FitchRatings

Banks
Universal Commercial Banks
Australia

# Macquarie Bank Limited

## Key Rating Drivers

**Risk Management Underpins Ratings:** Macquarie Bank Limited's (MBL) Issuer Default Ratings (IDR) and Viability Rating (VR) are underpinned by its robust risk management and control framework. This in turn results in asset diversification, strong liquidity management and solid capitalisation. These strengths offset the greater level of complexity and risk appetite relative to Australian retail banks and a higher reliance on wholesale funding compared with international peers.

**Rated Above Parent:** MBL is rated one notch above its parent, Macquarie Group Limited (MGL; A-/Negative/a-), to reflect a stronger standalone risk profile and greater regulatory oversight relative to the consolidated group.

**Pandemic Drives Negative Outlook:** The May 2020 revision of the Outlook on MBL's Long-Term IDR to Negative, from Stable, reflects the heightened uncertainty due to risks from the pandemic. This has resulted in the factor outlooks on the operating environment (aa-), asset quality (a) and earnings (a) being revised to negative.

**Asset Quality Pressured:** MBL's exposure to commercial loans and non-loan assets is significantly above those of domestic peers, which leaves asset quality susceptible to the current downturn. Meaningful losses may not emerge for a year, but are then likely to take time to resolve.

**Earnings Outlook Negative:** Higher impairment charges, low rates and slower asset growth are likely to pressure earnings. A high reliance on trading income may also contribute to earning variability through a cycle, although it adds to revenue diversity. The bank had a high level of earning stability compared with most peers over the last five years.

**Sound Capital Buffers:** Capital buffers are sufficient to withstand a significant downturn at the current rating level, and the factor remains on a stable outlook. The bank's common equity Tier 1 (CET1) ratio of 12.2% at end-March 2020 was the highest ratio it has reported in its history.

**Strong Liquidity Management:** MBL's conservative liquidity management offsets its high reliance on wholesale funding. This is reflected in an average liquidity coverage ratio of 173% in the three months to end-March 2020 and a net stable funding ratio of 118%.

## Rating Sensitivities

**Base Case Significantly Exceeded:** MBL's VR and Long-Term IDR may be downgraded if our base-case economic downturn is significantly exceeded. This would be likely to result in the operating environment factor score being lowered to 'a+', which may lower our assessment of other financial profile factors.

The ratings may also be downgraded, even if the operating environment score is maintained at ‘aa-’, if there is significant deterioration in MBL's financial profile, such that metrics are no longer consistent with current factor scores. Deterioration of the robust risk-management framework and sound liquidity management would also pressure ratings.

**Base Case Emerges:** We would revise the Outlook on MBL's Long-Term IDR to Stable if our base-case economic forecasts occur. Under this scenario we expect MBL's financial profile to remain consistent with the current rating. An upgrade is less probable in the near term, as it would require a shallower downturn and swifter recovery than expected in Fitch's base case, combined with an improved company profile score and maintenance of the more stable profitability the bank has shown relative to many peers over the last five years.

### Ratings

| | |
|---|---|
| **Foreign Currency** | |
| Long-Term IDR | A |
| Short-Term IDR | F1 |
| | |
| Viability Rating | a |
| Support Rating | 3 |
| Support Rating Floor | BB+ |
| | |
| **Sovereign Risk** | |
| Long-Term Foreign-Currency IDR | AAA |
| Long-Term Local-Currency IDR | AAA |
| Country Ceiling | AAA |

### Outlooks

| | |
|---|---|
| Long-Term Foreign-Currency IDR | Negative |
| Sovereign Long-Term Foreign-Currency IDR | Negative |
| Sovereign Long-Term Local-Currency IDR | Negative |

### Applicable Criteria

Bank Rating Criteria (February 2020)

### Related Research

Macquarie Bank Limited - Ratings Navigator (June 2020)

Macquarie Group Limited - Ratings Navigator (June 2020)

Macquarie Group Limited (June 2020)

Global Economic Outlook: Crisis Update May 2020 - Coronavirus Shock Broadens (May 2020)

