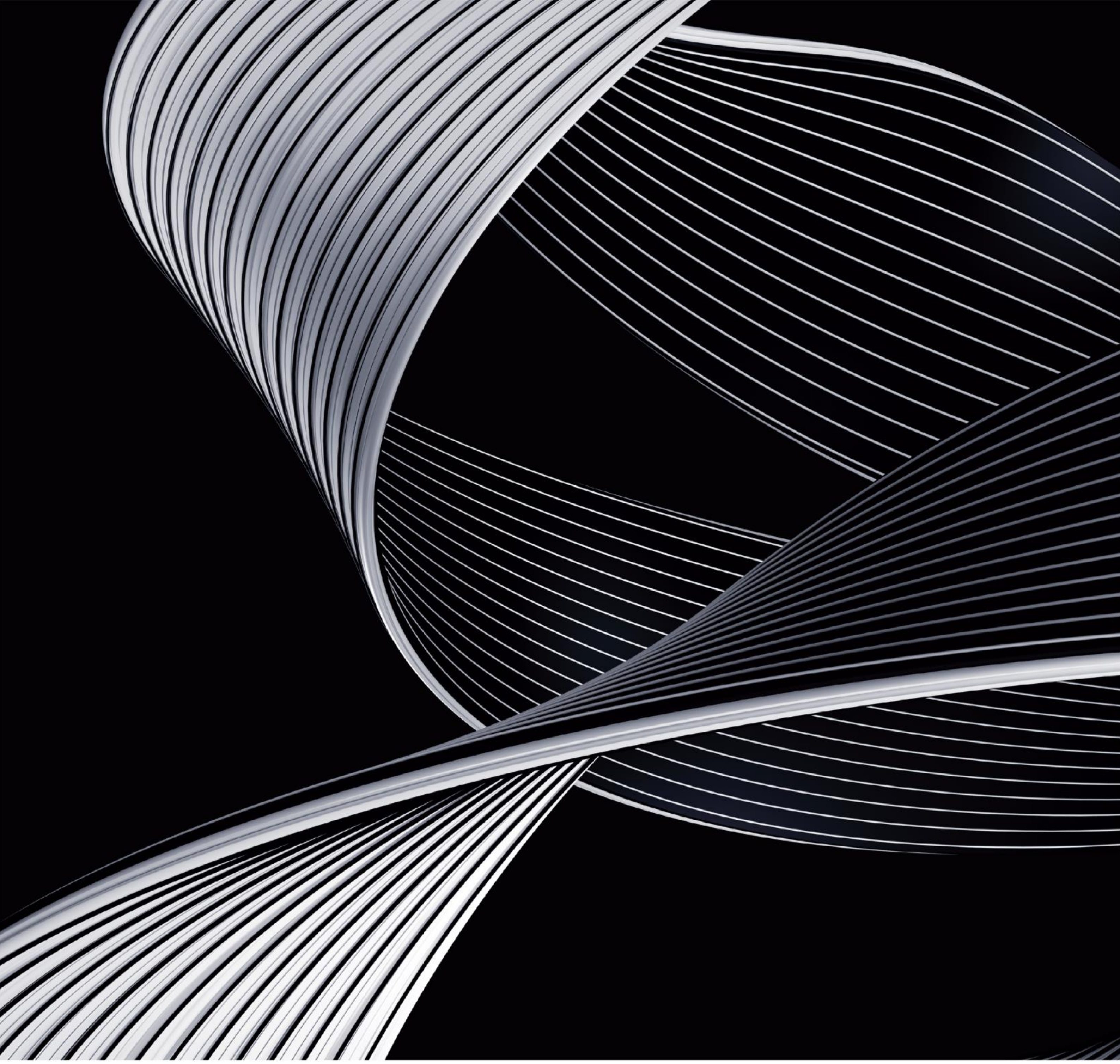

MBL Basel III Pillar 3 Capital Disclosures

March 2023

Macquarie Bank Limited
ACN 008 583 542

MACQUARIE BANK

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MACQUARIE BANK

ASX Release

MACQUARIE BANK RELEASES MARCH PILLAR 3 DISCLOSURE DOCUMENT

29 May 2023 – The Macquarie Bank Limited March 2023 Pillar 3 disclosure document was released today on the Macquarie website www.macquarie.com. These disclosures have been prepared in accordance with the Australian Prudential Regulation Authority (APRA) requirements of Prudential Standard APS 330: Public Disclosure.

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Introduction

Macquarie Bank Limited (MBL) is an Authorised Deposit taking Institution (ADI) regulated by the Australian Prudential Regulation Authority (APRA). MBL is accredited under the Foundation Internal Ratings Based Approach (FIRB) for credit risk and the Internal Model Approach (IMA) for market risk and interest rate risk in the banking book. These advanced approaches place a higher reliance on a bank's internal capital measures and therefore require a more sophisticated level of risk management and risk measurement practices. Operational risk is subject to the Standardised Measurement Approach (SMA) under APRA's revised bank capital framework which came into effect from 1 January 2023.

APRA has implemented the Basel Committee's Basel III framework, and in some areas has introduced stricter requirements (APRA superequivalence). This report details MBL's disclosures as required by APRA Prudential Standard APS 330: Public Disclosure (APS 330) as at 31 March 2023 together with the 31 March 2022 comparatives where appropriate. The disclosures as at 31 March 2023 have been prepared in accordance with APRA's revised bank capital framework. The comparative disclosures as at 31 March 2022 have not been restated to account for these regulatory changes. References to Macquarie in this report refer to the Level 2 regulatory group which includes MBL. Further details are provided in Section 1.1 Scope of Application.

This report also describes Macquarie's Risk Management Framework (RMF) and the supporting frameworks, policies and the measures adopted to monitor and report on the RMF. Detailed in this report are the key components of Macquarie's capital structure, the key risk exposures and the associated capital requirements. The key risk exposures are credit risk (including securitisation exposures, credit valuation adjustment, and exposures to central counterparties), market risk, operational risk and interest rate risk in the banking book. Each of these risks are individually discussed in later sections of this report where the individual risk components, measurement techniques and management practices are detailed. This report also presents information on the leverage and liquidity ratios.

APS 330 Table 6 (g)

Capital, Liquidity and Leverage Ratios – Level 2 regulatory group	**As at 31 March 2023**	As at 31 March 2022[1]
Common Equity Tier 1 capital ratio	**13.7%**	11.5%
Tier 1 capital ratio	**15.6%**	13.2%
Total capital ratio	**21.3%**	16.8%
Leverage ratio	**5.2%**	5.0%
Liquidity coverage ratio[2,3,4]	**214%**	189%
Net stable funding ratio[5]	**124%**	125%
Capital Ratios – Level 1 regulatory group[6]		
Common Equity Tier 1 capital ratio	**12.6%**	10.8%
Tier 1 capital ratio	**14.6%**	12.6%
Total capital ratio	**20.5%**	16.2%

Effective 1 January 2023, the minimum Common Equity Tier 1 (CET1) ratio in accordance with Prudential Standard APS 110 – Capital Adequacy is 8.75%. This includes the industry minimum CET1 requirement of 4.5%, capital conservation buffer (CCB) of 3.75% and a countercyclical capital buffer (CCyB) of 0.5%[7]. The corresponding ratios for Tier 1 and Total capital are 10.25% and 12.25%, respectively. APRA also requires ADIs to maintain a minimum leverage ratio of 3.5% effective 1 January 2023. In addition, APRA may impose ADI-specific minimum ratios which may be higher than these levels. At 31 March 2023, the Macquarie Level 1 and Level 2 regulatory group capital and liquidity ratios are above the regulatory minimum required by APRA, and the Board imposed internal minimum requirement.

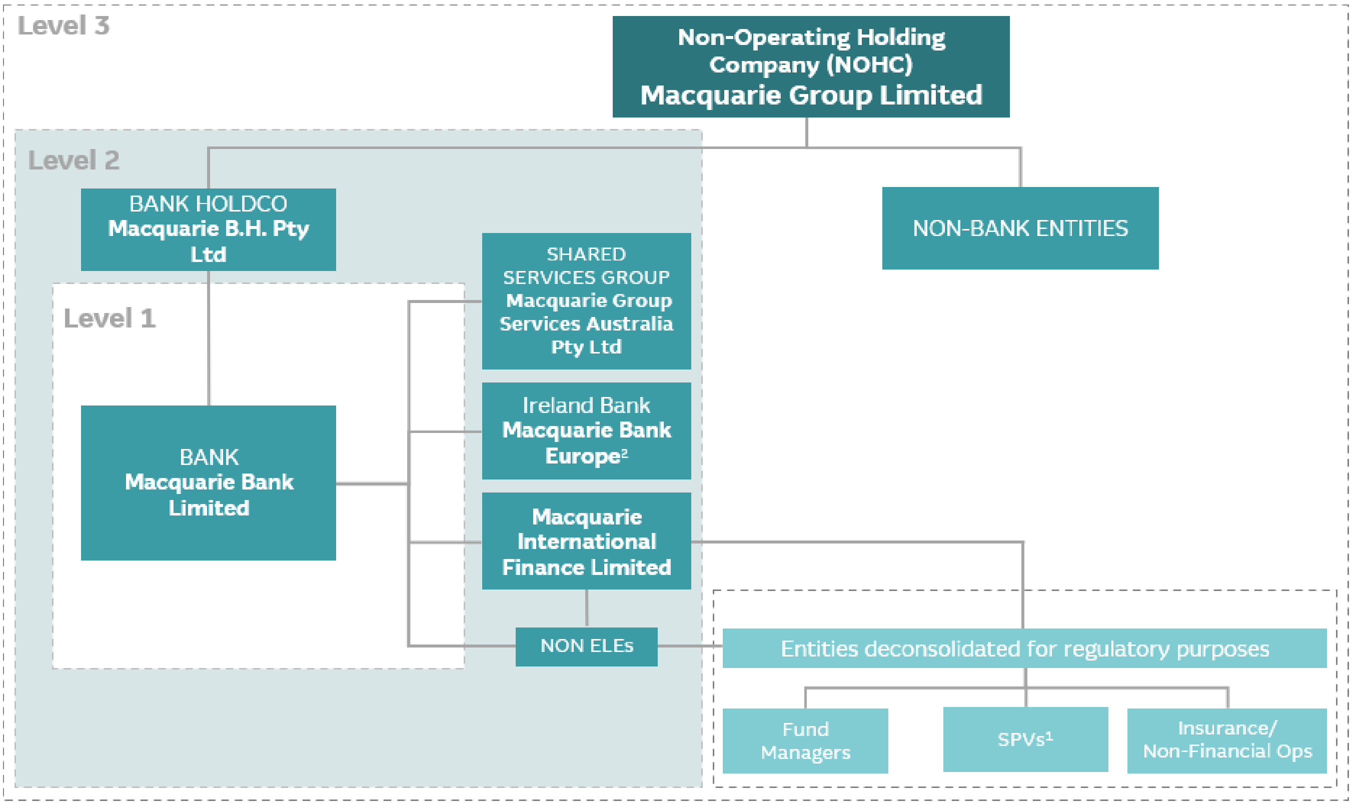
[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] The Liquidity Coverage Ratio for the 3 months to 31 March 2023 is calculated from 63 daily LCR observations (31 March 2022 is calculated from 62 daily LCR observations).
[3] APRA imposed a 15% add-on to the Net Cash Outflow component of the LCR calculation, effective from 1 April 2021. This add-on increased to 25% from 1 May 2022. Accordingly, the 3 month average LCR to 31 March 2022 includes a 15% NCO add-on and the 3 month average LCR to 31 March 2023 includes a 25% NCO add-on.
[4] Comparatives information for 31 March 2022 has been restated to conform to the MBL Basel III Pillar 3 Disclosures Restatements issued on 28 February 2023 where applicable.
[5] APRA imposed a 1% decrease to the Available Stable Funding component of the NSFR calculation, effective from 1 April 2021.
[6] APRA imposed a Level 1 operational capital overlay of $A500m on MBL, effective from 1 April 2021.
[7] The CCyB of the Level 2 regulatory group as at 31 March 2023 is 0.61%, which is rounded to 0.5% for presentation purposes. The individual CCyB varies by jurisdiction and the CCyB of the Level 2 regulatory group is calculated as a weighted average based on exposures in different jurisdictions at that time. Refer to Appendix 1 for further details on CCyB.

1. Overview

1.1 Scope of Application

MBL, as an approved ADI, is required to comply with the disclosure requirements of APS 330 on a Level 2 basis.

The regulatory consolidated group is different to the accounting consolidated group and identifies three different levels of consolidation as illustrated below:



1. These are securitisation vehicles that achieve Regulatory Capital Relief per APS 120.
2. Disclosure of Macquarie Bank Europe's Pillar 3 document is available on Macquarie's website https://www.macquarie.com/au/en/investors/regulatory-disclosures.html

Reporting levels are in accordance with APRA definitions contained in APRA Prudential Standard APS 110: Capital Adequacy. MBL represents the Level 1 regulatory group. The Level 2 regulatory group consists of MBL, its subsidiaries and its immediate parent (Macquarie B.H. Pty Ltd) but excludes certain subsidiaries of MBL which are required to be deconsolidated for APRA reporting purposes. Equity investments into these entities by the Level 2 group are required to be deducted from Common Equity Tier 1 (CET1) capital under APRA Prudential Standard APS 111 Capital Adequacy: Measurement of Capital. The subsidiaries which are deconsolidated for regulatory purposes include mortgage and leasing special purpose vehicles (SPVs) for which Macquarie has satisfied APS 120 Attachment A operational requirements for regulatory capital relief and entities conducting insurance, funds management and non-financial operations. These deconsolidated entities result in the Macquarie Level 2 group for regulatory purposes differing from MBL and its subsidiaries, the Consolidated Entity for accounting purposes. Therefore, the disclosures made in this report are for a different group of entities to those made in the financial report of MBL and its subsidiaries, the Consolidated Entity. A list of entities deconsolidated for Level 2 reporting purposes is included in Appendix 2.

References in this report to Macquarie refer to the Level 2 regulatory group as described above. Unless otherwise stated, all disclosures in this report represent the Level 2 regulatory group prepared on an APRA Basel III basis.

MBL is part of the larger Macquarie Group Limited Consolidated Group (MGL Group), which includes Macquarie Group Limited (MGL) and its subsidiaries (referred to as 'Level 3'). APS 330 does not require disclosures relating to the Level 3 Group, however, some limited Level 3 disclosures are made in this report (refer Section 4.0).

Comments on policies in this report generally reflect policies adopted across the MGL Group, unless it is stated that the policies are specific to any one part of the group.

1.2 Frequency

The qualitative disclosures in this report are required to be updated on an annual basis and more frequently if significant changes to policies are made. This report has been updated as at 31 March 2023 and policies disclosed within are effective at this time. The capital adequacy and summarised credit risk exposure quantitative disclosures are published on a quarterly basis. All other quantitative disclosures are published semi-annually in conjunction with Macquarie's half year (30 September) and annual (31 March) reporting cycles.

1.3 Report Conventions

The disclosures in this report are not required to be audited by an external auditor. However, the disclosures have been prepared on a basis consistent with information submitted to APRA. Under the revised APS 310 Audit and Related Matters, the information submitted to APRA is required to be either audited or reviewed by an external auditor at Macquarie's year end, being 31 March.

Averages have been prepared in this report for certain disclosures as required by APS 330.

All numbers in this report are in Australian Dollars and have been rounded to the nearest million, unless otherwise stated.

The disclosures as at 31 March 2023 have been prepared in accordance with the Prudential Standards that were released as part of APRA's revised bank capital framework which came into effect from 1 January 2023. Comparative information as at 31 March 2022 has not been restated to account for these regulatory changes. Where necessary, comparative information has been restated to conform with other changes in the current year, unless otherwise stated.

The Appendices include a Glossary of Terms used throughout this document.

1.4 Overview of the Basel III Regulatory Capital Framework

Basel III is designed to raise the resilience of the banking sector by strengthening the regulatory capital framework. The framework seeks to increase the sensitivity to risk in the capital calculations and to ensure that this is aligned with an ADI's internal processes for assessing risk. Consequently, there is a number of different approaches to risk calculation that allow use of internal models to calculate regulatory capital. A bank may be accredited to use the advanced approaches when it can demonstrate the integrity and sophistication of its risk management framework. It must also ensure that its internal estimates of risk are fully integrated into corporate governance functions as well as internal calculations of capital. Further to this, the most advanced approaches are available if a bank has sufficient depth and history of default data to enable it to generate its own Loss Given Default (LGD) and Probability of Default (PD) estimates based on its own loss experience.

The requirements of Basel III are contained within three broad sections or 'Pillars'.

1.4.1 Pillar 1

The first section of the Basel III framework covers the rules by which Risk Weighted Assets (RWA) and capital adequacy must be calculated.

Macquarie has been approved by APRA to apply the FIRB approach for credit risk capital calculation. This approach utilises the PD and internal rating assigned to the obligor. The exposure is weighted using this internal PD and a LGD value set by APRA. APRA-assigned Credit Conversion Factors are applied to off balance sheet exposures based on the nature of the exposure. Market risk and interest rate risk in the banking book is calculated using the internal model approach. Operational risk is calculated using the SMA.

1.4.2 Pillar 2

Pillar 2 (the Supervisory Review Process) of the Basel III framework requires ADIs to make their own assessments of capital adequacy in light of their risk profile and to have a strategy in place for maintaining their capital levels. Macquarie's Internal Capital Adequacy Assessment Process (ICAAP) addresses its requirements under Pillar 2.

The ICAAP is part of Macquarie's overall risk management framework; its key features include:

- Comprehensive risk assessment process
- Internal assessment of capital adequacy using Macquarie's economic capital model (refer Section 4.1)
- Risk appetite setting (refer Section 4.2)
- Capital management plans designed to ensure the appropriate level and mix of capital given Macquarie's risk profile; and
- Regular reporting of capital adequacy and monitoring of risk profile against risk appetite.

Macquarie's ICAAP is subject to Board and Senior Management oversight and internal control review.

1.4.3 Pillar 3

These disclosures have been formulated in response to the requirements of Pillar 3 of the Basel III Framework. APRA has laid down the minimum standards for market disclosure in its APS 330.

This report includes a breakdown of both on and off-balance sheet exposures, RWA and Liquidity measures. The report consists of sections covering:

- Risk Governance and Risk Management Framework
- Capital Structure
- Capital Adequacy
- Credit Risk Measurement
- Calculation of Credit Risk Exposures
- Provisioning
- Credit Risk Mitigation
- Securitisation
- Credit Valuation Adjustment
- Exposures to Central Counterparties
- Market Risk
- Equity Risk
- Operational Risk
- Leverage Ratio
- Liquidity Coverage Ratio
- Net Stable Funding Ratio

2. Risk Governance and Risk Management Framework

2.1 Risk Governance at Macquarie

Role of the Board

The role of the MBL Board is to promote the long-term interests of MBL, taking into account obligations it must discharge as an authorised deposit-taking institution.

The MBL Board is ultimately responsible for MBL's Risk Management Framework (RMF) and the oversight of its operation by Management. The MBL Board approves the MBL Risk Appetite Statement and the Group's Risk Management Strategy.

Role of Management

The Group Heads of the Operating and Central Service Groups are responsible for implementation of the risk management framework in their groups. They are required semi-annually to attest that key risks have been identified and are adequately controlled in their groups. These management representations support the sign-off of the half year and the full year financial statements.

Three lines of defence

Macquarie's approach to risk management adopts the 'three lines of defence' model which sets risk ownership responsibilities functionally independent from oversight and assurance:

- primary responsibility for day-to-day risk management lies with the business. The risk owner is the first line of defence. All staff throughout Macquarie are expected to manage risks in accordance with the risk management framework
- the Risk Management Group (RMG) forms the second line of defence and provides independent and objective review and challenge, oversight, monitoring and reporting in relation to Macquarie's material risks
- Internal Audit, as the third line, provides independent and objective risk-based assurance on the compliance with, and effectiveness of, Macquarie's financial and risk management framework.

2.2 Macquarie's Risk Management Framework

Macquarie's RMF is the totality of systems, structures, policies, processes and people within Macquarie that identify, measure, monitor, report and control or mitigate all internal and external sources of material risk. Material risks are those that could have a material impact, financial or non-financial on Macquarie. Macquarie's material risks include aggregate, asset, conduct, country, credit, environmental and social, equity, financial crime, legal, liquidity, market, operational (including cyber and information security), regulatory and compliance, reputational, strategic, tax, and work health and safety risks. The RMF is applied appropriately throughout Macquarie.

Core risk management principles

Macquarie's approach to risk management is based on stable and robust core risk management principles. These are:

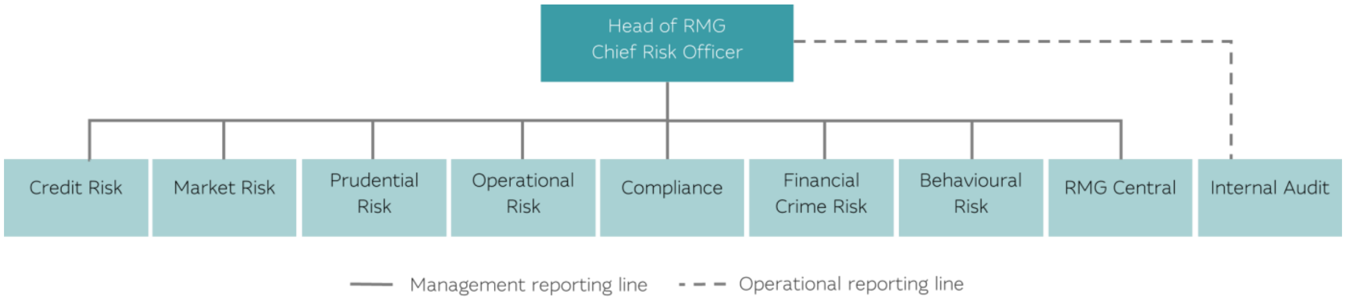
- **Ownership of risk at the business level:** Group Heads are responsible for ownership of material risks that arise in, or because of, the business operations, including identification, measurement, evaluation, monitoring, control and mitigation of these risks. Before making decisions, clear analysis of the risks is sought to ensure those decisions are consistent with the risk appetite and strategy of Macquarie.
- **Understanding worst case outcomes:** Macquarie's risk management approach is based on examining the consequences of worst-case outcomes and determining whether these are acceptable and within Macquarie's risk appetite. This approach is adopted for all material risk types and is often achieved by stress testing. Macquarie operates a number of sophisticated quantitative risk management processes, but the foundation of the approach is the informed consideration of both quantitative and qualitative inputs by experienced professionals.

- **Requirement for an independent sign off by RMG:** Macquarie places significant importance on having a strong, independent risk management function charged with signing off all material risk acceptance decisions. It is essential that RMG has the capability to do this effectively. RMG has invested in recruiting skilled professionals from a range of industries, including those with trading or advisory and capital markets experience. For all material proposals, RMG's opinion must be sought at an early stage in the decision-making process. The approval document submitted to senior management must include independent input from RMG on risk and return.

2.3 Risk Management Group Structure

RMG, which forms the second line of defence, is an independent and centralised function responsible for independent and objective review and challenge, oversight, monitoring and reporting in relation to Macquarie's material risks. RMG designs and oversees the implementation of the risk management framework.

RMG is structured into specialist functional divisions (depicted below) and adopts an integrated approach to risk analysis and management across risk classes. RMG's assessment and monitoring of risks involves a collaborative effort across the divisions to ensure a detailed analysis takes place both at the individual and aggregate risk level.



2.4 Internal Audit

The Internal Audit Division, as the third line, provides independent and objective risk-based assurance to the Board Audit Committee (BAC), Board, other relevant Board Committees and senior management on the compliance with, and effectiveness of, Macquarie's financial and risk management framework, including its governance, systems, structures, policies, processes and people for managing material risks. The Internal Audit division assesses whether material risks have been properly identified by management and reported to the Board or relevant Board Committees, and whether key internal controls have been properly designed and are operating effectively and sustainably to mitigate those material risks.

The BAC has primary power of direction over the Internal Audit Division and is accountable for reviewing the effectiveness of the Internal Audit function. The Head of Internal Audit reports functionally to the BAC and is primarily accountable to it. The Head of Internal Audit has unrestricted access to the BAC (and its Chair) and meets privately with the BAC members at least annually. The BAC monitors and reviews the performance, objectives, rating, remuneration and degree of independence of the Head of Internal Audit. The BAC also approves any appointment and removal of the Head of Internal Audit. The Head of Internal Audit reports operationally to the CRO for day-to-day management. For audit matters relating to RMG, the role of the CRO is substituted by the CEO.

3. Capital Structure

3.1 Total Available Capital

The Macquarie Level 2 regulatory group capital supply is detailed in the table below.

	As at 31 March 2023 $m	As at 31 March 2022[1] $m
Common Equity Tier 1 capital		
Paid-up ordinary share capital	**10,161**	9,562
Retained earnings	**9,135**	7,962
Reserves	**1057**	434
Gross Common Equity Tier 1 capital	**20,353**	17,958
Regulatory adjustments to Common Equity Tier 1 capital:		
Goodwill	**39**	36
Deferred tax assets	**1,044**	853
Net other fair value adjustments	**150**	47
Intangible component of investments in subsidiaries and other entities	**39**	37
Loan and lease origination fees and commissions paid to mortgage originators and brokers	**656**	582
Shortfall in provisions for credit losses	**218**	302
Equity exposures	**998**	952
Capitalised Software	**12**	22
Other Common Equity Tier 1 capital deductions	**137**	152
Total Common Equity Tier 1 capital deductions	**3,293**	2,983
Net Common Equity Tier 1 capital	**17,060**	14,975
Additional Tier 1 capital		
Additional Tier 1 capital instruments	**2,418**	2,297
Gross Additional Tier 1 capital	**2,418**	2,297
Deductions from Additional Tier 1 capital	**-**	-
Net Additional Tier 1 capital	**2,418**	2,297
Total Net Tier 1 capital	**19,478**	17,272
Tier 2 capital		
Tier 2 capital instruments and other	**7,154**	4,645
Total capital base	**26,632**	21,917

3.2 Common Equity Tier 1 Capital

Macquarie's Common Equity Tier 1 capital under Basel III consists of ordinary share capital, retained earnings and certain reserves.

3.3 Additional Tier 1 Capital

Macquarie's Tier 1 capital consists of Common Equity Tier 1 capital and Additional Tier 1 capital (hybrids).

Macquarie's Additional Tier 1 capital consists of Macquarie Additional Capital Securities (MACS), Bank Capital Notes 2 (BCN2) and Bank Capital Notes 3 (BCN3).

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

MACS were issued by MBL, acting through its London Branch in March 2017. MACS are subordinated, unsecured notes that pay discretionary, non-cumulative, semi-annual fixed rate cash distributions. Subject to certain conditions the MACS may be redeemed on 8 March 2027, or every 5th anniversary thereafter. MACS can be exchanged for a variable number of fully paid MGL ordinary shares on an acquisition event (where a person acquires control of MBL or MGL); where MBL's Common Equity Tier 1 capital ratio falls below 5.125%; or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support).

BCN2 were issued by MBL in June 2020 and are quoted on the Australian Securities Exchange. The BCN2 pay discretionary, quarterly floating rate cash distributions equal to three-month BBSW plus 4.70% per annum margin, adjusted for franking credits. These instruments are non-cumulative and unsecured and may be redeemed at face value on 21 December 2025, 21 June 2026 or 21 December 2026 (subject to certain conditions being satisfied) or earlier in specified circumstances. The BCN2 can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 21 December 2028; exchanged earlier upon an acquisition event (with the acquirer gaining control of MGL or MBL); or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support).

BCN3 were issued by MBL in August 2021 and are quoted on the Australian Securities Exchange. The BCN3 pay discretionary, quarterly floating rate cash distributions equal to three-month BBSW plus 2.90% per annum margin, adjusted for franking credits. These instruments are non-cumulative and unsecured and may be redeemed at face value on 7 September 2028, 7 March 2029, or 7 September 2029 (subject to certain conditions being satisfied) or earlier in specified circumstances. The BCN3 can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 8 September 2031; exchanged earlier upon an acquisition event (with the acquirer gaining control of MGL or MBL); or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support).

3.4 Tier 2 Capital

Macquarie's Tier 2 capital consists of a portion of certain credit loss reserves plus subordinated debt instruments.

MBL has issued cumulative convertible subordinated debt amounting to $US750 million in June 2015, $A750 million in May 2020, $US750 million in June 2020, $US1,000 million in March 2021, $A750 million in June 2021, $A850 million in June 2022 and $US1,000 million in January 2023 which are Basel III compliant. This is reported at the value of liability at the period end date adjusted for any amortisation required under APS 111.

