

Moody's **INVESTORS SERVICE**

CREDIT OPINION

15 February 2024

Update

Send Your Feedback

RATINGS

First International Bank of Israel Ltd.

Domicile	Tel Aviv, Israel
Long Term CRR	A2
Туре	LT Counterparty Risk Rating - Fgn Curr
Long Term Deposit	A3
Туре	LT Bank Deposits - Fgn Curr
Outlook	Negative

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

Alexios Philippides VP-Senior Analyst	+357.2569.3031
alexios.philippides@moo	dys.com
Corina Moustra Lead Ratings Associate corina.moustra@moodys	+357.2569.3003
Henry MacNevin Associate Managing Direct henry.macnevin@moody	
nem y.machevin@moody	5.00111

Nick Hill +33.1.5330.1029 MD-Financial Institutions nick.hill@moodys.com

First International Bank of Israel Ltd.

Update following ratings downgrade

Summary

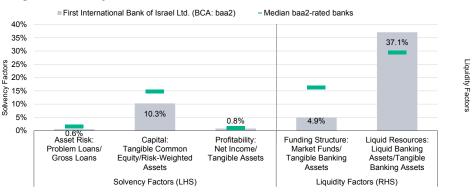
First International Bank of Israel Ltd. (FIBI)'s A3 long-term deposit ratings reflect (1) the bank's baa2 Baseline Credit Assessment (BCA); and (2) two notches of rating uplift based on our assessment of a very high likelihood of support from the Government of Israel (A2 negative), in case of need.

FIBI's baa2 BCA reflects the bank's current strong asset quality, stable retail deposit funding base and comfortable liquidity, and a strong presence in niche segments that benefit it with consistent business opportunities.

The BCA also reflects additional downside risks from a significant exposure concentration to the Israeli property market. The bank's capital buffers are adequate but modest with a tangible common equity (TCE)/risk-weighted assets (RWAs) ratio of 10.3% as of September 2023, which, although below similarly-rated international peers, has been consistently stable and reflects the Bank of Israel's (BoI) conservative risk weights.

Exhibit 1

Rating Scorecard - Key financial ratios



These are our Banks Methodology scorecard ratios. Asset Risk and Profitability reflect the weaker of either the latest figure or the three-year and latest figure average. Capital is the latest reported figure. Funding Structure and Liquid Resources reflect the latest fiscal year-end figures.

Source: Moody's Investors Service

Credit strengths

- » Asset quality has been strong, driven by a relatively low-risk loan book structure
- » Stable mostly retail deposit-based funding structure and comfortable liquidity
- » Strong presence in niche segments provides stable business growth
- » Very high likelihood of government support, in case of need, underpins the deposit ratings

Credit challenges

- » Given the crystallisation of geopolitical risks, asset quality will likely deteriorate and profitability will decline
- » Concentration in real estate is also a downside risk
- » Modest risk-weighted capitalisation and leverage
- » Moderate profitability, which has benefited from strong business growth, expanding net interest margins and ongoing operating cost control

Outlook

The negative outlook on the long-term deposit ratings captures both the negative outlook on the Government of Israel's rating and the potential for a significantly more negative impact on the economy in the event of an escalation in the ongoing conflict, which could lead to the bank's standalone fundamentals being impacted more severely.

Factors that could lead to an upgrade

» There is a limited scope for an upgrade of the bank's deposit ratings given the negative outlook. We could stabilise the outlook on the bank's ratings in case the outlook on the sovereign rating changes to stable and/or downside risks to the economy and the bank subside.

Factors that could lead to a downgrade

- » The deposit ratings could be downgraded if both the sovereign rating and the standalone BCA is downgraded.
- » The bank's BCA could be downgraded in case of a prolonged and wider conflict that could have a significant impact on the standalone fundamental, or if the bank's performance proves more volatile than in previous conflicts and economic crises.