Fitch Ratings Coronavirus Scenarios: Baseline and Downside Cases -Update (April 2020)

Australia Steps Up Economic Support, Banks to Still Feel Pain (March 2020)

Australian Coronavirus Response Highlights Support for Banks (March 2020)

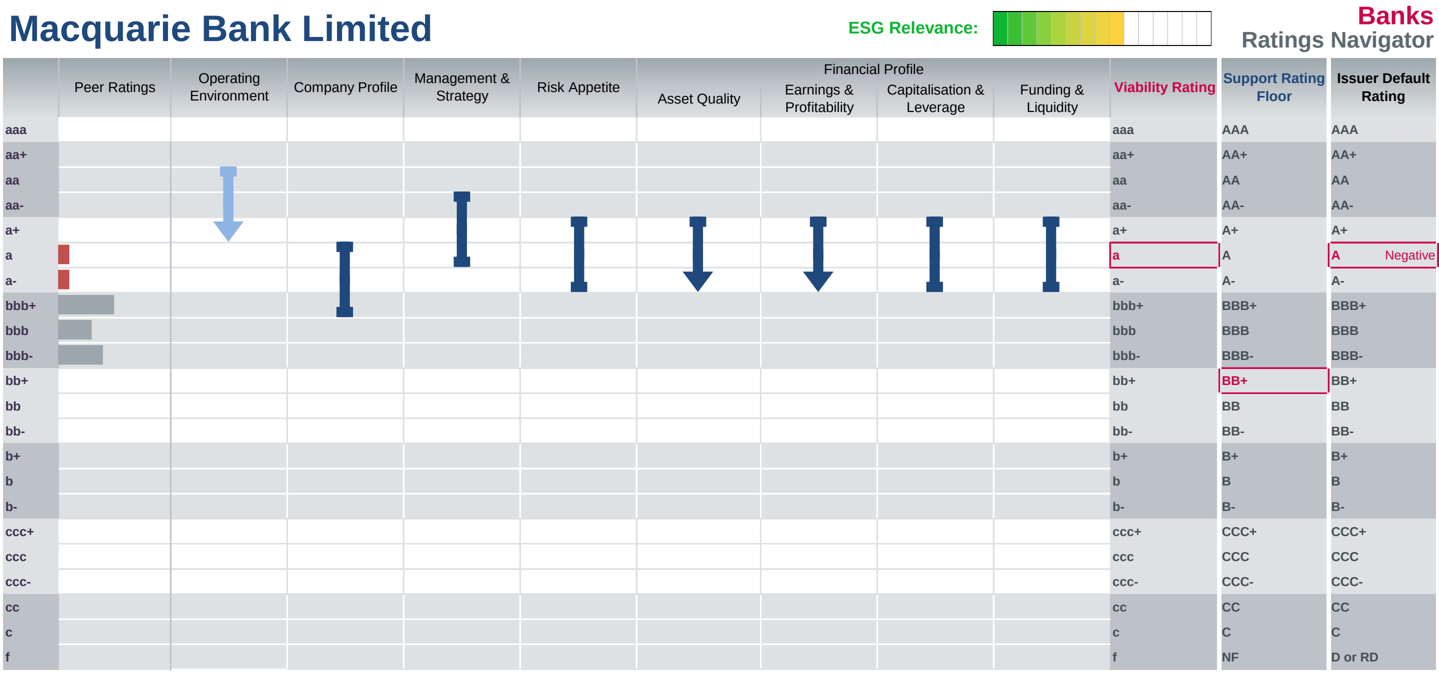
Coronavirus Adds Pressure to Australia, New Zealand Bank Earnings (March 2020)

### Analysts

Tim Roche
+61 2 8256 0310
tim.roche@fitchratings.com

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

## Ratings Navigator




## Significant Changes

### Pandemic Risk

The factor outlooks for the operating environment, asset quality and earnings have been revised to negative, from stable, to reflect heightened risk related to the economic downturn that has resulted from efforts to slow the spread of the coronavirus pandemic.

Other factor scores retain a stable outlook, as they are either not significantly affected by the economic downturn - company profile, management and strategy and, to a lesser extent, risk appetite - or buffers are sufficient at the current score to withstand a downturn that is more severe than our base case - capitalisation and leverage, funding and liquidity.