3.5 Restrictions on Capital

The Macquarie group maintains an internal capitalisation framework to ensure a prudent approach to managing subsidiary capitalisation and ratings. Various restrictions or costs exist on the transfer of capital within the Macquarie accounting consolidated group. For example:

- Regulated and licensed entities such as Australian Financial Services Licensed (AFSL) entities are required to maintain minimum capital levels to comply with their regulatory requirements. Macquarie seeks to maintain a sufficient level of capital within these entities to ensure compliance with these regulations
- Where retained earnings are transferred from related entities, tax costs may be payable on repatriation which may reduce the actual amount of available capital
- As an ADI, Macquarie is subject to the prudential limits imposed by APRA Prudential Standard APS 222 Associations with Related Entities
- FMG and RMG also manage and monitor internal limits on exposures to related entities which, combined with APRA's prudential limits, seeks to minimise contagion risk.

4. Capital Adequacy

4.1 Capital Management

Capital management strategy

Macquarie's capital management strategy is to maximise shareholder value through optimising the mix, level and use of capital resources, whilst also providing the flexibility to take advantage of opportunities as they may arise.

The capital management objectives are to maintain sufficient capital resources to:

- Support Macquarie's business and operational requirements
- Safeguard interests of depositors and Macquarie's ability to continue as a going concern
- Exceed regulatory requirements; and
- Support Macquarie's credit rating.

Macquarie's capital management strategy uses both internal and external measures of capital. Internally, Macquarie has developed an Economic Capital Adequacy Model (ECAM) that is used to quantify MGL Group and MBL's Level 2 group aggregate level of risk, including for specific risk types such as equity, credit, market and operational risk. Externally, Macquarie is subject to minimum capital requirements imposed by APRA on a Level 1, Level 2 and Level 3 basis.

The two measures of capital are used to support business decision making including:

- Capital adequacy assessment
- Risk appetite setting; and
- Risk adjusted performance measurement.

Capital adequacy assessment

Capital adequacy is assessed on a regulatory and economic basis[1] for both MGL Group (Level 3) and the Level 1 and 2 regulatory groups. The assessment is conducted in accordance with the ICAAP framework (refer Section 1.4.2), with results reported to the MGL Board, MBL Board and senior management on a regular basis, together with projections of capital adequacy under a range of scenarios.

Capital requirements are assessed as follows:

Entity	Regulatory (Basel III)	Economic (ECAM)
Level 1 regulatory group	Capital to cover RWA and regulatory deductions, according to APRA's ADI prudential standards	n/a
Level 2 regulatory group	Capital to cover RWA and regulatory deductions, according to APRA's ADI prudential standards	Internal model, covering exposures of the Bank Group
Level 3 regulatory group (MGL Group)	Level 2 regulatory group capital requirement plus economic capital requirement of the Non-Bank Group	Internal model, covering all exposures of the MGL Group

[1] Economic capital adequacy is assessed for MGL Group and Level 2 only.

The Non-Bank Group's capital requirement is calculated using Macquarie's ECAM. The ECAM is based on similar principles and models as the Basel III regulatory capital framework for banks, as shown in the table below with both calculating capital at a one year, 99.9% confidence level. The table below shows a comparison of Basel III and ECAM methodologies for key risk types.

Risk[1]	Basel III[2]	ECAM
Credit	Capital requirement generally determined by Basel III IRB formula, with some parameters specified by the regulator (e.g. loss given default estimates for wholesale counterparties)	Capital requirement generally determined by Basel III IRB formula, but with internal estimates of key parameters
Equity	Harmonised Basel III: 250% or 400% risk weight, depending on the type of investment, Deduction from Common Equity Tier 1 above a threshold APRA Basel III: 100% Common Equity Tier 1 deduction[3]	Extension of Basel III credit model to cover equity exposures. Capital requirement between 34% and 84% of face value; average 54%
Market	3 times 10-day 99% Value at Risk (VaR) plus 3 times 10-day 99% Stressed Value at Risk (SVaR), plus a specific risk charge	Scenario based approach
Operational	Standardised Measurement Approach	Advanced Measurement Approach

The MGL Group and the Level 1 and 2 regulatory groups are well capitalised. Surplus capital is available to support growth, provide strategic flexibility, accommodate regulatory change and capital volatility. Macquarie actively manages the sensitivity of its capital position to foreign currency movements in order to reduce volatility.

4.2 Risk Appetite Setting

Macquarie's risk appetite is the degree of risk that the Group is prepared to accept in pursuit of its strategic objectives and business plan. This is detailed in Macquarie's Board approved *Risk Appetite Statement* (RAS). The RAS describes Macquarie's risk appetite, being the nature and amount of risk that Macquarie is willing to accept in pursuit of an appropriate and resilient long-term return on its capital. The RAS states transactions must generate returns proportionate to the risks. Accordingly, a risk and return analysis is required for all significant new deals, products and businesses.

The RAS is accessible to all staff and is referred to in the *Code of Conduct*. The principles of the RAS are implemented primarily through the following mechanisms:

Policies

Policies are a key tool to ensure that risks taken are consistent with the Board approved RAS. They set out the principles that govern the acceptance and management of risks. They are designed to influence and determine all major decisions and actions, and all activities must take place within the boundaries set by them.

Limits

In many cases, limits translate risk appetite principles into hard constraints on individual businesses. These consist of granular limits for specific risk types as well as the Global Risk Limit that constrains Macquarie's aggregate level of risk. Macquarie sets the Global Risk Limit with reference not only to capital but also to earnings so that in a prolonged, severe downturn, earnings and surplus capital are sufficient to cover losses and maintain market confidence in Macquarie.

Under Macquarie's 'no limits, no dealing' approach, compliance with specific limits is monitored by the Business and RMG. These granular limits are set to allow businesses to achieve their near-term plans while promoting a reassessment of the opportunity and associated risks as the limit is approached.

[1] The ECAM also covers non-traded interest rate risk and the risk on assets held as part of business operations, including fixed assets, goodwill, intangible assets and capitalised expenses.
[2] Basel III requirements shown. APRA has implemented the Basel III framework (APRA Basel III), and in some areas has introduced stricter requirements (APRA superequivalence).
[3] Includes all Banking Book equity investments, plus net long Trading Book holdings in financial institutions.

New product and business approval process

All new businesses and significant changes to existing products, processes or systems are subject to a rigorous, interactive approval process that adheres to the principles stated in the RAS. This results in constructive dialogue on risk matters between RMG and the relevant business.

This formal process is designed so that the proposed transaction or operation can be managed properly, without creating unwanted risks for Macquarie. All relevant risks are reviewed to ensure they are identified and addressed prior to implementation. These risks are also monitored on an ongoing basis. The approvals of RMG, Financial Management Group, Legal and Governance and other relevant stakeholders within Macquarie are obtained. RMG also checks that all necessary internal approvals are obtained prior to commencement. The Operational Risk division within RMG oversees the new product and business approval process.

The Risk Appetite Test – An aggregate stress test

The key tool that the Board uses to quantify aggregate risk appetite is the Risk Appetite Test. This is a Macquarie wide stress test that seeks to confirm that we maintain throughout, and emerge from a severe economic downturn with sufficient capital to meet our minimum regulatory requirements without taking any mitigating actions.

The Risk Appetite Test asserts that potential losses must be less than the Global Risk Limit, which comprises underlying earnings that Macquarie can achieve in a downturn (downturn forward earnings capacity) plus surplus regulatory capital. Consideration is also given to the year-by-year outcome of the modelled downturn scenario to ensure that market confidence is maintained.

Operating Groups and Divisions estimate downturn forward earnings capacity under a downturn scenario provided to them by RMG. RMG reviews the estimates for consistency with scenario assumptions and across groups.

Aggregate risk breaks down into two categories:

- **Business risk,** meaning decline in earnings through deterioration in volumes and margins due to market conditions; and
- **Potential losses,** including potential credit losses, write downs of equity investments, operational risk losses and losses on trading positions.

Business risk is captured by the difference in base case and downturn forward earnings estimates. Potential losses are quantified using stress testing models, which translate scenario parameters (GDP, unemployment, interest rates etc) into loss and transition rates. A principal use of the Risk Appetite Test is in setting the Equity Risk Limit (ERL). This limit constrains Macquarie's aggregate level of risk arising from principal equity positions, managed fund holdings, property equity investments and other equity investments. Any changes to the ERL are sized to ensure that even under full use of this limit and allowing for growth in other risk types, the requirements of the Risk Appetite Test will be met.

4.3 Risk Weighted Assets (RWA)

RWA are a risk-based measure of exposures used in assessing overall capital usage of the Level 2 regulatory group. When applied against eligible regulatory capital the overall capital adequacy ratio is determined. RWA are calculated in accordance with APRA Prudential Standards.

Effective 1 January 2023, APRA's revised bank capital framework introduced new asset classes used to determine RWA. These include Corporate – Income-producing real estate (IPRE) and Financial Institutions. Where relevant, the new classifications have been applied accordingly across the disclosures for 31 March 2023 in this document.

The table below sets out the RWA for the Macquarie Level 2 regulatory group.

APS 330 Table 6 (b) to (f)

	As at 31 March 2023 $m
Credit risk	
Subject to IRB approach	
Corporate[1]	29,686
SME Corporate	5,227
Corporate - IPRE	2,455
Sovereign	450
Financial Institution[2]	11,289
Residential Mortgages[3]	21,066
Other Retail	2,048
Retail SME	1,682
Total RWA subject to IRB approach	73,903
Specialised lending exposures subject to slotting criteria[4]	6,973
Subject to Standardised approach	
Corporate	1,778
Residential Mortgages	801
Other Retail	867
Total RWA subject to Standardised approach	3,446
Credit risk RWA for securitisation exposures	636
Credit Valuation Adjustment RWA	8,975
Exposures to Central Counterparties RWA	476
RWA for Other Assets[5]	3,076
Total Credit risk RWA	97,485
Market risk RWA	9,743
Operational risk RWA	15,828
Interest rate risk in the banking book RWA	1,920
Total RWA	124,976

[1] 'Corporate' asset class includes Large Corporates.
[2] 'Financial Institution' asset class includes banks and other corporate financial institutions.
[3] Residential mortgages RWA as at 31 March 2023 includes a $2.3bn overlay as advised by APRA for the purpose of calibrating MBL's IRB residential mortgages model.
[4] Specialised lending exposures subject to supervisory slotting criteria are measured using APRA determined risk weightings.
[5] The major components of Other Assets are unsettled trades, fixed assets and residual value of operating leases.

APS 330 Table 6 (h) & (i)

Effective 1 January 2023, Prudential Standard APS 110 Capital Adequacy introduced a capital floor which places a limit on the internal modelling of RWA, setting total IRB RWA to a minimum of 72.5% of the RWA calculated under the standardised approach. The table below presents MBL's capital floor as at 31 March 2023. There was no capital floor adjustment required.

RWA under the standardised approach	**As at 31 March 2023 $m**
Credit Risk RWA	**139,513**
of which residential mortgages subject to IRB approach	**44,004**
Market Risk RWA	**9,743**
Operational Risk RWA	**15,828**
Interest rate risk in the banking book RWA	**-**
Total	**165,084**

RWA prior to application of capital floor	
Credit Risk RWA	**97,485**
of which residential mortgages subject to IRB approach	**21,066**
Market Risk RWA	**9,743**
Operational Risk RWA	**15,828**
Interest rate risk in the banking book RWA	**1,920**
Total	**124,976**
Capital floor (72.5% of risk-weighted assets under the standardised approach)	**119,686**
Capital floor adjustment	**N/A**

The table below sets out the 31 March 2022 RWA exposures for the Macquarie Level 2 regulatory group.

	As at 31 March 2022[1] $m
Credit risk	
Subject to IRB approach	
Corporate	39,861
SME Corporate	4,529
Sovereign	3,542
Bank	1,659
Residential Mortgages	26,802
Other Retail	2,856
Retail SME	2,474
Total RWA subject to IRB approach	81,723
Specialised lending exposures subject to slotting criteria[2]	8,983
Subject to Standardised approach	
Corporate	52
Residential Mortgages	581
Other Retail	1,026
Total RWA subject to Standardised approach	1,659
Credit risk RWA for securitisation exposures	718
Credit Valuation Adjustment RWA	12,294
Exposures to Central Counterparties RWA	525
RWA for Other Assets	2,585
Total Credit risk RWA	108,487
Market risk RWA	10,230
Operational risk RWA	10,335
Interest rate risk in the banking book RWA	1,588
Total RWA	130,640

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] Specialised lending exposures subject to supervisory slotting criteria are measured using APRA determined risk weightings.

5. Credit Risk Measurement

5.1 Credit Risk Overview

Credit risk is defined as the risk that a counterparty will fail to complete its contractual obligations when they fall due (default risk) or changes in the creditworthiness of the obligor (migration risk). The consequent loss is either the amount of the loan or financial obligation not paid back, the change in the value of a non-traded debt instrument, or the loss incurred in replicating a trading contract with a new counterparty.

RMG Credit maintains a comprehensive and robust framework for the identification, analysis and monitoring of credit risks arising in each business. Key aspects of this framework are detailed below.

5.2 Credit Risk Management

Macquarie's philosophy on credit risk management reflects the principle of separating prudential control from operational management. The responsibility for approval of initial credit limits is delegated to specific individuals.

Credit risk approvals reflect two principles:

- A requirement for dual sign off; and
- A requirement that, above specified limits, all credit exposures must be approved outside the business line proposing to undertake them.

5.2.1 Approval of Exposures

The MGL and MBL Boards are responsible for establishing the framework for approving credit exposures. The MGL and MBL Boards delegate discretions to approve credit exposure to designated individuals within the Group whose capacity to prudently exercise authority has been assessed.

Operating Groups are assigned modest levels of credit discretions. Credit exposures above these levels are assessed independently by RMG and approved by experienced RMG staff, MBL CEO, MGL CEO, MBL Board and MGL Board as required.

Macquarie enforces a strict 'no limit, no dealing' rule. All proposed transactions are analysed and approved by designated individuals before they can proceed.

All wholesale credit exposures are assessed at least once a year, or more frequently if required. Retail credit exposures are monitored on a portfolio basis.

5.2.2 Assessment of Macquarie Ratings

All corporate, sovereign and bank counterparties (wholesale) customer limits and exposures are allocated a Macquarie Group rating (MQ rating) which broadly correspond with Standard and Poor's (S&P) and Moody's Investor Services credit ratings. Each MQ rating has been assigned a PD derived from Standard and Poor's long-term average one year default rates for similarly rated obligors. A LGD percentage is additionally assigned to each limit and exposure, reflecting the economic loss estimated to result if default occurs, taking into account the security supporting the credit exposure.

Ratings provided by External Credit Assessment Institutions (ECAI) are considered throughout the rating process but are supplementary to the internal rating process.

The table on next page outlines the internal MQ Ratings relative to ECAI ratings.

MQ ratings are used to:

- Assess the default risk of credit exposures for management reporting, credit approval of limits, risk attribution and regulatory purposes
- Assist in credit decisions by providing guidelines and tools that promote a more consistent analytical approach
- Assist in the process of sharing credit knowledge (including knowledge of specialised and unique companies, industries and products); and

- Provide a basis for disclosing and reporting to investors and the market.

Each MQ rating band is associated with an estimate of the PD by the counterparty on its financial obligations and provides a consistent measure across the Level 2 regulatory group. Applicable at either the borrower or transaction level, a rating must be justified and set as part of the credit approval and review process.

The ratings process combines a quantitative analysis by way of scoring industry specific risk factors and a qualitative assessment based on expert judgement.

Rating System

Macquarie	S&P	Moody's
MQ1	AAA	Aaa
MQ2	AA+ AA AA–	Aa1 Aa2 Aa3
MQ3	A+	A1
MQ4	A	A2
MQ5	A–	A3
MQ6	BBB+	Baa1
MQ7	BBB	Baa2
MQ8	BBB–	Baa3
MQ9	BB+	Ba1
MQ10	BB	Ba2
MQ11	BB–	Ba3
MQ12	B+	B1
MQ13	B	B2
MQ14	B–	B3
MQ15	CCC+ CCC CCC–	Caa1 Caa2 Caa3
MQ16	CC C	Ca C
MQ99	D	D

For wholesale counterparties, Macquarie utilises a number of industry templates and a sovereign template to assess the appropriate MQ ratings. These industry templates are designed to ensure that Macquarie ratings take into account the different risk factors that affect different industries. Analysts are required to input a range of quantitative and qualitative factors and then consider the MQ rating output. At the same time as considering the appropriate MQ rating, analysts are also required to consider the appropriate LGD. For economic capital purposes, LGDs are stressed estimates, taking into account the security, jurisdiction, seniority and quality of the balance sheet. For regulatory capital, MBL uses the APRA supervisory estimates for LGDs.

For retail counterparties, PDs and LGDs are assigned to retail pools. Retail exposures are allocated to pools, such that each pool has homogenous risk. PDs and LGDs are calculated using the following methods:

- **PDs:** calculate the long run average default rate from the internal and external default data available for each pool. When internal data is not available in sufficient quantity, external data is used but only in the case where it is relevant to the pool.
- **LGDs:** consider a downturn scenario and the loss that would be incurred for this scenario on defaulted loans in each pool.

Macquarie applies a standard definition of default in accordance with Prudential Standard APS 220 Credit Risk Management. An obligor is considered defaulted when it is either (i) 90 days past due; or (ii) unlikely to pay. 'Unlikely to pay' is defined in Macquarie policies based on APRA standards.

All templates and models are validated annually by RMG Model Risk Management with oversight from the Credit Models Review Committee. Validation includes the following activities:

- Validation of wholesale MQ ratings templates
- Wholesale ratings migration analysis
- Validation of wholesale PD, LGD and Exposure at Default (EAD) estimates
- Validation of retail PD, LGD and EAD estimates; and
- Validation of any new or changes to existing credit risk models.

Macquarie has developed system functionality to support the allocation of internal ratings. This application ensures that all supporting factors and weightings are stored together with the system generated rating. Approvers have access to all of these details through the credit approval process. Details are also maintained of any rating override which must be accompanied by specific commentary from the credit analyst, and which is subject to regular review.

Macquarie considers that ratings are an integral part of determining the creditworthiness of the obligor. However, Macquarie does not believe that model and template output should replace thorough and thoughtful analysis. In addition to the system details, credit analysts must also provide specific justification of the internal rating as part of their overall credit analysis of each counterparty. Credit approvers consider and approve the internal rating for the counterparty in relation to the size and tenor of their proposed credit limits.

All proposals for significant deals, products and businesses must contain an analysis of risk adjusted returns, based on the ECAM which for credit exposures is a function of the assessed credit rating (together with other factors such as maturity and estimates of LGD). In assessing these proposals, the Executive Committee and Board consider these returns together with other relevant factors. They therefore form an important element in ensuring the visibility and impact of the MQ rating to the overall risk acceptance decision.

Risk adjusted performance metrics for each business unit are prepared on a regular basis and distributed to senior management and the Board as well as to business units. These performance metrics are based on Regulatory Capital and Economic Capital usage and are a factor when allocations of performance-based remuneration are determined for each business.

5.2.3 Measuring and Monitoring Exposures

Credit exposures are calculated differently according to the nature of the obligation. Materially all loan assets are reported at amortised cost, whereas derivative contracts are reported at fair value according to both internal and external regulatory measures of Counterparty Credit Exposure. Exposures are assessed in the context of the replacement cost of the contract should the counterparty default prior to the maturity of the trade. For regulatory purposes, EAD is calculated according to the Standardised Approach to Counterparty Credit Risk (SA CCR) outlined in APRA ADI Prudential Standards 180 (APS 180) and comprises of replacement cost (RC) and potential future exposure (PFE). The RC is a function of derivative revaluation, collateralisation and the terms of any variation margin agreement in place with a counterparty. The PFE is a function of the outstanding notional of derivative contracts with a counterparty, the nature of these contracts, the level of collateralisation and whether these contracts are subject to variation margining. The sum of the RC and the PFE is subject to a regulatory prescribed scaling factor, the alpha multiplier, which equals 1.4.

The internal measure of counterparty credit exposure is calculated as a function of market movements. A range of exposure profiles are calculated using models based simulated scenarios through the life of the portfolio, the resultant exposure is then ranked to reflect different confidence levels. At a minimum, counterparty credit limits are set for all businesses against a consistent low probability (high confidence) profile. The effect of this limit framework is to ensure that there is a low probability of exposures exceeding the original approved limit. The models and parameters used to determine future asset prices and consequent portfolio exposures are reviewed and approved by RMG quarterly, significant changes in volatility or market conditions result in more frequent reviews.

High confidence level exposure measures are supplemented by regular and ad hoc exposure sensitivity analysis to evaluate the effect of extreme stress on the portfolio.

Exposure relating to derivatives are calculated on a net basis where appropriate legal netting arrangements are in effect. The details of what products can be netted for each counterparty are recorded in legal documentation systems. These systems are tightly integrated into the exposure calculation functionality and serve to ensure that netting is only performed when the legal basis for this has been formally assessed and confirmed.

Where trading gives rise to settlement risk, this risk is normally assessed at full face value of the settlement amount. However, Macquarie utilises a number of market standard clearing mechanisms to ensure that the bulk of settlements are affected on a secured basis or through exchanges where a Delivery vs payment (DVP) settlement process is ensured.

Contingent exposures arising from the issuance of guarantees, letters of credit and performance bonds are also reported daily.

On and off-balance sheet exposures are considered together for approval, monitoring and reporting purposes. Credit exposures of all types are calculated and reported daily.

Each business is responsible for calculating their credit exposures to ensure that they stay within credit limits. In addition, these exposures are supplied to RMG Credit on a daily basis for centralised limit monitoring. Any excesses identified are investigated and escalated as appropriate to both business line and RMG management. All wholesale limits and ratings are reviewed at least once a year, or more frequently if necessary, to ensure any deterioration is identified and reflected in an adjustment to limits and/or their MQ rating. Furthermore, other indicators of deterioration in credit quality are regularly monitored, such as share price and credit default swap spread movements, covenant breaches and external credit ratings downgrades. Where appropriate, these are reported to senior management and where recoverability is in doubt, appropriate provisions are held.

A review of the Credit, Equity and Asset Portfolio analysing exposure concentrations by counterparty, region, industry and credit quality is carried out quarterly and reported to the Board semi-annually. Policies are in place to manage and limit large exposures to single counterparties and sectoral concentrations.

5.2.4 Credit Assurance

Credit Assurance (CA) is a centralised function within RMG which independently verifies the effectiveness of Macquarie's credit risk management. The role of the CA is to provide an independent assurance of analysis and process to support credit quality and the effectiveness of credit controls.

Key responsibilities are:

- Assuring the quality of wholesale credit approvals through sample testing
- Reporting on the effectiveness (design and performance) of RMG Credit's critical controls including sample testing to ensure compliance with key Credit policies and the effectiveness of critical controls; and
- Overseeing Business (Retail) CA functions in Banking and Financial Services (BFS) and Commodities and Global Markets (CGM).

RMG CA reports to the RMG Head of Operational Risk and Governance to ensure independence. In addition to regular reporting to senior management and the Chief Risk Officer, CA is required to report at least annually to the Board. In the interim, matters that require Board attention are reported via the Chief Risk Officer.

5.3 Macquarie's Credit Risk Exposures

Credit exposures are disclosed in the following pages based on:

- Geographic distribution
- Maturity profile
- Measurement approach
- Risk weight banding; and
- Risk grade.

Disclosures in this section have been prepared on a gross credit exposure basis. Gross credit risk exposure relates to the potential loss that Macquarie would incur as a result of a default by an obligor. The gross credit risk exposures are calculated as the exposure at default on drawn and undrawn facilities along with derivatives and repurchase agreements. The exposure at default is calculated in a manner consistent with APRA Prudential Standards.

Exposures have been based on a Level 2 regulatory group as defined in Section 1.1. The gross credit risk exposures in this section will differ from the disclosures in the MBL and its subsidiaries, the Consolidated Entity financial report as gross credit risk exposures include off balance sheet exposures but exclude the exposures of subsidiaries which have been deconsolidated for APRA reporting purposes.

The exposures below exclude the impact of:

- Credit risk mitigation (discussed in Section 8)
- Securitisation exposures (discussed in Section 9)
- CVA (discussed in Section 10)
- Central counterparty exposures (discussed in Section 11)
- Trading book on balance sheet exposures (discussed in Section 12); and
- Equity exposures (discussed in Section 13).

APS 330 Table 7(b)

Portfolio Type	As at 31 March 2023 $m
Corporate[1]	**58,246**
SME Corporate[2]	**9,665**
Sovereign	**44,157**
Financial Institution	**26,025**
Residential Mortgages	**126,632**
Other Retail	**5,250**
Retail SME	**2,492**
Other Assets[3]	**4,020**
Total Gross Credit Exposure	**276,487**

Portfolio Type	As at 31 March 2022[4] $m
Corporate[1]	78,899
SME Corporate[2]	8,218
Sovereign	51,350
Bank	8,691
Residential Mortgages	108,288
Other Retail	6,957
Retail SME	3,641
Other Assets[5]	5,728
Total Gross Credit Exposure	271,772

[1] Corporate includes specialised lending exposure of $6,823 million as at 31 March 2023 (31 March 2022: $6,383 million). Corporate asset class includes Corporate – IPRE for 31 March 2023.
[2] SME Corporate includes specialised lending exposure of $75 million as at 31 March 2023 (31 March 2022: $3,015 million).
[3] The major components of Other Assets are unsettled trades, fixed assets and residual value of operating leases.
[4] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[5] The major components of Other Assets are unsettled trades, related party exposures, and fixed assets.

APS 330 Table 7(b) (continued)

	As at 31 March 2023				
		Off balance sheet			
	On balance Sheet $m	Non-market related $m	Market related $m	Total $m	Average exposures[1] $m
Subject to IRB approach					
Corporate	20,255	3,238	24,827	48,320	
SME Corporate	7,824	1,723	43	9,590	
Sovereign	40,030	4,037	90	44,157	
Financial Institution	5,170	10,879	9,976	26,025	
Residential Mortgages	111,106	14,643	-	125,749	
Other Retail	3,693	-	-	3,693	
Retail SME	2,477	15	-	2,492	
Total IRB approach	190,555	34,535	34,936	260,026	256,978
Specialised Lending subject to slotting criteria	2,256	1,142	3,500	6,898	8,148
Subject to Standardised approach					
Corporate	1,656	538	909	3,103	
Residential Mortgages	832	51	-	883	
Other Retail	1,203	354	-	1,557	
Other Assets	4,001	19	-	4,020	
Total Standardised approach	7,692	962	909	9,563	6,140
Total Gross Credit Exposures	200,503	36,639	39,345	276,487	274,130

[1] Only sub totals in respect to average exposures are reported due to the change in asset classes under APRA's revised bank capital framework. Average exposures have been calculated on 31 March 2023 and 31 March 2022 spot positions.

APS 330 Table 7(b) (continued)

	As at 31 March 2022[1]				
		Off balance sheet			
	On balance Sheet $m	Non-market related $m	Market related $m	Total $m	Average exposures[2] $m
Subject to IRB approach					
Corporate	19,860	10,474	42,130	72,464	57,528
SME Corporate	4,087	1,116	–	5,203	5,112
Sovereign	44,638	6,526	186	51,350	33,638
Bank	1,686	3,149	3,856	8,691	8,047
Residential Mortgages	91,988	15,359	–	107,347	94,012
Other Retail	5,233	–	–	5,233	5,921
Retail SME	3,634	7	–	3,641	4,021
Total IRB approach	171,126	36,631	46,172	253,929	208,287
Specialised Lending	5,013	1,125	3,260	9,398	8,141
Subject to Standardised approach					
Corporate	–	52	–	52	72
Residential Mortgages	941	–	–	941	1,032
Other Retail	1,724	–	–	1,724	1,649
Total Standardised approach	2,665	52	–	2,717	2,753
					–
Other Assets	4,040	848	840	5,728	5,824
					–
Total Gross Credit Exposures	182,844	38,656	50,272	271,772	255,005

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] Average exposures have been calculated on 31 March 2022 and 31 March 2021 spot positions.

5.4 Credit Risk by Geographic Distribution

The credit risk exposures below have been based on a geographical split by domicile of the counterparty.

APS 330 Table 7(c)

	As at 31 March 2023				
Portfolio Type	**Asia Pacific $m**	**Australia $m**	**EMEA[1] $m**	**Americas $m**	**Total $m**
Corporate	**3,834**	**12,961**	**21,204**	**20,247**	**58,246**
SME Corporate	**32**	**9,538**	**-**	**95**	**9,665**
Sovereign	**99**	**37,883**	**6,082**	**93**	**44,157**
Financial Institution	**1,973**	**3,659**	**9,657**	**10,736**	**26,025**
Residential Mortgages	**413**	**125,859**	**219**	**141**	**126,632**
Other Retail	**97**	**4,896**	**2**	**255**	**5,250**
Retail SME	**-**	**2,492**	**-**	**-**	**2,492**
Other Assets	**703**	**1,017**	**1,571**	**729**	**4,020**
Total Gross Credit Exposure	**7,151**	**198,305**	**38,735**	**32,296**	**276,487**

	As at 31 March 2022[2]				
Portfolio Type	Asia Pacific $m	Australia $m	EMEA[1] $m	Americas $m	Total $m
Corporate	6,028	11,195	34,164	27,512	78,899
SME Corporate	3	8,215	-	-	8,218
Sovereign	101	46,047	5,000	202	51,350
Bank	829	1,462	4,913	1,487	8,691
Residential Mortgages	389	107,597	185	117	108,288
Other Retail	89	6,688	-	180	6,957
Retail SME	-	3,641	-	-	3,641
Other Assets	522	3,168	1,075	963	5,728
Total Gross Credit Exposure	7,961	188,013	45,337	30,461	271,772

[1] EMEA represents Europe, United Kingdom, Middle East and Africa.
[2] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

5.5 Credit Risk Distribution by Counterparty Type

The credit risk exposures by Basel III risk type (portfolio type) below have been classified based on counterparty split of the exposure.

