

Pillar 3 disclosures

Macquarie Bank
September 2017



This page has been left blank intentionally.

Macquarie Bank Limited
ABN 46 008 583 542

No.1 Martin Place
Sydney NSW 2000
GPO Box 4294
Sydney NSW 1164

Telephone (61 2) 8232 3333
Facsimile (61 2) 8232 7780
Telex 122246
Internet <http://www.macquarie.com.au>
DX 10287 SSE
SWIFT MACQUAU2S

Money Market 8232 3600 Facsimile 8232 4227
Foreign Exchange 8232 3666 Facsimile 8232 3019
Metals and Mining 8232 3444 Facsimile 8232 3590
Futures 9231 1028 Telex 72263
Debt Markets 8232 3815 Facsimile 8232 4414



ASX Release

MACQUARIE BANK RELEASES SEPTEMBER PILLAR 3 DISCLOSURE DOCUMENT

13 November 2017 - The Macquarie Bank Limited September 2017 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.

Contacts:

Karen Khadi, Macquarie Group Investor Relations	+612 8232 3548
Lisa Jamieson, Macquarie Group Media Relations	+612 8232 6016

This page has been left blank intentionally.

Contents

Introduction	2
1.0 Overview	3
2.0 Risk Management Governance and Framework	5
3.0 Capital Structure	7
4.0 Capital Adequacy	9
5.0 Credit Risk Measurement	14
6.0 Calculation of Credit Risk Exposures	27
7.0 Provisioning	33
8.0 Credit Risk Mitigation	41
9.0 Securitisation	44
10.0 Credit Valuation Adjustment	57
11.0 Exposures to Central Counterparties	58
12.0 Market Risk	59
13.0 Equity Risk	64
14.0 Operational Risk	67
15.0 Leverage Ratio Disclosures	68
16.0 Liquidity Coverage Ratio Disclosures	70
Disclaimer	72
Appendices	73

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, the Advanced Measurement Approach (AMA) for operational risk, 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.

On 1 January 2013, reforms to the Basel II capital adequacy framework came into effect (the Basel III framework). These reforms are designed to strengthen global capital rules with the goal of promoting a more resilient banking sector. The objective of the reforms is to improve the banking sector's ability to absorb shocks arising from financial stress, whatever the source, thus reducing the risk of spillover from the financial sector to the real economy.

APRA has implemented the Basel III framework, and in some areas has gone further by introducing stricter requirements (APRA superequivalence). This report details MBL's disclosures as required by APRA Prudential Standard APS 330: Public Disclosure as at 30 September 2017 together with the 31 March 2017 comparatives where appropriate.

This report also describes Macquarie's risk management policies and risk management framework and the measures adopted to monitor and report within this framework. Detailed in this report are the major components of 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.

The current Macquarie Bank Group capital, liquidity coverage and leverage ratios and relevant comparatives are set out in the table below.

	As at 30 September 2017	As at 31 March 2017
Capital, Liquidity and Leverage Ratios		
Level 2 Macquarie Bank Group Common Equity Tier 1 capital ratio ¹	11.0%	11.1%
Level 2 Macquarie Bank Group Total Tier 1 capital ratio ¹	12.9%	13.3%
Level 2 Macquarie Bank Group Total capital ratio ¹	14.9%	15.4%
Level 2 Macquarie Bank Group Leverage ratio	6.1%	6.4%
Level 2 Macquarie Bank Group Liquidity coverage ratio ^{1,2,3}	153%	168%

¹ The Macquarie Bank Group capital and liquidity coverage ratios are well above the regulatory minimum required by APRA, and the Board imposed internal minimum requirement.

² For liquidity coverage ratio, Level 2 Macquarie Bank Group includes Special Purpose Vehicles (SPVs), which are deconsolidated for Capital adequacy purposes.

³ The LCR for the 3 months to 30 September 2017 is calculated from 64 daily LCR observations (3 months to 31 March 2017 was calculated from 63 daily LCR observations).

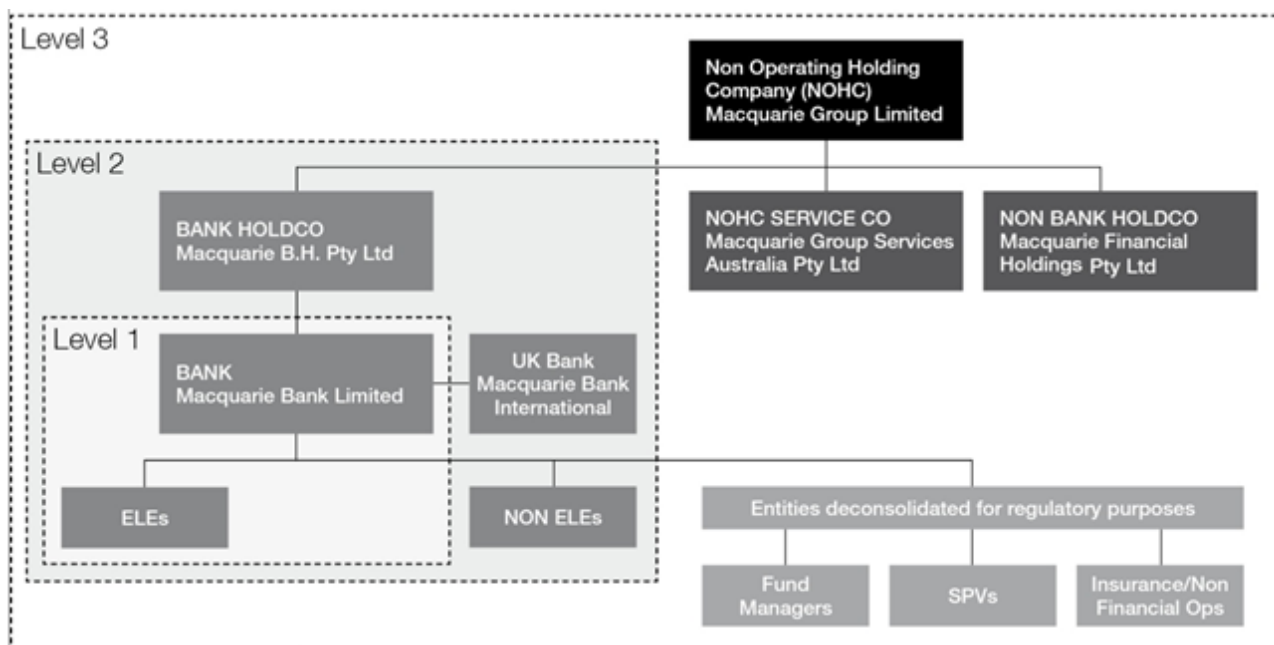
1.0 Overview

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, as described below.

1.1.1 Macquarie Regulatory Group

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



Reporting levels are in accordance with APRA definitions contained in APRA Prudential Standard APS 110: Capital Adequacy.

MBL and certain subsidiaries which meet the APRA definition of Extended Licensed Entities (ELE) are reported to APRA as Level 1. Level 2 consists of MBL, its subsidiaries and its immediate parent (Macquarie B.H. Pty Ltd) but excluding certain subsidiaries of MBL which are required by APRA 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) 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 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. A list of entities deconsolidated for Level 2 reporting purposes is included in Appendix 2.

References in this report to Macquarie or Bank Group or Macquarie Bank Group 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 a 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.

1.0 Overview

continued

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 30 September 2017 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.

Where necessary comparative information has been restated to conform with changes in presentation in the current year.

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, building on the three pillars of the Basel II 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 are a number of different approaches to risk calculation that allows 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 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 Loss Given Default (LGD) value set by APRA. Credit Conversion Factors are applied to off balance sheet exposures based on the nature of the exposure.

Operational risk is calculated using the AMA.

Market risk and interest rate risk in the banking book is calculated using the internal model approach.

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, and RWA. The report consists of sections covering:

- Risk Management Governance and Framework
- Capital Management
- Credit Risk Measurement
- Provisioning
- Credit Risk Mitigation
- Securitisation
- Credit Valuation Adjustment
- Exposures to Central Counterparties
- Market Risk
- Equity Risk
- Operational Risk
- Leverage Ratio
- Liquidity Coverage Ratio

2.0 Risk Management Governance and Framework

2.1 Risk Governance at Macquarie

The primary role of the Board is to promote Macquarie's long-term health and prosperity. The Board is ultimately responsible for Macquarie's risk management framework including oversight of its operation by management. Macquarie's robust risk management framework supports the Board in its role and oversight of the framework is a key priority.

Macquarie recognises that a sound risk culture is a fundamental requirement of an effective risk management framework. The long-held foundations of Macquarie's risk culture are the principles of *What We Stand For* – Opportunity, Accountability and Integrity. Staff are made aware that these principles are expected to form the basis of all day-to-day behaviours and actions.

Board Committees, Management Committees and ultimately individuals support the Board in its oversight; for further detail refer to Macquarie's Corporate Governance Statement available at [macquarie.com/leadership-corporate-governance](https://www.macquarie.com/leadership-corporate-governance).

2.2 Macquarie's Risk Management Framework

Macquarie's risk management framework consists of its systems, structures, policies and processes. Under the framework staff are responsible for identifying, measuring, evaluating, monitoring, reporting and managing material risks.

Details about the risks we manage at Macquarie are available on [macquarie.com/au/about/company/risk-management-at-Macquarie](https://www.macquarie.com/au/about/company/risk-management-at-Macquarie).

The risk management framework incorporates active management and monitoring of regulatory, compliance, reputation, credit, market, equity, operational, liquidity, legal, tax, model, cyber, and environmental and social – including climate change – risks. It also includes risk culture and conduct risk management frameworks. The risk management framework applies to all business activities across Operating and Central Service Groups. The assumption of risk is made within a calculated and controlled framework that assigns clear risk roles and responsibilities represented by 'three lines of defence':

- primary responsibility for risk management lies at the business level. This is the first line of defence. Part of the role of all business managers throughout Macquarie is to ensure they manage risks appropriately.
- the risk management function forms the second line of defence and independently assesses all material risks
- the third line, which includes Internal Audit, independently reviews and challenges the Group's risk management controls, processes and systems.