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

First International Bank of Israel Ltd. (Consolidated Financials) [1]

	09-23 ²	12-22 ²	12-21 ²	12-20 ²	12-19 ²	CAGR/Avg. ³
Total Assets (ILS Million)	210,673.0	195,955.0	180,470.0	167,778.0	141,110.0	11.3 ⁴
Total Assets (USD Million)	55,338.3	55,534.9	58,119.6	52,254.3	40,854.1	8.44
Tangible Common Equity (ILS Million)	11,427.0	10,436.0	9,620.0	8,804.0	8,252.0	9.1 ⁴
Tangible Common Equity (USD Million)	3,001.6	2,957.6	3,098.1	2,742.0	2,389.1	6.3 ⁴
Problem Loans / Gross Loans (%)	0.5	0.5	0.7	0.9	1.1	0.75
Tangible Common Equity / Risk Weighted Assets (%)	10.3	9.9	10.5	10.3	10.0	10.2 ⁶
Problem Loans / (Tangible Common Equity + Loan Loss Reserve) (%)	4.6	4.9	7.0	7.9	10.4	6.9 ⁵
Net Interest Margin (%)	2.5	2.0	1.6	1.7	1.9	2.05
PPI / Average RWA (%)	3.6	2.7	2.2	1.9	1.9	2.56
Net Income / Tangible Assets (%)	1.1	0.9	0.8	0.5	0.7	0.85
Cost / Income Ratio (%)	42.7	49.8	56.7	60.4	62.4	54.4 ⁵
Market Funds / Tangible Banking Assets (%)	4.7	4.9	5.3	4.5	2.8	4.5 ⁵
Liquid Banking Assets / Tangible Banking Assets (%)	39.6	37.1	40.2	42.0	34.0	38.6 ⁵
Gross Loans / Due to Customers (%)	66.6	70.0	66.7	65.4	74.6	68.7 ⁵
Following and the second						

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

Sources: Moody's Investors Service and company filings

Profile

FIBI is the fifth-largest banking group in Israel by assets with an 8.6% market share and total consolidated assets of NIS211 billion (around \$55 billion) as of September 2023. As a universal bank, FIBI provides banking services to individuals, small businesses, corporations and high net-worth clients. The bank also provides capital market, foreign currency, global trade and corporate finance services.

FIBI maintains a strong market presence in specific niche retail segments in Israel, including the armed forces, teachers and the ultraorthodox. The bank also has a leading position in capital market services.

The bank's common stock trades on the Tel Aviv Stock Exchange (ticker: FIBI). As of September 2023, FIBI Holdings Ltd. held a 48.3% stake in FIBI, with the Bino-Liberman Group in turn, owning 51.9% of the shares in FIBI Holdings Ltd.

Source of facts and figures cited 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 the banks' reports and are based on our own chart of accounts and may be adjusted for analytical purposes. Please refer to <u>Financial Statement Adjustments in the Analysis of Financial Institutions</u> published on 1 February 2024. We do not use the Bank of Israel's exchange rates in converting figures from Israeli shekel into US dollars, so US dollar figures may differ from bank reported figures.

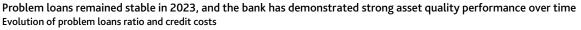
Detailed credit considerations

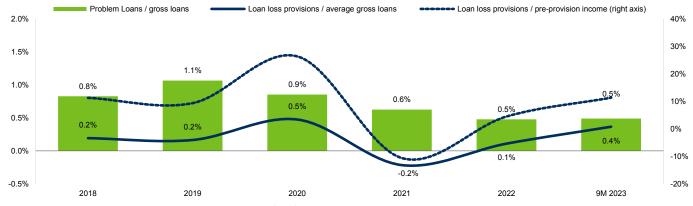
Strong asset quality that will likely deteriorate

FIBI's asset quality will deteriorate from current strong levels because of the economic impact of the ongoing military conflict. The bank is proactively provisioning against downside scenarios. Additionally to risks from geopolitical tensions and similarly to other Israeli banks, the bank's exposure concentration to Israel's property market is also a downside risk for its asset quality. However, our assessment of the bank's asset risk also reflects the relatively low risk structure of the bank's loan book, limited single-borrower concentrations (with no exposures exceeding 15% of its capital as of September 2023) and conservative underwriting standards along with close regulatory oversight. These characteristics have translated into low credit costs over past economic cycles, which were lower than most of its domestic peers.