APS 330 Table 7(d)

	As at 31 March 2023				
Portfolio Type	**Financial Institution $m**	**Government $m**	**Corporate $m**	**Retail $m**	**Total $m**
Corporate	**10,141**	**366**	**47,610**	**129**	**58,246**
SME Corporate	**704**	**-**	**7,847**	**1,114**	**9,665**
Sovereign	**42,063**	**2,092**	**2**	**-**	**44,157**
Financial Institution	**24,066**	**786**	**1,173**	**-**	**26,025**
Residential Mortgages	**614**	**-**	**4,262**	**121,756**	**126,632**
Other Retail	**49**	**-**	**273**	**4,928**	**5,250**
Retail SME	**37**	**-**	**1,799**	**656**	**2,492**
Other Assets	**378**	**658**	**2,984**	**-**	**4,020**
Total Gross Credit Exposure	**78,052**	**3,902**	**65,950**	**128,583**	**276,487**

	As at 31 March 2022[1]				
Portfolio Type	Financial Institution $m	Government $m	Corporate $m	Retail $m	Total $m
Corporate	20,929	119	57,731	120	78,899
SME Corporate	738	–	6,516	964	8,218
Sovereign	50,315	1,035	–	–	51,350
Bank	8,691	–	–	–	8,691
Residential Mortgages	801	–	3,610	103,877	108,288
Other Retail	157	49	459	6,292	6,957
Retail SME	59	–	2,579	1,003	3,641
Other Assets	3,353	330	2,045	–	5,728
Total Gross Credit Exposure	85,043	1,533	72,940	112,256	271,772

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

5.6 Credit Risk by Maturity Profile

The credit risk exposures below have been based on residual contractual maturity of the exposure.

APS 330 Table 7(e)

	As at 31 March 2023			
Portfolio Type	**≤1 year $m**	**1 ≤ 5 years $m**	**> 5 years $m**	**Total $m**
Corporate	**33,227**	**21,740**	**3,279**	**58,246**
SME Corporate	**2,625**	**6,040**	**1,000**	**9,665**
Sovereign	**34,570**	**7,200**	**2,387**	**44,157**
Financial Institution	**21,157**	**3,655**	**1,213**	**26,025**
Residential Mortgages	**97**	**539**	**125,996**	**126,632**
Other Retail	**734**	**3,868**	**648**	**5,250**
Retail SME	**317**	**2,157**	**18**	**2,492**
Other Assets	**2,519**	**88**	**1,413**	**4,020**
Total Gross Credit Exposure	**95,246**	**45,287**	**135,954**	**276,487**

	As at 31 March 2022[1]			
Portfolio Type	≤1 year $m	1 ≤ 5 years $m	> 5 years $m	Total $m
Corporate	50,017	25,008	3,874	78,899
SME Corporate	1,702	5,564	952	8,218
Sovereign	43,312	7,346	692	51,350
Bank	7,190	1,204	297	8,691
Residential Mortgages	81	502	107,705	108,288
Other Retail	1,172	5,286	499	6,957
Retail SME	329	3,293	19	3,641
Other Assets	3,435	844	1,449	5,728
Total Gross Credit Exposure	107,238	49,047	115,487	271,772

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

Macquarie is approved by APRA to use the Basel III Foundation Internal Ratings Based (FIRB) Approach for credit risk for its wholesale portfolios. Approval for the FIRB approach enables Macquarie to rely on its own internal estimates for some of the necessary credit risk components in determining the capital requirement for a given credit exposure. Internal estimates are used for PD and Maturity, while for wholesale exposures APRA provided estimates must be used for LGD and Exposure at Default (EAD).

A number of retail businesses have been accredited to use the Internal Ratings Based (IRB) Approach, whereby retail exposures are assigned to pools based on both borrower and transaction risk and where the PD and LGD estimates are derived from Macquarie's loss history for exposures in that pool.

Macquarie has a number of portfolios which do not have a statistically significant loss history and therefore do not qualify for the IRB approach to credit risk. Accordingly, the Standardised approach is applied to these portfolios and they are assessed periodically to determine if a change to the IRB approach can be substantiated.

Other portfolios will remain Standardised either because they are in run off or have been approved by APRA as such. The obligors in these portfolios are not rated by any of the recognised ECAI (S&P & Moody's) as they are primarily composed of individual borrowers or small businesses. Consequently, these exposures are risk weighted at 100%.

A summary of the applicable IRB or Standardised treatment to the Macquarie credit portfolios is set out in the table below.

Exposure Type	**Approach**	**Treatment**
Primarily all credit exposures to Corporate (including SME Corporate), Financial Institution and Sovereign counterparties	IRB	MQ rating is mapped to the S&P ratings scale S&P historical default data is used to estimate a PD for each rating grade
Income Producing Real Estate (IPRE)	IRB	MQ rating is mapped to the S&P ratings scale S&P historical default data is used to estimate a PD for each rating grade
All exposures subject to Supervisory Slotting Treatment	IRB	Exposure is slotted based on a combination of its MQ rating and LGD, with APRA determined supervisory risk weights assigned to each exposure
Macquarie originated auto and equipment lease exposures in Australia[1]	IRB	Through-the-cycle pool PDs and downturn LGDs
Macquarie originated and purchased Residential Mortgages in Australia	IRB	Through-the-cycle pool PDs and downturn LGDs An APRA approved LGD model has been applied to the portfolio, taking into account the regulatory requirement of a 10% LGD floor.
Other Residential Mortgages	Standardised	Risk Weighted per APS 112 Capital Adequacy: Standardised Approach to Credit Risk
Other auto and equipment lease exposures in Australia	Standardised	Risk Weighted per APS 112 Capital Adequacy: Standardised Approach to Credit Risk
Credit card exposures in Australia	Standardised	75% risk-weighted
Personal loan exposures in Australia	Standardised	75% risk-weighted
Margin loan exposures in Australia	IRB	A 20% risk-weight prescribed in APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk is applied
Related party exposures	Standardised	Risk Weighted per APS 112 Capital Adequacy: Standardised Approach to Credit Risk

[1] Excludes loans to self managed superannuation funds secured by residential property and reverse mortgages, which are considered as other residential mortgages under standardised approach.

6. Calculation of Credit Risk Exposures

6.1 Credit Risk Exposures by Measurement Approach

The table below sets out the gross exposures by Basel III portfolio class as required by APRA under APS 330.

APS 330 Table 7(i)

Portfolio Type	As at 31 March 2023 $m
Subject to IRB approach	
Corporate[1]	**55,143**
SME Corporate[2]	**9,665**
Sovereign	**44,157**
Financial Institution	**26,025**
Residential Mortgages	**125,749**
Other Retail	**3,693**
Retail SME	**2,492**
Total IRB approach	**266,924**
Subject to Standardised approach	
Corporate	**3,103**
Residential Mortgages	**883**
Other Retail	**1,557**
Other Assets	**4,020**
Total Standardised approach	**9,563**
Total Gross Credit Exposure	**276,487**

Portfolio Type	As at 31 March 2022[3] $m
Subject to IRB approach	
Corporate	78,847
SME Corporate	8,218
Sovereign	51,350
Bank	8,691
Residential Mortgages	107,347
Other Retail	5,233
Retail SME	3,641
Total IRB approach	263,327
Subject to Standardised approach	
Corporate	52
Residential Mortgages	941
Other Retail	1,724
Total Standardised approach	2,717
Other Assets	5,728
Total Gross Credit Exposure	271,772

[1] Corporate includes specialised lending exposure of $6,823 million as at 31 March 2023 (31 March 2022: $6,383 million).
[2] SME Corporate includes specialised lending exposure of $75 million as at 31 March 2023 (31 March 2022: $3,015 million).
[3] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

6.2 Credit Risk Exposures by Risk Weight

The tables below detail total credit exposures by risk weight bandings for the standardised portfolio and risk weightings for specialised lending exposures.

The disclosure of Standardised exposures below shows gross credit exposures before and after the impact of risk mitigation by collateral and guarantees.

APS 330 Table 8(b) Standardised Approach Exposures

	As at 31 March 2023		As at 31 March 2022[1]	
Risk Weight	**Total Gross Credit Exposure $m**	**Exposure after mitigation by eligible collateral & guarantees $m**	Total Gross Credit Exposure $m	Exposure after mitigation by eligible collateral & guarantees $m
0%	2,294	-	2	2
> 0% ≤ 20%	7	7	–	–
> 20% ≤ 50%	1,459	1,157	517	517
> 50% ≤ 75%	1,080	1,080	380	380
> 75% ≤ 100%	4,696	3,754	1,818	1,251
> 100% ≤ 150%	19	19	–	–
> 150%	8	8	–	–
Total	**9,563**	**6,025**	2,717	2,150

Specialised lending exposures subject to supervisory slotting

	Gross Credit Exposure	
Risk Weight	**As at 31 March 2023 $m**	As at 31 March 2022[1] $m
70%	191	1,521
90%	3,176	3,679
115%	3,445	4,099
250%	20	32
Default	1	17
Total[2]	**6,833**	9,348

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] Specialised lending exposures for 31 March 2023 exclude IPRE under APRA's revised bank capital framework.

6.3 Credit Risk Exposures by Risk Grade

This section sets out the gross credit exposures split by PD for Non-Retail portfolios and Expected Loss (EL) for Retail portfolios.

The tables below provide a breakdown of gross credit exposures into each PD band for the Non-Retail portfolios under the Basel III FIRB classes of Corporate, SME Corporate, Sovereign and Financial Institution as shown in Section 6.1.

APS 330 Table 9(d)

	As at 31 March 2023 PD Grade								
Non-Retail	**0 <= 0.05% \$m**	**0.05% <= 0.15% \$m**	**0.15% <= 0.4% \$m**	**0.4% <= 1% \$m**	**1% <= 5% \$m**	**5% <=15% \$m**	**15% <= 100% \$m**	**Default \$m**	**Total Gross Credit Exposure \$m**
Corporate	**1,679**	**7,675**	**17,898**	**12,013**	**11,114**	**3,815**	**351**	**598**	**55,143**
SME Corporate	**-**	**12**	**370**	**3,312**	**4,398**	**1,287**	**48**	**238**	**9,665**
Sovereign	**44,042**	**70**	**18**	**1**	**12**	**5**	**9**	**-**	**44,157**
Financial Institution	**8,573**	**7,654**	**5,914**	**2,696**	**1,001**	**128**	**22**	**37**	**26,025**
Total Gross Credit Exposure	**54,294**	**15,411**	**24,200**	**18,022**	**16,525**	**5,235**	**430**	**873**	**134,990**

	As at 31 March 2022[1] PD Grade							
Non-Retail	0 <= 0.03% \$m	0.03% <= 0.15% \$m	0.15% <= 1% \$m	1% <= 5% \$m	5% <=15% \$m	15% <= 100% \$m	Default \$m	Total Gross Credit Exposure \$m
Corporate	2,862	13,638	42,678	13,728	5,057	392	492	78,847
SME Corporate	–	12	3,053	3,898	1,044	71	140	8,218
Sovereign	50,556	721	35	36	2	–	–	51,350
Bank	624	7,717	193	157	–	–	–	8,691
Total Gross Credit Exposure	54,042	22,088	45,959	17,819	6,103	463	632	147,106

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

Included within Total Gross Credit Exposures in the previous page are exposures for undrawn commitments. These undrawn commitment exposures are set out in the following tables.

APS 330 Table 9(d)

	As at 31 March 2023 PD Grade								
Undrawn Commitments	**0 <= 0.05% $m**	**0.05% <= 0.15% $m**	**0.15% <= 0.4% $m**	**0.4% <= 1% $m**	**1% <= 5% $m**	**5% <=15% $m**	**15% <= 100% $m**	**Default $m**	**Total Gross Credit Exposure $m**
Corporate	**34**	**202**	**439**	**695**	**1,220**	**336**	**4**	**-**	**2,930**
SME Corporate	**-**	**12**	**80**	**643**	**593**	**131**	**1**	**9**	**1,469**
Sovereign	**11**	**-**	**-**	**-**	**12**	**-**	**-**	**-**	**23**
Financial Institution	**-**	**48**	**10**	**20**	**7**	**1**	**5**	**-**	**91**
Total Undrawn Commitments	**45**	**262**	**529**	**1,358**	**1,832**	**468**	**10**	**9**	**4,513**

	As at 31 March 2022[1] PD Grade							
Undrawn Commitments	0 <= 0.03% $m	0.03% <= 0.15% $m	0.15% <= 1% $m	1% <= 5% $m	5% <=15% $m	15% <= 100% $m	Default $m	Total Gross Credit Exposure $m
Corporate	–	173	1,321	847	247	46	–	2,634
SME Corporate	–	12	542	552	84	1	8	1,199
Sovereign	28	–	–	21	–	–	–	49
Bank	–	80	8	–	–	–	–	88
Total Undrawn Commitments	28	265	1,871	1,420	331	47	8	3,970

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

The tables below provide a breakdown of gross credit exposures into each EL category for the Retail portfolios under the Basel III classes of Residential Mortgages, Other Retail and Retail SME as shown in Section 6.1.

APS 330 Table 9(d)

	As at 31 March 2023 Expected Loss Categories					
Retail	**0 <= 0.1% $m**	**0.1% <= 0.3% $m**	**0.3% <= 3% $m**	**3% <= 10% $m**	**10% <= 100% $m**	**Total Gross Credit Exposure $m**
Residential Mortgages	**109,371**	**14,779**	**729**	**301**	**569**	**125,749**
Other Retail	**-**	**1,843**	**1,438**	**301**	**111**	**3,693**
Retail SME	**33**	**107**	**2,115**	**164**	**73**	**2,492**
Total Gross Credit Exposure	**109,404**	**16,729**	**4,282**	**766**	**753**	**131,934**

	As at 31 March 2022[1] Expected Loss Categories					
Retail	0 <= 0.1% $m	0.1% <= 0.3% $m	0.3% <= 3% $m	3% <= 10% $m	10% <= 100% $m	Total Gross Credit Exposure $m
Residential Mortgages	52,139	50,428	3,572	659	549	107,347
Other Retail	–	2,579	2,032	485	137	5,233
Retail SME	10	147	3,069	306	109	3,641
Total Gross Credit Exposure	52,149	53,154	8,673	1,450	795	116,221

Included within Total Gross Credit Exposures in the tables above are exposures for undrawn commitments. These undrawn commitment exposures are set out in the following tables.

APS 330 Table 9(d)

	As at 31 March 2023 Expected Loss Categories					
Undrawn Commitments	**0 <= 0.1% $m**	**0.1% <= 0.3% $m**	**0.3% <= 3% $m**	**3% <= 10% $m**	**10% <= 100% $m**	**Total $m**
Residential Mortgages	**14,337**	**250**	**37**	**10**	**9**	**14,643**
Retail SME	**14**	**-**	**1**	**-**	**-**	**15**
Total Undrawn Commitments	**14,351**	**250**	**38**	**10**	**9**	**14,658**

	As at 31 March 2022[1] Expected Loss Categories					
Undrawn Commitments	0 <= 0.1% $m	0.1% <= 0.3% $m	0.3% <= 3% $m	3% <= 10% $m	10% <= 100% $m	Total $m
Residential Mortgages	9,674	5,472	172	40	1	15,359
Retail SME	7	–	–	–	–	7
Total Undrawn Commitments	9,681	5,472	172	40	1	15,366

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

7. Provisioning

7.1 Non-Performing Facilities

Facilities are classified as non-performing when there is doubt regarding the collectability of some or all of the contractual payments due from a counterparty. The contractual payments include principal outstanding, interest and other related charges. In addition, facilities that are more than 90 calendar days past contractual due date are by default classified as non-performing.

Exposures will be assessed for specific provisions where there is objective evidence of impairment. Objective evidence of impairment may include market, economic or legal factors impacting upon the ability of a counterparty to meet their repayment obligations. The assessment process consists of a comparison of the carrying value of the exposure and the present value of its estimated future cash flows (recoverable amount).

The estimation of expected future cash flows takes into consideration:

- External valuations of the asset (taking into account the value of any security held)
- Costs of recovery; and
- The timeframe for realisation of recovery and/or sale of security.

The estimated future cash flows are discounted at the effective interest rate to determine the recoverable amount of the financial asset.

For the purposes of this report, past dues represent the full amount outstanding, not just the amount that is past due.

7.2 Specific Provisions and General Provisions

Specific Provisions

Facilities that are assessed as non-performing are subject to a recoverability test. Specific provisions are calculated as per the APRA Prudential Standard APS 220: Credit Risk Management and are generally measured as the difference between the contractual and expected cash flows from the individual exposure, discounted using the effective interest rate for that exposure.

General Provisions

The General Provisions is required under APS 220 to cover credit losses prudently estimated but not certain to arise over the full life of all individual facilities making up the credit risk portfolio.

Provisions representing 12 months expected credit loss (ECL) on performing loans (referred to as stage I provisions under AASB 9), are allocated to General Provisions as they are held against future, presently unidentified losses. ECL provisions are determined based on the point in time probability of default (PD) over the next 12 months and the lifetime losses associated with such PD, adjusted for forward looking information.

Additional Regulatory Specific Provisions

Lifetime ECL provisions on underperforming and nonperforming loans (referred to as stage II provisions under AASB 9) deemed ineligible to be included in the General Provisions, are considered regulatory specific provisions. Lifetime ECL provisions are determined with reference to the financial asset's lifetime PD and the lifetime losses associated with that PD, adjusted for forward looking information.

7.3 Regulatory Expected Loss (REL)

REL represents the estimated future credit losses expected to be incurred in a portfolio. For non-defaulted exposures, REL is calculated as a function of the outstanding exposure, PD and LGD whereas REL for defaulted Corporate, Sovereign and Financial Institution exposures under the FIRB approach is determined as the product of LGD and EAD. LGDs are defined by APRA for Corporate, Financial Institution and Sovereign. Specialised lending exposures subject to supervisory slotting criteria are measured using APRA determined risk weightings. For defaulted retail exposures under the IRB approach, REL is based on the best estimate of loss. The excess of REL over eligible provisions is required by APRA to be deducted from Common Equity Tier 1 capital. Eligible provisions include credit related provisions, partial write offs, and discounts on defaulted assets excluding purchased defaulted assets. As at 31 March 2023, the total REL was $939 million (31 March 2022: $1,053 million), with the excess of REL over eligible provisions resulting in a Common Equity Tier 1 deduction of $218 million (31 March 2022: $302 million).

7.4 Provisions by Counterparty Type

The table below details non-performing facilities and specific provisions.

APS 330 Table 7(f) & (i)

	As at 31 March 2023				For the 12 months to 31 March 2023	
		Non- Performing				
	Gross Credit Exposure $m	< 90 Days Past Due $m	≥ 90 Days Past Due $m	Specific Provisions[1] $m	Charges for Specific Provisions $m	Write-offs[2] $m
Subject to IRB approach						
Corporate[3]	55,143	130	141	(93)	(71)	-
SME Corporate[1]	9,665	110	127	(33)	(6)	-
Sovereign	44,157	-	-	-	-	-
Financial Institution	26,025	-	37	(36)	-	-
Residential Mortgages	125,749	279	282	(15)	(4)	-
Other Retail	3,693	92	20	(30)	-	-
Retail SME	2,492	52	22	(19)	(1)	-
Total IRB approach	266,924	663	629	(226)	(82)	-
Subject to Standardised approach					-	-
Corporate	3,103	-	-	-	-	-
Residential Mortgages	883	-	-	-	-	-
Other Retail	1,557	18	9	(24)	(4)	-
Other Assets	4,020				-	
Total Standardised approach	9,563	18	9	(24)	(4)	-
Total	276,487	681	638	(250)	(86)	-
Additional regulatory specific provisions				(173)		

[1] Specific provisions are provision on non-performing facilities.
[2] Under AASB 9, there are no longer direct write offs to Income Statement. A financial asset is written off when there is no reasonable expectation of recovering it. At the time of writing off a financial asset it is adjusted against the Expected Credit Loss (ECL) provision created over the life of the asset and not directly written off to Income Statement.
[3] IRB Corporate and SME Corporate includes specialised lending.

	As at 31 March 2022[1]				For the 12 months to 31 March 2022[1]	
	Gross Credit Exposure $m	Impaired Facilities $m	Past Due > 90 days $m	Specific Provisions $m	Charges for Specific Provisions $m	Write-offs[2] $m
Subject to IRB approach						
Corporate[3]	78,847	268	36	(192)	(102)	–
SME Corporate[1]	8,218	107	33	(44)	(7)	–
Sovereign	51,350	–	–	–	–	–
Bank	8,691	–	–	–	–	–
Residential Mortgages	107,347	227	255	(12)	(3)	–
Other Retail	5,233	128	4	(31)	(13)	–
Retail SME	3,641	99	4	(23)	(29)	–
Total IRB approach	263,327	829	332	(302)	(154)	–
Subject to Standardised approach						
Corporate	52	–	–	–	–	–
Residential Mortgages	941	–	–	–	–	–
Other Retail	1,724	20	3	(24)	(4)	–
Total Standardised approach	2,717	20	3	(24)	(4)	–
Other Assets	5,728	–	–	–	–	–
Total	271,772	849	335	(326)	(158)	–
Additional regulatory specific provisions				(193)		

APS 330 Table 9(e)

	For the 12 months to 31 March 2023	
	Charges for Specific provisions $m	**Write-offs[1] $m**
Subject to IRB approach		
Corporate	**(71)**	-
SME Corporate	**(6)**	-
Financial Institutions	-	-
Residential Mortgages	**(4)**	-
Other Retail	-	-
Retail SME	**(1)**	-
Total IRB approach	**(82)**	-
Subject to Standardised approach		
Other Retail	**(4)**	-
Total Standardised approach	**(4)**	-
Total	**(86)**	-

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] Under AASB 9, there are no longer direct write offs to Income Statement. A financial asset is written off when there is no reasonable expectation of recovering it. At the time of writing off a financial asset it is adjusted against the Expected Credit Loss (ECL) provision created over the life of the asset and not directly written off to Income Statement.
[3] IRB Corporate and SME Corporate includes specialised lending.

	For the 12 months to 31 March 2022[1]	
	Charges for Specific provisions $m	Write-offs[2] $m
Subject to IRB approach		
Corporate	(102)	–
SME Corporate	(7)	–
Residential Mortgages	(3)	–
Other Retail	(13)	–
Retail SME	(29)	–
Total IRB approach	(154)	–
Subject to Standardised approach		
Other Retail	(4)	–
Total Standardised approach	(4)	–
Total	(158)	–

7.5 Provisions by Geographic Region

The tables below split non-performing facilities and provisions by geographic region. Note that the geographic split has been based on the domicile of the counterparty.

APS 330 Table 7(g)

	As at 31 March 2023			
	Non - Performing			
Geographic Region	**< 90 Days Past Due**	**≥ 90 Days Past Due**	**Specific Provisions $m**	**General Provisions $m**
Australia	**609**	**461**	**(134)**	**(337)**
EMEA	**16**	**144**	**(83)**	**(12)**
Americas	**56**	**6**	**(33)**	**(33)**
Asia Pacific	**0**	**27**	**-**	**(1)**
Total	**681**	**638**	**(250)**	**(383)**
Additional regulatory specific provisions			**(173)**	

	As at 31 March 2022[1]			
Geographic Region	Impaired Facilities $m	Past due > 90 days $m	Specific Provisions $m	GRCL $m
Australia	584	299	(135)	(271)
EMEA	210	36	(160)	(11)
Americas	41	–	(22)	(16)
Asia Pacific	14	–	(9)	–
Total	849	335	(326)	(298)
Additional regulatory specific provisions			(193)	

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.
[2] Under AASB 9, there are no longer direct write offs to Income Statement. A financial asset is written off when there is no reasonable expectation of recovering it. At the time of writing off a financial asset it is adjusted against the Expected Credit Loss (ECL) provision created over the life of the asset and not directly written off to Income Statement.

7.6 General Provisions

APS 330 Table 7(j)

	As at 31 March 2023 $m	As at 31 March 2022 $m
General provisions before tax	383	298
Tax effect	(100)	(72)
General provisions	**283**	226

7.7 Movement in Provisions

The table below shows the movement of provisions over the 12 months to 31 March 2023.

APS 330 Table 7(h)

	General Provisions $m	Specific Provisions and Additional Regulatory Specific Provision $m	Total $m
Provisions as at 31 March 2022	**300**	**528**	**828**
Charges (net of reversals) during the period	55	(1)	54
Assets written off or sold, previously provided for	-	(97)	(97)
Net transfer (to)/from other provisions	26	(26)	-
Adjustments for foreign exchange fluctuations	2	19	20
Provisions as at 31 March 2023	**383**	**423**	**805**

7.8 Analysis of Expected Credit Model Performance versus Actual Results

APS 330 Table 9(f)

The table below relates only to Macquarie's portfolios measured under the IRB approach and compares actual results of the current reporting period to the average estimate.

	PD		Exposure at default	LGD	
Portfolio Type	**Estimated %**	**Actual %**	**Estimate to Actual Ratio**	**Estimated %**	**Actual %**
Corporate (including SME)[1]	2.88%	2.50%	N/A	N/A	N/A
Sovereign[1]	0.83%	0.00%	N/A	N/A	N/A
Financial Institution[1]	1.08%	0.00%	N/A	N/A	N/A
Residential Mortgages[2]	1.06%	0.90%	101%	20.09%	2.80%
Other Retail[2]	2.08%	2.33%	116%	46.49%	20.55%

[1] Macquarie is accredited under the Foundation Internal Ratings Based Approach (FIRB). As the LGD and EAD assumptions under FIRB are set by APRA for these portfolio types, disclosure of actual against estimates does not facilitate meaningful assessment of the performance of internal rating processes for these portfolios. The PD average estimates reported for wholesale exposures (Corporate, Sovereign, Financial Institution) are over the March 2022 to March 2023 period, due to new asset classes under APRA's revised bank capital framework.

[2] Includes exposures disclosed as Retail SME. The PD average estimates reported for retail exposures (Residential Mortgages, Other Retail) are over the January 2008 to March 2023 period.

8. Credit Risk Mitigation

8.1 Netting and Collateral Management

Netting arises where a single legal obligation is created covering all transactions included in a netting agreement. The most common form of netting which Macquarie applies for these purposes is close out netting.

Netting is applied to a counterparty balance only when appropriate documentation governing transactions between the Macquarie entity and the counterparty has been entered into, Legal Risk Management has confirmed that it is legally effective to net with that counterparty, and APRA Prudential Standard APS 112 Capital Adequacy: Standardised Approach to Credit Risk (APS 112), has been complied with.

8.1.1 Collateral Valuation and Management

RMG Credit limits are set, and the related exposures are calculated before taking any non-cash collateral into consideration other than for securities finance transactions where liquid financial instruments are an inherent part of the lending arrangement. Typically, collateral is required for all but short dated, vanilla trading activity.

A wide variety of collateral can be accepted depending on the counterparty and the nature of the exposure. Some of the most common forms are charges over:

- Cash or gold deposits
- Debt or equity securities
- Company assets; and
- Commercial or residential property.

Guarantees are frequently requested from banks, parent or associated companies. Relative ratings between the obligor and guarantor are monitored as part of the regulatory capital calculation process as mitigation will normally cease to be eligible if the rating of the guarantor falls below that of the underlying obligor. Collateral taken in the form of tradeable securities is revalued daily by the same application systems which are used to trade those particular products. Credit default swaps are not a common form of credit risk mitigation. Macquarie policies require that all security is taken in conjunction with a formal written agreement which gives Macquarie direct and unconditional rights over the collateral in the event of default by the obligor.

