue to sustain high capitalisation

despite planned dividend payouts. While the bank follows its existing growth strategy, its implementation will continue to be gradual and will unlikely lead to rapid growth in leverage.

As of the end of March 2025, the bank reported a Basel III Tier 1 ratio of 35.83%, total capital adequacy ratio of 36.95% and shareholders' equity/total assets of 31.5%, which were all well above the ratios of the UAE local peers and more than adequate for its risk profile.

Profitability benefits from solid margins

We expect NBQ's profitability to remain sound during the outlook period. NBQ reported net income/tangible assets of 4.0% in Q1 2025, down from a high 4.7% for the same period in 2024. NBQ's solid profitability is supported by the bank's corporate franchise, which is underpinned by the bank's strong ties with UAE corporate groups and families, and a high equity funding (the bank's shareholders' equity/total assets is three times the local average), which allows the bank to minimise interest expenses. We expect the bank's profitability to remain strong in the next 12-18 months.

The bank's growth plan could hurt bottom-line profitability if provisions increase because of a failure in risk management controls. Lack of provision charges also contributes to higher profitability.

Net interest margin at NBQ remains solid despite a decline to 3.3% during the first three months of 2025 from 4.2% in 2024 (4.3% in 2023), driven mainly by higher interest expenses. Global trend of loosening monetary policy will continue to pressure NBQ's margins but they will likely remain reasonable.

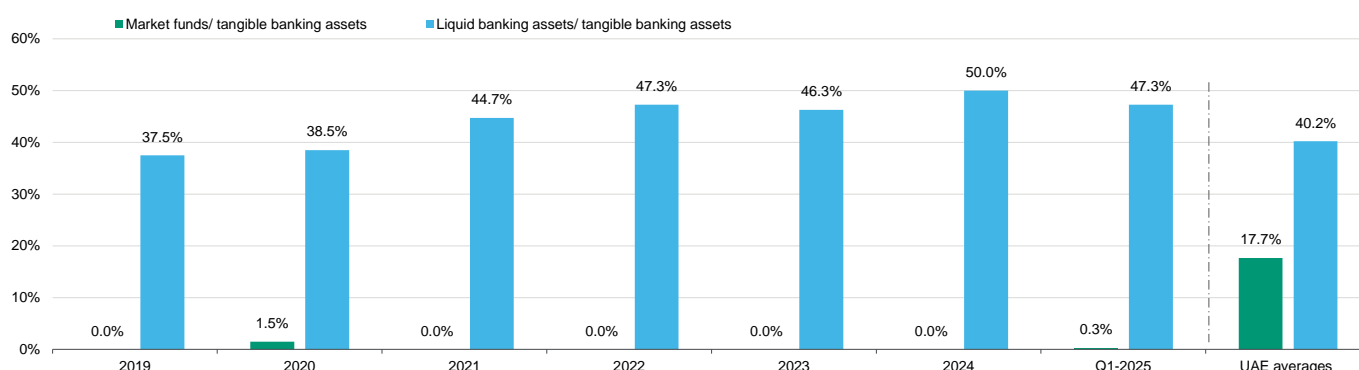
Its cost-to-income ratio is relatively low, at 19% in the first three months of 2025, and it remains well below that of domestic peers because of concentrated operations and efficiency control measures.

High liquidity buffers and low market funding reliance

NBQ does not rely on market funding, financing its operations primarily via deposits. The funding book exhibits high concentration, with 20 depositors accounting for more than 70% of the total deposits. More than half of these deposits are sourced from related parties, which will likely demonstrate higher stability.

Exhibit 4

Liquid assets and market funds



Source: Bank's financial statements

NBQ's liquid buffers mitigate the concentration risk in its funding profile. The bank's liquid banking assets/tangible banking assets remained high at 47.3% as of March 2025, in line with the 47.8% a year earlier. We expect the bank's liquid assets to gradually decline as the bank implements its medium-term growth plan, but to remain solid.

Limited business diversification while medium-term growth plan entails execution risks

The negative adjustment for Business Diversification reflects NBQ's limited business diversification, which constrains its credit strength by increasing the bank's sensitivity to stress in a single business line. NBQ's strong reliance on medium-sized corporate banking limits its income diversification and increases earnings volatility, especially given the high exposure to real estate and construction sectors.

The negative adjustment for Corporate Behaviour reflects the execution risks associated with the bank's growth plan to diversify away from its sector concentration in real estate. Lack of a track record of its diversification and growth strategy, combined with the existing risk management and control framework, constrains the bank's credit strengths and creates uncertainties regarding the evolution of the bank's risk profile. The bank's intention to grow SME sectors give rise to additional risks given the potential pro-cyclical nature of the SME borrowers. Ability of the bank to balance risks and returns is still to be tested.

