Macquarie Bank Limited

Update

Key Rating Drivers

Strong Junior Debt Buffers: Macquarie Bank Limited's (MBL) Long-Term Issuer Default Rating (IDR) is above the viability rating (VR) and reflects the build-up of its junior debt buffers to address loss-absorbing capacity (LAC) requirements. Australia requires LAC to be met through existing capital instruments. Fitch Ratings believes MBL's LAC is set to be sufficient to reduce the risk of taxpayer funds being required to recapitalise the bank on resolution, protecting third-party senior creditors.

MBL's VR is in line with the implied VR, underpinned by the bank's sound business and financial profiles. The Stable Outlook reflects our view that MBL has sufficient headroom in its financial metrics to maintain its VR, even in a scenario that is moderately weaker than our base case.

Internationally Diversified Operation: We take a blended approach when assigning the operating environment (OE) score to MBL, given the scope of its international operation. MBL's score reflects the heavy weighting of its assets and exposures to jurisdictions that we score in the 'aa' OE range. We also factor in MBL's higher exposure to Australian mortgages and high household leverage, resulting in a score at the lower end of the 'aa' category.

Market Share Growth: We expect MBL to continue to expand its Australian lending and deposit market share over the next few years. We believe MBL has the strongest market position among Australian banks outside of the four majors, and this is likely to remain the case. Mortgage growth appears to have mainly been in the low-risk subsector and not at the expense of weakening underwriting, which should support MBL's financial profile through the cycle.

Robust Risk-Control Framework: MBL benefits from Macquarie Group Limited's (A/Stable) centralised risk management framework, oversight through a dedicated risk group and strong risk-management culture, which has resulted in robust financial outcomes over a sustained period. This offsets the bank's larger risk appetite than at most other Australian banking groups.

Modest Weakening in Asset Quality: We believe high interest rates and a modest rise in unemployment will weaken MBL's asset quality over the next 12 months, with the stage 3 loan/gross loan ratio peaking at about 1.2%. MBL's asset quality score of 'a+' is below the implied 'aa' category score, as we apply a negative adjustment for historical and future metrics. Fitch expects provision levels to fall as impaired loan balances rise, but high levels of collateral coverage in the loan portfolio should limit losses.

Robust Capital Buffers: MBL's common equity Tier 1 (CET1) ratio, which stood at 12.8% at end-September 2024 (1HFY25), is likely to retain sound capital buffers over regulatory minimums. The bank may manage the CET1 ratio down over the long-term through growth or other capital optimisation levers, but we do not anticipate it remaining below 12%.

Australia's regulator retains a level of conservatism in its application of the final Basel III rules, meaning the CET1 ratio appears modest relative to some international peers. We account for this by considering other metrics in addition to the CET1 ratio to assess MBL's capitalisation.

Sound Liquidity Management: We expect funding and liquidity to remain well managed for the group and bank over the next 12 months. This offsets some of the risk stemming from a greater reliance on wholesale funding than at international peers. MBL's average liquidity coverage ratio was 194% in the three months to end-September 2024 and its net stable funding ratio was 110% at end-September 2024.

Banks Universal Commercial Banks Australia

Ratings

Foreign Currency	
Long-Term IDR	A+
Short-Term IDR	F1
Viability Rating	а
Government Support Rating	bbb
Carranalan Diala	

Sovereign Risk

Long-Term Foreign-Currency IDR	AAA
Long-Term Local-Currency IDR	AAA
Country Ceiling	AAA

Outlooks

Long-Term Foreign-Currency IDR	Stable
Sovereign Long-Term Foreign- Currency IDR	Stable
Sovereign Long-Term Local- Currency IDR	Stable

Applicable Criteria

Bank Rating Criteria (March 2024) Non-Bank Financial Institutions Rating Criteria (January 2024)

Related Research

Macquarie Bank Limited (October 2024) Macquarie Group Limited (October 2024) Global Economic Outlook (September 2024) DM100 Banks Tracker (July 2024)

Fitch Upgrades Macquarie Bank Limited to 'A+'; Stable Outlook (May 2024)

Upgrades of Australian's Five Largest Banks Followed Build-Up of Resolution Buffers (May 2024)

Analysts

Jack Do +61 2 8256 0355 jack.do@fitchratings.com

Tim Roche +61282560310 tim.roche@fitchratings.com

Rating Sensitivities

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

MBL's Long-Term IDR would be downgraded if the VR is downgraded or if the regulator no longer envisages MBL's junior debt buffers as sufficient to protect senior creditors in a resolution.