To mitigate credit risk Macquarie makes frequent use of margining arrangements. In these cases, counterparties post collateral daily in the form of cash or liquid securities to cover outstanding trading positions. Macquarie also engages in reciprocal margining agreements with counterparties under International Swaps and Derivatives Association (ISDA) or similar agreements where the Credit Support Annex can contain provisions whereby margining thresholds may vary in relation to the credit ratings of the respective parties. Macquarie is compliant with OTC Margin reforms in all legal jurisdictions with respect to thresholds, minimum transfer amounts and rounding for affected counterparties in those jurisdictions. Collateral and funding requirements due to credit ratings downgrade(s) are incorporated into Macquarie's liquidity stress scenarios, which consider liquidity obligations for a twelve-month period under both a systemic and combined name and systemic crisis scenario. These scenarios are embedded in the MGL and MBL Liquidity Policies, alongside Macquarie's liquidity risk appetite. The increase in collateral and funding requirements as a result of credit rating downgrade(s) is included as an outflow in these scenarios, explicitly ensuring that Macquarie has sufficient funding coverage in these events.

All details regarding security together with netting/margining rules are recorded in collateral management systems which support the operational control framework.

Specific policy and protocols govern the acceptance of real estate as collateral.

Prior to acceptance, all real estate collateral will undergo a valuation assessment in line with approved policy requirements and, in the case of independent valuations, must also undergo a formal review process by which it is assessed for quality, adherence to policy and standing instructions. The escalation of this review and acceptance process depends on:

- The type of property being valued
- The dollar value of the property being valued; and
- The proposed loan to value ratio (LVR).

The value of all real estate collateral is assessed regularly and is re-valued where appropriate, be it on an asset specific basis or a market assessment across a pool of assets, such as residential mortgages. The interval between revaluation is contingent on the type of property, dollar value of the property being valued, LVR, the market conditions that have prevailed since the valuation was conducted and counterparty performance. All prior claims on the property collateral are recorded and taken into consideration when calculating the available security value.

8.1.2 Wrong Way Risk

Specific wrong way risk occurs when exposure to the counterparty exhibits strong positive correlation with the counterparty's probability of default. RMG Credit runs a monthly monitoring process to ensure that all instances of specific wrong way risk are identified and appropriately escalated. General wrong way risk occurs when the probabilities of counterparty defaults are positively correlated with counterparty exposure which results from market risk factor movements. Macquarie considers these correlations as part of the credit assessment process and has daily reports which identify asset sensitivities across a range of dimensions including industry/peer group, counterparty and rating grade.

8.2 Exposures Mitigated by Eligible Collateral

Eligible financial collateral is defined in APS 112 as cash, certificates of deposit, bank bills, certain rated debt issues and listed equities. Other items that are eligible for recognition as collateral include mortgages over commercial or residential real estate, and other physical collateral (subject to the satisfaction of certain requirements listed in APS 113).

As noted, Macquarie takes a wide range of collateral of which only a portion is eligible under APS 112 and APS 113. All collateral is recorded in appropriate systems with clear definition by type and eligibility status. Ineligible collateral under APRA standards is excluded from the capital calculation process.

Some types of collateral which are eligible by definition may be determined to be ineligible or adjusted with an appropriate haircut at the time of calculation due to mismatches of maturity or currency between the collateral and the underlying exposures.

For capital adequacy purposes, eligible cash collateral is considered in calculating the capital requirement. For non-cash collateral, a regulatory haircut is applied to both the gross credit exposure and the value of the collateral, and these adjusted amounts are used as the basis of calculating the capital requirement.

The tables on the following page show gross credit exposures by Basel III portfolio and the amount of risk exposure which is mitigated by APRA defined eligible collateral, guarantees or credit derivatives.

APS 330 Table 10(b) & (c)

Measurement Approach	Total Gross Credit Exposure[1] $m	Eligible Financial Collateral $m	Other Eligible Collateral $m	Exposures Covered by Guarantees $m
	As at 31 March 2023			
Subject to IRB approach				
Corporate	**55,143**	**573**	**917**	**7,726**
SME Corporate	**9,665**	**180**	**4,880**	**-**
Sovereign	**44,157**	**-**	**-**	**3**
Financial Institution	**26,025**	**472**	**1**	**95**
Residential Mortgages	**125,749**	**-**	**-**	**-**
Other Retail	**3,693**	**-**	**-**	**-**
Retail SME	**2,492**	**-**	**-**	**-**
Total IRB approach	**266,924**	**1,225**	**5,798**	**7,824**
Subject to Standardised approach				
Corporate	**3,103**	**811**	**-**	**13**
Residential Mortgages	**883**	**3**	**-**	**-**
Other Retail	**1,557**	**-**	**-**	**408**
Other Assets	**4,020**	**-**	**-**	**-**
Total Standardised approach	**9,563**	**814**	**-**	**421**
Total	**276,487**	**2,039**	**5,798**	**8,245**

Measurement Approach	Total Gross Credit Exposure[1] $m	Eligible Financial Collateral $m	Other Eligible Collateral $m	Exposures Covered by Guarantees $m
	As at 31 March 2022[2]			
Subject to IRB approach				
Corporate	78,847	504	212	8,083
SME Corporate	8,218	131	1,435	–
Sovereign	51,350	–	–	–
Bank	8,691	–	–	–
Residential Mortgages	107,347	–	–	–
Other Retail	5,233	–	–	–
Retail SME	3,641	–	–	–
Total IRB approach	263,327	635	1,647	8,083
Subject to Standardised approach				
Corporate	52	–	–	–
Residential Mortgages	941	–	–	–
Other Retail	1,724	–	–	567
Total Standardised approach	2,717	–	–	567
Other Assets	5,728	896	–	–
Total	271,772	1,531	1,647	8,650

[1] Per APS 180, the impact of eligible collateral for market related contracts is embedded in the calculation of total gross credit exposure and is not separately reported as eligible financial collateral.
[2] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

8.3 Counterparty Credit risk

Counterparty Credit Risk (CCR) is the risk that the counterparty to a transaction could default before the final settlement of the transactions cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value for any Group entity at the time of default. Unlike exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss whereby the market value for many different types of transactions can be positive or negative to either counterparty. The market value is uncertain and can vary over time with the movement of underlying market factors.

Regulatory capital is allocated to CCR exposures using the SA CCR calculation, which reflects expected exposure to the counterparty and its risk rating. Economic capital also reflects correlations and diversification impacts across risk types.

As at 31 March 2023, a unilateral one notch and two notch downgrade in the MBL's rating would have resulted in a further $376 million and $240 million (credit rating downgrade postings are cumulative) of collateral being posted to other counterparties respectively. Collateral stress tests are also conducted on the MBL's counterparties so that it can monitor for likely collateral stresses in the event of a counterparty downgrade.

APS 330 Table 11(b)

Exposure at default for counterparty exposures	**As at 31 March 2023 $m**	As at 31 March 2022[1] $m
Replacement cost excluding collateral	**25,386**	41,364
Replacement cost with eligible collateral (A)	**12,024**	19,327
Potential future exposure (PFE) (B)	**16,234**	16,759
Exposure at default [(A+B) * 1.4]	**39,560**	50,520
Comprising of:		
Interest rate	**1,453**	1,224
Credit	**111**	143
Equity	**2,161**	1,964
Foreign exchange	**8,028**	5,718
Commodity	**27,807**	41,471
Exposure at default	**39,560**	50,520

APS 330 Table 11(c)

	As at 31 March 2023		As at 31 March 2022[1]	
Notional amount of credit derivatives	**Protection Bought $m**	**Protection Sold $m**	Protection Bought $m	Protection Sold $m
Own credit portfolio	**3,056**	**1,978**	6,520	5,528
Client intermediation activities	**–**	**–**	–	–
Total	**3,056**	**1,978**	6,520	5,528
Credit default swaps (CDS)	**3,056**	**1,978**	6,520	5,528
Total return swaps	**–**	**–**	–	–
Total	**3,056**	**1,978**	6,520	5,528

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

9. Securitisation

9.1 Overview

A securitisation is defined as "a financing structure where the cash flow from a pool is used to make payments on obligations to at least two tranches or classes of creditors (typically holders of debt securities), with each tranche or class entitled to receive payments from the pool before or after another class of creditors, thereby reflecting different levels of credit risk."

Macquarie engages in a range of activities in the securitisation market, including playing the following roles:

- Originator, Arranger, Manager and Servicer on Macquarie mortgage and auto and equipment finance securitisation programs
- Lead Manager on Macquarie originated and third-party securitisations
- Swap Counterparty to Macquarie originated and third-party securitisations
- Warehouse facility provider to several third-party originators
- Liquidity facility provider to several third-party originators and provider of redraw facilities to all Macquarie Mortgage SPVs; and
- Investor in third party securitisation transactions.

Macquarie has also established contingent liquidity securitisation SPVs that issue and hold Residential Mortgage-Backed Securities (RMBS) eligible for repurchase with the RBA.

Macquarie may, as sponsor, use the following types of special purpose vehicles to securitise third party exposures:

- Trusts, and
- Special purpose companies

issuing RMBS or asset backed securities (ABS).

Following are the affiliated entities which the MGL group manages or advises, and which can invest either in the securitisation exposures that Macquarie has securitised or in SPVs for whom Macquarie is a sponsor (i.e. manager, adviser, dealer or liquidity and/or credit enhancement provider):

- Macquarie Australian Diversified Income (High Grade) Fund
- Macquarie Australian Diversified Income Fund
- Macquarie Core Australian Fixed Interest Fund
- Macquarie Corporate Bond Fund
- Macquarie Debt Market Opportunity Fund
- Macquarie Dynamic Bond Fund
- Macquarie Enhanced Australian Fixed Interest Fund
- Macquarie Fund Solutions-Macquarie Global Income Opportunities Fund
- Macquarie Global Income Opportunities Fund
- Macquarie Income Opportunities Fund
- Macquarie Managed Income Fund
- Macquarie Real Return Opportunities Fund
- Macquarie True Index Cash Fund
- Macquarie True Index Global Bond Fund
- Macquarie True Index Sovereign Bond Fund

- Macquarie Wholesale Australian Fixed Interest Fund

Any investments by these entities (if any) in securitisation exposures that Macquarie has securitised or sponsored does not form a majority of their investment portfolios and their investment represents a small percentage of the relevant securitisation issue.

9.1.1 Securitisation Risk Management

RMG is responsible for overseeing the management of the risk arising from all securitisation exposures. RMG approves all securitisation transactions and exposures arising from securitisation activity.

RMG Prudential RIsk reviews transactions where Macquarie acts as originator, manager or sponsor to ensure compliance with APS 120 and other regulations. RMG Credit sets limits on securitisation exposures and reviews transactions to identify all risks involved. RMG Market Risk reviews market exposures associated with securitisations, such as swaps, and other exposures held in the trading book. Macquarie's primary risk mitigant is the limit framework and approval process governing exposures to securitisations.

In addition to credit risk, securitised assets can be subject to liquidity risk, interest rate risk, and in some instances FX risk. The nature and scale of these risks varies from transaction to transaction. All securitised assets are subject to a degree of operational risk associated with documentation and the collection of cashflows.

Securitisation exposures are measured daily and monitored by RMG. RMG completes an annual review of all securitisation exposures and limits. Regulatory capital is calculated on all securitisation exposures using the available approaches in APS 116 and APS 120.

Macquarie applies the following approaches to the calculation of regulatory capital for securitisation exposures under APS 120:

- The External Ratings Based approach (ERBA); or
- The Supervisory Formula Approach (SFA).

If one of the above approaches does not apply to an exposure, then the exposure will be deducted from Common Equity Tier 1 Capital (CET1).

S&P and Moody's Ratings have all been used to rate Macquarie securitisations.

Mitigation of credit risk on securitisation exposures is performed in accordance with Macquarie's overall credit risk mitigation policy. Details of the policy can be found in Section 8.0 of this disclosure.

9.1.2 Accounting for Securitisation

Securitisation transactions undertaken by Macquarie are accounted for in accordance with Australian Accounting Standards. As noted, securitised positions are managed in a number of SPVs.

Where these SPVs are deconsolidated for regulatory purposes under APS 120, they still need to be assessed under Australian Accounting Standards to determine whether these SPVs should be considered part of the accounting consolidated group.

Control exists when the parent is exposed, or has rights, to variable returns from its involvement with an entity and has the ability to affect those returns through its power over that entity. In Macquarie's case, it has been determined that under Australian Accounting Standards, Macquarie consolidates Macquarie mortgage SPVs and auto and equipment finance SPVs. The assets and liabilities in these SPVs detailed in the tables within this section are consolidated into the Macquarie accounting consolidated group on the basis Macquarie controls those SPVs.

Banking book securitised assets consolidated by Macquarie are held on the balance sheet at amortised cost. Securitised exposures in the trading book are held at fair value through profit or loss. There has been no material change to the methods of valuation from the prior period.

If there are circumstances where Macquarie is required to provide financial support for securitised assets, a relevant liability is recognised on the Bank's balance sheet. Where a liability does not currently exist but could arise in the future as a result of uncertain events not wholly within Macquarie's control, a contingent liability is disclosed unless the possibility of an outflow of resources is remote. A contingent liability is not recognised on the Bank's balance sheet as an actual liability.

Further information on accounting policies as they relate to securitisation exposures, including key assumptions and inputs to valuation processes and Macquarie's policies on accounting consolidation, can be found in the Macquarie Bank Limited financial report.

9.2 Securitisation Exposures

9.2.1 Originating ADI Securitisation Exposures

The table below sets out the assets originated or sponsored by Macquarie where the exposures have subsequently been securitised.

Macquarie has not undertaken any synthetic securitisation in the banking and trading book.

APS 330 Table 12(g) and (o)

	As at 31 March 2023		
	Total outstanding exposures securitised		
Exposure Type	ADI originated assets[1] $m	ADI as sponsor[2] $m	Other $m
Banking Book			
Residential Mortgages	**63,456**	**51**	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	**2,733**	-	-
Total Banking Book	**66,189**	**51**	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Other	-	-	-
Total Trading Book	-	-	-
Total	**66,189**	**51**	-

	As at 31 March 2022		
	Total outstanding exposures securitised		
Exposure Type	ADI originated assets[1] $m	ADI as sponsor[1] $m	Other $m
Banking Book			
Residential Mortgages	60,651	66	–
Credit cards and other personal loans	–	–	–
Auto and equipment finance	1,126	–	–
Total Banking Book	61,777	66	–
Trading Book			
Residential Mortgages	–	–	–
Credit cards and other personal loans	–	–	–
Auto and equipment finance	–	–	–
Other	–	–	–
Total Trading Book	–	–	–
Total	61,777	66	–

[1] Included in the above are assets of $66,189 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in the Level 2 regulatory group (31 March 2022: $61,777 million).
[2] Included in the above are exposures held in third party warehouse funding facilities.

9.2.2 Performance of Assets Securitised

The assets below have been originated and securitised by Macquarie. The table below identifies the total exposures and non-performing of these assets.

APS 330 Table 12(h)

	As at 31 March 2023		
	Total outstanding exposures securitised		
Exposure Type	**Total outstanding exposures[1] $m**	**Non-performing[2] $m**	**ADI recognised loss from exposures securitised $m**
Residential Mortgages	**63,456**	**306**	**-**
Credit cards and other personal loans	**-**	**-**	**-**
Auto and equipment finance	**2,733**	**27**	**-**
Total	**66,189**	**333**	**-**

	As at 31 March 2022			
	Total outstanding exposures securitised			
Exposure Type	Total outstanding exposures[1] $m	Impaired $m	Past due $m	ADI recognised loss from exposures securitised $m
Residential Mortgages	60,651	137	185	–
Credit cards and other personal loans	–	–	–	–
Auto and equipment finance	1,126	30	1	–
Total	61,777	167	186	–

[1] Included in the above are assets of $66,189 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in the Level 2 regulatory group (31 March 2022: $61,777 million).
[2] Included in the above are non-performing facilities of $333million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in the Level 2 regulatory Group.

9.2.3 Summary of Outstanding Exposures Intended to be Securitised

APS 330 Table 12(i) and (p)

Macquarie may securitise assets depending on a variety of factors, including market conditions and business requirements. The table below sets out identified assets as at the reporting date which are intended to be put into securitisation deals.

Exposure Type	**As at 31 March 2023 $m**	As at 31 March 2022 $m
Banking Book		
Residential Mortgages[1]	**1,100**	600
Credit cards and other personal loans	**-**	–
Auto and equipment finance	**-**	3,377
Total Banking Book	**1,100**	3,977
Trading Book		
Residential Mortgages	**–**	–
Credit cards and other personal loans	**–**	–
Auto and equipment finance	**–**	–
Total Trading Book	**–**	–

[1] This exposure is intended for funding only securitisation.

9.2.4 Securitisation Activity

Over the 12 months to 31 March 2023, Macquarie has undertaken the following securitisation activity. Macquarie may or may not retain an exposure to securitisation SPVs to which Macquarie has sold assets.

APS 330 Table 12(j) and (q)

	For the 12 months to 31 March 2023		
	Value of loans sold or originated into securitisation		Recognised gain or loss on sale
Exposure Type	**ADI originated $m**	**ADI as sponsor $m**	**$m**
Banking Book			
Residential Mortgages[1]	**20,664**	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance[1]	**3,378**	-	-
Other	-	-	-
Total Banking Book	**24,042**	-	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Total Trading Book	-	-	-

	For the 12 months to 31 March 2022		
	Value of loans sold or originated into securitisation		Recognised gain or loss on sale
Exposure Type	ADI originated $m	ADI as sponsor $m	$m
Banking Book			
Residential Mortgages[1]	33,599	–	–
Credit cards and other personal loans	-	–	–
Auto and equipment finance	453	–	–
Other	–	–	–
Total Banking Book	34,052	–	–
Trading Book			
Residential Mortgages	–	–	–
Credit cards and other personal loans	–	–	–
Auto and equipment finance	–	–	–
Total Trading Book	–	–	–

[1] Exposures that have been transferred between different structures may also have been originated within the same period which would result in those exposures being included twice.

Originating ADI Securitisation Exposures

APS 330 Table 12(r) – Trading Book

	As at 31 March 2023			
	Total outstanding exposures securitised			
	Standard Approach		IMA Approach	
Exposure Type	**Traditional $m**	**Synthetic $m**	**Traditional $m**	**Synthetic $m**
Residential Mortgages	-	-	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Other	-	-	-	-
Total	-	-	-	-

	As at 31 March 2022			
	Total outstanding exposures securitised			
	Standard Approach		IMA Approach	
Exposure Type	Traditional $m	Synthetic $m	Traditional $m	Synthetic $m
Residential Mortgages	–	–	–	–
Credit cards and other personal loans	–	–	–	–
Auto and equipment finance	–	–	–	–
Other	–	–	–	–
Total	–	–	–	–

9.2.5 Exposures Arising from Securitisation Activity by Asset Type

This table sets out the on and off-balance sheet securitisation exposures originated or purchased, broken down by asset type.

APS 330 Table 12(k) and (s)

	As at 31 March 2023		
	Total outstanding exposures[1]		
Exposure Type	**On balance sheet $m**	**Off balance sheet $m**	**Total exposures $m**
Banking Book			
Residential Mortgages	**65,358**	**-**	**65,358**
Credit cards and other personal loans	**211**	**-**	**211**
Auto and equipment finance	**3,510**	**24**	**3,534**
Other	**360**	**-**	**360**
Total Banking Book	**69,439**	**24**	**69,463**
Trading Book			
Residential Mortgages	**-**	**-**	**-**
Credit cards and other personal loans	**-**	**-**	**-**
Auto and equipment finance	**-**	**-**	**-**
Other	**-**	**-**	**-**
Total Trading Book	**-**	**-**	**-**

	As at 31 March 2022		
	Total outstanding exposures[1]		
Exposure Type	On balance sheet $m	Off balance sheet $m	Total exposures $m
Banking Book			
Residential Mortgages	62,649	5	62,654
Credit cards and other personal loans	59	50	109
Auto and equipment finance	1,703	80	1,783
Other	287	72	359
Total Banking Book	64,698	207	64,905
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Other	-	-	-
Total Trading Book	-	-	-

[1] Included in the above are assets of $ 66,189 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group (31 March 2022: $61,777 million).

9.2.6 Exposure by Risk Weight Band

Banking Book

APS 330 Table 12(l)

Risk weight band	As at 31 March 2023 Gross Credit Exposure $m	As at 31 March 2023 Risk Weighted Assets $m	As at 31 March 2022 Gross Credit Exposure $m	As at 31 March 2022 Risk Weighted Assets $m
	Securitisation exposures subject to ERBA			
=<20%	1,289	255	1,476	292
>20%-50%	7	3	5	2
>50%-100%	97	59	33	20
>100%-140%	-	-	–	–
Total	**1,393**	**317**	1,514	314

Risk weight band	As at 31 March 2023 Gross Credit Exposure $m	As at 31 March 2023 Risk Weighted Assets $m	As at 31 March 2022 Gross Credit Exposure $m	As at 31 March 2022 Risk Weighted Assets $m
	Securitisation exposures subject to SFA			
=<20%	1,519	228	400	62
>20%-50%	345	91	1,123	287
>50%-100%	-	-	–	–
>100%-150%	-	-	–	–
>150%-650%	-	-	–	–
>650%-<1250%	-	-	–	–
Total	**1,864**	**319**	1,523	349

Risk weight band	As at 31 March 2023 Gross Credit Exposure $m	As at 31 March 2023 Risk Weighted Assets $m	As at 31 March 2022 Gross Credit Exposure $m	As at 31 March 2022 Risk Weighted Assets $m
	Securitisation exposures subject to risk weight cap			
=<20%	-	-	–	–
>20%-50%	-	-	–	–
>50%-100%	-	-	72	53
>100%-150%	-	-	–	–
>150%-650%	-	-	–	–
>650%-<1250%	-	-	–	–
Total	-	-	72	53

Exposure Type	As at 31 March 2023 CET1 Deduction[1] $m	As at 31 March 2022 CET1 Deduction[1] $m
Residential Mortgages	-	1
Credit cards and other personal loans	-	–
Auto and equipment finance	-	–
Other	17	20
Total	**17**	21

[1] Includes Resecuritisation Exposures $0 million as at 31 March 2023 (31 March 2022: $1 million).

Trading Book

APS 330 Table 12(t) & (u)

	As at 31 March 2023		As at 31 March 2022	
	Securitisation exposure subject to Standard Approach			
Risk weight band	Gross Credit Exposure $m	Risk Weighted Assets $m	Gross Credit Exposure $m	Risk Weighted Assets $m
=< 20%	–	–	–	–
>20%–50%	–	–	–	–
>50%–100%	–	–	–	–
>100%–140%	–	–	–	–
Total	–	–	–	–

	As at 31 March 2023		As at 31 March 2022	
	Securitisation exposure subject to IMA Approach			
Risk weight band	Gross Credit Exposure $m	Risk Weighted Assets $m	Gross Credit Exposure $m	Risk Weighted Assets $m
=< 20%	–	–	–	–
>20%–50%	–	–	–	–
>50%–100%	–	–	–	–
>100%–150%	–	–	–	–
>150%–650%	–	–	–	–
>650%–<1250%	–	–	–	–
Total	–	–	–	–

	As at 31 March 2023	As at 31 March 2022
	CET1 Deduction	
Exposure Type	$m	$m
Residential Mortgages	–	–
Credit cards and other personal loans	–	–
Auto and equipment finance	–	–
Other	–	–
Total	–	–

9.2.7 Resecuritisation Exposure

APS 330 Table 12(n) and (w)

	As at 31 March 2023	As at 31 March 2022
	Gross Credit Exposure[1]	
Exposure Type	**$m**	$m
Banking book		
Exposures with Credit Risk Mitigation	-	–
Exposures without Credit Risk Mitigation	-	1
Exposure to Guarantors by ratings:	-	–
Total banking book	-	1
Trading book		
Exposures with Credit Risk Mitigation	-	–
Exposures without Credit Risk Mitigation	-	–
Exposures to Guarantors by ratings:	-	–
Total trading book	-	–

[1] Exposures deducted from CET1 capital.

10. Credit Valuation Adjustment

Under Basel III, and in accordance with Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk ADI's are subject to a capital charge for potential mark to market losses on OTC derivatives (i.e. credit valuation adjustments) associated with a deterioration in the credit worthiness of a counterparty. APS 180 also allows an ADI to include eligible CVA hedges in the calculation of the CVA risk capital charge.

The CVA RWA is shown in the table below.

CVA capital	**As at 31 March 2023 $m**	As at 31 March 2022 $m
Total CVA RWA	**8,975**	12,294

11. Exposure to Central Counterparties

Under Basel III, and in accordance with Prudential Standard APS 180 Capital Adequacy: Counterparty Credit Risk ADI's are required to hold capital against exposures arising from trades cleared by central counterparties. This includes outstanding trade exposures, collateral placed with the clearing house (excluding collateral placed in bankruptcy remote manner), and default fund contributions.

The RWA on exposures arising from cleared trades as at 31 March 2023 is $476 million (31 March 2022 is $525 million). Details of the components of these exposures are shown in the tables below.

	As at 31 March 2023		
Central counterparty trade exposure	**Trade Exposure $m**	**Prefunded Default Fund Contribution $m**	**RWA $m**
Exposures to qualifying central counterparty	**14,176**	**659**	**476**
Exposures to non-qualifying central counterparty	**-**	**-**	**-**
Total central counterparty exposures	**14,176**	**659**	**476**

	As at 31 March 2022		
Central counterparty trade exposure	Trade Exposure $m	Prefunded Default Fund Contribution $m	RWA $m
Exposures to qualifying central counterparty	11,048	693	525
Exposures to non-qualifying central counterparty	–	–	–
Total central counterparty exposures	11,048	693	525

12. Market Risk

12.1 Market Risk

Market risk is the risk of adverse changes in the value of Macquarie's trading positions as a result of changes in market conditions. Macquarie is exposed to the following risks:

- **Price:** The risk of loss due to changes in price of a risk factor (interest rates, foreign exchange, commodities etc.)
- **Volatility:** The risk of loss due to changes in the volatility of a risk factor
- **Basis:** Risk of imperfect correlation between offsetting investments in a hedging strategy
- **Correlation:** Risk that the actual correlation between two assets or variables is different from the assumed correlation
- **Illiquid market:** Risk of inability to sell assets or close out positions in thinly traded markets at close to the last market prices
- **Concentration:** Risk of over concentration of trading exposures in certain markets and products
- **Valuation adjustments (XVA):** Risk of valuation adjustments to derivative positions; specifically, Credit Valuation Adjustment (CVA), Debit Valuation Adjustment (DVA) and Funding Valuation Adjustment (FVA).

Macquarie has long favoured transparent scenario analysis over complex statistical modelling as the cornerstone of risk measurement.

12.1.1 Market Risk Structure and Governance

RMG Market Risk is the second line risk function that assesses, monitors and reports on market risk. The operating groups own market risk arising from their activities, with independent monitoring and oversight by RMG Market Risk.

The RMG Market Risk function oversees Traded Market Risk (including VaR) and Non-Traded Market Risk (including IRRBB).

Traded Market Risk is governed by the Market Risk Committee (MRC), which meets on a quarterly basis. The MRC was established by Macquarie's Executive Committee to oversee the Value at Risk (VaR) model, the Trading Book Policy Statement and to review key information concerning the effectiveness of the Market Risk function. It meets quarterly and its composition includes certain members of the Executive Committee, with the CRO as Chairman.

Interest Rate Risk in the Banking Book (IRRBB) is governed by the Asset and Liability Committee (ALCO). The ALCO oversees the IRRBB management framework and approves changes to aggregate IRRBB limits. It meets at least five times throughout the year and is comprised of the members of the Executive Committee, with the CFO as Chairman.

12.1.2 Aggregate Measures of Market Risk

Macquarie's appetite for market risk is set by the Board as part of the Risk Appetite Statement and cascaded down through aggregate and division level limits.

Traded market risk

Aggregate traded market risk is constrained by two risk measures, Value at Risk (VaR) and the Macro Economic Linkages (MEL) stress scenarios. RMG Market Risk monitor traded market risk limits daily, with MEL monitored on T+1 basis and VaR on a T+2 basis.

The VaR model predicts the maximum likely loss in Macquarie's trading portfolio due to adverse movements in global markets over holding periods of one and ten days. The MEL scenario uses the contingent loss approach to capture simultaneous, worst case movements across all major markets. Whereas MEL focuses on extreme price movements, VaR focuses on unexceptional changes in price so that it does not account for losses that could occur beyond the 99% level of confidence. Stress testing therefore remains the predominant focus of RMG as it is considered to be the most effective mechanism to reduce Macquarie's exposure to unexpected market events.

Interest rate risk in the banking book (IRRBB)

Aggregate IRRBB is constrained by two measures, Economic Value Sensitivity (EVS) and Earnings at Risk (EaR). The EVS metric measures the change in net present value of the banking book as a result of changes in interest rates. The EaR model constrains the impact on reported income for a change in interest rates, including the Net Interest Income for accrual portfolios.

12.1.3 Traded Market Risk

All trading activities contain calculated elements of risk taking. Macquarie is prepared to accept such risks provided they are within agreed limits, independently and correctly identified, calculated and monitored by RMG and reported to senior management on a regular basis. Market Risk source exposures directly from the front office risk management system.