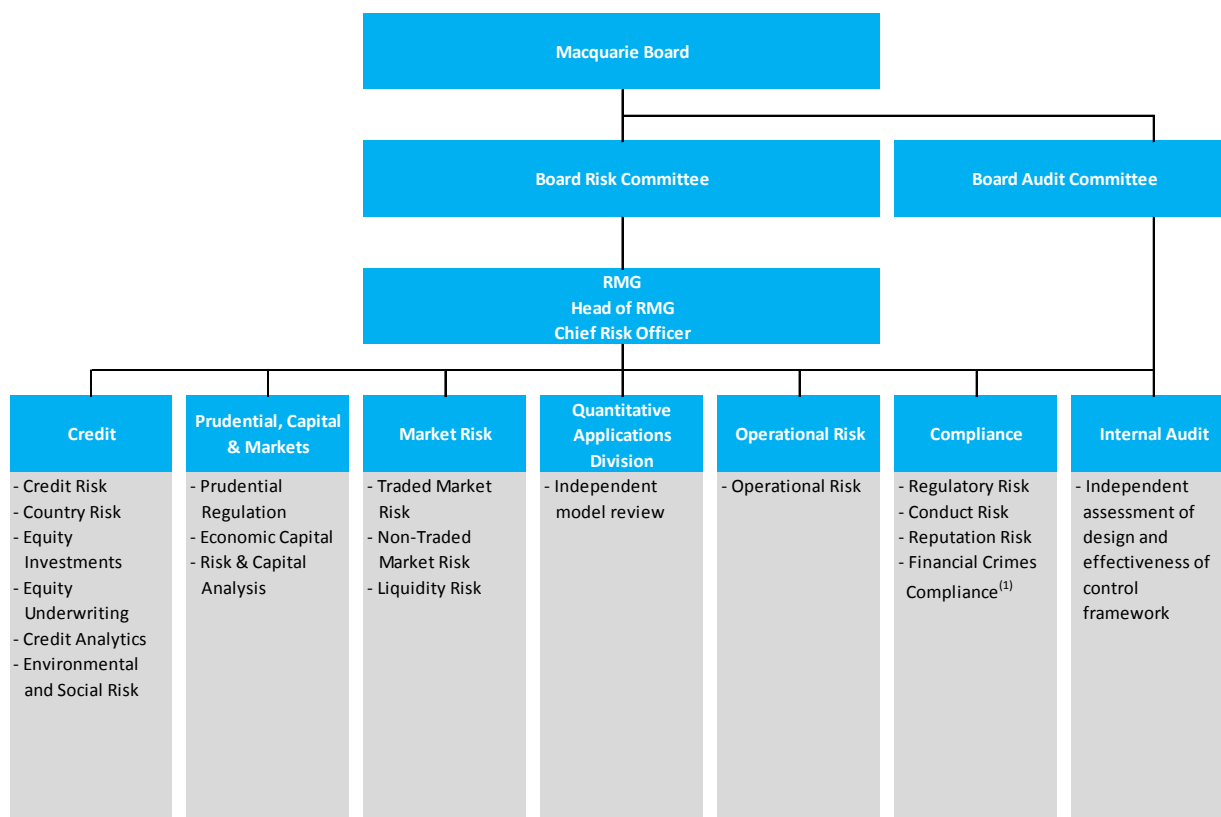
2.0 Risk Management Governance and Framework

continued

2.3 Risk Management Group Structure

Effective risk management is a function of both rigorous processes and the ability of experienced professionals to provide new perspectives on the risks they are considering. RMG attracts high caliber candidates. It recruits experienced individuals both from within Macquarie and externally. Conversely, Operating and Central Service Groups also source talent from RMG.

While RMG is structured into specialist teams as detailed below, it employs an integrated approach to risk analysis and management across risk classes. RMG's assessment and monitoring of risks involves a collaborative effort across the teams to ensure that a detailed analysis takes place both at the individual and aggregate risk level.



¹ Financial Crimes Compliance includes anti-money laundering, anti-bribery & corruption and sanctions.

2.3.1 Internal Audit

Internal Audit provides independent assurance to senior management and the Board on the adequacy and operational effectiveness of Macquarie's internal controls, risk management, and governance systems and processes. Internal Audit provides an objective assessment on whether risks have been adequately identified, appropriate internal controls are in place to manage those risks and whether those controls are working effectively.

A specialist Risk Mindset and Behaviours team, composed of risk culture specialists, performs reviews across Macquarie using a well-established assessment methodology. The prevailing risk management attitudes and behaviours of selected functions in Operating and Central Service Groups are assessed. Areas of relative strengths are highlighted. Areas for improvement and required actions are identified.

Findings from all Internal Audit work are followed up to ensure remediation.

Internal Audit is independent of both business management and the activities it reviews. The Head of Internal Audit is jointly accountable to the Board Audit Committee (BAC) and the Chief Risk Officer (CRO). The BAC approves the appointment and removal of the Head of Internal Audit who has unlimited access to the BAC.

3.0 Capital Structure

3.1 Total Available Capital

The Macquarie Bank Group capital supply is detailed in the table below.

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Common Equity Tier 1 capital		
Paid-up ordinary share capital	9,523	9,520
Retained earnings	2,348	2,354
Reserves	355	411
Gross Common Equity Tier 1 capital	12,226	12,285
Regulatory adjustments to Common Equity Tier 1 capital:		
Goodwill	39	37
Deferred tax assets	167	157
Net other fair value adjustments	(86)	(104)
Intangible component of investments in subsidiaries and other entities	51	51
Loan and lease origination fees and commissions paid to mortgage originators and brokers	384	349
Shortfall in provisions for credit losses	364	338
Equity exposures	1,137	1,179
Other Common Equity Tier 1 capital deductions	271	254
Total Common Equity Tier 1 capital deductions	2,327	2,261
Net Common Equity Tier 1 capital	9,899	10,024
Additional Tier 1 capital		
Additional Tier 1 capital instruments	1,619	1,970
Gross Additional Tier 1 capital	1,619	1,970
Deductions from Additional Tier 1 capital	-	-
Net Additional Tier 1 capital	1,619	1,970
Total Net Tier 1 capital	11,518	11,994
Tier 2 capital		
Tier 2 capital instruments and other	1,869	1,889
Total capital base	13,387	13,883

3.0 Capital Structure

continued

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.

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 Income Securities (MIS), Bank Capital Notes (BCN) and Macquarie Additional Capital Securities (MACS).

MIS are a perpetual instrument with no conversion rights. MIS were listed for trading on the Australian Stock Exchange (now known as the Australian Securities Exchange) in 1999. MIS distributions are paid quarterly at a floating rate of BBSW plus 1.7% per annum and payment is subject to certain conditions including profitability of the Bank. MIS are eligible for transitional arrangements under Basel III rules.

BCN were issued by MBL in October 2014 and are quoted on the Australian Securities Exchange. The BCN pay discretionary, semi-annual floating rate cash distributions equal to six month BBSW plus 3.30% per annum margin, adjusted for franking credits. These instruments are non-cumulative and unsecured and may be redeemed at face value on 24 March 2020, 24 September 2020 and 24 March 2021 (subject to certain conditions being satisfied) or earlier in specified circumstances. The BCN can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 24 March 2023; 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). APRA has confirmed that BCN are eligible for inclusion as Additional Tier 1 capital.

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). APRA has confirmed that MACS are eligible for inclusion as Additional Tier 1 capital.

3.3 Tier 2 Capital

Macquarie's Tier 2 capital consists of a portion of certain credit loss reserves plus subordinated debt instruments. A portion of subordinated debt is included under Basel III transitional rules which require the value recognised to amortise by 10% each year until no part of the instruments are included after 10 years.

MBL has issued cumulative convertible subordinated debt amounting to US\$750m in June 2015 which is Basel III compliant and not subject to the transitional rules referred to above. This is reported at the value of liability at the period end date.

3.4 Restrictions on Capital

Various restrictions or costs exist on the transfer of capital within the Macquarie accounting consolidated group. For example:

- Licensed entities such as Australian Financial Services Licensed (AFSL) entities are required to maintain minimum capital requirements to comply with their licence. 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;
- RMG also manage and monitor internal limits on exposures to related entities which, combined with APRA's prudential limits, seeks to minimise contagion risk.

4.0 Capital Adequacy

4.1 Capital Management

Macquarie's capital management strategy is to maximise shareholder value through optimising the 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:

- continue to support Macquarie's credit rating;
- ensure sufficient capital resources to support Macquarie's business and operational requirements;
- maintain sufficient capital to exceed externally imposed capital requirements; and
- safeguard Macquarie's ability to continue as a going concern.

Macquarie's capital management strategy uses both internal and external measures of capital. Internally, Macquarie has developed an economic capital model that is used to quantify MGL Group's aggregate level of risk. The economic capital framework complements the management of specific risk types such as equity, credit, market and operational risk by providing an aggregate view of MGL Group's risk profile.

The economic capital model is used to support business decision-making and has three main applications:

- capital adequacy assessment;
- risk appetite setting; and
- risk-adjusted performance measurement.

Capital adequacy is assessed for both MGL Group and the Bank Group. In each case, capital adequacy is assessed on a regulatory basis and on an economic basis, with capital requirements assessed as follows:

Economic capital adequacy means an internal assessment of capital adequacy, designed to ensure Macquarie has sufficient capital to absorb potential losses and provide creditors with the required degree of protection.