### Bar Chart Legend

Vertical bars – VR range of Rating Factor

Bar Colors – Influence on final VR

- Higher influence
- Moderate influence
- Lower influence

Bar Arrows – Rating Factor Outlook

⇧ Positive ⇩ Negative

⇳ Evolving ▫ Stable

## Company Summary

### Weighted Average Approach to Operating Environment

Fitch utilises a weighted-average approach in determining MBL's operating environment score to incorporate the large portion of the business that is conducted outside Australia. Greater emphasis is given to Australia to reflect that it is MBL's home jurisdiction and is subject to the strong Australian regulatory framework.

### Undertakes Group Banking Operations

MBL is the registered bank within Macquarie group. It was Australia's fifth-largest bank by Australian assets at end-March 2020, accounting for 3% of total system assets. MBL operates in the Banking and Financial Services (BFS) and Commodities and Global Markets (CGM) divisions of MGL. MBL's business model adds complexity relative to most retail-oriented Australian banks, but also results in greater geographic and earning diversity.

### Strong Alignment to Group Strategic Approach

MBL's management-quality, corporate governance and strategy are consistent with those of MGL, reflective of the high level of integration throughout the group; see Macquarie Group Limited (June 2020) for details.

### Strong Risk Management Offsets Higher-than-Domestic-Peer Risk Appetite

Credit risk is MBL's largest risk, accounting for 85% of risk-weighted assets in the financial year ending March 2020 (FYE20). Much of this is generated by the loan portfolio (39% of total assets at FYE20), although MBL also has large securities (11%) and derivatives (20%) exposures, unlike most other Australian banks.

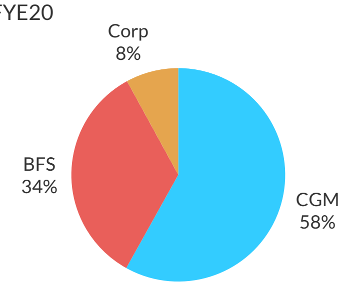
Loan underwriting is broadly in line with other participants in the markets in which MBL writes loans, although a higher exposure to commercial lending relative to retail-oriented Australian banks indicates a greater risk appetite. Australian residential mortgages made up 63% of total loans at FYE20, up from 57% at FYE19, due to strong growth (34% in FY20). Growth appears to have been achieved due to IT system investment, which has allowed for better service to brokers relative to many peers, rather than at the expense of underwriting standards.

Securities exposures appear to be of better quality than the loan portfolio. Some exposures relate to client-initiated trades, although there is a small proportion of a proprietary nature. Derivatives exposures relate primarily to client hedging activity, with the bank seeking security for exposures with weak counterparties. Exposures are subject to limit policies and stress testing set at the group level.

Market risk appears manageable, accounting for about 4% of risk-weighted assets at FYE20, with much of the risk associated with MBL's securities operations captured in the credit-risk charge. Traded-market risk is MBL's main form of market risk. MBL says it transfers interest-rate risk in the banking book to its trading portfolio, where possible, and trading is undertaken primarily on behalf of clients. This has typically led to low volatility in trading revenue. Non-traded foreign-currency exposures are hedged, unless specifically approved by the risk management group.