The VR could be downgraded if a combination of the following were to occur:

The four-year average of the stage 3 loans/gross loans ratio rising above 2.0% for a sustained period (FY21-FY24: 1.0%);

The four-year average of operating profit/risk-weighted assets declining to below 1.5% for a sustained period (FY21-FY24: 3.1%);

The CET1 ratio falling below 10% without a credible plan to raise it back above this level (end-June 2024: 12.8%);

The business profile score being revised down to 'a-', possibly due to a large drop in lending or MBL's deposit market position.

Deterioration or findings of significant deficiencies in MBL's risk-management framework and liquidity management could also pressure the ratings, as it would most likely result in a lower risk-profile score. This could negatively affect our assessment of some financial profile factors.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

Positive momentum in MBL's VR and IDR would be likely to require the factor score for either MBL's business profile, risk profile, earnings and profitability, which are at 'a', to be revised to 'a+', assuming all other factor scores are unchanged.

Other Debt and Issuer Ratings

Rating Level	Rating	Outlook
Senior Unsecured: Long Term	A+	n.a.
Senior Unsecured: Short Term	F1	n.a.
Subordinated: Long Term	BBB+	n.a.

Short-Term IDR

The Short-Term IDR of MBL is at the lower of the two options available at a Long-Term IDR of 'A+', because the 'a' funding and liquidity score is lower than the minimum 'aa-' score to achieve the higher option of 'F1+'.

Senior Unsecured

MBL's senior unsecured debt ratings are aligned with the IDRs, consistent with Fitch's Bank Rating Criteria.

Subordinated Debt

MBL's subordinated Tier 2 debt is rated two notches below its anchor rating – the VR – for loss severity, with nonperformance risk adequately captured by the VR. The point of non-viability for these instruments is at the discretion of the regulator. None of the reasons for alternative notching from the anchor rating, as described in the criteria, are present.

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

Short-Term IDR

A downgrade of MBL's Short-Term IDR would occur if the Long-Term IDR is downgraded to 'A-' or below and the funding and liquidity score is revised to below 'a'.

Senior Unsecured Instruments

The senior unsecured instrument ratings will be downgraded if MBL's IDRs are downgraded.

Subordinated Debt

The Tier 2 instrument ratings will be downgraded if MBL's VR is downgraded or if any of the reasons for higher notching outlined in our *Bank Rating Criteria* apply, although we view this as unlikely to occur.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade *Short-Term IDR*

The Short-Term IDR could be upgraded if the Long-Term IDR is upgraded by one notch to 'AA-' or the funding and liquidity score is revised to 'aa-' or above, assuming no change to the Long-Term IDR.

Senior Unsecured Instruments

The long-term senior unsecured instrument ratings will be upgraded if MBL's Long-Term IDR is upgraded.

Subordinated Debt

The Tier 2 instrument ratings will be upgraded if MBL's VR is upgraded or if any of the reasons for lower notching outlined in Fitch's *Bank Rating Criteria* apply, although we view this as unlikely to occur.