RMG monitors positions within Macquarie according to a limit structure that sets limits for all exposures in all markets. Limits are applied at a granular level to individual trading desks, through increasing levels of aggregation to Divisions and Operating Groups, and ultimately, Macquarie. This approach removes the need for future correlations or scenarios to be precisely predicted as all risks are stressed to the extreme and accounted for within the risk profile agreed for each business and Macquarie in aggregate.

Limits are approved by senior management with appropriate authority for the size and nature of the risk and Macquarie adheres to a strict 'no limit, no dealing' policy. If a product or position has not been authorised and given a limit structure by RMG, then it cannot be traded. Material breaches of the approved limit structure are communicated monthly to the Macquarie and Macquarie Bank Boards.

RMG sets three complementary limit structures:

- **Contingent loss limits:** Worst case scenarios that shock prices and volatilities by more than has occurred historically. Multiple scenarios are set for each market to capture the non-linearity and complexity of exposures arising from derivatives. A wide range of assumptions about the correlations between markets is applied
- **Position limits:** Volume, maturity and open position limits are set on a large number of market instruments and securities in order to constrain concentration risk and to avoid the accumulation of risky, illiquid positions
- **Value at Risk (VaR) limits:** Statistical measure based on a 10-day holding period and a 99% confidence level, as stipulated by the APRA capital adequacy standard. The model is validated daily by back testing a one-day VaR against hypothetical and actual daily trading profit or loss.

The risk of loss from incorrect or inappropriate pricing and hedging models is mitigated by the requirement for all new pricing models to be independently tested by the specialists within the Model Risk Management team in RMG.

12.1.4 Value at Risk Model

VaR provides a statistically based summary of overall market risk in the Group. The VaR model uses a Monte Carlo simulation to generate normally distributed price and volatility paths for approximately 9,300 benchmarks, using volatilities and correlations based on three years of historical data. Emphasis is placed on more recent market movements to more accurately reflect current conditions. Each benchmark represents an asset at a specific maturity, for example, one year crude oil futures or spot gold. The benchmarks provide a high level of granularity in assessing risk, covering a range of points on yield curves and forward price curves, and distinguishing between similar but distinct assets; for example, crude oil as opposed to heating oil, or gas traded at different locations. Exposures to individual equities within a national market are captured by specific risk modelling incorporated directly into the VaR model.

The integrity of the VaR model is tested against daily hypothetical and actual trading outcomes (profit and loss) and reported to APRA quarterly.

12.1.5 Macro-Economic Linkage Model

MEL scenarios are large, simultaneous, 'worst case' movements in global markets. The MEL scenarios consider very large movements in a number of markets at once, based on Macquarie's understanding of the economic linkages between markets. The MEL scenarios reflect a market 'shock' or 'gap' as opposed to a sustained deterioration.

12.2 Market Risk Capital Requirement

APRA has approved the use of Macquarie's internal model to calculate regulatory capital for market risk under APS 116.

The internal model calculation is based upon:

- Value at Risk using a 10-day time horizon at a 99% confidence level
- Stressed Value at Risk using a 10-day time horizon at a 99% confidence level
- Regulatory capital for debt security specific risk is calculated using the APRA standard method (see Section 12.2.3).

The sum of the VaR and debt security specific risk amounts is scaled by 12.5 in accordance with APRA policy to arrive at the traded market risk RWA, which was $9,743 million as at 31 March 2023 (31 March 2022: $10,230 million).

There were four hypothetical and three actual trading losses that exceeded the 1 day 99% VaR calculated for the 12 months ended 31 March 2023. The observed number of back testing exceptions indicates continued acceptable operation of the VaR model.

12.2.1 Value at Risk Figures (10 day 99%)

APS 330 Table 14(f)

	For the 12 months to 31 March 2023				For the 12 months to 31 March 2022			
	VaR over the current reporting period				VaR over the previous reporting period			
	Mean value $m	**Max value $m**	**Min value $m**	**VaR (31-Mar) $m**	Mean value $m	Max value $m	Min value $m	VaR (31-Mar) $m
Commodities	**132**	**358**	**76**	**87**	78	136	36	72
Equities[1]	**6**	**16**	**2**	**7**	8	15	4	4
Foreign Exchange	**10**	**25**	**1**	**15**	4	9	1	5
Interest Rates	**21**	**36**	**7**	**7**	10	20	6	17
Aggregate	**130**	**349**	**78**	**84**	77	137	34	70

12.2.2 Stressed Value at Risk Figures (10 day 99%)

APS 330 Table 14(f)

	For the 12 months to 31 March 2023				For the 12 months to 31 March 2022			
	VaR over the current reporting period				VaR over the previous reporting period			
	Mean value $m	**Max value $m**	**Min value $m**	**VaR (31-Mar) $m**	Mean value $m	Max value $m	Min value $m	VaR (31-Mar) $m
Commodities	**151**	**331**	**107**	**113**	143	211	89	167
Equities[1]	**12**	**26**	**3**	**16**	16	39	6	10
Foreign Exchange	**21**	**53**	**7**	**35**	7	21	0	14
Interest Rates	**36**	**56**	**15**	**26**	39	56	27	55
Aggregate	**135**	**309**	**94**	**105**	132	198	81	159

12.2.3 Debt Security Specific Risk Figures

Regulatory capital for Macquarie's debt security specific risk (including securitisations held in the trading book) is calculated using the APRA standard method.

APS 330 Table 13(b)

	As at 31 March 2023 $m	As at 31 March 2022 $m
Debt specific risk	**55**	49

The specific risks referred to above arise from movements in credit curves in the Macquarie trading book.

[1] Equities figures incorporate the Equity specific risk amount.

12.2.4 Interest Rate Risk in the Banking Book (IRRBB)

Interest rate exposures, where possible, are transferred into the trading books of Commodities and Global Markets and Group Treasury and managed under traded market risk limits. The residual risks in the banking book are not material but are nevertheless monitored and constrained by RMG and reported to senior management monthly. Macquarie measures and monitors interest rate risk on both an economic value and earnings basis. IRRBB is measured on a monthly basis using an APRA approved repricing gap model with monthly bucketing of exposures.

The total IRRBB capital is calculated for each currency in accordance with APS 117 Capital Adequacy: Interest Rate Risk in the Banking Book (Advanced ADIs). Macquarie's internal model sums the change in economic value or earnings arising from the following risk categories:

- Repricing and yield curve (parallel and non-parallel moves)
- Basis (imperfect correlation between indices of the same tenor)
- Optionality (breakdowns in assumptions used for hedging); and
- Embedded gains and losses (difference between the fair value and book value arising from past interest rate movements).

A standardised calculation for credit spread risk in the banking book is also included in MBL's total IRRBB capital.

Macquarie includes expectations of client behaviour where appropriate, including prepayments on loans & leases, and pull-through assumptions on fixed rate commitments. This is supported by stresses to these assumptions within the 'Optionality' risk calculation. Any change to these assumptions requires approval by the Risk Management Group.

	As at 31 March 2023 $m	As at 31 March 2022 $m
IRRBB RWA	**1,920**	1,588

APS 330 Table 17(b)

	As at 31 March 2023	As at 31 March 2022
	Change in economic value	
Stress testing: interest rate shock applied	**$m**	$m
AUD		
200 basis point parallel increase	**13.8**	9.1
200 basis point parallel decrease	**(16.6)**	(10.8)
CAD		
200 basis point parallel increase	**-**	(0.1)
200 basis point parallel decrease	**-**	0.1
EUR		
200 basis point parallel increase	**(5.3)**	(4.3)
200 basis point parallel decrease	**4.9**	9.4
GBP		
200 basis point parallel increase	**1.8**	(0.4)
200 basis point parallel decrease	**(1.9)**	0.5
USD		
200 basis point parallel increase	**(4.9)**	9.1
200 basis point parallel decrease	**4.8**	(4.4)

Note that the brackets in the above table indicate a loss in economic value due to movements in interest rates.

	As at 31 March 2023 $m	As at 31 March 2022 $m
IRRBB regulatory capital requirement – AUD	**154**	127

13. Equity Risk

Equity risk is the risk of loss arising from banking book equity type exposures. These exposures include:

- Holdings in specialised funds managed by Macquarie
- Property equity, including property trusts and direct property equity investments; and
- Other equity investments.

All of the above equity risk positions are subject to an aggregate Equity Risk Limit (ERL). The ERL is set by the Board by reference to the Risk Appetite Test that is described further in the Capital Adequacy Section 4. When the Board sets the limit, it also considers the level of earnings, capital and market conditions. RMG reviews the limit periodically and reports the results of the review to the MGL/MBL Risk Committee and the Board.

13.1 Accounting for Equity Holdings in the Banking Book

Equity investment positions have varying accounting treatments depending on the nature of the exposure. These include:

- Equity accounting for investments in associates and Joint Ventures
- Investment fair valued through profit or loss. Macquarie has not elected to designate any equity positions as fair value through OCI.

In addition to equity investment positions in the Banking Book, Macquarie also has equity investments in trading portfolios at fair value through profit or loss, which are included in the Market Risk calculation.

13.1.1 Investments in Associates and Joint Ventures

Equity accounting is applied to investments in which Macquarie has significant influence or joint control (joint ventures). These equity investments are described as Investments in Associates and Joint Ventures within this document. Equity accounting is applied such that Macquarie's share of its investee's post acquisition profit or losses are recorded in Macquarie's Consolidated Income Statement, and the share of its post-acquisition movements in other comprehensive income in Macquarie's Consolidated Statement of Comprehensive Income. Dividends or distributions from associates or joint ventures reduce the carrying amount of the investment to the extent that they are returns of capital. Where there is an indicator of impairment, the carrying amount of the investment is tested for impairment by comparing its recoverable amount with its carrying value. Impairment losses are recognised in the Consolidated Income Statement as part of other impairment charges/reversals. A reversal of a previously recognised impairment loss is recognised only to the extent that the investment's carrying value does not exceed the carrying amount that would have been determined (including consideration of any equity accounted losses), if no impairment loss had been recognised.

13.1.2 Fair value Investments through profit or loss

Fair value reflects the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

Quoted prices or rates are used to determine fair value where an active market exists. If the market for a financial instrument is not active, fair values are estimated using present value or other valuation techniques, using inputs based on market conditions prevailing at the measurement date.

Gains and losses arising from subsequent changes in fair value of equity investments are recognised in the Consolidated Income Statement as investment income within net other operating income.

13.2 Equity Investments

The table below details the carrying value of equity investments held by Macquarie, in comparison to the applicable fair value of these equities. The categorisation of listed and unlisted investments is required for APRA regulatory reporting purposes – these include the equity investments under each of the accounting classifications outlined above. Valuations have been based on the requirements of accounting standards.

APS 330 Table 16(b) and (c)

	As at 31 March 2023		As at 31 March 2022	
Equity investments[1]	**Carrying value $m**	**Fair value[2] $m**	Carrying value $m	Fair value[1] $m
Value of listed (publicly traded) equities	**65**	**65**	96	96
Value of unlisted (privately held) equities	**718**	**718**	643	643
Total	**783**	**783**	739	739

13.3 Capital Requirements Arising from Equity Risks

Equity investments are deducted from Common Equity Tier 1 capital under APRA's version of the Basel III rules.

APS 330 Table 16(f)

Deduction amount	**As at 31 March 2023 $m**	As at 31 March 2022 $m
Equity investments[3]	**742**	736

13.4 Gains and Losses on Equity Investments

APS 330 Table 6(d) and (e)

Gains / (losses) on equity investments	**As at 31 March 2023 $m**	As at 31 March 2022 $m
Cumulative realised gains/(losses)[4]	**38**	4
Total unrealised gains/(losses)	**(29)**	50
Total unrealised gains/(losses) included in Tier 1	**(29)**	50

[1] At MBL and its subsidiaries, the Consolidated Entity.
[2] Includes Investments in Associates which are equity accounted and not fair valued and undrawn commitments (off balance sheet) which are deemed in the nature of equity for Regulatory Capital purposes.
[3] At Level 2 regulatory group.
[4] Gains are defined as proceeds on sale less costs net of provisions.

14. Operational Risk

Operational risk is inherent in Macquarie's business. Macquarie defines operational risk as the risk of loss resulting from inadequate or failed internal processes, controls or systems or from external events. It also includes the failure or inadequate management of other risk types.

14.1 Macquarie's Operational Risk Management Framework

Operational Risk Objectives

Macquarie's *Operational Risk Management Framework* (ORMF) is designed to identify, assess and manage operational risks across the organisation. The key objectives of the framework are:

- Risk identification, analysis and acceptance
- Developing control frameworks to support the management of material risks
- Execution and monitoring of risk management practices
- Reporting and escalation of risk information on a routine and exception basis.

Operational Risk Management Process

Operating Groups and Central Service Groups implement the *ORMF* in a manner that is tailored to their specific operational risk profile. However, a group-wide risk and control management framework exists to ensure consistency and alignment to minimum standards, including the following mandatory elements:

- A robust change management process to ensure operational risks in new activities or products are identified, addressed, and managed prior to implementation
- A risk and control self-assessment process to identify material risks that arise through the delivery of business activities and assess how these risks are managed across both Operating Groups and Central Service Groups
- Recording operational risk incidents in a centralised reporting system. Incidents are analysed to identify trends and establish lessons learnt on the effectiveness of controls
- Allocation of operational risk capital to Macquarie businesses as a tool to further encourage positive behaviour in Macquarie's day to day management of operational risk
- Macquarie wide policies that require a consistent approach and minimum standards on specific operational risk matters
- Embedded Business Operational Risk Managers (BORMs) in Operating Groups who act as delegates of the Operating Group Head. These representatives are required to assess whether operational risks are addressed appropriately and that the *ORMF* is executed within their area.

Structure and Organisation of the Operational Risk Function

Most Macquarie operational risk staff operate at the business level. The BORMs are responsible for embedding operational risk management practices within their business to support the identification and management of risks across their business group. They report directly to the relevant business and have a dotted reporting line to the Head of RMG Operational Risk.

RMG Operational Risk is a division of RMG and is managed separately from other risk disciplines within RMG. RMG Operational Risk is responsible for defining the ORMF and the group-wide minimum standards in relation to operational risk and control management.

RMG regularly reports on the operational risk profile and the effectiveness of the Framework to the Board Risk Committee (BRiC) and to senior management.

14.2 Operational Risk Capital Calculation

Macquarie holds operational risk capital to absorb potential losses arising from operational risk exposures.

As of 1 January 2023, following the implementation of APRA's revised bank capital framework, Macquarie uses the Standardised Measurement Approach for assessing operational risk capital, as required by Prudential Standard APS 115 Capital Adequacy: Standardised Measurement Approach to Operational Risk. The increase in operational risk capital over the period is due to the change in calculation methodology and does not reflect a corresponding change in the operational risk profile.

Operational Risk – RWA

	As at 31 March 2023 $m	As at 31 March 2022[1] $m
Operational Risk RWA	**15,828**	10,335

[1] Comparatives for 31 March 2022 have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

15. Leverage Ratio Disclosures

The leverage ratio is a non-risk-based ratio that is intended to restrict the build-up of excessive leverage in the banking system and acts as a supplementary measure to create a back stop for the risk-based capital requirements.

Under APRA's revised bank capital framework, Prudential Standard APS 110 Capital Adequacy requires a minimum leverage ratio of 3.5% effective 1 January 2023. Macquarie's leverage ratio was 5.2% at 31 March 2023. There was a reduction in total exposures driven by market movements in commodity derivatives and a decrease in liquidity holdings. This was partially offset by an increase in exposure value under APRA's revised calculation methodology, resulting in a neutral impact to the leverage ratio quarter on quarter.

Capital and total exposures	**31 March 2023 $m**	31 December 2022[1] $m	30 September 2022[1] $m	30 June 2022[1] $m
Tier 1 Capital	**19,478**	19,961	19,876	18,896
Total exposures	**375,561**	384,047	418,822	372,868
Macquarie Level 2 regulatory group Leverage ratio	**5.2%**	5.2%	4.7%	5.1%

[1] Comparatives have not been restated for APRA's revised bank capital framework which came into effect from 1 January 2023.

15.1 Leverage Ratio Disclosure Template

APS 330 Table 18

Item		As at 31 March 2023 $m
On-balance sheet exposures		
1	On-balance sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	257,972
2	(Asset amounts deducted in determining Tier 1 capital)	(2,794)
3	**Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 and 2)**	255,178
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e., net of eligible cash variation margin)	34,699
5	Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	31,200
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the Australian Accounting Standards	-
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(14,131)
8	(Exempted central counterparty (CCP) leg of client-cleared trade exposures)	(6,081)
9	Adjusted effective notional amount of written credit derivatives	1,619
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(1,457)
11	**Total derivative exposures (sum of rows 4 to 10)**	45,849
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	47,528
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(570)
14	CCR exposure for SFT assets	5,440
15	Agent transaction exposures	-
16	**Total SFT exposures (sum of rows 12 to 15)**	52,398
Other off-balance sheet exposures		
17	Off-balance sheet exposure at gross notional amount	24,934
18	(Adjustments for conversion to credit equivalent amounts)	(2,798)
19	**Other off-balance sheet exposures (sum of rows 17 and 18)**	22,136
Capital and total exposures		
20	Tier 1 Capital	19,478
21	**Total exposures (sum of rows 3, 11, 16 and 19)**	375,561
Leverage ratio		
22	**Leverage ratio**	5.2%

15.2 Summary Comparison of Accounting Assets versus Leverage Ratio Exposure Measure

Item		As at 31 March 2023 $m
1	Total consolidated assets as per published financial report	**330,823**
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	**1,241**
3	Adjustment for assets held on the balance sheet in a fiduciary capacity pursuant to the Australian Accounting Standards but excluded from the leverage ratio exposure measure	**-**
4	Adjustments for derivative financial instruments	**6,402**
5	Adjustment for SFTs (i.e., repos and similar secured lending)	**9,197**
6	Adjustment for off-balance sheet exposures (i.e., conversion to credit equivalent amounts of off-balance sheet exposures)	**22,136**
7	Other adjustments	**5,762**
8	**Leverage ratio exposure**	**375,561**

16. Liquidity Coverage Ratio Disclosure

Liquidity Coverage Ratio disclosure template

APS 330 Table 20

Liquidity Coverage Ratio disclosure template		**For the 3 months to 31 March 2023**		For the 3 months to 31 December 2022	
		Total unweighted value (average) $m	**Total weighted value (average) $m**	Total unweighted value (average) $m	Total weighted value (average) $m
Liquid assets, of which:					
1	High quality liquid assets (HQLA)		**57,295**		63,111
2	Alternative liquid assets (ALA)		**-**		1,643
3	Reserve Bank of New Zealand (RBNZ) securities		**-**		-
Cash outflows					
4	Retail deposits and deposits from small business customers, of which:	**80,155**	**7,925**	74,430	7,275
5	Stable deposits	**25,037**	**1,252**	24,224	1,211
6	Less stable deposits	**55,118**	**6,673**	50,206	6,064
7	Unsecured wholesale funding, of which:	**43,015**	**22,497**	44,686	23,386
8	Operational deposits (all counterparties) and deposits in networks for cooperative banks	**18,067**	**3,428**	18,534	3,572
9	Non-operational deposits (all counterparties)	**19,061**	**13,182**	20,574	14,236
10	Unsecured debt	**5,887**	**5,887**	5,578	5,578
11	Secured wholesale funding		**989**		3,260
12	Additional requirements, of which:	**41,071**	**20,916**	48,060	26,823
13	Outflows related to derivatives exposures and other collateral requirements	**20,267**	**18,940**	27,158	24,572
14	Outflows related to loss of funding on debt products	**350**	**350**	452	452
15	Credit and liquidity facilities	**20,454**	**1,626**	20,450	1,799
16	Other contractual funding obligations	**12,702**	**12,673**	15,097	15,058
17	Other contingent funding obligations	**10,259**	**616**	10,861	669
18	**Total cash outflows**		**65,616**		76,471
Cash Inflows					
19	Secured lending (e.g., reverse repos)	**39,295**	**21,251**	42,146	24,247
20	Inflows from fully performing exposures	**3,178**	**2,436**	3,445	2,743
21	Other cash inflows	**20,494**	**20,494**	24,562	24,562
22	**Total cash inflows**	**62,967**	**44,181**	70,153	51,552
23	**Total liquid assets**		**57,295**		64,754
24	**Total net cash outflows**[1]		**26,794**		31,147
25	**Liquidity Coverage Ratio (%)**[2]		**214%**		208%

[1] APRA imposed a 15% add-on to the Net Cash Outflow (NCO) component of the LCR calculation, effective from 1 April 2021. This add-on increased to 25% from 1 May 2022. For the 3 months to 31 March 2023 an average NCO overlay of $5,359 million is included in the disclosed balance of $26,794 million (3 months to 31 December 2022 overlay of $6,229 million is included in the disclosed balance of $31,147 million).
[2] The LCR for the 3 months to 31 March 2023 is calculated from 63 daily LCR observations (3 months to 31 December 2022 was calculated from 62 daily LCR observations).

The Liquidity Coverage Ratio (LCR)

The LCR requires unencumbered liquid assets be held to cover expected net cash outflows (NCOs) under a regulatory-defined stress scenario lasting 30 calendar days. Macquarie's 3 month average LCR to 31 March 2023 was 214% (based on 63 daily observations). This represents an increase of 6% from the 3 month LCR to 31 December 2022, driven by a reduction in NCOs partially offset by a decrease in liquid assets. Note that Macquarie's 3 month average LCR to 31 December 2022 included Macquarie's allocation under the Committed Liquidity Facility. Consistent with the industry-wide phase out of the CLF, Macquarie's CLF allocation reduced to zero as at December 2022.

Liquidity management is performed centrally by Group Treasury, with oversight from the MGL and MBL Asset and Liability Committees (ALCO), the MGL and MBL Boards and the Risk Management Group (RMG). Furthermore, the Board approved Liquidity Policy and Risk Tolerance is designed to ensure Macquarie maintains sufficient liquidity to meet its obligations as they fall due.

Macquarie sets internal management and Board approved minimum limits for the LCR above the regulatory minimum level and monitors its aggregate LCR position against these limits on a daily basis. Macquarie also monitors the LCR position on a standalone basis for major currencies in which it operates, with the high-quality liquid assets (HQLA) portfolio being denominated and held in both Australian Dollars and a range of other currencies. This ensures that liquid assets are maintained consistent with the distribution of liquidity needs by currency, allowing for an acceptable level of currency mismatches.

Macquarie actively considers the impact of business decisions on the LCR, as well as internal liquidity metrics that form part of the broader liquidity risk management framework. Macquarie's LCR fluctuates on a daily basis as a result of normal business activities and, accordingly, ongoing fluctuations in the reported LCR are expected and are not necessarily indicative of a changing risk appetite. Some examples of factors that can influence the LCR include wholesale funding activities (such as upcoming maturities and prefunding expected future asset growth), the degree of activity in Macquarie's capital markets facing businesses, the composition and nature of liquid asset holdings, and a variety of other external market considerations that could impact day to day collateral requirements.

Liquid Assets

In addition to notes and coin and balances held with central banks, Macquarie's LCR liquid assets include Australian Dollar Commonwealth Government and semi-Government securities as well as certain HQLA-qualifying foreign currency securities.

Net Cash Outflows (NCOs)

NCOs in the LCR include contractual and assumed cash outflows, offset by certain allowable contractual cash inflows. Some of the key drivers of Macquarie's NCOs include:

Retail and SME deposits: assumed regulatory outflow relating to deposits from retail and SME customers that are at call or potentially callable within 30 days.

Unsecured wholesale funding: includes remaining deposits which are not received from retail or SME customers along with unsecured debt balances contractually maturing within 30 days.

Secured wholesale funding and lending: represent inflows and outflows from secured lending and borrowing activities contractually maturing within 30 days, such as repurchase, and reverse repurchase agreements.

Outflows relating to derivative exposures and other collateral requirements: includes gross contractual cash outflows relating to contractually maturing derivative contracts (with gross inflows on maturing derivative contracts profiled in 'other cash inflows'). Further, contingent liquidity outflows such as potential collateral requirements from market movements, a 3-notch credit ratings downgrade and withdrawal of excess collateral placed with Macquarie are also included in this category.

Inflows from fully performing exposures: In Macquarie's LCR, a large component of this balance relates to excess liquidity placed on an overnight or very short-term basis with third parties (internally considered part of the cash and liquid asset portfolio).

Other contractual funding obligations and other cash inflows: includes other gross flows not profiled elsewhere in the LCR. The volumes in these categories are large relative to Macquarie's total cash outflows and inflows. In addition to derivative inflows noted above, key balances in these categories include:

- **Segregated client funds placed with Macquarie:** Macquarie acts as a clearing agent for clients on various futures exchanges. Clients place margin with Macquarie and Macquarie places this margin either directly with the exchange, holds it in other segregated external asset accounts or retains a portion on deposit with Macquarie. Some of the balances are recorded on a gross basis on Macquarie's balance sheet and APRA require these to be profiled as gross inflows and outflows in the LCR.
- **Security and broker settlement balances:** these represent securities that have been purchased or sold by Macquarie that have not yet settled and broker balances where stock has been bought or sold on behalf of clients, but payment has not been made to / received from the client. APRA require these balances to be reflected on a gross basis in the LCR as 100% weighted inflows and outflows. The net effect of these balances on Macquarie's average LCR is minimal.

17. Net Stable Funding Ratio Disclosures

Net Stable Funding Ratio disclosure template

APS 330 Table 21

		As at 31 March 2023				
		Unweighted value by residual maturity				
Net Stable Funding Ratio disclosure template		No maturity $m	<6 months $m	>=6 months to < 1yr $m	>= 1yr $m	Weighted value $m
Available Stable Funding (ASF) Item						
1	**Capital**	20,353	-	-	9,572	29,925
2	Regulatory Capital	20,353	-	-	9,572	29,925
3	Other capital instruments	-	-	-	-	-
4	**Retail deposits and deposits from small business customers**	78,994	14,860	-	-	85,829
5	Stable deposits	25,276	1,929	-	-	25,845
6	Less stable deposits	53,718	12,931	-	-	59,984
7	**Wholesale funding**	28,230	59,019	9,671	40,570	62,471
8	Operational deposits	14,727	3,616	-	-	9,172
9	Other wholesale funding	13,503	55,403	9,671	40,570	53,299
10	**Liabilities with matching interdependent assets**	-	-	-	-	-
11	**Other Liabilities**	4,289	21,508	56	635	(1,127)
12	NSFR derivative liabilities	-	11,540	-	-	-
13	All other liabilities and equity not included in the above categories[1]	4,289	9,968	56	635	(1,127)
14	**Total ASF**	131,866	95,387	9,727	50,777	177,098
Required Stable Funding (RSF) Item			-	-	-	-
15(a)	**Total NSFR (HQLA)**	31,750	7,372	978	7,106	1,449
15(b)	**ALA**	-	-	-	11,256	1,126
15(c)	**RBNZ securities**					
16	**Deposits held at other financial institutions for operational purposes**	1,547	-	-	-	773
17	**Performing loans and securities**	24,471	41,788	7,606	121,264	111,306
18	Performing loans to financial institutions secured by Level 1 HQLA	3,011	6,555	-	63	1,025
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	13,952	21,845	48	1,636	7,031
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs), of which:	1,570	3,976	1,014	26,890	21,697

[1]APRA has imposed a 1% decrease to the Available Stable Funding component of the NSFR calculation, effective from 1 April 2021. An overlay of $1,789 million, equal to a 1% decrease to the ASF component, is included in the disclosed 'No maturity' balance of $4,289 million.