### MBL Segment Assets

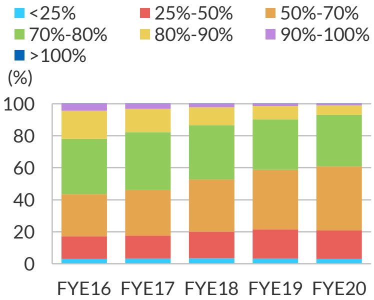
FYE20




Source: MBL

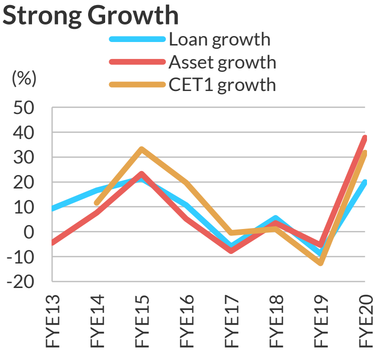
### Australian Mortgage LVR

% of total




Source: MBL

### Strong Growth




Source: Fitch Ratings, Fitch Solutions, MBL

## Summary Financials and Key Ratios

| | Year end (USDm) Audited - unqualified | 31 Mar 20 Year end (AUDm) Audited - unqualified | 31 Mar 19 Year end (AUDm) Audited - unqualified | 31 Mar 18 Year end (AUDm) Audited - unqualified | 31 Mar 17 Year end (AUDm) Audited - unqualified |
|---|---|---|---|---|---|
| **Summary income statement** | | | | | |
| Net interest and dividend income | 1,260 | 2,040.0 | 1,978.0 | 2,024.0 | 2,180.0 |
| Net fees and commissions | 364 | 589.0 | 454.0 | 271.0 | 194.0 |
| Other operating income | 1,962 | 3,178.0 | 2,939.0 | 3,150.0 | 2,780.0 |
| Total operating income | 3,586 | 5,807.0 | 5,371.0 | 5,445.0 | 5,154.0 |
| Operating costs | 2,273 | 3,681.0 | 3,655.0 | 3,391.0 | 3,462.0 |
| Pre-impairment operating profit | 1,313 | 2,126.0 | 1,716.0 | 2,054.0 | 1,692.0 |
| Loan and other impairment charges | 283 | 458.0 | 233.0 | 43.0 | 291.0 |
| Operating profit | 1,030 | 1,668.0 | 1,483.0 | 2,011.0 | 1,401.0 |
| Other non-operating items (net) | 241 | 391.0 | 952.0 | 142.0 | 332.0 |
| Tax | 362 | 586.0 | 394.0 | 570.0 | 509.0 |
| Net income | 910 | 1,473.0 | 2,041.0 | 1,583.0 | 1,224.0 |
| Other comprehensive income | 324 | 525.0 | 45.0 | 144.0 | -140.0 |
| Fitch comprehensive income | 1,234 | 1,998.0 | 2,086.0 | 1,727.0 | 1,084.0 |
| | | | | | |
| **Summary balance sheet** | | | | | |
| **Assets** | | | | | |
| Gross loans | 54,591 | 88,407.0 | 73,668.0 | 80,806.0 | 76,586.0 |
| - Of which impaired | 726 | 1,176.0 | 1,344.0 | 467.0 | 875.0 |
| Loan loss allowances | 425 | 688.0 | 510.0 | 367.0 | 753.0 |
| Net loans | 54,166 | 87,719.0 | 73,158.0 | 80,439.0 | 75,833.0 |
| Interbank | n.a. | n.a. | n.a. | n.a. | n.a. |
| Derivatives | 27,692 | 44,845.0 | 14,022.0 | 12,695.0 | 12,067.0 |
| Other securities and earning assets | 41,545 | 67,280.0 | 53,567.0 | 52,292.0 | 53,359.0 |
| Total earning assets | 123,404 | 199,844.0 | 140,747.0 | 145,426.0 | 141,259.0 |
| Cash and due from banks | 4,846 | 7,847.0 | 6,550.0 | 7,722.0 | 7,538.0 |
| Other assets | 11,390 | 18,445.0 | 16,702.0 | 20,070.0 | 18,644.0 |
| Total assets | 139,639 | 226,136.0 | 163,999.0 | 173,218.0 | 167,441.0 |
| | | | | | |
| **Liabilities** | | | | | |
| Customer deposits | 41,529 | 67,253.0 | 56,120.0 | 59,379.0 | 57,682.0 |
| Interbank and other short-term funding | 1,434 | 2,322.0 | 4,216.0 | 11,653.0 | 14,236.0 |
| Other long-term funding | 46,750 | 75,708.0 | 56,199.0 | 56,528.0 | 53,382.0 |
| Trading liabilities and derivatives | 26,667 | 43,186.0 | 19,080.0 | 21,718.0 | 17,957.0 |
| Total funding | 116,380 | 188,469.0 | 135,615.0 | 149,278.0 | 143,257.0 |
| Other liabilities | 13,626 | 22,067.0 | 15,652.0 | 9,431.0 | 9,859.0 |
| Preference shares and hybrid capital | 1,089 | 1,764.0 | 1,883.0 | 1,797.0 | 2,128.0 |
| Total equity | 8,544 | 13,836.0 | 10,849.0 | 12,712.0 | 12,197.0 |
| Total liabilities and equity | 139,639 | 226,136.0 | 163,999.0 | 173,218.0 | 167,441.0 |
| Exchange rate | | USD1 = AUD1.619433 | USD1 = AUD1.411034 | USD1 = AUD1.30463 | USD1 = AUD1.3082 |