Ratings Navigator

Ma	cquari	e Banl	< Limit	ed				ESG Relevance			Banks Ratings Navigator
					Financia	al Profile					
	Operating Environment	Business Profile	Risk Profile	Asset Quality	Earnings & Profitability	Capitalisation & Leverage	Funding & Liquidity	Implied Viability Rating	Viability Rating	Government Support	lssuer Default Rating
		20%	10%	20%	15%	25%	10%				
aaa								aaa	aaa	aaa	AAA
aa+								aa+	aa+	aa+	AA+
аа								аа	аа	аа	AA
aa-								aa-	aa-	aa-	AA-
a+								a+	a+	a+	A+ Sta
а								а	а	a	A
a-								a-	a-	a-	A-
bbb+								bbb+	bbb+	bbb+	BBB+
bbb								bbb	bbb	bbb	BBB
bbb-								bbb-	bbb-	bbb-	BBB-
bb+								bb+	bb+	bb+	BB+
bb								bb	bb	bb	BB
bb-								bb-	bb-	bb-	BB-
b+								b+	b+	b+	B+
b								b	b	b	В
b-								b-	b-	b-	В-
ccc+								ccc+	ccc+	ccc+	CCC+
ссс								ссс	ccc	ccc	CCC
ccc-								ccc-	ccc-	ccc-	CCC-
сс								сс	сс	сс	СС
с								с	с	с	С
f								f	f	ns	D or RD

The Key Rating Driver (KRD) weightings used to determine the implied VR are shown as percentages at the top. In cases where the implied VR is adjusted upwards or downwards to arrive at the VR, the KRD associated with the adjustment reason is highlighted in red. The shaded areas indicate the benchmark-implied scores for each KRD.

VR - Adjustments to Key Rating Drivers

The asset quality score of 'a+' has been assigned below the 'aa' category implied score for following adjustment reason: historical and future metrics (negative).

Financials

Summary Financials

	30 Sep 24		31 Mar 24	31 Mar 23	31 Mar 22	
	6 months - interim	6 months - interim	Year end	Year end	Year end	
	(USDm)	(AUDm)	(AUDm)	(AUDm)	(AUDm)	
	Reviewed - unqualified	Reviewed - unqualified	Audited - unqualified	Audited - unqualified	Audited - unqualified	
Summary income statement	•	· · ·	· · ·	· · ·		
Net interest and dividend income	1,088	1,570.0	3,131.0	2,640.0	2,453.0	
Net fees and commissions	878	1,266.0	1,997.0	1,876.0	1,449.0	
Other operating income	1,857	2,679.0	5,764.0	7,869.0	4,714.0	
Total operating income	3,823	5,515.0	10,892.0	12,385.0	8,616.0	
Operating costs	2,636	3,803.0	6,901.0	6,858.0	5,406.0	
Pre-impairment operating profit	1,187	1,712.0	3,991.0	5,527.0	3,210.0	
Loan and other impairment charges	8	11.0	-34.0	116.0	16.0	
Operating profit	1,179	1,701.0	4,025.0	5,411.0	3,194.0	
Other non-operating items (net)	3	5.0	50.0	n.a.	473.0	
Тах	374	540.0	1,163.0	1,506.0	950.0	
Net income	808	1,166.0	2,912.0	3,905.0	2,717.0	
Other comprehensive income	-268	-387.0	173.0	629.0	138.0	
Fitch comprehensive income	540	779.0	3,085.0	4,534.0	2,855.0	
Summary balance sheet						
Assets						
Gross loans	115,559	166,703.0	157,287.0	142,384.0	123,594.0	
- of which impaired	n.a.	n.a.	1,504.0	1,174.0	1,005.0	
Loan loss allowances	351	507.0	551.0	624.0	590.0	
Net loans	115,207	166,196.0	156,736.0	141,760.0	123,004.0	
Interbank	n.a.	n.a.	n.a.	n.a.	n.a.	
Derivatives	16,276	23,479.0	23,767.0	35,820.0	84,616.0	
Other securities and earning assets	72,884	105,141.0	97,261.0	79,107.0	64,582.0	
Total earning assets	204,366	294,816.0	277,764.0	256,687.0	272,202.0	
Cash and due from banks	10,995	15,861.0	28,055.0	41,612.0	48,972.0	
Other assets	24,015	34,644.0	34,344.0	32,524.0	28,454.0	
Total assets	239,377	345,321.0	340,163.0	330,823.0	349,628.0	
Liabilities						
Customer deposits	109.799	158.395.0	148.340.0	134.648.0	101.614.0	
Interbank and other short-term funding	28,084	40,513.0	39,957.0	44,477.0	16,947.0	
Other long-term funding	39,889	57,543.0	65,313.0	62,147.0	94,059.0	
Trading liabilities and derivatives	19,226	27,735.0	30,643.0	37,276.0	89,397.0	
Total funding and derivatives	196,998	284,186.0	284,253.0	278,548.0	302,017.0	
Other liabilities	27,760	40,046.0	32,148.0	29,563.0	27,349.0	
Preference shares and hybrid capital	n.a.	n.a.	2,381.0	2,360.0	2,294.0	
Total equity	14,619	21,089.0	21,381.0	20,352.0	17,968.0	
Total liabilities and equity	239,377	345,321.0	340,163.0	330,823.0	349,628.0	
Exchange rate		USD1 = AUD1.442585	USD1 = AUD1.530925	USD1 = AUD1.489869	USD1 = AUD1.336541	