Potential losses are quantified using the Economic Capital Adequacy Model (ECAM). These potential losses are compared to the capital resources available to absorb loss, consisting of book equity and eligible hybrid equity. Earnings are also available to absorb losses, however, only a fraction of potential earnings is recognised as a buffer against losses.

APRA has approved Macquarie's ECAM for use in calculating the regulatory capital requirement of the Non-Bank Group. The ECAM is based on similar principles and models as the Basel III regulatory capital framework for banks, as shown in the table which appears on the following page with both calculating capital at a one year, 99.9% confidence level. This 99.9% confidence level is broadly consistent with the acceptable probability of default implied by Macquarie's credit ratings.

Entity	Economic	Regulatory
Bank Group	Internal model, covering exposures of the Bank Group	Capital to cover RWA and regulatory deductions, according to APRA's Bank prudential standards
MGL Group	Internal model, covering all exposures of the MGL Group	Bank Group regulatory capital requirement plus economic capital requirement of the Non-Bank Group

4.0 Capital Adequacy

continued

Risk	Basel III	ECAM
Credit	Capital requirement determined by Basel III IRB formula, with some parameters specified by the regulator (e.g. LGD)	Capital requirement determined by Basel III IRB formula, with internal estimates of key parameters
Equity	100% Common Equity Tier 1 deduction	Extension of Basel III credit model to cover equity exposures. Capital requirement between 36% and 82% of face value; average 47%
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	Advanced Measurement Approach	Advanced Measurement Approach

Macquarie is currently well capitalised. The remaining capital surplus is available to support growth, provide strategic flexibility and accommodate capital volatility. In order to reduce volatility in Macquarie's capital position, Macquarie actively manages the sensitivity of its capital position to foreign currency movements.

The capital adequacy results are reported to the MGL Board and senior management on a regular basis, together with projections of capital adequacy under a range of scenarios.

4.2 Risk Appetite Setting

The Board reviews and endorses Macquarie's risk appetite as part of the annual corporate strategy review process. Risk appetite is the nature and amount of risk the Group is willing to accept as outlined in the Board-approved *Risk Appetite Statement (RAS)*.

The *RAS* sets out the degree of risk Macquarie is willing to take overall and for each material risk type. It also conveys the process for ensuring that risk limits (tolerances) are set at an appropriate level, monitored and reviewed.

The principles of the *RAS* are implemented primarily through the following four mechanisms:

4.2.1 New Product and Business Approval Process

All new businesses and significant changes to existing products or processes are subject to a rigorous and 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 unknown or 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, Finance Division, Taxation Division, Legal and Governance and other relevant stakeholders within Macquarie are obtained. RMG also checks that all necessary internal approvals are obtained prior to commencement.

For all material transactions, independent input from RMG on the risk and return of the transaction is included in the approval document submitted to senior management.

The Operational Risk function within RMG oversees the New Product and Business Approval process.

RMG Internal Audit performs an audit of the operations of any significant new businesses based on an assessment of the associated risk faced by Macquarie. The audit typically takes place within six months of an acquisition or launch. It includes confirmation that operations are in line with the new product approval document.

4.2.2 Limits

In many cases, limits translate risk appetite principles into hard constraints on individual businesses.

These consist of specific risk limits given to various businesses and products or industry sectors 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 Macquarie's earnings and surplus capital cover losses and market confidence in Macquarie is maintained.

Under Macquarie's 'no limits, no dealing' approach, individual credit and equity exposures must fit within approved counterparty limits. Market risk exposures are also governed by a suite of individual and portfolio limits.

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.

4.2.3 Relevant Policies

Policies expand on the principles found in the *RAS* and often translate them into operational requirements for individuals and business activities.

Formalising practices and principles into policies assists in providing a framework for the consistent management of risks. It also promotes sharing of experience and expertise gained from managing risks in various business activities.

4.2.4 Communication and Training

The *RAS* is accessible to all staff and is referred to in the *Code of Conduct*. In addition, the principles in the *RAS* are communicated to relevant staff through formal and informal training programs. These include regular communication of policies to key staff, training programs for specific policies and mandatory Director-level staff training on the risk management framework.

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 considers losses and earnings under a severe economic downturn scenario with the aim of Macquarie emerging from that scenario with sufficient capital to continue operating.

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 three-year 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 three-year 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.

4.0 Capital Adequacy

continued

4.3 Risk Weighted Assets (RWA)

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

The table below sets out the RWA exposures for the Macquarie Bank Group.

APS 330 Table 6 (b) to (f)

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Credit risk		
Subject to IRB approach		
Corporate	26,736	27,473
SME Corporate	2,962	2,830
Sovereign	226	227
Bank	1,315	1,175
Residential Mortgages ¹	11,597	10,545
Other Retail	4,093	3,642
Retail SME ¹	3,056	2,961
Total RWA subject to IRB approach²	49,985	48,853
Specialised lending exposures subject to slotting criteria³	4,939	6,277
Subject to Standardised approach		
Corporate	938	794
Residential Mortgages	1,635	1,634
Other Retail ⁴	4,847	5,755
Total RWA subject to Standardised approach²	7,420	8,183
Credit risk RWA for securitisation exposures	529	441
Credit Valuation Adjustment RWA	3,014	2,457
Exposures to Central Counterparties RWA	1,423	1,232
RWA for Other Assets	8,976	8,554
Total Credit risk RWA	76,286	75,997
Market risk RWA	3,314	3,958
Operational risk RWA	10,025	9,979
Interest rate risk in the banking book RWA	-	82
Total RWA	89,625	90,016

¹ Includes APRA approved changes for the treatment of SME loans secured by mortgages.

² Refer to section 6.0 for more details on exposures calculated under the IRB and Standardised approaches.

³ Specialised lending exposures subject to supervisory slotting criteria are measured using APRA determined risk weightings.

⁴ RWA on standardised "other retail" has decreased pursuant to amortisation of Corporate and Asset Finance (CAF) Retail Leasing portfolio.

Ratios for Common Equity Tier 1, Total Tier 1, and Total capital of Macquarie Bank Group are set out below.

APS 330 Table 6 (g)

Capital Ratios	As at 30 September 2017	As at 31 March 2017
Level 2 Macquarie Bank Group Common Equity Tier 1 capital ratio	11.0%	11.1%
Level 2 Macquarie Bank Group Total Tier 1 capital ratio	12.9%	13.3%
Level 2 Macquarie Bank Group Total capital ratio	14.9%	15.4%
Level 1 Macquarie ELE Common Equity Tier 1 capital ratio	10.7%	10.6%
Level 1 Macquarie ELE Total Tier 1 capital ratio	12.6%	12.9%
Level 1 Macquarie ELE Total capital ratio	14.8%	15.1%

APRA requires Authorised Deposit-taking Institutions (ADIs) to have a minimum ratio of total capital to risk weighted assets (RWA) of 8% at both Level 1 and Level 2, with at least 6% of this capital in the form of Tier 1 capital and at least 4.5% of this minimum capital in the form of Common Equity Tier 1 capital. In addition, APRA imposes ADI specific minimum capital ratios which may be higher than these levels. From 1 January 2016, APRA further imposes ADI capital buffer requirements which include a 2.5% capital conservation buffer above the minimum Common Equity Tier 1 capital.

At 30 September 2017, the countercyclical capital buffer requirement for Level 2 Macquarie Bank Group is less than 0.01%.

5.0 Credit Risk Measurement

5.1 Credit Risk Overview

Credit risk is defined as the risk of a counterparty failing to complete its contractual obligations when they fall due. The consequent loss is either the amount of the loan not repaid, 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 Analysis and Approval of Exposures

The MGL and MBL Boards are responsible for establishing the framework for approving credit exposures. The 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, the CEO and the Boards 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 reviewed at least once a year, or more frequently if required. Retail credit exposures are monitored on a portfolio basis.

5.2.2 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), Fitch and Moody's Investor Services credit ratings. Each MQ rating has been assigned a PD derived from Standard and Poor's or Moody'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 Bank 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.

5.2.2 Macquarie Ratings (continued)

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

5.0 Credit Risk Measurement

continued

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, which is that an item 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 Credit with oversight from the Credit Models Review Committee. The following annual validation activities are undertaken:

- validation of wholesale ratings templates;
- validation of wholesale PD estimates;
- validation of wholesale LGD estimates;
- wholesale ratings migration analysis;
- validation of retail PDs;
- validation of retail LGDs; and
- approval of any changes to 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 significant 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. Loan assets are reported at amortised cost whereas derivative contracts are measured according to both internal and 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.

Derivative revaluation based measures are calculated using valuation models which are consistent with those used for determining mark to market values for financial reporting purposes and are reported daily to RMG Credit.

For regulatory purposes, CEA (Credit Equivalent Amount) is calculated according to the methodology outlined in the APRA Prudential Standards (APS) which combines the positive mark-to-market value (Current Credit Exposure) with a percentage of the face value based on the type of contract and the contractual maturity (Potential Credit Exposure). CEA exposures are used in daily calculations of large exposures in accordance with APS 221 Large Exposures.

The internal measure of counterparty credit exposure is calculated as a function of market movements. A range of exposure profiles are calculated representing portfolio exposures at different confidence levels or under predefined scenarios through the life of the portfolio. 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.

Both the internal and regulatory calculations of 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 effected 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 reportable excesses are summarised and reported to the Board monthly.

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 and Equity Portfolio analysing exposure concentrations by counterparty, country, risk type, industry and credit quality is carried out quarterly and reported to the Board semi-annually. Policies are in place to 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 Corporate and Asset Finance Group (CAF).

RMG CA reports to the RMG Head of Operational Risk 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.