Source: Fitch Ratings, Fitch Solutions

## Summary Financials and Key Ratios

| | 31 Mar 20 | 31 Mar 19 | 31 Mar 18 | 31 Mar 17 |
|---|---|---|---|---|
| **Ratios (annualised as appropriate)** | | | | |
| | | | | |
| **Profitability** | | | | |
| Operating profit/risk-weighted assets | 1.7 | 1.9 | 2.2 | 1.6 |
| Net interest income/average earning assets | 1.2 | 1.3 | 1.4 | 1.5 |
| Non-interest expense/gross revenue | 63.9 | 69.2 | 62.8 | 68.4 |
| Net income/average equity | 12.1 | 16.9 | 12.8 | 10.0 |
| | | | | |
| **Asset quality** | | | | |
| Impaired loans ratio | 1.3 | 1.8 | 0.6 | 1.1 |
| Growth in gross loans | 20.0 | -8.8 | 5.5 | -6.0 |
| Loan loss allowances/impaired loans | 58.5 | 38.0 | 78.6 | 86.1 |
| Loan impairment charges/average gross loans | 0.4 | 0.2 | 0.0 | 0.3 |
| | | | | |
| **Capitalisation** | | | | |
| Common equity Tier 1 ratio | 12.2 | 11.4 | 11.0 | 11.1 |
| Fully loaded common equity Tier 1 ratio | 12.2 | 11.4 | 11.0 | 11.1 |
| Fitch Core Capital ratio | n.a. | 12.5 | 12.3 | 12.0 |
| Tangible common equity/tangible assets | 5.9 | 6.3 | 7.2 | 7.2 |
| Basel leverage ratio | 5.7 | 5.3 | 6.0 | 6.4 |
| Net impaired loans/common equity Tier 1 | 4.2 | 9.4 | 1.0 | 1.2 |
| Net impaired loans/Fitch Core Capital | n.a. | 8.6 | 0.9 | 1.1 |
| | | | | |
| **Funding and liquidity** | | | | |
| Loans/customer deposits | 131.5 | 131.3 | 136.1 | 132.8 |
| Liquidity coverage ratio | 173.0 | 154.0 | 162.0 | 168.0 |
| Customer deposits/funding | 44.1 | 44.9 | 42.6 | 43.0 |
| Net stable funding ratio | 118.0 | 112.9 | n.a. | n.a. |

Source: Fitch Ratings, Fitch Solutions

## Key Financial Metrics – Latest Developments

### Asset Quality Weakening Likely

MBL's asset quality tends to be stronger than that of the group, reflecting the lower risk profile of many of the operations undertaken by the bank. This contributes to the 'a' factor score that is one notch higher than that of the consolidated group. Nevertheless, the bank is likely to face asset quality pressure across its portfolio due to the economic downturn, similarly to other Australian banks.

Loans made up less than 40% of total assets at FYE20, similarly to the group. However, MBL has less exposure to large corporates than the group, as many of these exposures are originated in the non-banking operation. This results in a stronger and less volatile stage 3/gross loans ratio relative to the group. Similarly, non-loan financial-asset quality is better than that of the group, with stage 3 non-loan financial assets at just 0.3% of total non-loan financial assets at FYE20 (FYE19: 0.4%). Loan loss allowance coverage of stage 3 loans was increased to 59% in FY20, from 38% in FYE19, to reflect the risks facing asset quality. Expected credit loss provisioning levels for all assets rose to AUD852 million, from AUD540 million, in FY20.