Source: Fitch Ratings, Fitch Solutions, Macquarie Bank Limited

Key Ratios

	30 Sep 24	31 Mar 24	31 Mar 23	31 Mar 22
Ratios (annualised as appropriate)				
Profitability				
Operating profit/risk-weighted assets	2.5	3.1	4.3	2.5
Net interest income/average earning assets	1.1	1.2	0.9	1.0
Non-interest expense/gross revenue	69.0	63.6	55.5	63.0
Net income/average equity	11.0	14.1	19.9	17.0
Asset quality				
Impaired loans ratio	n.a.	1.0	0.8	0.8
Growth in gross loans	6.0	10.5	15.2	23.9
Loan loss allowances/impaired loans	n.a.	36.6	53.2	58.7
Loan impairment charges/average gross loans	0.0	0.0	0.1	-0.1
Capitalisation				
Common equity Tier 1 ratio	12.8	13.6	13.7	11.5
Fully loaded common equity Tier 1 ratio	n.a.	n.a.	n.a.	n.a.
Fitch Core Capital ratio	n.a.	n.a.	15.4	13.1
Tangible common equity/tangible assets	5.8	6.2	5.8	4.9
Basel leverage ratio	5.0	5.2	5.2	5.0
Net impaired loans/common equity Tier 1	n.a.	5.4	n.a.	n.a.
Net impaired loans/Fitch Core Capital	n.a.	n.a.	2.9	2.4
Funding and liquidity				
Gross loans/customer deposits	105.3	106.0	105.8	121.6
Gross loans/customer deposits + covered bonds	n.a.	105.3	105.0	n.a.
Liquidity coverage ratio	n.a.	191.0	214.0	188.9
Customer deposits/total non-equity funding	60.4	56.8	54.2	46.2
Net stable funding ratio	n.a.	115.0	124.0	125.0

Note: Stage 3 loans and impaired loans figure not reported for the half-year ending September 2024 Source: Fitch Ratings, Fitch Solutions, Macquarie Bank Limited

Support Assessment

Commercial Banks: Government Support					
Typical D-SIB GSR for sovereign's rating level (assuming high propensity)	a+ to a-				
Actual jurisdiction D-SIB GSR	а				
Government Support Rating	bbb				
Government ability to support D-SIBs					
Sovereign Rating	AAA/ Stable				
Size of banking system	Negative				
Structure of banking system	Negative				
Sovereign financial flexibility (for rating level)	Positive				
Government propensity to support D-SIBs					
Resolution legislation	Neutral				
Support stance	Neutral				
Government propensity to support bank					
	Negative				
Systemic importance					
Systemic importance Liability structure	Neutral				

Higher influence Moderate influence Lower influence

MBL's Government Support Rating (GSR) reflects its rising systemic importance over a number of years, underpinned by its position as Australia's fifth-largest bank by deposit and mortgage market shares of about 5%. We believe there is a high probability of support for MBL by the Australian authorities. We rate MBL's GSR higher than that of domestic non-major bank peers. MBL is also a significant participant in domestic financial markets, and is the only non-major bank that is subject to the Australian government's bank levy.