ESG considerations

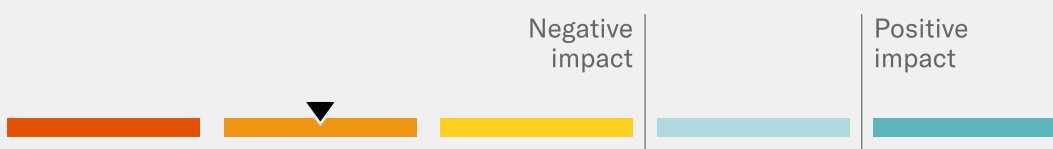
National Bank of Umm Al-Qaiwain (PSC)'s ESG credit impact score is CIS-4

Exhibit 5

ESG credit impact score

CIS-4

Score



ESG considerations have a discernible impact on the current rating, which is lower than it would have been if ESG risks did not exist. The negative impact of ESG considerations on the rating is higher than for an issuer scored CIS-3.

Source: Moody's Ratings

National Bank of Umm Al-Qaiwain's **CIS-4** indicates a material impact of ESG considerations on the bank's ratings, mostly because of the bank's high governance risks incorporated in a one-notch negative rating adjustment for corporate behavior. The bank's corporate governance risks mainly stems from lack of track record of growth strategy execution combined with risk management framework in place. Environmental and social factors have a limited impact on the bank's credit profile to date.

Exhibit 6

ESG issuer profile scores



Source: Moody's Ratings

Environmental

National Bank of Umm Al-Qaiwain faces relatively high exposure to environmental risks, mainly because of carbon transition risk. Although the bank has limited direct lending exposure to carbon-intensive sectors, the contribution of the hydrocarbon industry to the UAE economy (although low hydrocarbon production costs provide a degree of insulation to carbon transition), as well as its dependence on desalinated water and exposure to rising sea levels, increases its vulnerability to environmental risks, potentially affecting the creditworthiness of the bank's counterparties.

Social

National Bank of Umm Al-Qaiwain faces moderate social risks, mostly related to customer relations and associated regulatory and litigation risks. Demographic trends have favored financial inclusion and adaptation innovation of the population in the city centers. National Bank of Umm Al-Qaiwain and UAE banks are generally focused on the intermediation of simple, plain vanilla products. Less prone to mis-selling.

Governance

National Bank of Umm Al-Qaiwain faces high governance risks, reflecting lack of track record of strategy execution in recent years and current risk management framework in place. Government of Umm al Qaiwain owning around one-third of the bank does not result in incremental governance risks because of the country's developed institutional framework and is also mitigated by the composition of the Board which is by the majority independent. The bank is a publicly-listed firm and provides timely external reporting.

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

Very high likelihood of government support in case of need

NBQ's Baa2 long-term deposit ratings take into consideration the bank's ba2 BCA and three notches of government support uplift from the UAE government based on our expectation of a very high probability of government support. Our assessment reflects the Government of Umm Al Qaiwain's 34% stake in NBQ and the UAE authorities' track record of support for the country's banks in case of need.

Source of facts and figures cited in this report

Unless noted otherwise, we have sourced data related 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 8 April 2024.

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 (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 7

Rating Factors

Macro Factors							
Weighted Macro Profile		Strong - 100%					
Factor	Historic Ratio	Initial Score	Expected Trend	Assigned Score	Key driver #1	Key driver #2	
Solvency							
Asset Risk							
Problem Loans / Gross Loans	6.0%	ba2	↑↑	b3	Single name concentration	Sector concentration	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - fully loaded)	39.9%	aa3	↔	a2	Expected trend	Risk-weighted capitalisation	
Profitability							
Net Income / Tangible Assets	3.2%	aa3	↓	baa3	Expected trend	Loan loss charge coverage	
Combined Solvency Score		a3		ba1			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	0.0%	aa3	↔	baa1	Deposit quality	Expected trend	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	50.0%	a2	↔	a3	Expected trend		
Combined Liquidity Score		a1		baa1			
Financial Profile		a2		baa3			
Qualitative Adjustments				Adjustment			
Business Diversification				-1			
Opacity and Complexity				0			
Corporate Behavior				-1			
Total Qualitative Adjustments				-2			
Sovereign or Affiliate constraint				Aa2			
BCA Scorecard-indicated Outcome - Range				ba1 - ba3			
Assigned BCA				ba2			
Affiliate Support notching				0			
Adjusted BCA				ba2			

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	ba1	3	Baa1	Baa1
Counterparty Risk Assessment	1	0	ba1 (cr)	3	Baa1(cr)	
Deposits	0	0	ba2	3	Baa2	Baa2

[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 8

Category	Moody's Rating
NATIONAL BANK OF UMM AL-QAIWAIN (PSC)	
Outlook	Stable
Counterparty Risk Rating	Baa1/P-2
Bank Deposits	Baa2/P-2
Baseline Credit Assessment	ba2
Adjusted Baseline Credit Assessment	ba2
Counterparty Risk Assessment	Baa1(cr)/P-2(cr)

Source: Moody's Ratings

Endnotes

- ¹ The UAE central bank has recently updated regulation, which helps limit domestic banks' exposure to the historically volatile real estate sector. The regulator has capped exposure in the sector to 30% of each bank's credit risk-weighted assets, which includes off-balance sheet items and investments in real estate securities other than loans.

© 2025 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 INVESTMENT OR FINANCIAL 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 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 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 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., and Moody's Local PA Clasificadora de Riesgo 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. 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 1444687

CLIENT SERVICES

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