Derivative and trading assets made up the bulk of the remaining assets, similarly to the group.

### Earning Pressure to Emerge

The revision of the outlook on the 'a' earning score to negative, from stable, reflects the headwinds faced by MBL, its parent, MGL, and all other Australian banks as a result of the economic downturn. The structure of MBL's earning profile, including a low proportion of net interest income and a high level of foreign-sourced earnings relative to domestic peers, means MBL's earnings are likely to be more variable through a cycle than those of domestic peers, although earning stability has improved over the last decade, in part due to the bank's diversified earning base. MBL's earnings are likely to be more stable through a cycle than at the consolidated group, as the non-banking operations typically exhibit higher levels of volatility.

### Solid Capital Buffers

MBL entered the pandemic with a solid capital buffer and we expect its capitalisation to remain consistent with an 'a' factor score under our base case. The bank will not pay a dividend to MGL for the 2HFY20, which should further support capitalisation, while it has access to capital from the group, if required.

MBL's regulatory capital adequacy is calculated using the foundation internal ratings-based approach for credit risk and the advanced measurement approach for operational risk under Basel III. MBL's CET1 ratio rose to 12.2% in FY20, from 11.4% at FYE19, and is at the highest level ever reported by the bank. The bank estimated its FYE20 globally harmonised full Basel III CET1 ratio at 14.9% (FYE19 14.3%). The difference between the Australian regulatory and harmonised ratios is largely driven by the conservative mortgage risk-weights and capital deductions in Australia. The latter relate to deductions for equity investments, loan and lease origination fees and commissions and deferred tax assets.

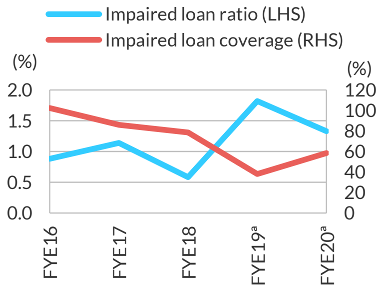
MBL's Basel III leverage ratio, as calculated by the Australian Prudential Regulation Authority (APRA), was 5.7% at FYE20, up from 5.3% at FYE19, and remains well in excess of the 3.5% minimum proposed by the regulator. Capital in MBL is ringfenced from the broader group – dividends can only be paid out of current-year earnings unless approved by APRA.

### Sound Liquidity Management

MBL has a high reliance on wholesale funding sources relative to its international bank peers, however, this risk is offset by the bank's strong liquidity and wholesale funding management. The strength of the liquidity position, combined with access to a central bank term-funding facility, if required, means MBL's funding and liquidity profile is unlikely to deteriorate substantially from the current economic slowdown, supporting the 'a' factor score.

MBL's liquidity policies are set so that it is able to meet its obligations over a 12-month period assuming dislocated funding markets and a modest downturn in its core businesses. This approach means MBL typically holds a higher proportion of liquid assets relative to its

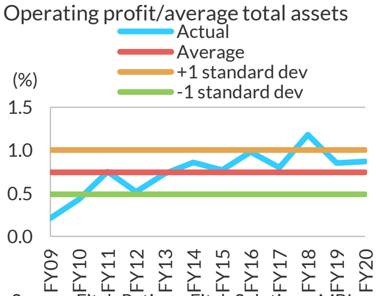
### Asset Quality




[a] Stage 3 loans, impaired loans previously
Source: Fitch Ratings, Fitch Solutions, MBL