	Net Stable Funding Ratio disclosure template	As at 31 March 2023 Unweighted value by residual maturity No maturity $m	 <6 months $m	 >=6 months to < 1yr $m	 >= 1yr $m	 Weighted value $m
21	With a risk weight of less than or equal to 35% under APS 112	-	52	282	1,750	1,304
22	Performing residential mortgages		6,485	5,283	90,664	73,156
23	With a risk weight equal to 35%		1,369	1,309	90,116	64,797
24	Securities that are not in default and do not qualify as HQLA, including exchange- traded equities	5,938	2,927	1,261	2,011	8,397
25	**Assets with matching interdependent liabilities**	-	-	-	-	-
26	**Other assets:**	7,522	6,599	175	44,385	27,333
27	Physical traded commodities, including gold	5,227				4,443
28	Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	-			8,518	7,240
29	NSFR derivative assets				13,592	2,052
30	NSFR derivative liabilities before deduction of variation margin	–			17,792	3,558
31	All other assets not included in the above categories	2,295	6,599	175	4,483	10,040
32	**Off-balance sheet items**	–		–	21,903	1,009
33	**Total RSF**	65,290	55,759	8,759	205,914	142,996
34	**Net Stable Funding Ratio (%)**	–	–	–	–	123.8%

Net Stable Funding Ratio disclosure template

APS 330 Table 21

		As at 31 Dec 2022				
		Unweighted value by residual maturity				
Net Stable Funding Ratio disclosure template		No maturity $m	<6 months $m	>=6 months to < 1yr $m	>= 1yr $m	Weighted value $m
Available Stable Funding (ASF) Item						
1	**Capital**	20,912	-	-	7,991	28,903
2	Regulatory Capital	20,912	-	-	7,991	28,903
3	Other capital instruments	-	-	-	-	-
4	**Retail deposits and deposits from small business customers**	75,890	14,620	-	-	82,781
5	Stable deposits	24,583	1,842	-	-	25,104
6	Less stable deposits	51,307	12,778	-	-	57,677
7	**Wholesale funding**	27,637	62,848	13,712	40,929	64,194
8	Operational deposits	14,460	3,550	-	-	9,005
9	Other wholesale funding	13,177	59,298	13,712	40,929	55,189
10	**Liabilities with matching interdependent assets**	-	-	-	-	-
11	**Other Liabilities**	5,891	26,251	33	645	(1,104)
12	NSFR derivative liabilities		14,999			
13	All other liabilities and equity not included in the above categories[1]	5,891	11,252	33	645	(1,104)
14	**Total ASF**	130,330	103,719	13,745	49,565	174,774
Required Stable Funding (RSF) Item				-	-	-
15(a)	**Total NSFR (HQLA)**	29,590	8,422	1,248	7,705	2,723
15(b)	**ALA**	-	-	-	11,256	1,126
15(c)	**RBNZ securities**		-	-	-	-
16	**Deposits held at other financial institutions for operational purposes**	1,595	-	-	-	797
17	**Performing loans and securities**	24,197	49,137	7,853	117,115	111,701
18	Performing loans to financial institutions secured by Level 1 HQLA	1,395	12,093	116	-	1,432
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	14,324	23,759	1,389	7,023	13,588
20	Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs), of which:	1,906	9,436	3,394	13,679	18,693
21	With a risk weight of less than or equal to 35% under APS 112	-	153	416	1,579	1,311
22	Performing residential mortgages	-	1,492	1,433	94,707	69,216
23	With a risk weight equal to 35%	-	1,431	1,382	91,003	65,794
24	Securities that are not in default and do not qualify as HQLA, including exchange- traded equities	6,572	2,357	1,521	1,706	8,772
25	**Assets with matching interdependent**	-	-	-	-	-

[1] APRA has imposed a 1% decrease to the Available Stable Funding component of the NSFR calculation, effective from 1 April 2021. An overlay of $1,765 million, equal to a 1% decrease to the ASF component, is included in the disclosed 'No maturity' balance of $5,891 million.

Net Stable Funding Ratio disclosure template		As at 31 Dec 2022				
		Unweighted value by residual maturity				
		No maturity $m	<6 months $m	>=6 months to < 1yr $m	>= 1yr $m	Weighted value $m
26	**Other assets**	7,621	7,848	-	57,736	31,679
27	Physical traded commodities	5,688				4,835
28	Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	-			11,588	9,732
29	NSFR derivative assets	-			17,595	2,596
30	NSFR derivative liabilities before deduction of variation margin	-			22,279	4,456
31	All other assets not included in the above categories	1,933	7,848	-	6,274	10,060
32	**Off-balance sheet items**				21,998	1,016
33	**Total RSF**	63,003	65,407	9,101	215,810	149,042
34	**Net Stable Funding Ratio (%)**					117.3%

The Net Stable Funding Ratio (NSFR)

The NSFR is a twelve-month structural funding metric, requiring that "available stable funding" (ASF) be sufficient to cover "required stable funding" (RSF), where 'stable' funding has an actual or assumed maturity of greater than twelve months. Macquarie's NSFR as at 31 March 2023 was 124% and 117% as at 31 December 2022. The NSFR increased over the quarter as a result of an increase in ASF and a decrease in RSF.

The NSFR seeks to encourage ADIs to fund their activities with more stable sources of funding on an ongoing basis, and thereby promote greater balance sheet resilience. It also aims to reduce an ADI's reliance on less stable sources of funding. These requirements are in line with Macquarie's Board approved Liquidity Policy and Risk Tolerance.

Macquarie sets internal management and Board approved minimum limits for the NSFR above the regulatory minimum level and monitors its aggregate NSFR position against these limits on a daily basis.

Whilst the NSFR and LCR are regulatory minima, Macquarie also models a number of additional internal liquidity scenarios covering both market wide and Macquarie name specific crises. Macquarie actively considers the impact of business decisions on the NSFR and LCR, as well as other internal liquidity metrics that form part of its broader liquidity risk management framework.

Macquarie's NSFR fluctuates as a result of normal business activities and, accordingly, ongoing fluctuations in the reported NSFR are expected and are not necessarily indicative of a changing risk appetite. Some examples of factors that can influence the NSFR include wholesale funding activities (such as prefunding expected future asset growth), growth in home loans and customer deposits, equity and hybrids issuance, the degree of activity in Macquarie's capital markets facing businesses, and a variety of other external market considerations.

Calculation of the Net Stable Funding Ratio

Under the regulatory rules, Available Stable Funding factors are applied to Macquarie's capital and liabilities; while Required Stable Funding factors are applied to assets and off-balance sheet exposures. This calculation is shown in table 21 on pages 70 to 73 and is based on spot balances.

Appendix 1 Regulatory Capital Reconciliation

Common Disclosures Template

The capital disclosures detailed in the template below represents Basel III common disclosure requirements. These tables should be read in conjunction with Section 1.2 Regulatory Balance sheet and Section 1.3 Reconciliation between common disclosures template and the Regulatory Balance Sheet.

Common Equity Tier 1 capital: instruments and reserves		As at 31 March 2023 $m	Table Reference
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	**10,161**	Table f
2	Retained earnings	**9,122**	
3	Accumulated other comprehensive income (and other reserves)	**1,057**	
4	Directly issued capital subject to phase out from CET1 (only applicable to mutually-owned companies)	**-**	
5	Ordinary share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	**-**	
6	**Common Equity Tier 1 capital before regulatory adjustments**	**20,340**	
Common Equity Tier 1 capital: regulatory adjustments			
7	Prudential valuation adjustments	**-**	
8	Goodwill (net of related tax liability)	**39**	Table b
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	**58**	Table b
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	**55**	Table a
11	Cash-flow hedge reserve	**91**	
12	Shortfall of provisions to expected losses	**-**	
13	Securitisation gain on sale (as set out in paragraph 562 of Basel II framework)	**-**	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	**59**	
15	Defined benefit superannuation fund net assets	**-**	
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	**-**	
17	Reciprocal cross-holdings in common equity	**-**	
18	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	**-**	Table c
19	Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	**-**	Table c
20	Mortgage service rights (amount above 10% threshold)	**-**	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	**-**	Table a
22	Amount exceeding the 15% threshold	**-**	
23	of which: significant investments in the ordinary shares of financial entities	**-**	Table c
24	of which: mortgage servicing rights	**-**	
25	of which: deferred tax assets arising from temporary differences	**-**	Table a
	Other regulatory adjustments not reported in rows 7 to 25	**53**	

Common Equity Tier 1 Capital (Harmonised)[1]		**19,985**	
APRA Specific Regulatory Adjustments			
26	National specific regulatory adjustments (sum of rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i and 26j)	**2,925**	
26a	of which: treasury shares	**-**	
26b	of which: offset to dividends declared under a dividend reinvestment plan (DRP), to the extent that the dividends are used to purchase new ordinary shares issued by the ADI	**-**	
26c	of which: deferred fee income	**(13)**	
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23	**482**	Table c
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	**989**	Table a
26f	of which: capitalised expenses	**716**	
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	**516**	Table c
26h	of which: covered bonds in excess of asset cover in pools	**-**	
26i	of which: undercapitalisation of a non-consolidated subsidiary	**-**	
26j	of which: other national specific regulatory adjustments not reported in rows 26a to 26i	**235**	
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	**-**	
28	**Total regulatory adjustments to Common Equity Tier 1**	**3,280**	
29	**Common Equity Tier 1 Capital (APRA)**	**17,060**	
Additional Tier 1 Capital: instruments			
30	Directly issued qualifying Additional Tier 1 instruments	**2,418**	
31	of which: classified as equity under applicable accounting standards	**-**	
32	of which: classified as liabilities under applicable accounting standards	**2,418**	
33	Directly issued capital instruments subject to phase out from Additional Tier 1	-	
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group ATI)	**-**	
35	of which: instruments issued by subsidiaries subject to phase out	**-**	
36	**Additional Tier 1 Capital before regulatory adjustments**	**2,418**	Table d
Additional Tier 1 Capital: Regulatory adjustments			
37	Investments in own Additional Tier 1 instruments	**-**	
38	Reciprocal cross-holdings in Additional Tier 1 instruments	**-**	
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	**-**	
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	**-**	
41	National specific regulatory adjustments (sum of rows 41a, 41b and 41c)	**-**	
41a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	**-**	
41b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidations not reported in rows 39 and 40	**-**	
41c	of which: other national specific regulatory adjustments not reported in rows 41a and 41b	**-**	
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions	**-**	
43	**Total regulatory adjustments to Additional Tier 1 capital**	**-**	

[1] 'Harmonised' Basel III estimates are calculated in accordance with the BCBS Basel III framework, noting that MB is not regulated by the BCBS and so impacts shown are indicative only.

44	**Additional Tier 1 capital (AT1)**	**2,418**	
45	**Tier 1 Capital (T1=CET1+AT1)**	**19,478**	
Tier 2 Capital: instruments and provisions			
46	Directly issued qualifying Tier 2 instruments	**7,139**	Table e
47	Directly issued capital instruments subject to phase out from Tier 2	**-**	Table e
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group T2)	**-**	
49	of which: instruments issued by subsidiaries subject to phase out	**-**	
50	Provisions	**15**	
51	**Tier 2 Capital before regulatory adjustments**	**7,154**	
Tier 2 Capital: regulatory adjustments			
52	Investments in own Tier 2 instruments	**-**	
53	Reciprocal cross-holdings in Tier 2 instruments	**-**	
54	Investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	**-**	
55	Significant investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	**-**	
56	National specific regulatory adjustments (sum of rows 56a, 56b and 56c)	**-**	
56a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	**-**	
56b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidation not reported in rows 54 and 55	**-**	
56c	of which: other national specific regulatory adjustments not reported in rows 56a and 56b	**-**	
57	**Total regulatory adjustments to Tier 2 capital**	**-**	
58	**Tier 2 capital (T2)**	**7,154**	
59	**Total capital (TC=T1+T2)**	**26,632**	
60	**Total risk-weighted assets based on APRA standards**	**124,976**	
Capital ratios and buffers			
61	**Common Equity Tier 1 (as a percentage of risk-weighted assets)**	**13.7%**	
62	**Tier 1 (as a percentage of risk-weighted assets)**	**15.6%**	
63	**Total capital (as a percentage of risk-weighted assets)**	**21.3%**	
64	**Buffer requirement (minimum CET1 requirement of 4.5% plus capital conservation buffer of 3.75% plus any countercyclical buffer requirements expressed as a percentage of risk-weighted assets)**	**8.86%**	
65	of which: capital conservation buffer requirement	**3.75%**	
66	of which: ADI-specific countercyclical buffer requirements	**0.61%**	Table h
67	of which: G-SIB buffer requirement (not applicable)	**N/A**	
68	**Common Equity Tier 1 available to meet buffers (as a percentage of risk-weighted assets)**[1]	**13.7%**	
National minima (if different from Basel III)			
69	National Common Equity Tier 1 minimum ratio (if different from Basel III minimum)	**N/A**	
70	National Tier 1 minimum ratio (if different from Basel III minimum)	**N/A**	
71	National total capital minimum ratio (if different from Basel III minimum)	**N/A**	
Amount below thresholds for deductions (not risk-weighted)			
72	Non-significant investments in the capital of other financial entities	**141**	Table c
73	Significant investments in the ordinary shares of financial entities	**341**	Table c

[1] This represents CET1 ratio of the ADI, less any common equity used to meet the ADI's Tier 1 and Total Capital requirements.

74	Mortgage servicing rights (net of related tax liability)	**-**	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	**989**	Table a
Applicable caps on the inclusion of provisions in Tier 2			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	**15**	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	**161**	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	**-**	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	**504**	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)			
80	Current cap on CET1 instruments subject to phase out arrangements	**-**	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	**-**	
82	Current cap on AT1 instruments subject to phase out arrangements	**-**	
83	Amount excluded from AT1 instruments due to cap (excess over cap after redemptions and maturities)	**-**	
84	Current cap on T2 instruments subject to phase out arrangements	**-**	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	**-**	

Regulatory Balance Sheet as at 31 March 2023

	Macquarie Bank Group Consolidated[1] $m	Adjustment[2] $m	Level 2 Regulatory Balance Sheet $m	Template/ Reconciliation Table Reference
Assets				
Cash and bank balances	41,612	(53)	41,559	
Cash collateralised lending and reverse repurchase agreements	43,201	-	43,201	
Trading assets	15,792	(3)	15,789	
Margin money and settlement assets	19,375	(3)	19,372	
Derivative assets	35,820	(746)	35,074	
Financial Investments	16,899	-	16,899	
Held for sale and other assets[3]	6,278	(364)	5,914	Table b
Loan assets	141,760	125	141,885	
Due from related body corporate entities	4,421	2,149	6,570	
Property, plant and equipment and right-of-use assets	4,577	(24)	4,553	
Investment in regulatory non-consolidated subsidiaries[1]	-	204	204	Table c
Deferred tax assets	1,088	(44)	1,044	Table a
Total Assets	330,823	1,241	332,064	
Liabilities				
Cash collateral borrowing and repurchase agreements	18,737	-	18,737	
Trading liabilities	4,754	-	4,754	
Margin money and settlement liabilities	21,913	(1)	21,912	
Derivative liabilities	32,522	(8)	32,514	
Deposits	134,648	(1)	134,647	
Other liabilities	7,627	(637)	6,990	
Borrowings	8,103	-	8,103	
Due to related body corporate entities	14,642	1,876	16,518	
Issued debt securities	57,979	-	57,979	
Deferred tax liabilities	23	11	34	
Total Liabilities excluding loan capital	300,948	1,240	302,188	
Loan capital	9,523	-	9,523	Table d
Total liabilities	310,471	1,240	311,711	
Net assets	20,352	1	20,353	
Equity				
Contributed equity	10,161	-	10,161	Table f
Reserves	1,057	-	1,057	Row 3
Retained earnings	9,134	1	9,135	Row 2
Total capital and reserves attributable to the ordinary equity holder of Macquarie Bank Limited	20,352	1	20,353	
Non-controlling Interests	-	-	-	Table g
Total equity	20,352	1	20,353	

[1] As per Macquarie Bank Limited financial report as at 31 March 2023.
[2] Reflects the deconsolidation of certain subsidiaries for APRA reporting purposes. The subsidiaries which are deconsolidated for regulatory purposes include entities conducting insurance, funds management and non-financial operations. Assets and Liabilities of mortgage and leasing special purpose vehicles (SPV) where Macquarie has satisfied APS 120 Attachment A operational requirements for regulatory capital relief are not included in the Level 2 regulatory group.
[3] The intangible component of investments in non-consolidated subsidiaries is included in held for sale and other assets.

Reconciliation between Common Disclosures Template and Level 2 Regulatory Balance Sheet

Table a	31 March 2023 $m	Template Reference
Deferred Tax Assets		
Total Deferred Tax Assets per Level 2 Regulatory Balance Sheet	**1,044**	
Less: Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	**(55)**	Row 10
Less: Deferred tax assets (temporary differences) – Amounts below prescribed threshold	**(989)**	Row 26e, 75
Total per Common Disclosure Template – Deferred Tax Asset – amount exceed 10%/15% threshold	**-**	Row 21 / 25

Table b	31 March 2023 $m	Template Reference
Intangible Assets		
Total Intangible Assets reported in Held for sale and other assets per Level 2 Regulatory Balance Sheet	**97**	
Less: capitalised software and other intangibles	**(19)**	Row 9
Less: intangible component of deconsolidated subsidiaries	**(39)**	Row 9
Total per Common Disclosure Template – Goodwill	**39**	Row 8

Table c	31 March 2023 $m	Template Reference
Equity Investments		
Significant investment in financial entities[1,2]	**341**	Row 73
Non-significant investment in financial entities[1]	**141**	Row 72
Total Investments in financial institutions	**482**	Row 26d
Investment in commercial entities[1,1]	**516**	Row 26g
Total Equity Investments before applying prescribed threshold	**998**	
Less: amounts risk weighted under Harmonised Basel III guidelines	**(998)**	
Total per Common Disclosure Template – Equity Investments	**-**	Row 18, 19, 23

[1] Equity Investments are classified in the Level 2 Regulatory Balance Sheet across Financial Investments, Investment in regulatory non-consolidated subsidiaries and Held for sale and other assets. In addition, the Level 2 regulatory group has undrawn commitments (off balance sheet) which are deemed in the nature of equity for Regulatory Capital purposes.
[2] Included in significant investment in financial entities is $171 million of equity investments in regulatory non-consolidated subsidiaries. Included in investment in commercial entities is $41 million of equity investments in regulatory non-consolidated subsidiaries.

Table d	31 March 2023 $m	Template Reference
Additional Tier 1 Capital		
Total Loan Capital per Level 2 Regulatory Balance Sheet	9,523	
Less: Accrued interest	(8)	
Add: Capitalised expenses deducted in Common Equity Tier 1 Capital[1]	16	Included in Row 26f
Less: Fair value hedge adjustments[2]	58	
Less: Tier 2 capital instruments reported in Table e	(7,171)	Table e
Additional Tier 1 Capital (MACS, BCN2 and BCN3)	2,418	
Less: Basel III transitional amortisation	-	
Total per Common Disclosure Template – Additional Tier 1 Capital	2,418	Row 36

Additional Tier 1 Capital Instruments		
Macquarie Additional Capital Securities	1,122	
Macquarie Bank Capital Notes 2	641	
Macquarie Bank Capital Notes 3	655	
Total per Common Disclosure Template – Additional Tier 1 Capital	2,418	Row 36

Table e	31 March 2023 $m	Template Reference
Total Tier 2 Capital per Balance Sheet		
Total Tier 2 Capital per Balance Sheet	7,171	Table d
Less: Accrued Interest	(71)	
Add: Capitalised expenses deducted in Common Equity Tier 1 Capital	22	Included in Row 26f
Less: Fair value hedge adjustments[1]	466	
Less: Amortisation as per APS 111 (per Para 2 of Attachment H)	(449)	
Total per Common Disclosure Template – Tier 2 Capital	7,139	Row 46+47

Tier 2 Capital Instruments		
2 Subordinated Debts - USD750m each – fully qualified Tier 2 instrument	1,796	
2 Subordinated Debts - AUD750m each – fully qualified Tier 2 instrument	1,500	
Subordinated Debt – AUD850m – fully qualified Tier 2 instrument	850	
2 Subordinated Debts - USD1.0bn each – fully qualified Tier 2 instrument	2,993	
Total per Common Disclosure Template – Tier 2 Capital	7,139	Row 46+47

Details on the main features of Capital instruments included in the Level 2 regulatory group's Regulatory Capital, (Ordinary Share Capital, Additional Tier 1 Capital and Tier 2 capital) as required by APS 330 Attachment B can be found at: macquarie.com/investors

Table f	31 March 2023 $m	Template Reference
Contributed Equity		
Total Contributed Equity as per Level 2 Regulatory Balance Sheet	10,161	
Add: Capitalised expenses deducted in Common Equity Tier 1 Capital	-	Included in Row 26f
Total per Common Disclosure Template – Contributed Equity	10,161	Row 1

[1] Unamortised issue cost relating to capital instruments are netted against each instrument on the Level 2 Regulatory Balance Sheet. For regulatory capital purposes, the unamortised costs are deducted at CET1 as part of capitalised expenses in row 26f of the Common Disclosures Template.
[2] For regulatory capital purposes, APRA requires these instruments to be included as if they were unhedged.

Table g	31 March 2023 $m	Template Reference
Non-Controlling Interests		
Total Non-Controlling Interests as per Level 2 Regulatory Balance Sheet	-	
Less: other non-controlling interests not included in capital	-	
Total per Common Disclosure Template - Non-Controlling Interests	-	Row 5

Countercyclical Capital Buffer

The Countercyclical Capital Buffer (CCyB) is an extension of the capital conservation buffer which must be held in the form of CET1 capital, ranging from 0 to 3.5%. The CCyB is designed to ensure that ADIs build up capital buffers when excess aggregate credit growth is judged to be associated with a build-up of system wide risk. The CCyB is calculated as the weighted average of the jurisdictional buffers set by the relevant national authority where an ADI has private sector credit exposures, excluding exposures to Banks and Sovereigns.

Table h	RWA $m	Jurisdictional buffer	Countercyclical buffer requirement[1]	Template Reference
Australia	47,916	1.000%	0.5010%	
United Kingdom	8,045	1.000%	0.0841%	
Germany	1,321	0.750%	0.0104%	
Luxembourg	526	0.500%	0.0028%	
Hong Kong	216	1.000%	0.0023%	
Norway	132	2.500%	0.0035%	
Denmark	81	2.500%	0.0021%	
Sweden	75	1.000%	0.0008%	
Slovakia	65	1.000%	0.0007%	
Czech Republic	63	2.000%	0.0013%	
Estonia	46	1.000%	0.0005%	
Iceland	19	2.000%	0.0004%	
Croatia	8	0.500%	0.0000%	
Romania	7	0.500%	0.0000%	
Bulgaria	3	1.500%	0.0000%	
Others	37,109	0.000%	0.0000%	
Total	**95,633**		**0.6099%**	Row 66

[1] Calculated as each country's share of total private sector credit exposures multiplied by the CCyB applicable to each country.

Appendix 2 List of Entities Deconsolidated from the Level 2 Regulatory Group for APRA Reporting Purposes

31 March 2023	Total Assets[1,2,3,4]	Total Liabilities[1,1,1,1]
Funds Management		
Bond Street Custodians Limited	21	-
Macquarie Australia Securities Pty Limited	-	-
Macquarie Fonds GmbH	-	-
Macquarie Fondsmanagement GmbH	1	-
Macquarie Investment Management Ltd	182	4
Macquarie Investment Services Limited	17	-
Macquarie Life Limited	2	-
Macquarie Management GmbH	-	-
Macquarie Prism Pty Limited	3	1
Macquarie Securities Management Pty Limited	-	-
Macquarie Treuvermögen GmbH	-	-
Non-Financial Operations		
Avenal Power Center, LLC	14	12
Capital Meters Limited	16	7
Comercializadora Energia de la Reforma S. de R.L. de C.V.	21	6
Corona Energy Limited	33	-
Corona Energy Retail 1 Limited	56	23
Corona Energy Retail 2 Limited	109	76
Corona Energy Retail 3 Limited	7	1
Corona Energy Retail 4 Limited	521	511
Corona Gas Management Limited	19	11
Digital Asset Lease Co, LLC	2	-
Ion Energy Pte. Limited	-	-
Liberty Green Renewables Indiana, LLC	3	1
Macquarie Corona Energy Holdings Limited	21	5
Macquarie Energy Services Pty Limited	5	-
Macquarie Equipment Finance Services Limited	3	3
Macquarie Equipment Finance Services Limited, Vienna Branch	-	-
Macquarie Equipment Trading (Shanghai) Co., Ltd	-	-
Macquarie Semiconductor and Technology Inc.	34	25
NU Mobile Pty Limited	3	1

[1] These balances, along with any Australian GAAP adjustment where required, are included in Macquarie Bank Group's audited Australian GAAP financial report for the period ended 31 March 2023. The financial report under local GAAP of certain entities may be subjected to separate audits from the Macquarie Bank Group audit and these audits may not be complete as at the date of this report.
[2] The total assets and liabilities should not be aggregated as certain entities are holding companies for other entities in the table shown above.
[3] Numbers are rounded to the nearest $A million.
[4] The assets and liabilities for deconsolidated subsidiaries includes receivables from and payables to related entities.

31 March 2023	Total Assets[1,2,3,4]	Total Liabilities[1,1,1,1]
PropertyIQ Pty Limited	6	-
Pt Macquarie Commodities Indonesia	-	-
Resource Marine Pte. Limited	10	-
Sustainable Feedstocks Group Limited	4	-
Sustainable Feedstocks Group Guangdong Limited	8	6
Insurance		
Macquarie (Bermuda) Limited	40	37

Appendix 3 Annual Remuneration Disclosures

Introduction

This document has been prepared in accordance with the Australian Prudential Regulatory Authority (APRA) Prudential Standard APS 330 Public Disclosure (APS 330) for Authorised Deposit-taking Institutions (ADIs). The remuneration disclosures presented herein for the financial years ended 31 March 2023 and 31 March 2022 of Macquarie Bank Limited (MBL or Macquarie Bank) are separate to the requirements of the Corporations Act 2001 (Cth) and may not be comparable to other information disclosed by MBL.

Macquarie Bank is a subsidiary of the Macquarie Group. The MBL Board (the Board) is comprised of Non-Executive Directors (NEDs) common to both the Board and the MGL Board (the Boards) and two bank-only non-executive directors (BONDs). Whilst the Macquarie Group remuneration framework applies to all staff including those within the Macquarie Bank, the MBL Board oversees the remuneration policies applicable to MBL staff and approves remuneration outcomes relating to the senior executives of Macquarie Bank. To support the MBL Board on these processes, the MBL Board Remuneration Committee (BRC or Committee) was established effective 1 June 2022 and a BOND has been appointed among its members. Throughout this disclosure document, for consistency, references are made to the Macquarie Group's remuneration arrangements which apply to all staff including Macquarie Bank staff.

The qualitative remuneration disclosures (sections 1 to 4) outline the remuneration framework consistent with the Macquarie Group's Remuneration Policy. Macquarie Group's Remuneration Policy applies to all employees globally. The quantitative information (section 5) relates to senior managers and material risk takers of MBL for the financial years ended 31 March 2023 and 31 March 2022. The BRC assisted the Board in identifying the following groups of employees as senior managers and material risk takers as defined in paragraph 22 of APS 330 for the financial year ended 31 March 2023. The Board was assisted by the MGL BRC for the financial year ended 31 March 2022:

		Number of individuals[1]	
Roles		**2023**	**2022**
Senior managers	the MBL Executive Committee[2]	**8**	10
Material risk takers	Executive Directors who are MBL Designated Executive Directors[3]	**31**	36

1. Remuneration Governance

The Board oversees MBL's remuneration framework and its effective application. On 1 June 2022, the Board established a BRC. The BRC works closely with the MGL BRC to assist the Board with its oversight of remuneration policies and practices applying to staff of Macquarie Bank.

The BRC currently comprises three independent NEDs and a BOND:

Board Remuneration Committee members	
Jillian Broadbent	Chair
Philip Coffey[4]	Member
Rebecca McGrath[5]	Member
Mike Roche	Member
Ian Saines	Member
Peter Warne[4]	Member

[1] One individual was a material risk taker for part of FY2022 and upon appointment to the Executive Committee became a senior manager. This individual is included in both categories in the above table for FY2022.
[2] These individuals will be referred to as either senior managers or Executive Committee members throughout this document.
[3] Executive Directors who have a significant management or risk responsibility in the organisation. These individuals will be referred to as either material risk takers (MRTs) or Designated Executive Directors (Designated EDs) throughout this document.
[4] Mr Warne and Mr Coffey ceased to be members of the BRC on 9 May 2022 and 1 June 2022 respectively.
[5] Ms McGrath became a member of the BRC on 1 June 2022.

The BRC members have the required experience and expertise in human resources, remuneration and risk to enable them to achieve effective governance of the remuneration framework. The BRC has established a regular meeting cycle and met five times during FY2023. Strict processes are in place to ensure conflicts of interest are appropriately managed.

The BRC pays close attention to the design and operation of remuneration practices for all Macquarie Bank staff, not just for the most senior executives. The responsibilities of the BRC are outlined in its Charter, which is reviewed and approved annually by the Board.

Some of the responsibilities include:

- overseeing the process for the annual review by the Board of the CEO's and other Executive KMPs' performance
- recommending to the Board the remuneration outcomes for all Executive KMP, Designated Executive Directors and other senior executives of Macquarie Bank
- assessing the effectiveness of the *Remuneration Policy* to ensure compliance with legal and regulatory requirements, as well as its alignment with Macquarie Bank's strategy to promote its sustainable performance in a manner that supports its long-term soundness
- recommending the *Remuneration Policy* to the Board for approval.

The BRC has retained Pay Governance as its independent remuneration consultant, for the use of the MGL Board to obtain advice on the appropriateness of Macquarie Group's remuneration framework.

The only service that Pay Governance provides to Macquarie Group is executive compensation consulting to the BRC. Pay Governance has not made any remuneration recommendations, as defined by the *Corporations Act 2001* (Cth) (the Act). The BRC is responsible for making decisions within the terms of its Charter. Pay Governance's terms of engagement set out their independence from members of Macquarie Group's management. This year, Pay Governance:

- provided information on global remuneration and regulatory trends
- considered alignment with shareholder interests
- compared individual remuneration for Executive KMP where relevant comparator company information was available
- considered Macquarie Group's overall remuneration approach compared to comparator company organisations.