5.0 Credit Risk Measurement

continued

5.3 Macquarie's Credit Risk Exposures

Credit exposures are disclosed in the following pages dissected by:

- 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 amount outstanding on drawn facilities and the exposure at default on undrawn facilities. 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 1.1.1. The gross credit risk exposures in this section will differ from the disclosures in the Macquarie Bank Limited Consolidated 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 30 September 2017 \$m	As at 31 March 2017 \$m
Corporate ¹	43,203	44,462
SME Corporate ²	4,044	3,863
Sovereign	2,081	2,941
Bank	7,973	7,020
Residential Mortgages	39,265	37,561
Other Retail	12,357	12,702
Retail SME	4,638	4,835
Other Assets ³	13,901	11,551
Total Gross Credit Exposure	127,462	124,935

¹ Corporate includes specialised lending exposure of \$4,787 million as at 30 September 2017 (31 March 2017: \$6,246 million).

² SME Corporate includes specialised lending exposure of \$566 million as at 30 September 2017 (31 March 2017: \$530 million).

³ The major components of Other Assets are operating lease residuals, other debtors and unsettled trades.

APS 330 Table 7(b) (continued)

	As at 30 September 2017			Total \$m	For the 6 months to 30 September 2017 Average Exposures \$m
	On Balance Sheet \$m	Off Balance sheet Non-market related \$m	Market related \$m		
Subject to IRB approach					
Corporate	19,759	3,976	13,743	37,478	37,450
SME Corporate	2,922	556	-	3,478	3,405
Sovereign	1,253	-	828	2,081	2,511
Bank	2,552	12	5,409	7,973	7,496
Residential Mortgages	30,603	6,355	-	36,958	35,905
Other Retail	7,463	-	-	7,463	7,190
Retail SME	4,614	24	-	4,638	4,737
Total IRB approach	69,166	10,923	19,980	100,069	98,694
Specialised Lending	4,441	567	345	5,353	6,065
Subject to Standardised approach					
Corporate	-	938	-	938	866
Residential Mortgages	2,307	-	-	2,307	2,508
Other Retail	4,894	-	-	4,894	5,340
Total Standardised approach	7,201	938	-	8,139	8,714
Other Assets	13,491	185	225	13,901	12,726
Total Gross Credit Exposures	94,299	12,613	20,550	127,462	126,199

5.0 Credit Risk Measurement

continued

APS 330 Table 7(b) (continued)

	As at 31 March 2017				For the 6 months to 31 March 2017
	Off Balance sheet			Total \$m	Average Exposures \$m
	On Balance Sheet \$m	Non-market related \$m	Market related \$m		
Subject to IRB approach					
Corporate	21,528	3,930	11,964	37,422	36,987
SME Corporate	2,788	545	-	3,333	3,253
Sovereign	2,135	-	806	2,941	2,729
Bank	2,993	-	4,027	7,020	7,445
Residential Mortgages	28,820	6,031	-	34,851	34,705
Other Retail	6,916	-	-	6,916	6,673
Retail SME	4,708	127	-	4,835	4,774
Total IRB approach	69,888	10,633	16,797	97,318	96,566
Specialised Lending	4,708	1,588	480	6,776	6,639
Subject to Standardised approach					
Corporate	-	794	-	794	785
Residential Mortgages	2,710	-	-	2,710	2,703
Other Retail	5,786	-	-	5,786	6,403
Total Standardised approach	8,496	794	-	9,290	9,891
Other Assets	11,299	95	157	11,551	12,039
Total Gross Credit Exposures	94,391	13,110	17,434	124,935	125,135

APS 330 Table 7(f) & (i)

	As at 30 September 2017				For the 6 months to 30 September 2017	
	Gross Credit Exposure \$m	Impaired Facilities \$m	Past Due > 90 days ¹ \$m	Individually Assessed Provisions \$m	Charges for Individually Assessed Provisions \$m	Write-offs \$m
Subject to IRB approach						
Corporate ²	42,265	613	39	(296)	(55)	(4)
SME Corporate ²	4,044	65	26	(21)	-	-
Sovereign	2,081	-	-	-	-	-
Bank	7,973	-	-	-	-	-
Residential Mortgages	36,958	181	89	(4)	(1)	-
Other Retail	7,463	113 ⁶	-	(21) ⁶	9 ^{6,7}	(34) ⁶
Retail SME	4,638	-	-	-	-	-
Total IRB approach	105,422	972	154	(342)	(47)	(38)
Subject to Standardised approach						
Corporate	938	-	-	-	-	-
Residential Mortgages ³	2,307	-	235	-	-	-
Other Retail	4,894	95	3	(20)	(4)	(29)
Total Standardised approach	8,139	95	238	(20)	(4)	(29)
Other Assets⁴	13,901	54	-	-	-	-
Total	127,462	1,121	392	(362)	(51)	(67)

As at
30 September
2017
\$m

General reserve for credit losses⁵ 330

¹ In accordance with APRA prudential definitions, Past Due >90 days do not form part of impaired facilities as they are well secured, and represent the full amount outstanding, not just the amount that is past due.

² IRB Corporate and SME Corporate includes specialised lending.

³ Past due > 90 days predominantly relates to defaulted exposures acquired at a discount in the CAF Lending business.

⁴ Other assets impaired facilities include other real estate owned subsequent to facility foreclosure.

⁵ The General reserve for credit losses is equivalent to the collective provisions for regulatory purposes.

⁶ Includes Retail SME

⁷ Includes write-back of provision.

5.0 Credit Risk Measurement

continued

APS 330 Table 7(f) & (i)

	As at 31 March 2017				For the 6 months to 31 March 2017	
	Gross Credit Exposure \$m	Impaired Facilities \$m	Past Due > 90 days ¹ \$m	Individually Assessed Provisions \$m	Charges for Individually Assessed Provisions \$m	Write-offs \$m
Subject to IRB approach						
Corporate ²	43,668	820	132	(300)	(52)	(55)
SME Corporate ²	3,863	62	29	(21)	(12)	-
Sovereign	2,941	-	-	-	-	-
Bank	7,020	-	-	-	-	-
Residential Mortgages	34,851	175	94	(5)	-	-
Other Retail	6,916	110 ⁶	-	(30) ⁶	(9) ⁶	(25) ⁶
Retail SME	4,835	-	-	-	-	-
Total IRB approach	104,094	1,167	255	(356)	(73)	(80)
Subject to Standardised approach						
Corporate	794	-	-	-	-	-
Residential Mortgages ³	2,710	-	283	-	-	-
Other Retail	5,786	103	10	(17)	1	(16)
Total Standardised approach	9,290	103	293	(17)	1	(16)
Other Assets ⁴	11,551	55	-	-	-	-
Total	124,935	1,325	548	(373)	(72)	(96)

As at
31 March
2017
\$m

General reserve for credit losses⁵ 344

¹ In accordance with APRA prudential definitions, Past Due >90 days do not form part of impaired facilities as they are well secured, and represent the full amount outstanding, not just the amount that is past due.

² IRB Corporate and SME Corporate includes specialised lending.

³ Past due > 90 days predominantly relates to defaulted exposures acquired at a discount in the CAF Lending business.

⁴ Other assets impaired facilities include other real estate owned subsequent to facility foreclosure.

⁵ The General reserve for credit losses is equivalent to the collective provisions for regulatory purposes.

⁶ Includes Retail SME

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)

Portfolio Type	As at 30 September 2017				
	Asia Pacific \$m	Australia \$m	EMEA* \$m	Americas \$m	Total \$m
Corporate	3,799	7,566	16,460	15,378	43,203
SME Corporate	-	4,044	-	-	4,044
Sovereign	168	1,036	668	209	2,081
Bank	548	1,198	4,462	1,765	7,973
Residential Mortgages	99	38,144	995	27	39,265
Other Retail	-	11,319	487	551	12,357
Retail SME	-	4,638	-	-	4,638
Other Assets	1,830	2,689	7,799	1,583	13,901
Total Gross Credit Exposure	6,444	70,634	30,871	19,513	127,462

*EMEA represents Europe, Middle East and Africa

Portfolio Type	As at 31 March 2017				
	Asia Pacific \$m	Australia \$m	EMEA* \$m	Americas \$m	Total \$m
Corporate	3,834	7,458	17,758	15,412	44,462
SME Corporate	-	3,862	1	-	3,863
Sovereign	63	1,729	524	625	2,941
Bank	699	1,820	3,154	1,347	7,020
Residential Mortgages	101	35,942	1,048	470	37,561
Other Retail	-	11,717	466	519	12,702
Retail SME	2	4,833	-	-	4,835
Other Assets	1,303	1,461	7,275	1,512	11,551
Total Gross Credit Exposure	6,002	68,822	30,226	19,885	124,935

*EMEA represents Europe, Middle East and Africa

5.0 Credit Risk Measurement

continued

5.5 Credit Risk Distribution by Counterparty Type

The credit risk exposures by Basel III risk type (Portfolio Type) below have been classified on a counterparty split consistent with the Macquarie Bank Limited Consolidated financial report.