### Earnings Volatility

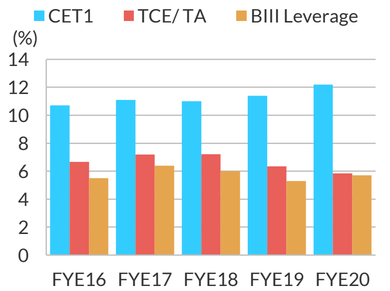
Operating profit/average total assets




Source: Fitch Ratings, Fitch Solutions, MBL

### Capitalisation

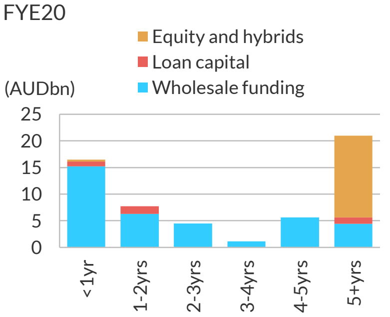
As per APRA rules




Source: Fitch Ratings, Fitch Solutions, MBL

### Wholesale Maturity

FYE20




Source: Fitch Ratings, Fitch Solutions, MBL domestic peers and therefore reports stronger liquidity ratios. The bank held AUD33.6 billion of cash and liquid assets at FYE20, well in excess of the AUD16.5 billion of wholesale funding maturities over the 12 months to March 2021. This position was bolstered by AUD23.5 billion of repo-eligible self-securitised assets with the Reserve Bank of Australia in a crisis. MBL's Basel III liquidity coverage ratio (LCR) averaged 173% in 4Q20, while the bank reported a Basel III net stable funding ratio of 118% at FYE20. Both ratios exceed those typically reported by domestic peers and are elevated relative to levels normally reported by MBL due to the liquidity in system.

Wholesale funding accounted for 56% of total funding at FYE20, with the rest comprising customer deposits. The bank's wholesale funding is diversified by maturity, currency and investor. Foreign currency risk is managed through foreign-currency borrowings either being hedged into the currency of the funded asset or aligned to foreign-currency assets.

## Sovereign Support Assessment

| **Support Rating Floor** | | | Value |
|---|---|---|---|
| Typical D-SIB SRF for sovereign's rating level (assuming high propensity) | | | A+ to A- |
| Actual country D-SIB SRF | | | A |
| **Support Rating Floor:** | | | **BB+** |
| **Support Factors** | Positive | Neutral | Negative |
| Sovereign ability to support system | | | |
| Size of banking system relative to economy | | | ✓ |
| Size of potential problem | | ✓ | |
| Structure of banking system | | | ✓ |
| Liability structure of banking system | | ✓ | |
| Sovereign financial flexibility (for rating level) | ✓ | | |
| Sovereign propensity to support system | | | |
| Resolution legislation with senior debt bail-in | | | ✓ |
| Track record of banking sector support | | ✓ | |
| Government statements of support | | ✓ | |
| Sovereign propensity to support bank | | | |
| Systemic importance | | ✓ | |
| Liability structure of bank | | | ✓ |
| Ownership | | ✓ | |
| Specifics of bank failure | | ✓ | |
| Policy banks | | | |
| Policy role | | | |
| Funding guarantees and legal status | | | |
| Government ownership | | | |

MBL's Support Rating and Support Rating Floor reflect a moderate probability of support, given its position as Australia's fifth-largest bank by total assets, that it is the only non-major bank that is subject to the Australian government's bank levy and that it is a key competitor in the domestic financial markets.

# Environmental, Social and Governance Considerations

FitchRatings **Macquarie Bank Limited**

**Banks**
**Ratings Navigator**

**Credit-Relevant ESG Derivation**

Macquarie Bank Limited has 5 ESG potential rating drivers

- 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.
- Governance is minimally relevant to the rating and is not currently a driver.

| | | | Overall ESG Scale |
|---|---|---|---|
| key driver | 0 | issues | 5 |
| driver | 0 | issues | 4 |
| potential driver | 5 | issues | 3 |
| not a rating driver | 4 | issues | 2 |
| | 5 | issues | 1 |

**Environmental (E)**

| General Issues | E Score | Sector-Specific Issues | Reference | E Scale |
|---|---|---|---|---|
| GHG Emissions & Air Quality | 1 | n.a. | n.a. | 5 |
| Energy Management | 1 | n.a. | n.a. | 4 |
| Water & Wastewater Management | 1 | n.a. | n.a. | 3 |
| Waste & Hazardous Materials Management; Ecological Impacts | 1 | n.a. | n.a. | 2 |
| Exposure to Environmental Impacts | 2 | Impact of extreme weather events on assets and/or operations and corresponding risk appetite & management; catastrophe risk; credit concentrations | Company Profile; Management & Strategy; Risk Appetite; Asset Quality | 1 |