NED fees are set acknowledging the level required to appropriately remunerate highly qualified NEDs who have the relevant skills and experience to govern as a member of the Board. The NED remuneration framework seeks to remunerate high calibre directors by:

- setting an overall fee that reflects the scale and complexity of the Bank Group (being MBL and its subsidiaries) including additional risk management and regulatory responsibilities and the global financial nature of the Bank Group's activities
- setting MBL Board and Board Committee fees to reflect the time commitment required to meet the responsibilities involved in the annual scheduled calendar, taking into account market rates for relevant organisations and market trends
- paying separate fees for additional responsibilities that may arise on an ad hoc basis
- delivering these fees in a form that is not contingent on the Bank Group's performance.

An internal review of NED fees was completed during the year and the Boards agreed the annual fees to be paid to BONDs. The Boards each determined, following this review, that MBL Board and Board Committee fees would remain unchanged.

The Boards resolved during FY2023, that the NEDs of MGL who are also members of the MBL Board (Common NEDs) will receive their Board and Board Committee fees for services provided to MGL and MBL from MGL. The fees paid to Common NEDs in respect of their services to MBL are paid as an aggregate fee by MGL. The annual Board and Committee fees paid to BONDs are received from MBL and include a Board member base fee of $A245,000, Board Committee fees of $A37,000 and a Board Conflicts Committee Chair fee of $A80,000.

2. Remuneration Design and Structure

Macquarie Bank's longstanding and consistent approach to remuneration continues to meet our remuneration objectives and align with our principles. The Board recognises that to achieve these objectives, we must attract, motivate and retain exceptional people with deep industry expertise, align their interests with stakeholders to meet the needs of clients and customers and ensure that the spirit and intent of regulatory requirements are upheld.[1] This broad approach has been in place since Macquarie Bank's inception and is reviewed regularly to ensure the framework continues to meet our remuneration objectives and align with the expectations of our stakeholders.

Our remuneration approach has been a key driver of our sustained success as an international organisation. Staff are motivated to grow businesses over the medium to long-term, taking accountability for all decisions and their accompanying risk management, customer, economic and reputational outcomes.

This approach has been fundamental in ensuring we can continue to attract, motivate and retain exceptional, entrepreneurial and ethical people across the global markets in which we operate. We hire and retain world-class people in 19 highly competitive markets. These people come from, and compete in, various industry sectors (including global investment banks, commodity houses and other banks, as well as industries that are not specific to banking or financial services, for example, technology, accounting and engineering) across many jurisdictions.

The table below shows the link between our purpose and our remuneration objectives and principles.

Our purpose:

Empowering people to innovate and invest for a better future

Opportunity | Accountability | Integrity

Remuneration objectives	Remuneration principles
Macquarie Bank's remuneration framework is designed to: • attract, motivate and retain exceptional people with deep industry expertise • deliver strong company performance over the short and long-term whilst prudently managing risk • promote effective management of financial and non-financial risks, and Macquarie Bank's long-term soundness • align the interests of staff and MBL stakeholders to deliver sustained results for our customers, clients and community • promote innovation and the building of sustainable businesses • drive behaviours that reflect the best interests of Macquarie Bank, our culture, the principles of *What We Stand For* and support the prevention and mitigation of conduct risk • foster a diverse, equitable and inclusive work environment.	These objectives are achieved by: • emphasising performance-based remuneration • determining an individual's variable remuneration based on a range of financial and non-financial factors • retaining a significant proportion of performance-based remuneration to enable risk outcomes to be considered over a longer period • delivering retained profit share in MGL equity to ensure the interests of staff and MBL's stakeholders are aligned over the long-term • remunerating high-performing staff appropriately, relative to global peers • providing consistent arrangements over time to give staff the confidence to pursue multi-year initiatives.

[1] Stakeholders include MBL's ultimate parent, MGL and its shareholders.

The remuneration framework operates as an integrated whole. As summarised below, an individual's remuneration comprises fixed remuneration, profit share and, for Executive Committee members (our Executive KMP), Performance Share Units (PSUs). The table below summarises the framework for FY2023.

Remuneration framework

Fixed Remuneration

- primarily comprises base salary, as well as superannuation contributions and standard country-specific benefits in line with local market practice
- for Executive KMP, is set at a comparatively low level, relative to the industry, and a low proportion of total remuneration but sufficient to avoid inappropriate risk-taking
- is reviewed annually and reflects technical and functional expertise, role scope, market practice and regulatory requirements
- for risk and financial control staff, is generally a higher proportion of total remuneration than for front office staff.

Performance-based Remuneration

Criteria	Profit Share	Performance Share Units
Eligibility	• all permanent employees	• Executive Committee members
Determination	• allocations reflect an individual's performance, which is assessed against a range of financial and non-financial factors including: – contribution to financial/business performance – approach to risk management and compliance – business leadership including outcomes for customers and the community – people leadership and professional conduct	• individual allocations reflect their role as members of the Executive Committee and their contribution to driving the collective performance of MBL and Macquarie Group • allocations are based on the face value of shares on the grant date • allocations are subject to Board discretion
Structure	• significant proportion is retained (up to 80% for the MGL CEO, MBL CEO and other Executive KMP) • long deferral periods (up to seven years for the MGL CEO, MBL CEO and other Executive KMP) • retained profit share is delivered in a combination of MGL equity and Macquarie-managed fund equity	• PSUs vest after four years, subject to the achievement of two financial performance hurdles (no retesting of hurdles) • PSUs are structured as Deferred Share Units (DSUs)[1] with no exercise price • PSU holders have no right to dividend equivalent payments
Malus	• applies for senior employees, including all Executive Directors	• applies to all awards
Forfeiture	• retained profit share is subject to forfeiture upon leaving Macquarie Group except in certain circumstances	• unvested PSUs are subject to forfeiture upon leaving Macquarie Group except in certain circumstances

[1] A DSU is a Deferred Share Unit and is an award type under the Macquarie Group Employee Retained Equity Plan (MEREP). For further details, refer to Note 29 to the financial statements in the Financial Report.

The Boards periodically review and fine-tune the remuneration framework to ensure it is consistent with changing market conditions and complies with regulatory expectations and corporate governance developments. As set out in the 2022 Pillar 3 disclosure document, the Boards undertook a holistic review of all structural components of the remuneration framework to address both regulatory requirements under APRA's Prudential Standard CPS 511 Remuneration (CPS 511) and the evolving expectations of our stakeholders.

As part of this review, the Boards considered diverse perspectives, including those of shareholders and regulators, as well as global peer group benchmarking and increased global competition for talent in many of Macquarie Group's areas of activity. The Board believes that the revised arrangements are consistent with our longstanding remuneration principles and allow for ongoing attraction, motivation, retention and accountability of talent, respecting and recognising the expectations of all stakeholders.

These changes are being implemented in a phased approach for FY2023 and FY2024 and are referenced where relevant throughout the following sections.

2.1 Risk and Financial Control Personnel

The Boards and management seek to ensure that remuneration for risk and financial control personnel, including the Chief Financial Officer (CFO) and the Chief Risk Officer (CRO), is structured so that it does not compromise the independence of these personnel in carrying out their functions and is determined in a way that maintains Macquarie's robust risk management framework.

The proportion of fixed compensation for risk and financial control staff is generally higher than for other staff, with profit share allocations being less variable than those awarded to staff performing front office functions. The CRO and CFO are each responsible for reviewing the remuneration of all staff across Macquarie whose primary role is risk and financial control and for alerting the BRC to any pay discrepancies. The CRO and CFO each provide written confirmation to the BRC each year that remuneration for such staff has been determined in such a way that preserves the independence of the function and maintains Macquarie's robust risk management framework.

3. Culture, accountability and remuneration

Risk culture

Our purpose of 'empowering people to innovate and invest for a better future' and *What We Stand For* principles of Opportunity, Accountability and Integrity remain pivotal to our culture. Our purpose and principles effectively guide our staff in balancing risk and reward and making decisions that realise opportunity for the benefit of our clients, shareholders, partners and the communities in which we operate. Staff are continually made aware that these principles must form the basis of all behaviours and actions. These behavioural expectations are outlined in the Board approved *Code of Conduct*, which is actively promoted by management and cascaded through the organisation through multiple mechanisms. We invest significant time and effort in communicating and reinforcing our culture through communications from senior management, policy reminders, training, and learning and development activities. The Board is able to assess Macquarie Bank's culture in a number of ways including through staff survey results, human capital reporting, strategy presentations, risk culture reports, consequence management reports as well as through personal observation of management, and staff behaviour and actions.

Prudent risk management is a fundamental part of everyone's role. Staff understand they are rewarded not just for their contribution to financial results, but also for how those results are achieved. This includes an assessment of an individual's approach to managing risk, and their alignment to the *What We Stand For* principles. Staff are aware of the consequences for non-compliance with the risk management framework and the *Code of Conduct*. Staff training and communications emphasise the link between risk, conduct, policy breaches and consequence management outcomes, including, where appropriate, adjustments to performance-based remuneration.

Alignment of remuneration with risk outcomes

The Board considers that the effective alignment of remuneration with prudent risk-taking is fundamental to Macquarie Bank's remuneration approach. To ensure there is appropriate focus on MBL, MBL specific risk considerations are embedded throughout the entire remuneration process including through the determination of individual profit share allocations, business group and company-wide profit share pools as well as through the way in which remuneration is structured and delivered.

The Board is aware of the increasing focus of regulators and shareholders on ensuring risk-related matters that come to light subsequent to remuneration being awarded are appropriately factored into remuneration decisions. Macquarie Bank's retention and vesting arrangements provide a mechanism for the Board to consider risk outcomes over a long period. Furthermore, where an investigation has commenced into a risk or conduct-related matter that may result in forfeiture or, for senior employees, the application of malus, Macquarie Bank may further defer the payment, vesting and/or release of profit share to allow for the investigation to be completed.

The following mechanisms exist to risk adjust remuneration outcomes:

In-year profit share adjustments	**Applies to all staff**

- determined as part of assessing an individual's performance each year
- the annual assessment includes consideration of compliance with the risk management framework and with the behavioural expectations outlined in the *Code of Conduct*
- in addition, outcomes from the consequence management process (such as a formal warning) or the independent reporting from the CRO, Head of Internal Audit, and Group General Counsel (GGC) are also considered.

Forfeiture	**Applies to all staff with retained profit share**

- where an individual's employment is terminated due to a compliance or conduct concern (or they resign), unvested remuneration is forfeited, as per our standard policy.

Malus Events (expanded for FY2022)	**Applies to senior employees (all staff from FY2024)**

The malus provisions, which apply across the whole Macquarie Group, provide the Boards with the ability to reduce or eliminate in full the retained profit share for senior employees, and for Executive Committee members unvested PSUs, where it is determined:

- there was a significant error in or a significant misstatement of criteria on which the remuneration determination was based; or
- the employee has at any time:
  - engaged in misconduct leading to significant adverse outcomes
  - acted dishonestly (including, but not limited to, misappropriating funds or deliberately concealing a transaction)
  - significantly failed in or breached their compliance, accountability or fitness and propriety requirements or
  - acted or failed to act in a way that contributed to, and/or by virtue of their role or seniority is accountable for:
    - a breach of a significant legal or significant regulatory requirement relevant to Macquarie Bank
    - MGL or MBL making a material financial restatement
    - MGL, MBL or any Group within Macquarie Group[1] incurring significant reputational harm
    - MGL, MBL or any Group within Macquarie Group incurring a significant unexpected financial loss, impairment charge, cost or provision
    - a significant failure of financial or non-financial risk management or
    - a significant adverse outcome for customers, beneficiaries or other stakeholders.

Additional provisions may apply to staff in certain jurisdictions to ensure compliance with local regulations. This includes staff in the UK and EU who are subject to additional malus and clawback provisions under local regulatory requirements.

The BRC considers whether, and the extent to which, to apply malus, taking into account local employment laws, the nature and circumstances of the event and any other redress that has been or may be applied.

As set out in the 2022 Pillar 3 disclosure, from FY2024 the malus framework will apply to all employees with retained profit share, and clawback will also apply to certain senior employees in line with CPS 511 requirements. These clawback provisions will allow Macquarie Bank to recover paid or vested remuneration for up to two years from the point of payment or vesting, in exceptional circumstances and where all other adjustment tools have been exhausted. Clawback events will include where it is determined that:

a. there was a significant error in or a significant misstatement of criteria on which the remuneration determination was based;

[1] A "Group within Macquarie Group" is a reference to any Operating Group or Central Services Group within MGL or MBL.

b. the employee has at any time engaged in misconduct leading to significant adverse outcomes;

c. the employee has at any time significantly failed in or breached their compliance, accountability or fitness and propriety requirements; or

d. the employee has at any time acted or failed to act in a way that contributed to:

   i. a significant failure of financial or non-financial risk management; or

   ii. a significant adverse outcome for customers, beneficiaries or other stakeholders.

Risk adjustment processes

There are robust processes in place to ensure that all risk, reputation, and conduct-related matters are specifically considered when determining remuneration outcomes. These processes may result in a downward adjustment to group and/or individual profit share allocations where appropriate. A wide range of risks that could have a financial or non-financial impact on Macquarie Bank are considered, including any detriment to customers or impact on prudential standing.

To assist the Board and BRC when determining remuneration outcomes, independent control functions provide input as it applies to the BRC as follows:

Independent control function input when determining remuneration outcomes		
Risk Management Group	Internal Audit	Legal
The CRO provides the BRC with an independent report detailing significant risk matters (financial and non-financial), including those relating to incidents, issues and regulatory and litigation matters.	The Head of Internal Audit provides the BRC with an independent report detailing notable internal audit issues and any trends at company-wide or business group level.	The GGC provides a further source of independent input and, in conjunction with HR, considers whether there are any incidents (including any breach of the BEAR obligations) that should be brought to the attention of the BRC which might lead to a malus determination.

Human Resources

The Global Head of HR discusses the reports from RMG and Internal Audit with the Group Heads to ensure any matters listed in the reports are appropriately reflected in remuneration outcomes for relevant staff and provides a report to the joint committee meeting of the BRC, Board Risk Committee (BRiC), Board Audit Committee (BAC) and Board Governance and Compliance Committee (BGCC) on how this has been achieved.

The Global Head of HR also annually reports to the BRC on the outcomes from the consequence management process and confirms that these matters have been considered in determining remuneration and promotion outcomes where appropriate.

Consequence management process

Incidents, breaches of policy and misconduct issues are regularly reported to senior management. There are a number of processes in place to ensure consistency (across business groups and staff levels) in the application of consequences and the determination of remuneration outcomes, including the review and challenge by senior management of consequence management outcomes for consistency at year end.

Where an investigation has commenced into a risk or conduct-related matter, vesting, payment and/or release of profit share (including available and/or retained amounts) to an employee may be deferred to allow for the investigation to be completed.

Consequence management outcomes

The Consequence Management Guideline applies wherever a breach of internal policy or regulatory requirement is identified, including where there has been a breach of BEAR accountability obligations. Consequences may include further training, removal of delegated authorities or permissions, adjustments to performance-based remuneration, impact on promotion, formal warnings or termination.

Where an employee has received a formal warning, their performance-based remuneration is subject to further review and in some cases, it will be reduced to zero. Promotion decisions may also be impacted. Impacts may also be applied where a formal warning has not been issued. In each case, judgement is exercised as to the appropriate consequence(s) based on all the relevant circumstances.

In FY2023, for Macquarie Bank, there were 101 (FY2022: 63) matters involving conduct or policy breaches that resulted in formal consequences. These included 56 (FY2022: 29) Code of Conduct or appropriate workplace behaviour related matters and 45 (FY2022: 34) other policy matters including risk management and technology breaches. Of the 101:

- for 43 matters, termination of employment was the outcome (FY2022: 25)
- for 58 matters, a formal warning was issued (FY2022: 38). Additional consequences were applied as appropriate including additional training, removal of delegated authorities or permissions, adjustments to profit share and/or impact to promotion (13 have resulted in individuals subsequently leaving Macquarie Bank before year-end outcomes were determined and 45 individuals had their profit share reduced by an average of 43%).

The 101 matters were considered isolated incidents and there was no evidence of broader systemic conduct issues.

4. Annual process to determine profit share outcomes

Profit share allocations are based on realised outcomes and are determined through a principles-based approach, which considers individual, business group and company-wide performance. At all levels, profit share determinations take into account risk management, compliance and conduct.

Individual profit share allocations reflect an employee's performance against their objectives, which are formally assessed annually. Permanent employees are required to have at least one formal Year in Review with their manager each year. The Year in Review comprises two core components:

- **What** was achieved over the past 12 months, including any Operating or Central Service Group specific goals and objectives
- **How** the objectives were achieved, demonstrating the cultural/behavioural expectations as set out in our *Code of Conduct*

An individual's performance is assessed against a range of financial and non-financial factors, which fall under the four factors and link to the 'what' and 'how' components of the Year in Review. Consideration is given to ensuring there is appropriate focus on MBL. This includes MBL-specific objectives and performance measures (as relevant to an individual's role), for example, the management of MBL-specific projects and risks. The below table outlines the definition of each factor and considerations for assessing performance and determining remuneration outcomes.

	Areas considered
Financial / business results	• for revenue-generating staff, based on individual contribution to profitability (including consideration of capital and risk-adjusted returns) • for risk and financial control roles, primarily based on delivery of or contribution to high quality risk and control functions • for other staff, based on their delivery of or contribution to high quality services to support the businesses, while managing costs and investing in people and technology to ensure the ongoing robustness of the risk management framework
Risk management and compliance	• the active identification, escalation, ownership and management of MBL-specific financial and non-financial risks including compliance with Banking licence requirements and obligations, prudential standards and the Banking Executive Accountability Regime (BEAR) • motivating a culture of disciplined risk management, and regulatory, policy and business compliance • the management of MBL's funding and capital management strategy and the MBL liquidity and stress testing frameworks • fostering an environment where staff feel comfortable to raise issues or concerns

	• performance against a risk management objective, which is mandatory for all employees and consistent across Macquarie Bank
Business leadership	• sustainable business growth and innovation • delivering solutions and services to our customers and the communities in which we operate • relationship with external and internal stakeholders, including regulators, customers and clients • seeking out and valuing collaboration and diverse perspectives (internally and externally)
People leadership and professional conduct	• conduct and behaviour consistent with the *Code of Conduct* and *What We Stand For* • talent development and succession planning • fostering a diverse and inclusive work environment, including performance against a mandatory objective on Diversity, Equity and Inclusion (DEI) aligned to Macquarie Group's DEI strategy • for all people managers, performance against a people management objective aligned to our purpose and culture.

Three of these four factors are non-financial, with considerations given in varying proportions to reflect an individual's role and responsibilities. Individual profit share allocations also consider relativities in the market in which each business competes for talent.

When determining individual allocations, consideration is given to any matters raised in the independent reports provided to the BRC by the CRO and the Head of Internal Audit, or matters raised through the consequence management process, which may result in downward adjustments to profit share allocations for relevant individuals. Significant judgement is applied in determining remuneration outcomes to ensure all factors that may potentially impact the quantum of profit share allocations are considered.

Profit share pools

The initial business group profit share pools are determined through a combination of a top-down and bottom-up approach. The company-wide profit share pool is an aggregate of the assessments conducted at both the business group and individual level. The initial profit share pools are then adjusted up or down to reflect consideration of the factors below:

Operating / Central Service Group Level			
Financial performance For Operating Groups: • contribution to company-wide profits • returns on economic and regulatory capital • funding requirements and usage. For Central Service Groups: • based on the quality and integrity of control functions and support services • are not primarily determined with reference to profitability.	**Risk management** • risk profile of the business (e.g. capital usage) • extent and nature of financial and non-financial risks including any significant reputational, cultural or compliance matters • regulatory environment and regulatory risk considerations.	**Business specific considerations** • innovation, new business development (including acquisitions) and maturity of the business • reliance on intellectual versus financial capital • customer/client and community outcomes • impact of one-time gains/losses.	**Market position and trends** • overall remuneration levels in the market in which each business operates • staff retention considerations.

Macquarie Group / Macquarie Bank level
Additional considerations at a Macquarie Group and Macquarie Bank level include: • profitability, including the balance of profit distribution between employees and shareholders • capital metrics (including prudential ratios) and liquidity considerations • impact of the profit share pool on Macquarie Bank's capital position and ability to strengthen its capital base (as confirmed by the Chief Financial Officer (CFO)) • reasonableness of the resultant estimated compensation expense to income ratio and how it compares to that of peers • regulatory considerations, including any company-wide risk and conduct matters • factors that impact the macro environment in which Macquarie Bank operates, including those that may affect our ability to attract and retain high-performing staff • CRO and Head of Internal Audit confirmation as to whether there have been any matters of systemic concern during the year.

The Board retains discretion to amend the profit share pool as determined in accordance with the above process to ensure all relevant factors, including risk and conduct matters, have been appropriately taken into consideration.

4.1 Retained profit share: retention and vesting

A percentage of each individual's annual profit share allocation is retained (retained profit share) above certain thresholds. While they are employed, an individual's retained profit share vests and is released over a period that reflects the scope and nature of their role and responsibilities.[1] These arrangements ensure that Macquarie Bank continues to retain high-performing staff, provide significant long-term alignment to shareholders and customers, as well as enabling risk outcomes to be considered over a longer period.

Retention and vesting arrangements are determined by the BRC according to prevailing market conditions, remuneration trends, and compliance with regulatory requirements (including under the BEAR and from FY2024, CPS 511). For each year's allocation, once the vesting period has been determined it remains fixed for that allocation.

As explained in the 2022 Pillar 3 disclosure, to address both regulatory requirements under CPS 511 and the evolving expectations of our stakeholders, the Boards undertook a holistic review of all structural components of the remuneration framework. One of the key changes was that retention rates and vesting periods will be reduced for certain senior employees (including the MBL CEO, Executive KMP and Designated Executive Directors) for profit share allocations made in respect of FY2024 onwards. These changes reflect that under CPS 511, Macquarie Bank will no longer be able to release unvested awards on retirement or redundancy for such employees over a two-year period. Awards will instead be kept on their original vesting schedule (up to five years). The new retention rates and vesting periods remain long enough to appropriately consider the time horizons of risk, and will meet or exceed both the minimum requirement under CPS 511 and the deferral arrangements of many of Macquarie Group's global comparators.

[1] Profit share that is not retained ("available profit share") is delivered in cash except for certain staff subject to requirements under European remuneration regulations, where 50% of available profit share is delivered in Macquarie equity and is subject to either a 6-month or 12-month hold period, as applicable.

The table below summarises the standard retention and vesting arrangements applicable for FY2023 and FY2024. These vesting periods do not include the performance year but begin following the date remuneration is awarded.

Standard profit share retention and vesting arrangements for FY2023 and FY2024

	FY2023		FY2024	
Role	**Profit share retention (%)**	**Vesting and release of profit share[1]**	**Profit share retention (%)**	**Vesting and release of profit share[1]**
MBL CEO	60	One-fifth in each of years 3–7	60	One-third in each of years 3–5
MGL CEO	80		70	
Executive Committee members	60		50	
Designated Executive Directors[2]	50		40	
Executive Directors	40	One-third in each of years 3–5	40	
Staff other than Executive Directors[3]	25–60	One-third in each of years 2–4	25–60	One-third in each of years 2–4

The Board's discretion to change remuneration arrangements, as noted above, includes changes to profit share retention levels provided that at least 30% of profit share is retained for all Executive Directors. For FY2023, the Board exercised such discretion to increase the Head of CGM's retention rate to 70%.

Investment of retained profit share

An individual's retained profit share is invested in a combination of MGL ordinary shares under the Macquarie Group Employee Retained Equity Plan (MEREP) and Macquarie-managed fund equity notionally invested under the Directors' profit Share (DPS) Plan.[4] The allocation reflects the nature of their role and responsibilities as set out in the table below:

Standard investment of retained profit share for FY2023

	Retained profit share investment	
Role	**MEREP (MGL ordinary shares) %**	**DPS Plan (Macquarie-managed fund equity) %**
MBL and MGL CEO	90	10
Executive Committee members	80–90	10–20
Executive Directors[5]	80–100	0–20
Staff other than Executive Directors[6]	100	0

In addition to the arrangements set out in the tables above, different arrangements may apply in certain circumstances:

- Retention rates and vesting and release schedules may vary for certain groups of staff who have become employees as a result of an acquisition, or for staff in certain jurisdictions, for example in the UK or European Union (EU), to ensure compliance with local regulatory requirements.
- In limited circumstances, and only with the approval of the BRC, retained profit share may be allocated under arrangements other than the MEREP or DPS Plan. For example, this may include investment in funds or products of a specific business group where there is a need to directly align the interests of staff with those of their clients.

[1] For certain staff subject to European remuneration regulations, retained profit share invested in MGL equity is subject to a further 6-month or 12-month hold post the vesting period.
[2] Executive Directors who have significant management or risk responsibility in the organisation (equivalent to "Material Risk Takers" under CPS 511).
[3] Above certain monetary thresholds.
[4] Both the MEREP and DPS Plan are fundamental tools in Macquarie Bank's retention, alignment and risk management strategies, encompassing both long-term retention arrangements and equity holding requirements. The MEREP has a flexible plan structure that offers different types of equity grants depending on the jurisdiction in which the participating employees are based. In most cases, the equity grants are in the form of units comprising a beneficial interest in MGL ordinary shares held in a trust for the staff member (Restricted Share Units or RSUs). For further details on the MEREP, refer to Note 29 *Employee equity participation* to the financial statements in the Financial Report. The DPS Plan comprises exposure to a notional portfolio of Macquarie-managed funds. Retained amounts are notionally invested over the retention period. This investment is described as 'notional' because Executive Directors do not directly hold securities in relation to this investment.
[5] For certain Executive Directors subject to the European remuneration regulations, retained profit share is invested 60% in Macquarie equity and 40% in the DPS Plan.
[6] For staff other than Executive Directors, retained profit share is generally 100% invested in MGL equity with the exception of those staff with funds responsibilities where retained profit share is invested in a combination of MGL equity and Macquarie-managed fund equity.

4.2 Forfeiture of retained profit share – Malus and Clawback

The Board has the ability to reduce or eliminate unvested retained profit share for certain senior employees (including all Executive Directors) in certain circumstances (malus). For certain employees identified in the European remuneration regulations, the Board also has the ability to recover (in whole or in part) vested profit share (clawback).

4.3 Early vesting and release of retained profit share

The standard policy is that staff who cease employment with the Macquarie Group will forfeit their unvested retained profit share. The Board may exercise discretion for the vesting and release of a departing employee's retained profit share after their employment has ended including, for example, retirement from the Macquarie Group, redundancy, death, serious incapacitation, disability, or serious ill-health. For Executive Directors, the Board's discretion for the vesting and release of retained profit share under these circumstances is subject to the conditions of release as set out below.

Discretion may be exercised in certain other limited exceptional circumstances on the grounds of business efficacy, in relation to strategic business objectives, including in connection with the divestment or internalisation of Macquarie Group businesses, or when an employee resigns to fulfil a public service role in a governmental organisation or agency. Where such discretion is exercised, the Board may impose such other conditions as it considers appropriate. This year there were no executives for whom such discretion was exercised.

4.3.1 Conditions of early release to departing Executive Directors – Post Employment Events

Where discretion has been exercised to accelerate the vesting of retained profit share to a departing Executive Director, the Board may reduce or eliminate their retained profit share, if it is determined that at any time during their employment or the relevant release periods after their employment committed a Malus Event or they have:

a. taken staff to a competitor of Macquarie Group or been instrumental in causing staff to go to a competitor, or

b. joined a competitor of Macquarie Group or otherwise participated in a business that competes with Macquarie Group.

Each of the above is a Post Employment Event.

For retained profit share awarded in respect of FY2023 and subsequent years, where the release relates to relevant circumstances other than death or serious disability, the release will occur over the period from 12 months to 24 months after the Executive Director leaves, in accordance with the table below.[1] Awards in respect of FY2022 and earlier will remain subject to their original conditions of release to a departing Executive Director, as previously disclosed.

As set out in the 2022 Pillar 3 disclosure, for profit share allocations made to Executive KMP, Designated Executive Directors and Executive Directors in risk and financial control functions in respect of FY2024 onwards, unvested retained profit share will no longer be released over a 24-month period and will instead be kept on its original vesting schedule (other than in cases of death or serious disability). This may result in final vesting being up to five years from the end of employment. There will be no change in the timeframe for application of the Post Employment Events set out below.

	First Period	**Second Period**
Time post-departure	12 months	12 months to 24 months
Unvested retained profit share released	From all but the last 24 months of employment	From the last 24 months of employment
Subject to malus	No Malus Event	No Malus Event
Subject to Post Employment Events	No Post Employment Event during employment or during the period expiring 6 months following the end of employment, and	No Post Employment Event during employment or during the period expiring 6 months following the end of employment, and
	No Post Employment Event (a)	No Post Employment Event (a)

[1] In the case of death or serious incapacitation, the Board will typically accelerate the vesting of retained profit share and immediately release it.