Problem loans were 0.5% of gross loans as of September 2023 (see Exhibit 3) and lower than domestic peers. Credit costs (loan loss provision expenses to average gross loans) increased to 0.4% in the nine months ending September 2023 from very low levels in 2021 and 2022, mainly driven by group provisions booked in the third quarter of 2023 to reflect the uncertainty around the implications of the conflict on the economy and the bank's asset quality. For 2024, we expect FIBI's credit costs to remain above the historical average of 0.22%¹.

Exhibit 3



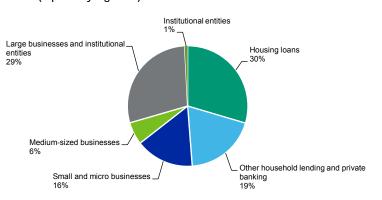


In 2022, Israeli banks implemented the US current expected credit losses (CECL) standard. Before the CECL standard implementation we defined problem loans as impaired loans and loans in arrears of 90 days or more. Accruing loans previously classified as impaired were not included in non-accruing debts under the new standard. 2021 problem loans ratio reflects the restated figures under the new standard.

Strong asset quality is a reflection of the bank's loan book structure and underwriting standards. Relatively low risk residential mortgages² accounted for 30% of total loans (see Exhibit 4), with 68% of outstanding credit granted at an original loan-to-value of up to 60% and 89% at a debt-income ratio of up to 35%. Medium and large businesses (including institutional entities) accounted for 35% as of September 2023. Other retail and consumer loans were 19% of total, but a significant portion of the unsecured retail portfolio is salary-assigned and the bank's client base is mainly higher-income, wealthier individuals. Following a 15% growth in 2022 that drives some unseasoned risk, loan growth moderated to 2% during the first nine months of 2023.

Exhibit 4

FIBI's loan book is relatively diversified by customer type Loan book breakdown as of September 2023 (supervisory segments)



Source: Bank's financial statements

Sector concentration to real estate is high. Beyond mortgages, lending to the construction and real estate sector made up 14% of FIBI's gross loans as of September 2023, but was lower than peers. Growth in the bank's exposure moderated to 2% year-over-year as of

September 2023, following double digit growth in 2022 because of strong demand. Therefore, FIBI's asset quality is susceptible to the risk of a sharp property price correction together with reduced ability of borrowers to service their loans. The real estate sector, already affected by higher interest rates and lower demand prior to the outbreak of the conflict, is also vulnerable to a sustained disruption in activity.

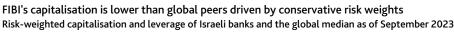
Credit secured by residential property accounted for 46% of the bank's total credit risk³ to the construction and real estate sectors as of September 2023, where risk is mitigated by close oversight of closed residential construction. Credit secured by commercial property accounted for 26%. A significant part, around 30%, of the exposure to the sector was for the acquisition of land for construction where projects will take several years to complete.

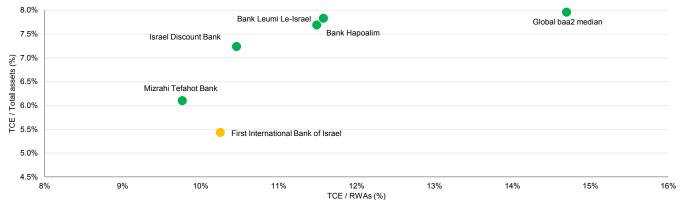
Modest risk-weighted capitalisation and leverage

FIBI's risk-weighted capitalisation and leverage are adequate, but modest. Although risk-weighted capital metrics are below global peers, the bank's loss-absorption buffers are supported by conservative regulatory risk-weights that result in higher loss-absorption buffers. For example, mortgages are risk-weighted according to their loan-to-value, resulting in an average risk weight of over 50% in Israel, which is higher than the 35% risk weight normally used in the standardised approach. The bank's capital ratios are also significantly more stable compared to banks globally that use a model based approach in calculating credit RWAs.