APS 330 Table 7(d)

Portfolio Type	As at 30 September 2017				
	Financial Institution \$m	Government \$m	Corporate \$m	Retail \$m	Total \$m
Corporate	10,189	496	32,222	296	43,203
SME Corporate	236	-	3,303	505	4,044
Sovereign	1,410	670	1	-	2,081
Bank	7,915	-	58	-	7,973
Residential Mortgages	1,370	-	1,343	36,552	39,265
Other Retail	41	1	1,502	10,813	12,357
Retail SME	4	-	3,059	1,575	4,638
Other Assets	4,205	285	9,404	7	13,901
Total Gross Credit Exposure	25,370	1,452	50,892	49,748	127,462

Portfolio Type	As at 31 March 2017				
	Financial Institution \$m	Government \$m	Corporate \$m	Retail \$m	Total \$m
Corporate	9,296	427	34,412	327	44,462
SME Corporate	247	-	3,130	486	3,863
Sovereign	2,099	802	40	-	2,941
Bank	6,622	-	398	-	7,020
Residential Mortgages	916	-	1,115	35,530	37,561
Other Retail	29	-	1,536	11,137	12,702
Retail SME	319	-	3,089	1,427	4,835
Other Assets	2,046	441	8,993	71	11,551
Total Gross Credit Exposure	21,574	1,670	52,713	48,978	124,935

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)

Portfolio Type	As at 30 September 2017			Total \$m
	≤1 year \$m	1 ≤ 5 years \$m	> 5 years \$m	
Corporate	21,027	15,724	6,452	43,203
SME Corporate	779	2,708	557	4,044
Sovereign	1,751	290	40	2,081
Bank	5,796	1,533	644	7,973
Residential Mortgages	105	407	38,753	39,265
Other Retail	1,576	9,278	1,503	12,357
Retail SME	629	3,886	123	4,638
Other Assets	6,798	4,966	2,137	13,901
Total Gross Credit Exposure	38,461	38,792	50,209	127,462

Portfolio Type	As at 31 March 2017			Total \$m
	≤1 year \$m	1 ≤ 5 years \$m	> 5 years \$m	
Corporate	21,806	15,410	7,246	44,462
SME Corporate	678	2,625	560	3,863
Sovereign	1,950	763	228	2,941
Bank	4,879	1,601	540	7,020
Residential Mortgages	342	626	36,593	37,561
Other Retail	1,560	9,503	1,639	12,702
Retail SME	484	3,543	808	4,835
Other Assets	4,599	4,437	2,515	11,551
Total Gross Credit Exposure	36,298	38,508	50,129	124,935

5.0 Credit Risk Measurement

continued

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 Exposures 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 & Fitch) 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), Bank and Sovereign counterparties	IRB	MQ rating is mapped to the S&P ratings scale S&P or Moody's 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	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 The regulatory floor of 20% applies to the LGD of the portfolio.
Other Residential Mortgages	Standardised	Risk Weighted per APS 112
Other auto and equipment lease exposures in Australia	Standardised	Risk Weighted per APS 112
Credit card exposures in Australia	Standardised	100% risk-weighted
Personal loan exposures in Australia	Standardised	100% risk-weighted
Margin loan exposures in Australia	IRB	A 20% risk-weight prescribed in APS113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk is applied
Retail investment loan exposures. The majority are capital protected	Standardised	100% risk-weighted

6.0 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 30 September 2017 \$m	As at 31 March 2017 \$m
Subject to IRB approach		
Corporate	42,265	43,668
SME Corporate	4,044	3,863
Sovereign	2,081	2,941
Bank	7,973	7,020
Residential Mortgages	36,958	34,851
Other Retail	7,463	6,916
Retail SME	4,638	4,835
Total IRB approach	105,422	104,094
Subject to Standardised approach		
Corporate	938	794
Residential Mortgages	2,307	2,710
Other Retail	4,894	5,786
Total Standardised approach	8,139	9,290
Other Assets¹	13,901	11,551
Total Gross Credit Exposure	127,462	124,935

¹ The major components of Other Assets are operating lease residuals, other debtors and unsettled trades.

6.0 Calculation of Credit Risk Exposures

continued

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

Risk Weight	As at 30 September 2017		As at 31 March 2017	
	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%	28	-	427*	-
> 0% ≤ 20%	-	-	-	-
> 20% ≤ 35%	79	79	108	108
> 35% ≤ 50%	973	973	955	955
> 50% ≤ 75%	544	544	470	470
> 75% ≤ 100%	6,515	6,515	7,330	7,330
> 100% ≤ 150%	-	-	-	-
> 150%	-	-	-	-
Total	8,139	8,111	9,290	8,863

* RWA in March 2017 includes a portion of Canadian Prime Residential Mortgages. These loans are mortgage insured, with the majority guaranteed by the Canadian government.

IRB Approach Exposures

Specialised lending exposures subject to supervisory slotting

Risk Weight	Gross Credit Exposure	
	As at 30 September 2017 \$m	As at 31 March 2017 \$m
70%	507	553
90%	1,794	2,466
115%	2,430	2,838
250%	70	163
Default ¹	552	756
Total	5,353	6,776

¹ Default specialised lending exposures are assessed for impairment (refer section 7).

6.3 Credit Risk Exposures by Risk Grade

This section sets out the FIRB 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 Bank as shown in section 6.1.

APS 330 Table 9(d)

As at 30 September 2017 PD Grade								
Non-Retail	0 < 0.03% \$m	0.03% < 0.15% \$m	0.15% < 0.5% \$m	0.5% < 3% \$m	3% < 10% \$m	10% < 100% \$m	Default \$m	Total Gross Credit Exposure \$m
Corporate	729	11,185	7,259	12,316	6,425	3,032	1,319	42,265
SME Corporate	-	3	32	2,699	954	269	87	4,044
Sovereign	1,627	399	37	4	14	-	-	2,081
Bank	2,154	5,255	503	27	34	-	-	7,973
Total Gross Credit Exposure	4,510	16,842	7,831	15,046	7,427	3,301	1,406	56,363

As at 31 March 2017 PD Grade								
Non-Retail	0 < 0.03% \$m	0.03% < 0.15% \$m	0.15% < 0.5% \$m	0.5% < 3% \$m	3% < 10% \$m	10% < 100% \$m	Default \$m	Total Gross Credit Exposure \$m
Corporate	720	10,741	6,684	13,576	7,478	2,645	1,824	43,668
SME Corporate	-	-	31	2,616	899	224	93	3,863
Sovereign	2,769	140	3	21	8	-	-	2,941
Bank	2,498	3,667	539	179	132	5	-	7,020
Total Gross Credit Exposure	5,987	14,548	7,257	16,392	8,517	2,874	1,917	57,492

6.0 Calculation of Credit Risk Exposures

continued

6.3 Credit Risk Exposures by Risk Grade (continued)

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.

APS330 Table 9(d) (continued)

	As at 30 September 2017 PD Grade							Total \$m
	0 < 0.03% \$m	0.03% < 0.15% \$m	0.15% < 0.5% \$m	0.5% < 3% \$m	3% < 10% \$m	10% < 100% \$m	Default \$m	
Undrawn Commitments								
Corporate	30	960	994	919	333	96	21	3,353
SME Corporate	-	-	7	362	91	16	1	477
Bank	-	-	-	10	-	-	-	10
Total Undrawn Commitments	30	960	1,001	1,291	424	112	22	3,840

	As at 31 March 2017 PD Grade							Total \$m
	0 < 0.03% \$m	0.03% < 0.15% \$m	0.15% < 0.5% \$m	0.5% < 3% \$m	3% < 10% \$m	10% < 100% \$m	Default \$m	
Undrawn Commitments								
Corporate	28	1,274	496	1,969	379	157	245	4,548
SME Corporate	-	-	2	371	86	12	4	475
Total Undrawn Commitments	28	1,274	498	2,340	465	169	249	5,023

6.3 Credit Risk Exposures by Risk Grade (continued)

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.

APS330 Table 9(d) (continued)

	As at 30 September 2017 Expected Loss Categories					Total Gross Credit Exposure \$m
	0 < 0.1% \$m	0.1% < 0.3% \$m	0.3% < 3% \$m	3% < 10% \$m	10% < 100% \$m ¹	
Retail						
Residential Mortgages	14,701	16,734	4,791	470	262	36,958
Other Retail	-	3,188	3,429	766	80	7,463
Retail SME	251	263	3,353	724	47	4,638
Total Gross Credit Exposure	14,952	20,185	11,573	1,960	389	49,059

¹ Includes best estimates expected loss for retail IRB defaulted exposures.

	As at 31 March 2017 Expected Loss Categories					Total Gross Credit Exposure \$m
	0 < 0.1% \$m	0.1% < 0.3% \$m	0.3% < 3% \$m	3% < 10% \$m	10% < 100% \$m ¹	
Retail						
Residential Mortgages	13,421	15,637	5,098	432	263	34,851
Other Retail	-	3,030	3,154	659	73	6,916
Retail SME	364	604	3,137	674	56	4,835
Total Gross Credit Exposure	13,785	19,271	11,389	1,765	392	46,602

¹ Includes best estimates expected loss for retail IRB defaulted exposures.

6.0 Calculation of Credit Risk Exposures

continued

6.3 Credit Risk Exposures by Risk Grade (continued)

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.

APS330 Table 9(d) (continued)

	As at 30 September 2017 Expected Loss Categories					Total \$m
	0 < 0.1% \$m	0.1% < 0.3% \$m	0.3% < 3% \$m	3% < 10% \$m	10% < 100% \$m	
Undrawn Commitments						
Residential Mortgages	5,756	309	261	27	-	6,353
Retail SME	22	1	-	-	-	23
Total Undrawn Commitments	5,778	310	261	27	-	6,376

	As at 31 March 2017 Expected Loss Categories					Total \$m
	0 < 0.1% \$m	0.1% < 0.3% \$m	0.3% < 3% \$m	3% < 10% \$m	10% < 100% \$m	
Undrawn Commitments						
Residential Mortgages	5,451	294	260	23	-	6,028
Retail SME	102	5	19	1	-	127
Total Undrawn Commitments	5,553	299	279	24	-	6,155

7.0 Provisioning

7.1 Impaired Facilities and Past Due

Impaired facilities are financial assets (including both on and off balance sheet exposures) where 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.

Exposures will be assessed for impairment 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 original effective interest rate to determine the recoverable amount of the financial asset.

Facilities that are more than 90 calendar days past contractual due date can be classified as either:

- impaired facility if it meets the criteria for impairment as detailed above; or
- past due where the facility is assessed as well secured.

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

7.2 Individually Assessed Provisions

Facilities that are assessed as impaired are subject to a recoverability test. Individually assessed provisions are calculated in accordance with Australian Accounting Standards and represent the difference between the carrying value of the exposure and the present value of expected future cash flows, discounted using the original effective interest rate.