**Social (S)**

| General Issues | S Score | Sector-Specific Issues | Reference | S Scale |
|---|---|---|---|---|
| Human Rights, Community Relations, Access & Affordability | 2 | Services for underbanked and underserved communities: SME and community development programs; financial literacy programs | Company Profile; Management & Strategy; Risk Appetite | 5 |
| Customer Welfare - Fair Messaging, Privacy & Data Security | 3 | Compliance risks including fair lending practices, mis-selling, repossession/foreclosure practices, consumer data protection (data security) | Operating Environment; Company Profile; Management & Strategy; Risk Appetite | 4 |
| Labor Relations & Practices | 2 | Impact of labor negotiations, including board/employee compensation and composition | Company Profile; Management & Strategy | 3 |
| Employee Wellbeing | 1 | n.a. | n.a. | 2 |
| Exposure to Social Impacts | 2 | Shift in social or consumer preferences as a result of an institution's social positions, or social and/or political disapproval of core banking practices | Company Profile; Financial Profile | 1 |

**Governance (G)**

| General Issues | G Score | Sector-Specific Issues | Reference | G Scale |
|---|---|---|---|---|
| Management Strategy | 3 | Operational implementation of strategy | Management & Strategy | 5 |
| Governance Structure | 3 | Board independence and effectiveness; ownership concentration; protection of creditor/stakeholder rights; legal /compliance risks; business continuity; key person risk; related party transactions | Management & Strategy; Earnings & Profitability; Capitalisation & Leverage | 4 |
| Group Structure | 3 | Organizational structure; appropriateness relative to business model; opacity; intra-group dynamics; ownership | Company Profile | 3 |
| Financial Transparency | 3 | Quality and frequency of financial reporting and auditing processes | Management & Strategy | 2 |
| | | | | 1 |

**How to Read This Page**
ESG scores range from 1 to 5 based on a 15-level color gradation. Red (5) is most relevant and green (1) is least relevant.

**The Environmental (E), Social (S) and Governance (G) tables** break out the individual components of the scale. The right-hand box shows the aggregate E, S, or G score. General Issues are relevant across all markets with Sector-Specific Issues unique to a particular industry group. Scores are assigned to each sector-specific issue. These scores signify the credit-relevance of the sector-specific issues to the issuing entity's overall credit rating. The Reference box highlights the factor(s) within which the corresponding ESG issues are captured in Fitch's credit analysis.

**The Credit-Relevant ESG Derivation table** shows the overall ESG score. This score signifies the credit relevance of combined E, S and G issues to the entity's credit rating. The three columns to the left of the overall ESG score summarize the issuing entity's sub-component ESG scores. The box on the far left identifies some of the main ESG issues that are drivers or potential drivers of the issuing entity's credit rating (corresponding with scores of 3, 4 or 5) and provides a brief explanation for the score.

**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 Priniciples for Responsible Investing (PRI) and the Sustainability Accounting Standards Board(SASB).

**Sector references** in the scale definitions below refer to Sector as displayed in the Sector Details box on page 1 of the navigator.

**CREDIT-RELEVANT ESG SCALE**

**How relevant are E, S and G issues to the overall credit rating?**

| | |
|---|---|
| 5 | 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. |
| 4 | Relevant to rating, not a key rating driver but has an impact on the rating in combination with other factors. Equivalent to "moderate" relative importance within Navigator. |
| 3 | 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. |
| 2 | Irrelevant to the entity rating but relevant to the sector. |
| 1 | Irrelevant to the entity rating and irrelevant to the sector. |

The highest level of ESG credit relevance, if present, is a score of 3. This means ESG issues are credit-neutral or have only a minimal credit impact on the entity(ies), either due to their nature or to the way in which they are being managed by the entity(ies). For more information on Fitch's ESG Relevance Scores, visit www.fitchratings.com/esg

The ratings above were solicited and assigned or maintained at the request of the rated entity/issuer or a related third party. Any exceptions follow below.