FIBI's TCE/RWAs ratio was 10.3% as of September 2023, below the global peer median (see Exhibit 5). The bank's TCE-to-total assets ratio was 5.4% as of September 2023, broadly at the same level as its 5.3% Basel III leverage ratio that was above the 4.5% minimum regulatory requirement that applied at that time. The bank's tighter leverage ratios compared to peers are in part driven by its high liquidity buffers, with a high share of cash and equivalents.

Exhibit 5





Source: Moody's Investors Service

FIBI reported a Common Equity Tier 1 (CET1) capital ratio of 10.8% as of September 2023, well above the 9.2% minimum regulatory requirement. Similarly to other periods of high volatility and in line with the BoI's guidance, FIBI adjusted down its dividend and distributed slightly below 20% of profits in the third quarter of 2023 against a dividend distribution policy of up to 50% of its annual net income. FIBI has demonstrated its ability to maintain steady capital ratios over time and typically higher buffers to regulatory requirements compared to Israeli peers.

Moderate profitability, which will decline from recent high levels

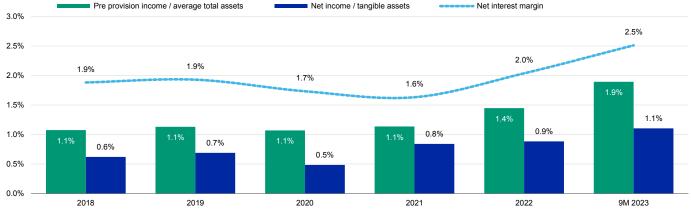
FIBI's recurring profitability is moderate but stable, supported by the bank's strong presence in niche markets, which coupled with high customer satisfaction have resulted in consistent credit and revenue growth in recent years. These niches include capital markets activity and teachers, armed forces and religious segments. Continued cost-reduction initiatives have driven significant operating <u>efficiency gains</u> for FIBI and closed the gap with peers, paving the way for higher sustainable profitability and strengthening its ability to

adapt and resist growing competition and its resiliency at times of stress. The bank's cost-to-income ratio was 44% in the nine months ending September 2023, from 51% in 2022 and levels exceeding 60% in prior years.

In the coming quarters, profitability will decline from recent exceptionally high levels because of elevated cost of risk, modest credit growth and support measures to customers affected by the conflict.⁴ The authorities' planned increase in bank taxes for 2024 and 2025 will also weigh on the bank's bottom-line. Gradually lower interest rates, the BoI cut its policy rate by 25 basis points to 4.5% in January 2024, and moderating CPI will also restrain financing income. But still overall high interest rates will be supportive of a healthy net interest margin and robust revenues.

FIBI reported net profits equivalent to 1.1% of tangible assets in the nine months ending September 2023, well above historical levels and up from 0.9% in 2022 and 0.8% in 2021 (see Exhibit 6). Profitability was supported by strong revenue growth owing to strong loan growth, an expanding net interest margin and higher CPI benefiting returns from the bank's net long CPI position (deriving mainly from CPI-linked mortgages).

Exhibit 6 FIBI's profitability is moderate, but has benefitted from an expanding net interest margin



Source: Moody's Investors Service

The bank's net interest margin widened to 2.5% in the nine months ending in September 2023 from 2.0% in 2022 and 1.6% in 2021 because rate hikes allowed the bank to unlock the value from its low-cost core deposit base. Even before the conflict and the recent policy rate cut, we expected the net interest margin to peak in mid-2023 because of a gradual shift from current accounts to costlier time deposits. The bank's non-interest bearing deposits accounted for 24% of total deposits as of September 2023 compared to 33% at end-2022.

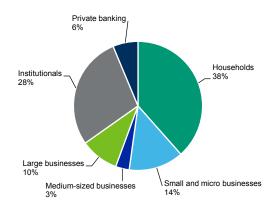
Stable mostly retail deposit-based funding structure and comfortable liquidity

FIBI benefits from a sound funding structure supported by a large and stable customer deposit base in Israel, which comfortably funds its loan portfolio, helped by Israel's strong savings culture. FIBI's net loans-to-deposits ratio stood at 66% as of September 2023.