7.3 Collective Provisions

Facilities for which no individually assessed provision is required are assessed collectively for impairment. Collective provisions are calculated in accordance with Australian Accounting Standards and are representative of credit losses that have been incurred but not yet specifically identified. For Wholesale and Retail IRB facilities, the collective provision calculation primarily applies the PD and LGD estimates to the EAD. For other facilities, assets are placed into portfolios with similar characteristics and assessed against parameters based on historical loss experience. The historical loss experience is adjusted, where appropriate, for current circumstances, trends and conditions which may affect portfolio recoverability over a period of time.

7.4 Regulatory Expected Loss (REL)

REL represents the estimated future credit losses expected to be incurred in a portfolio. For non-defaulted exposures, similar to collective provisions, REL is calculated as a function of the outstanding exposure, PD and LGD whereas REL for defaulted corporate, sovereign and bank exposures under the FIRB approach is determined as the product of LGD and EAD. LGDs are defined by APRA for Corporate, Bank 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 individually assessed provisions and collective provisions. As at 30 September 2017, the total REL was \$1,289 million (31 March 2017: \$1,527 million), with the excess of REL over eligible provisions resulting in a Common Equity Tier 1 deduction of \$364 million (31 March 2017: \$338 million).

7.0 Provisioning

continued

7.5 Impaired Facilities and Individually Assessed Provisions Reconciliation

The disclosures of impaired facilities in this report are presented on a basis consistent with APS220 Credit Quality. APS220 applies a broader definition of impaired facilities than the definition applied by Australian Accounting Standards. A reconciliation of the APS220 impaired facilities to MBL consolidated financial report – impaired loans and other financial assets is provided below:

	As at 30 September 2017		As at 31 March 2017	
	Impaired Facilities \$m	Individually Assessed Provisions \$m	Impaired Facilities \$m	Individually Assessed Provisions \$m
Total - APS220 impaired facilities	1,121	362	1,325	373
Impaired exposures without provisions ¹	(290)	-	(315)	-
Real estate and other assets acquired through security enforcement ²	(50)	-	(50)	-
Off balance sheet exposures	(22)	-	(93)	-
Other exposures	7	4	8	6
Total – Impaired loans & other financial assets with individually assessed provisions for impairment per MBL consolidated financial report	766	366	875	379

¹ Comprises secured exposures where no loss is anticipated, and which are not impaired in the MBL consolidated financial report. Collective provisions of \$25 million (\$63 million as at 31 March 2017) relating to these and other past due exposures which are treated as individually assessed provisions for regulatory purposes, are not presented in this table (refer to section 7.8).

² Real estate and other assets acquired through security enforcement are classified as Other Assets in the MBL consolidated financial report and in this document.

7.6 Provisions by Counterparty Type

The table below details impaired facilities, past due and individually assessed provisions.

APS 330 Table 7(f)

	As at 30 September 2017			As at 31 March 2017		
	Impaired Facilities \$m	Past Due >90 days \$m	Individually Assessed Provisions \$m	Impaired Facilities \$m	Past Due >90 days \$m	Individually Assessed Provisions \$m
Subject to IRB approach						
Corporate	613	39	(296)	820	132	(300)
SME Corporate	65	26	(21)	62	29	(21)
Residential Mortgages	181	89	(4)	175	94	(5)
Other Retail ¹	113	-	(21)	110	-	(30)
Total IRB approach	972	154	(342)	1,167	255	(356)
Subject to Standardised approach						
Residential Mortgages ²	-	235	-	-	283	-
Other Retail	95	3	(20)	103	10	(17)
Total Standardised approach	95	238	(20)	103	293	(17)
Other Assets	54	-	-	55	-	-
Total	1,121	392	(362)	1,325	548	(373)

¹ Includes Retail SME.

² Past due > 90 days predominantly relates to defaulted exposures acquired at a discount in the CAF Lending business.

7.0 Provisioning

continued

APS 330 Table 9(e)

	For the 6 months to 30 September 2017		For the 6 months to 31 March 2017	
	Charges for Individually Assessed provisions \$m	Write-offs \$m	Charges for Individually Assessed provisions \$m	Write-offs \$m
Subject to IRB approach				
Corporate	(55)	(4)	(52)	(55)
SME Corporate	-	-	(12)	-
Residential Mortgages	(1)	-	-	-
Other Retail ¹	9 ²	(34)	(9)	(25)
Total IRB approach	(47)	(38)	(73)	(80)
Subject to Standardised approach				
Other Retail	(4)	(29)	1	(16)
Total Standardised approach	(4)	(29)	1	(16)
Total	(51)	(67)	(72)	(96)

¹ Includes Retail SME.

² Includes write-back of provision.

7.7 Provisions by Geographic Region

The tables below split impaired facilities, past due and provisions by geographic region. Note that the geographic split has been based on the domicile of the counterparty.

APS 330 Table 7(g)

Geographic Region	As at 30 September 2017			
	Impaired Facilities \$m	Past due > 90 days \$m	Individually Assessed Provisions \$m	Collective Provisions \$m
Australia	539	119	(118)	(232)
EMEA	47	242	(17)	(48)
Americas	524	28	(221)	(74)
Asia Pacific	11	3	(6)	(1)
Total	1,121	392	(362)	(355)

Geographic Region	As at 31 March 2017			
	Impaired Facilities \$m	Past due > 90 days \$m	Individually Assessed Provisions \$m	Collective Provisions \$m
Australia	660	133	(127)	(239)
EMEA	48	286	(16)	(50)
Americas	591	125	(221)	(114)
Asia Pacific	26	4	(9)	(4)
Total	1,325	548	(373)	(407)

7.0 Provisioning

continued

7.8 General Reserve for Credit Losses

APS 330 Table 7(j)

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Collective provisions	355	407
Collective provisions treated as individually assessed provisions for regulatory purposes	(25)	(63)
Net collective provisions for regulatory purposes ¹	330	344
Tax effect	(85)	(88)
General reserve for credit losses	245	256

¹ The general reserve for credit losses is equivalent to the net collective provisions for regulatory reporting purposes.

7.9 Movement in Provisions

The table below shows the movement of provisions over the 6 months to 30 September 2017.

APS 330 Table 7(h)

	\$m
Total Provisions as at 31 March 2017	780
Collective Provisions	
Balance at start of the period	407
Written back during the period	(53)
Adjustments for foreign exchange fluctuations	1
Total Collective Provisions	355
Individually Assessed Provisions	
Balance at start of the period	373
Charge to income statement	51
Assets written off or sold, previously provided for	(48)
Recovery of loans, previously provided for	(9)
Adjustments for foreign exchange fluctuations	(5)
Total Individually Assessed Provisions	362
Total Provisions as at 30 September 2017	717

7.0 Provisioning

continued

7.10 Analysis of Expected Credit Model Performance versus Actual Results

The table below relates only to Macquarie's portfolios measured under the IRB approach and compares actual results to the average estimate over the January 2008 to September 2017 period.

APS 330 Table 9(f)

Portfolio Type	PD	Exposure at default		LGD	
	Estimated %	Actual %	Estimate to Actual Ratio	Estimated %	Actual %
Corporate	1.59%	0.84%	N/A ¹	N/A ¹	N/A ¹
SME Corporate	2.33%	1.67%	N/A ¹	N/A ¹	N/A ¹
Sovereign	0.13%	0.00%	N/A ¹	N/A ¹	N/A ¹
Bank	0.11%	0.00%	N/A ¹	N/A ¹	N/A ¹
Residential Mortgages ²	1.16%	1.18%	100%	20.31%	4.90%
Other Retail ²	1.63%	1.59%	112%	48.43%	28.60%

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.

² Includes exposures disclosed as Retail SME.

8.0 Credit Risk Mitigation

8.1 Netting

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 ensure 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 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. As part of the OTC Margining reforms in various jurisdictions in which Macquarie operates, limits have been imposed on thresholds, minimum transfer amounts and rounding for affected counterparties. Documents have been renegotiated with these counterparties in order to be compliant with these regulations. Margining thresholds are incorporated into the scenarios considered under the MGL Group liquidity policy which assesses the collateral and funding requirements in the event of a credit downgrade.

This is part of the general requirement of the MGL Group to be able to meet all obligations for a period of twelve months under both an individual and combined name and systemic challenge. The resultant increase in collateral requirements is included as an outflow in the scenarios - explicitly ensuring that Macquarie has sufficient funding coverage in this event.

Specific protocols surround the acceptance of real estate as collateral.

Prior to acceptance, any independent valuation must undergo a formal review process by which it is assessed for quality and adherence to policy and standing instructions. The escalation of this review and acceptance process will depend 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 re-valuation is contingent on the type of property, extent of the property's encumbrance, the LVR at origination and the market conditions that have prevailed since the valuation was conducted. All prior claims on the property collateral are recorded and taken into consideration when calculating the available security value.

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

8.1.2 Wrong Way Risk

Specific wrong-way risk occurs when exposure to the counterparty is positively correlated with the counterparty's probability of default. General wrong-way risk occurs when the probabilities of counterparty defaults are positively correlated with market risk factor movements. Macquarie considers these correlations as part of the credit assessment process.

8.0 Credit Risk Mitigation

continued

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 (subject to the satisfaction of certain requirement listed in APS113).