Subsidiaries and Affiliates

The Long-Term IDRs of Macquarie International Finance Limited (MIFL, A/Stable) and Macquarie Bank Europe Designated Activity Company (MBE, A/Stable) are driven by their respective Shareholder Support Ratings (SSRs) and are equalised with the VR of their parent, MBL. Their SSRs reflects their positions as key and integral parts of the banking group, which increases the propensity of MBL to extend support. A default by either of these entities would have a huge impact on the reputation and franchise of MBL and the wider group.

Factors that Could, Individually or Collectively, Lead to Negative Rating Action/Downgrade

A downgrade in the VR of MBL would be also be reflected in the IDRs of MIFL and MBE, assuming no change to Fitch's assumption around the propensity to support. In addition, a reduction in the role and relevance of these entities to the bank could lead to a downward revision of their SSR and therefore IDRs.

Factors that Could, Individually or Collectively, Lead to Positive Rating Action/Upgrade

An upgrade in the VR of MBL would be also be reflected in the IDRs of MIFL and MBE, assuming no change to Fitch's assumption around the propensity to support. The IDRs of MIFL and MBE may also be upgraded if Fitch believed there was sufficient junior debt buffers positioned into these entities and the anchor rating was switch to the IDR of MBL instead of the VR.

Criteria Variations

Fitch applied a variation from our *Bank Rating Criteria* by upgrading MBL's Long-Term IDR to one notch above the VR. The criteria state that an uplift can be applied where a banking group's resolution plan envisages that the bank's thirdparty senior creditors will be protected on a failure by a sufficient volume of qualifying junior debt and equity. We have applied the uplift without access to MBL's plan, as Australia's resolution and LAC framework envisages that senior creditors are protected on a bank failure. We believe this effectively meets the intent of Fitch's criteria.

Environmental. Social and Governance Considerations

FitchRatings **Macquarie Bank Limited**

Banks
Ratings Navigator
ESG Relevance to

Credit-Relevant ESG Derivation

Credit-Relevant ESG Derivation					dit Rating
Macquarie Bank Limited has 5 ESG potential rating drivers	key driver	0	issues	5	
Macquarie Bank Limited has exposure to compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) but this has very low impact on the rating.					
Sovernance is minimally relevant to the rating and is not currently a driver.	driver	0	issues	4	
	potential driver	5	issues	3	
	not a rating driver	4	issues	2	
	not a rating triver	5	issues	1	