Further, 52% of total deposits from the public were relatively granular household and small business deposits (excluding private banking deposits; see Exhibit 7). However, our assessment of FIBI's funding structure also considers that 28% of total deposits from the public as of September 2023 were sourced from institutional and capital markets investors, that could be more vulnerable to a loss in depositor confidence. This relatively high share of institutional investor deposits is partly driven by the bank's significant capital market activity and confidence-sensitivity is mitigated by sufficient liquidity. FIBI's deposit base has also proven to be stable during past systemic shocks.

Exhibit 7

Granular household and small business deposits make up the bulk of FIBI's deposit base Breakdown of deposits by segment as of September 2023



Note: Figures do not add up to 100% due to rounding. Source: Bank's financial statements

The bank is a net lender in the interbank market and has a low reliance on potentially more confidence-sensitive market funding at just 5% of tangible banking assets as of September 2023.

The bank also maintains a high level of liquidity, with a liquid assets to total assets ratio of 40% as of September 2023. The bank's liquid assets portfolio is also conservatively structured, with 29% of total assets held in cash and deposits with banks, and 10% invested in securities of which 58% is made up of Israeli government securities and an additional 35% of US government securities. FIBI reported a healthy liquidity coverage ratio of 142% as of September 2023.

ESG considerations

First International Bank of Israel Ltd.'s ESG credit impact score is CIS-2



Source: Moody's Investors Service

FIBI's **CIS-2** indicates that ESG factors are not material to the current ratings because a high level of government support mitigates the impact from ESG risks, which have lately increased (especially social risks) because of the military conflict and the high customer relations risks in Israel.

Exhibit 9 ESG issuer profile scores



Source: Moody's Investors Service

Environmental

FIBI faces moderate exposure to environmental risks, mainly because of its portfolio exposure to carbon transition risks as a diversified bank and one of Israel's five largest banks with a significant corporate exposure. In line with its peers, FIBI faces growing business risks and stakeholder pressure to meet broader carbon transition goals. FIBI is engaging in further developing its climate risk and relevant portfolio management capabilities and increasing its green financing.

Social

FIBI faces high social risks, related to societal and demographic trends as well as from customer relations. The current military conflict may cause a severe disruption of the economy and impact the bank's financial performance, depending on its duration and scale. However, a relatively young and growing population in Israel affords business opportunities for the bank. Further, FIBI faces high customer relations risk because of the considerable focus on consumer protection in Israel, exposing banks to potential fines from regulators and litigation from customers. High cyber and personal data risks are mitigated by a sound IT framework.

Governance

FIBI faces low governance risks, and its risk management, policies and procedures are in line with industry practices and commensurate with its universal banking model, while the bank provides timely and detailed external reporting. Although FIBI is publicly listed, its ownership is dominated by a controlling group of shareholders, but this does not result in incremental governance risks. The large presence of independent directors, and the domestic legal and regulatory framework mitigate associated risks. Furthermore, the bank's financial strategy is conservative, under the oversight of a proactive and hands-on regulator.

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 <u>here</u> to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

Government support considerations

FIBI's A3 deposit ratings incorporate two notches of government support uplift from the bank's baa2 Adjusted BCA because of our expectation of a very high probability of support from the Israeli authorities, in case of need. This assumption is based on FIBI's systemic importance as one of the country's five large banking groups and the Israeli government's long standing practice of supporting systemically important banks in case of need.

Counteparty Risk (CR) Assessment

FIBI's CR Assessment is A2(cr)/P-1(cr)

Prior to government support, the CR Assessment is positioned one notch above the bank's baa2 Adjusted BCA, reflecting our view that its probability of default is lower than that of deposits. Senior obligations represented by the CR Assessment will be more likely preserved to limit contagion, minimise losses and avoid disruption of critical functions. The CR Assessment also benefits from government support uplift, in line with our support assumptions on deposits.