As noted above, Macquarie takes a wide range of collateral of which only a portion is eligible under APS 112. 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 below show gross credit exposures by Basel III portfolio (Corporate, Sovereign and Bank) under the FIRB approach 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	As at 30 September 2017			
	Total Gross Credit Exposure \$m	Eligible Financial Collateral \$m	Other Eligible Collateral \$m	Exposures Covered by Guarantees \$m
Subject to IRB approach				
Corporate	42,265	1,389	33	2,046
SME Corporate	4,044	84	705	1
Sovereign	2,081	-	-	-
Bank	7,973	1,263	-	3
Total IRB approach	56,363	2,736	738	2,050

Measurement Approach	As at 31 March 2017			
	Total Gross Credit Exposure \$m	Eligible Financial Collateral \$m	Other Eligible Collateral \$m	Exposures Covered by Guarantees \$m
Subject to IRB approach				
Corporate	43,668	1,594	28	1,132
SME Corporate	3,863	83	683	-
Sovereign	2,941	100	-	39
Bank	7,020	930	-	461
Total IRB approach	57,492	2,707	711	1,632

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 transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value for MGL Group 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 current exposure method, which reflects expected exposure to the counterparty and its risk-rating. Economic capital also reflects correlations and diversification impacts across risk types.

As at 30 September 2017, a unilateral one-notch and two-notch downgrade in the MBL's rating would have resulted in a further \$504 million and \$55 million 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)

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Credit equivalent amounts for counterparty exposures		
Replacement cost	10,688	10,574
Potential future exposure	13,562	12,160
Gross credit equivalent amount	24,250	22,734
Comprising:		
Interest rate contracts	2,440	2,565
Credit derivative contracts	83	166
Equity contracts	1,631	1,564
Foreign exchange and gold contracts	7,710	6,874
Commodities and precious metals contracts	12,386	11,565
Gross credit equivalent amount	24,250	22,734
Less: Effect of netting arrangements	10,854	11,047
Credit equivalent amount after netting	13,396	11,687
Less: Collateral amount		
Eligible financial collateral	2,014	1,910
Other eligible collateral	-	-
Net credit equivalent amount	11,382	9,777

APS 330 Table 11(c)

	As at 30 September 2017		As at 31 March 2017	
Notional amount of credit derivatives	Protection Bought \$m	Protection Sold \$m	Protection Bought \$m	Protection Sold \$m
Own credit portfolio	1,156	1,943	1,442	3,077
Client intermediation activities	-	-	-	-
Total	1,156	1,943	1,442	3,077
Credit default swaps (CDS)	1,092	1,879	1,368	2,574
Total return swaps	64	64	74	503
Total	1,156	1,943	1,442	3,077

9.0 Securitisation

9.1 Overview

A securitisation is defined by APRA Prudential Standard APS 120 Securitisation (APS 120) as “a structure where the cash flow from a pool is used to service obligations to at least two different tranches or classes of creditors (typically holders of debt securities), with each class or tranche reflecting a different degree of credit risk (i.e. one class of creditors is entitled to receive payments from the pool before another class of creditors).”

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 Macquarie manages or advises and which can invest either in the securitisation exposures that Macquarie has securitised or in SPVs in relation to whom Macquarie performs any of the above roles:

- Macquarie Life Superannuation Approved Deposit Fund;
- Macquarie Global Income Opportunities 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, Capital & Markets (PCM) 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 APS116 and APS 120 and economic capital is calculated on all securitisation exposures across the Macquarie Bank Group.

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

- the Ratings Based approach;
- the Inferred Ratings Based approach;
- the supervisory formula; and
- the approach for eligible facilities under APS 120 Attachment D paragraph 39.

If the exposure is not covered by one of the above approaches it is assigned a 1250% risk weight.

S&P, Moody's and Fitch Ratings have all been used to rate Macquarie securitisations. They have been used to rate notes and commercial paper issued by Macquarie securitisation and Commercial Paper programs.

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 above, 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.

In Macquarie's case, it has been determined that under Australian Accounting Standards, Macquarie should consolidate 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. 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.

Banking book securitised assets consolidated by Macquarie are held on the balance sheet at amortised cost. Securitised exposures consolidated by Macquarie in the trading book are held at fair value. 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, the likelihood of an outflow of resources is assessed and a contingent liability disclosed as required. A contingent liability does not give rise to an actual liability being recognised on the Bank's balance sheet.

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.

9.0 Securitisation

continued

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.

APS 330 Table 12(g) and (o)

Exposure type – Traditional	As at 30 September 2017		
	Total outstanding exposures securitised		
	ADI originated assets ¹ \$m	ADI as sponsor ² \$m	Other \$m
Banking Book			
Residential Mortgages	22,402	193	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	7,523	-	-
Total Banking Book	29,925	193	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Other	-	-	-
Total Trading Book	-	-	-
Total	29,925	193	-

¹ Included in the above are assets of \$29,782 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group

² Included in the above are exposures held in third party warehouse funding facilities.

Exposure type – Traditional	As at 31 March 2017		
	Total outstanding exposures securitised		
	ADI originated assets ¹ \$m	ADI as sponsor ² \$m	Other \$m
Banking Book			
Residential Mortgages	23,468	223	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	9,067	-	-
Total Banking Book	32,535	223	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Other	-	-	-
Total Trading Book	-	-	-
Total	32,535	223	-

¹ Included in the above are assets of \$32,320 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory Group

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 impairment of these assets.

APS 330 Table 12(h)

As at 30 September 2017				
Total outstanding exposures securitised				
Exposure type	Total outstanding exposures ¹ \$m	Impaired ² \$m	Past due ³ \$m	ADI recognised loss from exposures securitised \$m
Residential Mortgages	22,402	181	96	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	7,523	73	-	-
Total	29,925	254	96	-

¹ Included in the above are assets of \$29,782 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

² Included in the above are impaired facilities of \$250 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

³ Included in the above are past due >90 days facilities of \$93 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory Group.

As at 31 March 2017				
Total outstanding exposures securitised				
Exposure type	Total outstanding exposures ¹ \$m	Impaired ² \$m	Past due ³ \$m	ADI recognised loss from exposures securitised \$m
Residential Mortgages	23,468	177	106	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	9,067	73	-	-
Total	32,535	250	106	-

¹ Included in the above are assets of \$32,320 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

² Included in the above are impaired facilities of \$244 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

³ Included in the above are past due >90 days facilities of \$103 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

9.0 Securitisation

continued

9.2.3 Summary of Outstanding Exposures Intended to be Securitised

APS 330 Table 12(i) and (p)

MBL 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 term securitisation deals.

Exposure type	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Banking Book		
Residential Mortgages	-	-
Credit cards and other personal loans	-	-
Auto and equipment finance	-	882
Total Banking Book	-	882
Trading Book		
Residential Mortgages	-	-
Credit cards and other personal loans	-	-
Auto and equipment finance	-	-
Total Trading Book	-	-

9.2.4 Securitisation Activity

Over the 6 months to 30 September 2017, 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)

Exposure type	For the 6 months to 30 September 2017		Recognised gain or loss on sale \$m
	Value of loans sold or originated into securitisation		
	ADI originated \$m	ADI as sponsor \$m	
Banking Book			
Residential Mortgages	3,188	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance ¹	2,413	-	-
Other	-	-	-
Total Banking Book	5,601	-	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Total Trading Book	-	-	

¹ Exposures included in Auto and equipment finance that have been transferred from warehouse structures to term structures, may also have been originated to the warehouse within the same period. This would result in those exposures being included twice.

Exposure type	For the 6 months to 31 March 2017		Recognised gain or loss on sale \$m
	Value of loans sold or originated into securitisation		
	ADI originated \$m	ADI as sponsor \$m	
Banking Book			
Residential Mortgages	3,273	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance ¹	5,372	-	-
Other	-	-	-
Total Banking Book	8,645	-	-
Trading Book			
Residential Mortgages	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Total Trading Book	-	-	

¹ Exposures included in Auto and equipment finance that have been transferred from warehouse structures to term structures, may also have been originated to the warehouse within the same period. This would result in those exposures being included twice.

9.0 Securitisation

continued

Originating ADI Securitisation Exposures APS 330 Table 12(r) – Trading Book

Exposure type	As at 30 September 2017			
	Total outstanding exposures securitised			
	Standard Method		IMA Method	
	Traditional \$m	Synthetic \$m	Traditional \$m	Synthetic \$m
Residential Mortgages	-	-	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Other	-	-	-	-
Total	-	-	-	-

Originating ADI Securitisation Exposures APS 330 Table 12(r) – Trading Book

Exposure type	As at 31 March 2017			
	Total outstanding exposures securitised			
	Standard Method		IMA Method	
	Traditional \$m	Synthetic \$m	Traditional \$m	Synthetic \$m
Residential Mortgages	-	-	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Other	-	-	-	-
Total	-	-	-	-

9.3 Exposures Arising from Securitisation Activity by Asset Type

9.3.1 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)

Exposure type	As at 30 September 2017		
	Total outstanding exposures securitised ¹		
	On balance sheet \$m	Off balance sheet \$m	Total exposures \$m
Banking Book			
Residential Mortgages	23,960	88	24,048
Credit cards and other personal loans	-	-	-
Auto and equipment finance	7,593	-	7,593
Other	230	57	287
Total Banking Book	31,783	145	31,928
Trading Book			
Residential Mortgages	-	34	34
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	5	5
Other	-	-	-
Total Trading Book	-	39	39

¹ Included in the above are assets of \$29,782 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

Exposure type	As at 31 March 2017		
	Total outstanding exposures securitised ¹		
	On balance sheet \$m	Off balance sheet \$m	Total exposures \$m
Banking Book			
Residential Mortgages	24,717	87	24,804
Credit cards and other personal loans	-	-	-
Auto and equipment finance	9,147	-	9,147
Other	201	3	204
Total Banking Book	34,065	90	34,155
Trading Book			
Residential Mortgages	-	2	2
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Other	-	-	-
Total Trading Book	-	2	2

¹ Included in the above are assets of \$32,320 million in securitisation entities where Macquarie continues to hold capital behind the underlying pool of securitised assets in Level 2 regulatory group.