Environmental (E) Relevance Scores Sector-Specific Issues General Issues E Score Reference E Re How to Read This Page ESG relevance scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant to the credit rating and green (1) GHG Emissions & Air Quality 1 n.a 5 is least relevant The Environmental (E), Social (S) and Governance (G) tables break out the ESG general issues and the sector-specific issues that are most relevant to each industry group. Relevance socres are assigned to each sector-specific issues to the issuer's overall credit rating. The Criteria Reference column highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis. The vertical color bars are visualizations of the frequency of concurrence of the highbart constituent relevance socrees. They do Energy Management 1 n.a 4 a Water & Wastewater Management 3 1 n.a ı.a of occurrence of the highest constituent relevance scores. They do not represent an aggregate of the relevance scores or aggregate Waste & Hazardous Materials Management; Ecological Impacts 1 n.a 2 ESG credit relevance The Credit-Relevant ESG Derivation table's far right column is a The Credit-Relevant ESO Derivation table's far right column is a visualization of the frequency of occurrence of the highest ESG relevance scores across the combined E. S and G categories. The three columns to the left of ESG Relevance to Credit Rating summarize rating relevance and impact to credit from ESG issues. The box on the far left identifies any ESG Relevance Sub-factor issues that are drivers or potential drivers of the issuer's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the relevance score. All scores of '4 and '5' are assumed to reflect a negative impact unless indicated with a '+ sign for positive impact. scores of 3, 4 or 5) and provides a brief explanation for the score. Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations Business Profile (incl. Management & governance); Risk Profile; Exposure to Environmental Impacts 2 1 Asset Quality Social (S) Relevance Scores General Issues S Score Sector-Specific Issues S Rele Reference Services for underbanked and underserved communities: SME and community development programs; financial literacy Business Profile (incl. Management & governance); Risk Profile Human Rights, Community Relations, Access & Affordability 2 5 programs Classification of ESG issues has been developed from Fitch's sector ratings criteria. The General Issues and Sector-Specific Issues draw on the classification standards published by the United Nations Principles for Responsible Investing (PRI), the Sustainability Accounting Standards Board (SASB), and the World Bank. Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) Customer Welfare - Fair Messaging, Privacy & Data Security Operating Environment; Business Profile (incl. Management & governance); Risk Profile 4 3 Impact of labor negotiations, including board/employee compensation and composition abor Relations & Practices 2 Business Profile (incl. Management & governance) 3 Employee Wellbeing 1 n.a n.a 2 Shift in social or consumer preferences as a result of an Exposure to Social Impacts Business Profile (incl. Management & governance); Financial Profile institution's social positions, or social and/or political disapproval of core banking practices Governance (G) Relevance Scores CREDIT-RELEVANT ESG SCALE Sector-Specific Issues G Relevance How relevant are E, S and G issues to the General Issues G Score Reference overall credit rating? Highly relevant, a key rating driver that has a significant impact on the rating on an individual basis. Equivalent to "higher" relative importance within Navigator. Business Profile (incl. Management & governance) Management Strategy Operational implementation of strategy 5 3 5 Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative Business Profile (incl. Management & governance); Earnings & Profitability; Capitalisation & Leverage Sovernance Structure 4 4 3 importance within Navigator. Minimally relevant to rating, either very low impact or actively managed in a way that results in no impact on the entity rating. Equivalent to "lower" relative importance within Navigator. Organizational structure; appropriateness relative to business Group Structure 3 Business Profile (incl. Management & governance) 3 3 model; opacity; intra-group dynamics; ownership Quality and frequency of financial reporting and auditing rrelevant to the entity rating but relevant to the sector. inancial Transparency 3 Business Profile (incl. Management & governance) 2 2 Irrelevant to the entity rating and irrelevant to the sector. 1 1

The highest level of ESG credit relevance is a score of '3', unless otherwise disclosed in this section. A score of '3' means ESG issues are credit-neutral or have only a minimal credit impact on the entity, either due to their nature or the way in which they are being managed by the entity. Fitch's ESG Relevance Scores are not inputs in the rating process; they are an observation on the relevance and materiality of ESG factors in the rating decision. For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/topics/esg/products#esg-relevance-scores.

SOLICITATION & PARTICIPATION STATUS

For information on the solicitation status of the ratings included within this report, please refer to the solicitation status shown in the relevant entity's summary page of the Fitch Ratings website.

For information on the participation status in the rating process of an issuer listed in this report, please refer to the most recent rating action commentary for the relevant issuer, available on the Fitch Ratings website.

DISCLAIMER & DISCLOSURES

All Fitch Ratings (Fitch) credit ratings are subject to certain limitations and disclaimers. Please read these limitations and disclaimers by this link: https://www.fitchratings.com/understandingcreditratings. In addition, the following following https://www.fitchratings.com/rating-definitions-document details Fitch's rating definitions for each rating scale and rating categories, including definitions relating to default. Published ratings, criteria, and methodologies are available from this site at all times. Fitch's code of conduct, confidentiality, conflicts of interest, affiliate firewall, compliance, and other relevant policies and procedures are also available from the Code of Conduct section of this site. Directors and shareholders' relevant interests are available at https://www.fitchratings.com/site/regulatory. Fitch may have provided another permissible or ancillary service to the rated entity or its related third parties. Details of permissible or ancillary service(s) for which the lead analyst is based in an ESMA- or FCA-registered Fitch Ratings company (or branch of such a company) can be found on the entity summary page for this issuer on the Fitch Ratings website.