Counteparty Risk Ratings (CRRs) FIBI's CRRs are A2/P-1 For jurisdictions with a non-operational resolution regime, such as Israel, the starting point for the CRR is one notch above the bank's Adjusted BCA. The CRRs also benefit from two notches of government support uplift.

Methodology and scorecard

About Moody's Bank scorecard

Our Bank 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 10

First International Bank of Israel Ltd.

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	0.6%	aa3	$\downarrow\downarrow$	baa2	Sector concentration	Expected trend	
Capital							
Tangible Common Equity / Risk Weighted Assets (Basel III - transitional phase-in)	10.3%	ba1	\leftrightarrow	ba1	Capital retention		
Profitability							
Net Income / Tangible Assets	0.8%	baa3	Ļ	ba1	Expected trend		
Combined Solvency Score		baa1		baa3			
Liquidity							
Funding Structure							
Market Funds / Tangible Banking Assets	4.9%	a1	\downarrow	a3	Deposit quality	Expected trend	
Liquid Resources							
Liquid Banking Assets / Tangible Banking Assets	37.1%	a3	\leftrightarrow	a3	Stock of liquid assets		
Combined Liquidity Score		a2		a3			
Financial Profile				baa2			
Qualitative Adjustments				Adjustment			
Business Diversification				0			
Opacity and Complexity				0			
Corporate Behavior				0			
Total Qualitative Adjustments				0			
Sovereign or Affiliate constraint				-			
BCA Scorecard-indicated Outcome - Range				baa1 - baa3			
Assigned BCA				baa2			
Affiliate Support notching				0			
Adjusted BCA				baa2			

Instrument Class	Loss Given	Additional	Preliminary Rating	Government	Local Currency	Foreign	
	Failure notching	notching	Assessment	Support notching	Rating	Currency	
	-	_			-	Rating	
Counterparty Risk Rating	1	0	baa1	-	A2	A2	
Counterparty Risk Assessment	1	0	baa1 (cr)	-	A2(cr)		
Deposits	0	0	baa2	-	A3	A3	

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

Ratings

Exhibit 11

Category	Moody's Rating
FIRST INTERNATIONAL BANK OF ISRAEL LTD.	
Outlook	Negative
Counterparty Risk Rating	A2/P-1
Bank Deposits	A3/P-2
Baseline Credit Assessment	baa2
Adjusted Baseline Credit Assessment	baa2
Counterparty Risk Assessment	A2(cr)/P-1(cr)

Source: Moody's Investors Service

Endnotes

- 1 Average is for the period in the run-up to the pandemic, 2006-2018. Credit in 2020 reflected the impact of the pandemic and were second-lowest out of the five large Israeli banks.
- 2 For housing loans risks are mitigated by (1) banks' full recourse to borrowers and a strong repayment culture; (2) a low level of housing debt at around 30% of GDP as of September 2023; and (3) macroprudential measures that enforce tight underwriting standards and which include a loan-to-value limit of 75% for sole dwellings and 70% for the rest but for non-investment purposes, a monthly repayment cap at 50% of a borrower's monthly salary and a limit on the variable-rate part of the mortgage at two-thirds of the loan. Higher risk-weights for the calculation of regulatory capital metrics for mortgages with higher loan-to-value and repayment ratios also encourage tighter underwriting.
- <u>3</u> On- and off-balance sheet exposures.
- 4 On 15 October 2023, the Bol set out a comprehensive outline to support bank customers during this period, which was later expanded.

© 2024 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-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 use highermation, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advined in advance of the possibility of such parses or the parse of the possibility of such parses or the parse of the parse of the parse of the parses in the parses of the parse

such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

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

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

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay to Moody's Investors Service, Inc. have, prior to assignment of any credit rating address the independence of 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 <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Charter 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 Calificadora 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 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 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 (as defined in Moody's Investors Service Rating Symbols and Definitions): Please note that a Second Party Opinion ("SPO") is not a "credit rating". The issuance of SPOs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs fall under the category of "Ancillary Businesse", 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 regulators. 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 1397021

MOODY'S INVESTORS SERVICE