	First Period	Second Period
	during the period from 6 months to 12 months following the end of employment	during the period from 6 months to 12 months following the end of employment
Where the release is by reason of retirement from the Macquarie Group	As above and in addition, the release is subject to no Post Employment Event (b) during the First Period	As above and in addition, the release is subject to no Post Employment Event (b) during the First or Second period

In addition to the above, for Accountable Persons, the exercise of discretion for any early release of retained profit share will be subject to Macquarie Bank meeting the minimum deferral periods required under the BEAR.

Where an Executive Director has a tax liability on termination of employment in respect of any unvested retained profit share, the Boards or its delegates have discretion to release unvested retained profit share up to an amount equal to the Executive Director's tax liability, at an earlier time than noted above.

4.4 Performance Share Units (PSUs)

Allocation and structure

Executive Committee members are the only group of staff eligible to receive PSUs, which are subject to the achievement of two financial performance hurdles. PSU allocations are determined with reference to Macquarie Group's and Macquarie Bank's performance as a whole, and as such they provide an additional incentive to Executive Committee members to drive company-wide performance over the long-term and beyond their Operating and Central Service Group responsibilities. PSU awards are a meaningful incentive but are generally not the major element of an Executive Committee member's total remuneration.

PSU allocations are based on their role as members of the Executive Committee and their contribution to driving the collective performance of Macquarie Bank and Macquarie Group (taking into consideration both financial and non-financial factors), including their collaboration across businesses.

PSUs are granted in August each year, after Macquarie Group's Annual General Meeting (AGM), in respect of the previous financial year. The number of PSUs to be allocated is calculated by dividing the face value of the award by the price of MGL ordinary shares on or around the date of grant.

Since their introduction, PSUs have been structured as DSUs with performance hurdles. Holders have no right to dividend equivalent payments. There is no exercise price for PSUs.

4.4.1 Performance Hurdles for PSUs

Performance hurdles

The following summarises the key terms of PSUs and the performance hurdles:

	EPS CAGR hurdle	ROE hurdle
Application	50% of PSU award	50% of PSU award
Performance measure	Compound annual growth rate (CAGR) in EPS over the vesting period (four years)[1]	Relative average annual ROE over the vesting period (four years) compared to a reference group of international financial institutions[1] The reference group comprises Bank of America Corporation, Barclays PLC, Citigroup Inc., Deutsche Bank AG, Goldman Sachs Group Inc., JPMorgan Chase & Co., Lazard Ltd, Morgan Stanley and UBS AG[2]
Hurdle	Sliding scale applies:	Sliding scale applies:

[1] PSUs awarded prior to FY2020 vested in two equal tranches after three and four years.
[2] For FY2023 PSU allocations, Credit Suisse Group has been removed from the international reference group for the ROE hurdle, following its government-supported acquisition by USB, AG, and has been replaced with Citigroup Inc.

	• 50% becoming exercisable at EPS CAGR of 7.5% • 100% at EPS CAGR of 12% For example, if EPS CAGR was 9.75%, 75% of the relevant awards would become exercisable	• 50% becoming exercisable above the 50th percentile • 100% at the 75th percentile For example, if ROE achievement was at the 60th percentile, 70% of the relevant awards would become exercisable
Forfeiture	• malus provisions apply • the standard policy is that unvested PSUs will be forfeited upon termination • in the case of retirement from Macquarie Group, redundancy, death, serious incapacitation, disability, serious ill-health or other limited exceptional circumstances, the Board or the BRC has the authority to either accelerate the vesting of PSUs or to permit the PSUs to continue to vest in accordance with the original award schedule and remain subject to the same performance hurdles • should a change of control occur the Board or the BRC has discretion to determine how unvested PSUs should be treated, having regard to factors such as the length of time elapsed in the performance period, the level of performance to date and the circumstances of the change in control.[1]	

Rationale for hurdles

The PSU hurdles are periodically reviewed by the BRC to ensure they continue to align the interests of staff and shareholders and provide a challenging but meaningful incentive to Executive Committee members. The BRC's review includes consideration of the most relevant performance metrics to be used as hurdles as well as the levels at which the hurdles are achieved. The international reference group used for the ROE hurdle is also reviewed to determine whether our comparators remain suitable for Macquarie Group's diversified business interests and global footprint. The BRC also considers historical and forecast market data, the views of corporate governance bodies, shareholders and regulators, as well as market practice.

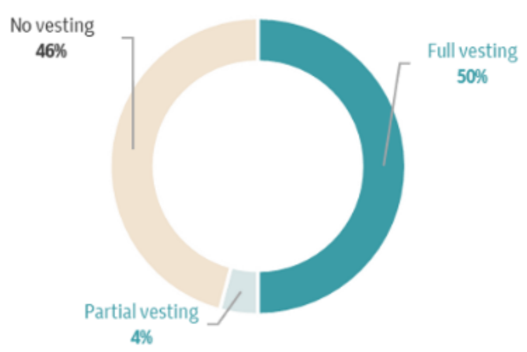
In the FY2023 annual review, both the relative ROE and absolute EPS hurdles were considered to still be appropriate for the following reasons:

- ROE and EPS growth drive long-term shareholder value and are appropriate as the Executive Committee can affect outcomes on both measures. In contrast, Total Shareholder Return (TSR) is influenced by many external factors over which executives have limited control
- ROE and EPS can be substantiated using information that is disclosed in MGL's annual reports
- a sliding scale diversifies the risk of not achieving the hurdles and provides rewards proportionate to performance for shareholders and is preferable to an all-or-nothing test, which some have argued could promote excessive risk-taking
- the hurdles are designed to reward sustained strong performance and are relatively well-insulated from short-term fluctuations
- the EPS targets are confirmed as rigorous when market performance is considered, with the EPS threshold hurdle exceeding the performance of most of the ASX20, the global reference group and relevant indices over time
- for the EPS element to fully vest, MGL needs to achieve at least 12% CAGR over the vesting period. Supporting the rigour of the hurdle, cumulative EPS growth of 57% over four years is required to achieve full vesting
- the ROE vesting thresholds and sliding scale are in line with the domestic market and are particularly challenging when compared to international practice.

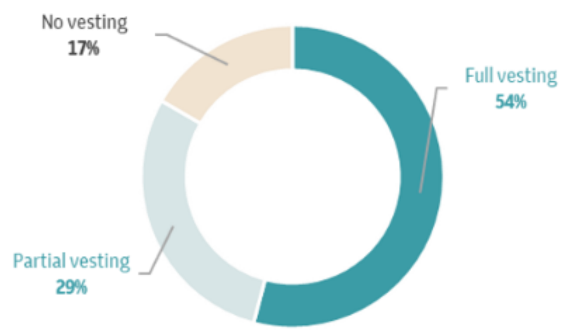
[1] Under the MEREP Plan Rules, a change in control occurs where a person acquires or ceases to hold a relevant interest in more than 30% of MGL shares or where the Board resolves that a person is in a position to remove one-half or more of the Non-Executive Directors.

The charts below display MGL's historical EPS and ROE PSU outcomes, highlighting that since their introduction in 2009, 50% of the EPS tranches and 46% of the ROE tranches have resulted in either no vesting or partial vesting.

Historical EPS tranche outcomes



Historical ROE tranche outcomes



Use of an international reference group

An international reference group recognises the extent of Macquarie Group's diversification and internationalisation. As at 31 March 2023, total international income represented approximately 71% of Macquarie Group's total income, with approximately 51% of Macquarie Group's staff located outside Australia. The BRC considers an international reference group to be appropriate on the basis that:

- the international reference group is currently most representative of Macquarie Group's business operations and talent pool. These firms broadly operate in the same markets and in similar business segments, and compete for the same people as Macquarie Group
- Macquarie Group has no comparable Australian-listed peers.

The BRC considers it important to not intervene reactively to remove under-performers or over-performers in any given period. However, given the recent government-supported acquisition of Credit Suisse Group by UBS AG, Credit Suisse Group has been removed from the international reference group for awards in respect of FY2023 onwards. The BRC have approved Citigroup Inc. as a replacement, taking into account the markets in which it operates and the diversification of its business segments.

4.5 Other features of Macquarie Group's remuneration framework

The following table summarises key features of Macquarie Group's remuneration framework:

Role-based allowances	• Role-based allowances are a component of fixed remuneration that may be awarded to certain employees, including those identified as Material Risk Takers (MRTs) under European regulatory requirements. These allowances are determined based on the role and organisational responsibility of the individuals.
Minimum shareholding requirement	• Executive Directors are required to hold a relevant interest in MGL ordinary shares that have a value equal to 5% of an Executive Director's aggregate profit share allocations for each of the past five years (10 years for Executive Committee members), which can be satisfied by the requirements of the profit share retention policy. • For Executive Committee members with a minimum of 10 years of service at the Executive Director level, compliance with this policy equates to a minimum shareholding requirement of between 100% to 1,170% of fixed remuneration based on share values unadjusted for market price changes.
Promotion and New Hire Awards	• Staff who are promoted to or hired at Associate Director, Division Director or Executive Director level receive an allocation of MEREP awards set with reference to an

	Australian dollar value. Currently these awards range from $A25,000 to $A175,000 depending on the Director level.
Hedging	• Macquarie Group prohibits staff from hedging shares held to meet the minimum shareholding requirement and unvested equity held in the MEREP.

Employment contracts

The following table summarises key features of the employment contracts for Executive Committee members including the CEO:

Length of contract	Permanent open-ended.
Remuneration review period	1 April to 31 March annually.
Profit share participation	Executive Committee members are eligible to be considered for a profit share allocation that ensures that a large part of their remuneration is 'at risk'.
PSU participation	Executive Committee members are eligible to receive PSUs.
Termination of employment	Requires no more than four weeks' notice by Macquarie Bank or the Executive Committee member (Post-employment restrictions apply).
Post-employment restrictions	Restrictions include non-solicitation provisions applicable for six months, and paid non-competition provisions applicable, at Macquarie Bank's election, for up to three months post-termination.

5. Quantitative Disclosures for Senior Managers and Material Risk Takers

The following tables have been prepared in accordance with APS 330 for the financial years ended 31 March 2023 and 31 March 2022. These tables are prepared on a different basis than those required by Australian Accounting Standards and the Corporations Act, as disclosed in Macquarie Bank's Annual Report.

5.1 Total Value of Remuneration Awards for Senior Managers and Material Risk Takers[1]

The following table sets out the total value of remuneration awarded to senior managers and material risk takers in respect of their performance for the financial years ended 31 March 2023 and 31 March 2022. 8 senior managers (FY2022: 10) and 31 material risk takers (FY2022: 36) received a variable remuneration award in respect of services to MBL in FY2023.

[1] Remuneration awarded in respect of FY2022 and FY2021 performance reflects remuneration relating to services to MBL for the portion of the relevant periods that each individual was a senior manager or material risk taker of MBL.

$A'000	Senior managers				Material risk takers			
	Non-Deferred		Deferred		Non-Deferred		Deferred	
	2023	2022	2023	2022	2023	2022	2023	2022
Fixed remuneration[1]								
Cash-based	**4,336**	3,878	**–**	–	**15,631**	19,083	**–**	–
Shares and share-linked instruments	**–**	–	**–**	–	**–**	–	**–**	–
Other	**–**	–	**–**	–	**–**	–	**–**	–
Variable remuneration[2]								
Cash-based	**29,086**	24,005	**–**	–	**38,806**	51,355	**–**	–
Shares and share-linked instruments[3]	**–**	–	**80,613**	57,151	**404**	1,784[4]	**39,554**	54,903
Other	**–**	–	**–**	–	**–**	–	**–**	–

5.2 Deferred Remuneration for Senior Managers and Material Risk Takers – Total Value Outstanding, Vested and Any Downward Adjustments

The following table sets out the total value of deferred remuneration outstanding at 31 March 2023 and 31 March 2022 respectively, remuneration granted in previous years that vested during the current financial year and any realised reductions due to ex post explicit and implicit adjustments. All outstanding deferred remuneration is exposed to ex post explicit and implicit adjustments.

$A'000	Senior managers		Material risk takers	
	2023	2022	2023	2022
Outstanding deferred remuneration[5]				
Cash-based	**–**	–	**–**	–
Shares and share-linked instruments[6]	**251,992**	277,432	**165,304**	254,844
Deferred remuneration vested during the financial year[7]	**45,677**	48,932	**28,371**	34,854
Deferred remuneration adjustments during the financial year				
Reductions due to ex post explicit adjustments[8]	**–**	(4,438)	**–**	(123)
Reductions due to ex post implicit adjustments	**–**	–	**–**	–

[1] Fixed remuneration comprises current year salary, including superannuation and other cash allowances.
[2] Variable remuneration awarded in respect of performance for FY2023 and FY2022 includes the total value of non-deferred and deferred components related to the FY2023 and FY2022 awards. The non-deferred (cash-based) components will be granted and paid in the following financial year and the payment of deferred components are deferred to a future period.
[3] Includes the value of retained profit share invested in MGL ordinary shares under the MEREP, retained profit share notionally invested in Macquarie managed-fund equity under the DPS Plan, and for senior managers, PSUs.
[4] Relates to EU Material Risk Takers in the UK for whom a portion of their non-deferred profit share is delivered in MGL ordinary shares in accordance with the Remuneration Code.
[5] Value as at 31 March 2023 and 31 March 2022 of unvested deferred remuneration.
[6] Includes the value as at 31 March 2023 (for FY2023) and 31 March 2022 (for FY2022) of retained profit share invested in MGL ordinary shares under the MEREP, retained profit share notionally invested in Macquarie managed-fund equity under the DPS Plan, and for senior managers, PSUs. The value of PSUs is determined based on the price of Macquarie ordinary shares consistent with Macquarie's PSU allocation methodology. The value of retained profit share invested in the MEREP and PSUs for FY2023 has been calculated based on the 31 March 2023 share price of $A175.66. For FY2022, the value of retained profit share invested in the MEREP was calculated based on the 31 March 2022 share price of $A203.27.
[7] Value as at the date of vesting of deferred remuneration that vested during the financial years ended 31 March 2023 and 31 March 2022 for senior managers and material risk takers. The value has been calculated based on the share price on the date of vesting which for FY2023 was in the range of $164.00 to $182.00 (FY2022: $149.97 to $203.16).
[8] Explicit adjustments include any realised reductions relating to forfeitures, lapses as a result of failure to meet performance hurdles, and adjustments made to deferred remuneration under the Malus and Post Employment Event provisions. Macquarie's reporting of adjustments for PSUs is determined based on the price of Macquarie ordinary shares at the date of grant.

As set out below, no sign-on awards were granted to senior managers during FY2022 and one senior manager was awarded a minimum conditional profit share and PSU award for the financial year ended 31 March 2023 (FY2022: 1). No material risk takers were awarded a guaranteed award or sign-on award during FY2023 (FY2021: Nil). No termination payments were made to a senior manager or material risk taker during FY2023 (FY2022: Nil for material risk takers). During FY2022, one senior manager received payments related to unused leave entitlements associated with termination.

	Senior managers				Material risk takers			
	No. of individuals		Total amount		No. of individuals		Total amount	
$A'000	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**	**2023**	**2022**
Sign-on awards[1]	**-**	-	**-**	-	**-**	-	**-**	-
Guaranteed variable remuneration[1]	**1**	1	**3,033**	368	**-**	-	**-**	-
Termination payments[2]	**-**	1	**-**	40	**-**	-	**-**	-

[1] These amounts reflect sign-on and minimum conditional profit share awards granted during FY2023 and FY2022 excluding buy-outs with respect to annual incentives forgone from their previous employers on appointment to Macquarie. Relevant amounts relating to the minimum conditional profit share awards for FY2023 and FY2022 and buy-out awards are also included in the tables under 5.1 and 5.2, respectively.
[2] This amount reflects payments made during FY2023 associated with termination of employment with Macquarie Group in accordance with Macquarie Group policies, Executive Director remuneration arrangements, individual employment agreements, and/or local legal requirements. Payments associated with termination will typically include unused long-service and annual leave entitlements, and redundancy amounts, where applicable, but will exclude the release (in accordance with Macquarie Group's remuneration arrangements) of deferred remuneration awarded in prior years which is included in deferred remuneration vested during the relevant financial year in table 5.2. There are no ex-gratia termination payments. Individuals may also retain deferred remuneration held in the MEREP, the DPS Plan or as PSUs (senior managers only), which may be released in future years subject to the relevant restriction periods, DPS release provisions and performance hurdles per Macquarie Group policies, Executive Director remuneration arrangements and/or individual employment agreements.

Appendix 4 List of APRA Quantitative Tables

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Appendix 5 Glossary of Terms

ADI	Authorised Deposit-taking Institution.
Additional Tier 1 Capital	A capital measure defined by APRA comprising high quality components of capital that satisfy the following essential characteristics: • Provide a permanent and unrestricted commitment of funds • Are freely available to absorb losses • Rank behind the claims of depositors and other more senior creditors in the event of winding up of the issuer; and • Provide for fully discretionary capital distributions.
Additional Tier 1 Capital deductions	An amount deducted in determining Additional Tier 1 Capital, as defined in Prudential Standard APS 111 Capital Adequacy: Measurement of Capital.
ALA	Alternative Liquid Assets
APRA	Australian Prudential Regulation Authority.
ADI Prudential Standards (APS)	APRA's ADI Prudential Standards. For more information refer to APRA website.
Associates	Associates are entities over which Macquarie has significant influence, but not control. Investments in associates may be further classified as Held for Sale ('HFS') associates. HFS associates are those that have a high probability of being sold within 12 months to external parties. Associates that are not held for sale are carried at cost and equity-accounted. Macquarie's share of the investment's post-acquisition profits and losses is recognised in the income statement and its share of post-acquisition movements in reserves is recognised within equity.
ASF	Available Stable Funding
Bank Group	MBL and its subsidiaries.
Basel III IRB Formula	A formula to calculate RWA, as defined in Prudential Standard APS 113 – Capital Adequacy: Internal Ratings-based Approach to Credit risk.
BAC	Board Audit Committee.
BCBS	Basel Committee on Banking Supervision.
BCN 2	BCN2 were issued by MBL in June 2020 and are quoted on the Australian Securities Exchange. The BCN2 pay discretionary, quarterly floating rate cash distributions equal to three-month BBSW plus 4.70% per annum margin, adjusted for franking credits. These instruments are non-cumulative and unsecured and may be redeemed at face value on 21 December 2025, 21 June 2026 or 21 December 2026 (subject to certain conditions being satisfied) or earlier in specified circumstances. The BCN2 can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 21 December 2028; exchanged earlier upon an acquisition event (with the acquirer gaining control of MGL or MBL); or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support).
BCN 3	BCN3 were issued by MBL in August 2021 and are quoted on the Australian Securities Exchange. The BCN3 pay discretionary, quarterly floating rate cash distributions equal to three-month BBSW plus 2.90% per annum margin, adjusted for franking credits. These instruments are non-cumulative and unsecured and may be redeemed at face value on 7 September 2028, 7 March 2029, or 7 September 2029 (subject to certain conditions being satisfied) or earlier in specified circumstances. The BCN3 can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 8 September 2031; exchanged earlier upon an acquisition event (with the acquirer gaining control of MGL or MBL); or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support)
BFS	Banking and Financial Services Group

The Board, Macquarie Bank Board	The Board of Voting Directors of Macquarie Bank Limited
BRC	Board Remuneration Committee
BRiC	Board Risk Committee
CA	Credit Assurance
CAF	Corporate and Asset Finance Group
CAGR	Compound Annual Growth Rate
CEO	Managing Director and Chief Executive Officer
CGM	Commodities and Global Markets Group
CFO	Chief Financial Officer
Contingent liabilities	Defined in AASB 137 Provisions, Contingent Liabilities and Contingent Assets as a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation that arises from past events but is not recognised because it is not probable to occur, or the amount cannot be reliably measured.
CCE	Current Credit Exposure. The sum of the positive mark-to-market value (or replacement cost) of market-related contracts entered into by the ADI.
CCR	Counterparty Credit Risk
CEA	Credit Equivalent Amount. The on-balance sheet equivalent value of an off balance sheet transaction.
Central counterparty	A clearing house or exchange that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer, and therefore ensuring the future performance or open contracts.
CLF	Committed Liquidity Facility
Common Equity Tier 1 capital (CET1)	A capital measure defined by APRA comprising the highest quality components of capital that fully satisfy all the following essential characteristics: • Provide a permanent and unrestricted commitment of funds • Are freely available to absorb losses • Do not impose any unavoidable servicing charge against earnings; and • Rank behind the claims of depositors and other creditors in the event of winding up. • Common equity tier 1 capital comprises Paid Up Capital, Retained Earnings, and certain reserves.
Common Equity Tier 1 Capital deductions	An amount deducted in determining Common Equity Tier 1 Capital, as defined in Prudential Standard APS 111 Capital Adequacy: Measurement of Capital.
Common Equity Tier 1 Capital Ratio	Common Equity Tier 1 Capital net of Common Equity Tier 1 deductions expressed as a percentage of RWA.
CRO	Chief Risk Officer
CVA	Credit Valuation Adjustment. The risk of mark-to-market losses on the expected counterparty risk to OTC derivatives.
Deconsolidated entities	Entities involved in conducting insurance, funds management and non-financial operations including special purpose vehicles (SPV) for which Macquarie has satisfied APS 120 Attachment A operational requirements for regulatory capital relief.
Directors' Profit Share (DPS)	The DPS plan comprises exposure to a notional portfolio of Macquarie-managed funds. Retained amounts for Executive Directors are notionally invested over the retention period. This investment is described as 'notional' because Executive Directors do not directly hold securities in relation to this investment. However, the value of the retained amounts will vary as if these amounts were directly invested in actual securities, giving the Executive Directors an effective economic exposure to the performance of the securities. If the notional investment results in a notional loss, this loss will be offset against any future notional income until the loss is completely offset.
DSR	Debt Specific Risk

DSU	Deferred Share Unit issued under the MEREP
DVP	Delivery versus Payment
EAD	Exposure at Default – the gross exposure under a facility (the amount that is legally owed to the ADI) upon default of an obligor.
ECAI	External Credit Assessment Institution.
ECAM	Economic Capital Adequacy Model.
EL	Expected Loss, which is a function of EAD, Probability of Default and Loss given Default.
ELE	Extended Licensed Entity is an entity that is treated as part of the ADI ('Level 1') for the purpose of measuring the ADI's capital adequacy and exposures to related entities. The criterion for qualification as an ELE is detailed in the APRA Prudential Standards.
EMEA	Europe, Middle East & Africa.
ERL	Equity Risk Limit – Board imposed limit by which equity risk positions are managed.
ERBA	External Rating Based Approach
Executive Key Management Personnel (Executive KMP)	Members of Executive Committee of MBL
Executive Voting Director	An Executive Board Member
FIRB	Foundation Internal Ratings Based Approach (for determining credit risk)
GAAP	Generally Accepted Accounting Principles
GRCC	Group Risk and Compliance Committee
HQLA	High Quality Liquid Assets
ICAAP	Internal Capital Adequacy Assessment Process.
IRRBB	Interest Rate Risk in the Banking Book.
Impaired assets	An asset for which the ultimate collectability of principal and interest is compromised.
ISDA	International Swaps and Derivatives Association
LCR	Liquidity Coverage Ratio
Level 1 Regulatory Group	MBL and certain subsidiaries which meet the APRA definition of Extended Licensed Entities
Level 2 Regulatory Group	MBL, its parent Macquarie B.H. Pty Ltd and MBL's subsidiaries but excluding deconsolidated entities for APRA reporting purposes.
Level 3 Regulatory Group	MGL and its subsidiaries but excluding entities required to be deconsolidated for regulatory reporting purposes.
LGD	Loss given default is defined as the economic loss which arises upon default of the obligor.
LVR	Loan to Value Ratio
Macquarie	Level 2 regulatory group
Macquarie Group	MGL and its subsidiaries
Malus	The discretion of the Board (from 2012) to reduce or eliminate unvested profit share amounts where it determines that an employee's action or inaction has caused the Macquarie Group significant reputational harm, caused a significant or unexpected financial loss or caused the Macquarie Group to make a material financial restatement.
MACS	On 8 March 2017, MBL, acting through its London Branch, issued $US750 million of Macquarie Additional Capital Securities (MACS). MACS are subordinated, unsecured notes that pay discretionary, non-cumulative, semi-annual fixed rate cash distributions. Subject to certain conditions the MACS may be redeemed on 8 March 2027, or each fifth anniversary thereafter. MACS can be exchanged for a variable number of fully paid MGL ordinary shares on an acquisition event (with the acquirer gaining control of MGL or MBL), where MBL's common equity Tier 1 capital ratio falls below 5.125%, or where APRA determines MBL would be non-viable without an exchange or a public sector injection of capital (or equivalent support).
MAM	Macquarie Asset Management Group

MBL	Macquarie Bank Limited ABN 46 008 583 542
MBL Consolidated Group	MBL and its subsidiaries
MEREP	Macquarie Group Employee Retained Equity Plan
MFHPL	Macquarie Financial Holdings Pty Limited
MGL	Macquarie Group Limited ABN 94 122 169 279
NCO	Net Cash Outflows
Non-Bank Group	MGL, MFHPL and its subsidiaries
NPAT	Net Profit after Tax
NSFR	Net Stable Funding Ratio
Operating Group	The Operating Groups consist of MAM, CAF, CGM, BFS and Macquarie Capital
ORMF	Operational Risk Management Framework
PCE, PFCE	Potential Credit Exposure (PCE) / Potential Future Credit Exposure (PFCE). The potential exposures arising on a transaction calculated as the notional principal amount multiplied by a credit conversion factor specified by APRA.
PD	Probability of Default. The likelihood of an obligor not satisfying its financial obligations.
Post-2009 DPS	Retained directors' profit share which is deferred to future periods and held as a notional investment in Macquarie managed-fund equity.
PSU	Performance Share Unit issued under the MEREP
Reserve Bank of Australia (RBA)	Central bank of Australia with responsibility over monetary policy.
Risk-weighted assets (RWA)	A risk-based measure of an entity's exposures, which is used in assessing its overall capital adequacy.
RAS	Risk Appetite Statement
RMG	Risk Management Group
ROE	Return on Ordinary Equity
RSF	Required Stable Funding
RSU	Restricted Share Unit issued under the MEREP
RMBS	Residential Mortgage-Backed Securities
Senior Executive	Macquarie Group's combined Division Director and Executive Director population.
Senior Management	Members of Macquarie Group's Executive Committee and Executive Directors who have significant management or risk responsibility in the organisation.
SFA	Supervisory Formula Approach
SFT	Securities Financing Transactions (SFT). SFTs are transactions such as repurchase agreements, reverse repurchase agreements and security lending and borrowing, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements.
SME	Small – Medium Enterprises
SPV's	Special purpose vehicles or securitisation vehicles.
SMA	Standardised Measurement Approach (for determining operational risk in accordance with Prudential Standard APS 115 Capital Adequacy: Standardised Measurement Approach to Operational Risk).
Subordinated debt	Debt issued by Macquarie for which agreements between Macquarie and the lenders provide, in the event of liquidation, that the entitlement of such lenders to repayment of the principal sum and interest thereon is and shall at all times be and remain subordinated to the rights of all other present and future creditors of Macquarie. Subordinated debt is classified as liabilities in the Macquarie financial report and may be included in Tier 2 Capital.
Tier 1 Capital	Tier 1 capital comprises of (i) Common Equity Tier 1 Capital; and (ii) Additional Tier 1 Capital
Tier 1 Capital Deductions	Tier 1 capital deductions comprises of (i) Common Equity Tier 1 Capital deductions; and (ii) Additional Tier 1 Capital deductions.
Tier 1 Capital Ratio	Tier 1 Capital net of Tier 1 Capital Deductions expressed as a percentage of RWA.

Tier 2 Capital	A capital measure defined by APRA, comprising other components of capital which contribute to the strength of the entity.
Tier 2 Capital Deductions	An amount deducted in Tier 2 Capital, as defined in Prudential Standard APS 111 Capital Adequacy: Measurement of Capital.
Total Capital	Tier 1 Capital plus Tier 2 Capital less Total Capital Deductions.
Total Capital Ratio	Total Capital expressed as a percentage of RWA.
TSR	Total Shareholder Return
VaR	Value-at-Risk

Disclaimer

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Unless otherwise specified all information is at 31 March 2023.

Although Pillar 3 disclosures are intended to provide transparent disclosures on a common basis the information contained in this document may not be directly comparable with other banks. This may be due to a number of factors such as:

- The mix of business exposures between banks.
- Pillar 2 capital requirements are excluded from this disclosure but play a major role in determining both the total capital requirements of the bank and any surplus capital available.
- Difference in implementation of Basel III framework i.e. APRA has introduced stricter requirements (APRA superequivalence).