In issuing and maintaining its ratings and in making other reports (including forecast information), Fitch relies on factual information it receives from issuers and underwriters and from other sources Fitch believes to be credible. Fitch conducts a reasonable investigation of the factual information relied upon by it in accordance with its ratings methodology, and obtains reasonable verification of that information from independent sources, to the extent such sources are available for a given security or in a given jurisdiction. The manner of Fitch's factual investigation and the scope of the third-party verification it obtains will vary depending on the nature of the rated security and its advisers, the availability of pre-existing third-party verifications such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification such as audit reports, agreed-upon procedures letters, appraisals, actuarial reports, engineering reports, legal opinions and other reports provided by third parties, the availability of independent and competent third-party verification such as audit reports, agreed-upon procedures letters and that neither an enhanced factual investigation nor any third-party verification can ensure that all of the information free prosts. Users of Fitch's ratings and reports should understand that neither and complete. Ultimately, the issuer are responsible for the accuracy of the information hey provide to Fitch and to the market in offering and attorneys with respect to legal and tax matters. Further, ratings and forecasts of financial and other information are inherently forward-looking and embody assumptions and predictions shoul thure events that by their nature cannot be verified as facts. As a result, despite any verification of current facts, ratings and forecasts can be affected by future events or conditions that were to an att

The information in this report is provided "as is" without any representation or warranty of any kind, and Fitch does not represent or warrant that the report or any of its contents will meet any of the requirements of a recipient of the report. A Fitch rating is an opinion as to the creditworthiness of a security. This opinion and reports made by Fitch are based on established criteria and methodologies that Fitch is continuously evaluating and updating. Therefore, ratings and reports are the collective work product of Fitch and no individuals, is solely responsible for a rating or a report. The rating does not address the risk of loss due to risks other than credit risk, unless such risk is specifically mentioned. Fitch is not engaged in the offer or sale of any security. All Fitch reports have shared authorship. Individuals identified in a Fitch report were involved in, but are not solely responsible for, the opinions stated therein. The individuals are named for contact purposes only. A report providing a Fitch rating is neither a prospectus nor a substitute for the information assembled, verified and presented to investors by the issuer and its agents in connection with the sale of the securities. Ratings may be changed or withdrawn at any time for any reason in the sole discretion of Fitch. Fitch does not provide investment advice of any sort. Ratings are not a recommendation to buy, sell, or hold any security. Ratings do not comment on the adequacy of market price, the suitability of any security for a particular investor, or the tax-exempt nature or taxability of payments made in respect to any security. Fitch receives fees from issuers, insurers, guarantors, other obligors, and underwriters for rating securities. Such fees generally vary from US\$1,000 to US\$1,500,000 (or the applicable currency equivalent) per issue. In certain cases, Fitch will rate all or a number of issues issued by a particular insurer or guarantor, for a single annual fee. Such fees are expected to vary from US\$1,000 to US\$1,500,0

For Australia, New Zealand, Taiwan and South Korea only: Fitch Australia Pty Ltd holds an Australian financial services license (AFS license no. 337123) which authorizes it to provide credit ratings to wholesale clients only. Credit ratings information published by Fitch is not intended to be used by persons who are retail clients within the meaning of the Corporations Act 2001.

Fitch Ratings, Inc. is registered with the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization (the "NRSRO"). While certain of the NRSRO's credit rating subsidiaries are listed on Item 3 of Form NRSRO and as such are authorized to issue credit ratings on behalf of the NRSRO (see https://www.fitchratings.com/site/regulatory), other credit rating subsidiaries are not listed on Form NRSRO (more "non-NRSROs") and therefore credit ratings issued by those subsidiaries are not issued on behalf of the NRSRO. However, non-NRSRO personnel may participate in determining credit ratings issued by or on behalf of the NRSRO.

Copyright © 2024 by Fitch Ratings, Inc., Fitch Ratings Ltd. and its subsidiaries. 33 Whitehall Street, NY, NY 10004. Telephone: 1-800-753-4824, (212) 908-0500. Reproduction or retransmission in whole or in part is prohibited except by permission. All rights reserved.