9.0 Securitisation

continued

9.3.2 Exposure by Risk Weight Band

Banking Book

APS 330 Table 12(l)

Risk weight band	As at 30 September 2017					
	Gross Credit Exposure			Risk Weighted Assets		
	Securitisation \$m	Resecuritisation \$m	Total \$m	Securitisation \$m	Resecuritisation \$m	Total \$m
=< 25%	2,009	3	2,012	160	1	161
>25%=<35%	-	-	-	-	-	-
>35%=<50%	-	-	-	-	-	-
>50%=<75%	71	-	71	53	-	53
>75%=<100%	2	1	3	2	1	3
>100%=<650%	48	-	48	203	-	203
1250%	9	-	9	109	-	109
CET1 deduction ¹	8	-	8	-	-	-
Total	2,147	4	2,151	527	2	529

- ¹ \$8 million of exposures and credit enhancements were deducted entirely from CET1, being \$nil million of subordinated notes in third party securitisations exposed to the first 10% of credit losses in the initial structure of those securitisations and \$8 million of other securitisation deductions.

Trading Book

APS 330 Table 12(t)

Risk weight band	Gross Credit Exposures As at 30 September 2017				
	IAA Approach \$m	RBA Approach \$m	SFA Approach \$m	Standardised Approach \$m	Total Exposures \$m
=< 25%	-	39	-	-	39
>25%=<35%	-	-	-	-	-
>35%=<50%	-	-	-	-	-
>50%=<75%	-	-	-	-	-
>75%=<100%	-	-	-	-	-
>100%=<650%	-	-	-	-	-
1250%	-	-	-	-	-
Total	-	39	-	-	39

Banking Book
APS 330 Table 12(l)

Risk weight band	As at 31 March 2017					
	Gross Credit Exposure			Risk Weighted Assets		
	Securitisation \$m	Resecuritisation \$m	Total \$m	Securitisation \$m	Resecuritisation \$m	Total \$m
=< 25%	1,664	6	1,670	120	1	121
>25%=<35%	8	-	8	3	-	3
>35%=<50%	6	-	6	3	-	3
>50%=<75%	80	-	80	60	-	60
>75%=<100%	9	1	10	9	1	10
>100%=<650%	57	-	57	244	-	244
1250%	-	-	-	-	-	-
CET1 deduction ¹	17	-	17	-	-	-
Total	1,841	7	1,848	439	2	441

¹ \$17 million of exposures and credit enhancements were deducted entirely from CET1, being \$7 million of subordinated notes in third party securitisations exposed to the first 10% of credit losses in the initial structure of those securitisations and \$10 million of other securitisation deductions.

Trading Book
APS 330 Table 12(t)

Risk weight band	Gross Credit Exposures As at 31 March 2017				
	IAA Approach \$m	RBA Approach \$m	SFA Approach \$m	Standardised Approach \$m	Total Exposures \$m
=< 25%	-	2	-	-	2
>25%=<35%	-	-	-	-	-
>35%=<50%	-	-	-	-	-
>50%=<75%	-	-	-	-	-
>75%=<100%	-	-	-	-	-
>100%=<650%	-	-	-	-	-
1250%	-	-	-	-	-
Total	-	2	-	-	2

9.0 Securitisation

continued

9.3.3 RWA by Risk Weight Band

APS 330 Table 12(u) – Trading Book

Risk weight band	Risk Weight Assets As at 30 September 2017			
	IAA Approach		RBA Approach	
	Securitisation \$m	Resecuritisation \$m	Securitisation \$m	Resecuritisation \$m
=< 25%	-	-	-	-
>25%=<35%	-	-	-	-
>35%=<50%	-	-	-	-
>50%=<75%	-	-	-	-
>75%=<100%	-	-	-	-
>100%=<650%	-	-	-	-
1250%	-	-	-	-
Total	-	-	-	-

Risk weight band	Risk Weight Assets As at 30 September 2017			
	SFA Approach		Standardised Approach	
	Securitisation \$m	Resecuritisation \$m	Securitisation \$m	Resecuritisation \$m
=< 25%	-	-	-	-
>25%=<35%	-	-	-	-
>35%=<50%	-	-	-	-
>50%=<75%	-	-	-	-
>75%=<100%	-	-	-	-
>100%=<650%	-	-	-	-
1250%	-	-	-	-
Total	-	-	-	-

APS 330 Table 12(u) – Trading Book (continued)

Risk Weight Assets As at 31 March 2017				
Risk weight band	IAA Approach		RBA Approach	
	Securitisation \$m	Resecuritisation \$m	Securitisation \$m	Resecuritisation \$m
=< 25%	-	-	-	-
>25%=<35%	-	-	-	-
>35%=<50%	-	-	-	-
>50%=<75%	-	-	-	-
>75%=<100%	-	-	-	-
>100%=<650%	-	-	-	-
1250% (Deduction)	-	-	-	-
Total	-	-	-	-

Risk Weight Assets As at 31 March 2017				
Risk weight band	SFA Approach		Standardised Approach	
	Securitisation \$m	Resecuritisation \$m	Securitisation \$m	Resecuritisation \$m
=< 25%	-	-	-	-
>25%=<35%	-	-	-	-
>35%=<50%	-	-	-	-
>50%=<75%	-	-	-	-
>75%=<100%	-	-	-	-
>100%=<650%	-	-	-	-
1250% (Deduction)	-	-	-	-
Total	-	-	-	-

9.0 Securitisation

continued

9.3.4 Resecuritisation Exposure

APS 330 Table 12(n) and (w)

	As at 30 September 2017 Gross Credit Exposure \$m	As at 31 March 2017 Gross Credit Exposure \$m
Resecuritisation type		
Banking book		
Exposures with Credit Risk Mitigation	-	-
Exposures without Credit Risk Mitigation	4	7
<i>Exposure to Guarantors by ratings:</i>	-	-
Total banking book	4	7
Trading book		
Exposures with Credit Risk Mitigation	-	-
Exposures without Credit Risk Mitigation	-	-
<i>Exposures to Guarantors by ratings:</i>	-	-
Total trading book	-	-

10.0 Credit Valuation Adjustment

10.1 Credit Valuation Adjustment

Under Basel III, and in accordance with APS 112 Capital Adequacy: Standardised Approach to Credit Risk banks are subject to a capital charge for potential mark-to-market losses on OTC derivatives (i.e. credit valuation adjustments – CVA – risk) associated with a deterioration in the credit worthiness of a counterparty.

The Credit Valuation Adjustment RWA as at 30 September 2017 is \$3,014 million. The CVA capital requirement is shown in the table below.

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
CVA capital treatment		
Total CVA capital charge (standardised formula)	241	197
Total CVA RWA ¹	3,014	2,457

¹ Credit Valuation Adjustment RWA is primarily aligned with OTC derivatives exposure combined with credit quality of the derivative counterparties.

11.0 Exposure to Central Counterparties

11.1 Exposures to Central Counterparties

Under Basel III, and in accordance with APS 112 Capital Adequacy: Standardised Approach to Credit 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, and default fund contributions.

The RWA on exposures arising from cleared trades as at 30 September 2017 is \$1,423 million. Details of the components of these exposures are shown in the tables below.

	As at 30 September 2017		
	Trade Exposure \$m	Prefunded Default Fund Contribution \$m	RWA \$m
Central counterparty trade exposure			
Exposures to qualifying central counterparty	3,545	235	502
Exposures to non-qualifying central counterparty	-	-	-
Bilateral exposures from cleared trades ¹	1,738	-	921
Total central counterparty exposures	5,283	235	1,423

¹ This represents exposure to clients arising from the provision of clearing services and broker exposures subject to bilateral treatment.

	As at 31 March 2017		
	Trade Exposure \$m	Prefunded Default Fund Contribution \$m	RWA \$m
Central counterparty trade exposure			
Exposures to qualifying central counterparty	4,317	209	632
Exposures to non-qualifying central counterparty	-	-	-
Bilateral exposures from cleared trades ¹	1,923	-	600
Total central counterparty exposures	6,240	209	1,232

¹ This represents exposure to clients arising from the provision of clearing services and broker exposures subject to bilateral treatment.

12.0 Market Risk

12.1 Market Risk

Market risk is the risk of adverse changes in the value of Macquarie's trading portfolios from changes in market prices or volatility. Macquarie is exposed to the following risks in each of the major markets in which it trades:

- **foreign exchange and bullion:** changes in spot and forward exchange rates and bullion prices and the volatility of exchange rates and bullion prices
- **interest rates and debt securities:** changes in the level, shape and volatility of yield curves, the basis between different debt securities and derivatives and credit margins
- **equities:** changes in the price and volatility of individual equities, equity baskets and equity indices
- **commodities and energy:** changes in the price and volatility of base metals, agricultural commodities and energy products.

Macquarie is also exposed to the correlation of market prices and rates within and across markets.

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

12.1.1 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.

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
- **position limits:** volume, maturity and open position limits are set on a large number of market instruments and securities to constrain concentration risk and to avoid the accumulation of risky, illiquid positions
- **Value-at-Risk (VaR) limits:** statistical measure that determines the potential loss in trading value at both a business and aggregate level.

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 specialist Quantitative Applications Division within RMG.

12.1.2 Aggregate Measures of Market Risk

Aggregate market risk is constrained by two risk measures, Value at Risk (VaR) and the Macro-Economic Linkages (MEL) stress scenarios. 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.

12.0 Market Risk

continued

12.1.3 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 4,200 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.

12.1.4 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 APS116.

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 \$3,314 million as at 30 September 2017 (31 March 2017: \$3,958 million).

There was no hypothetical trading loss that exceeded the 1-day 99% VaR calculated for the six months ended 30 September 2017. There was also no actual trading loss that exceeded the 1-day 99% VaR during this period. 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 6 months to 30 September 2017				For the 6 months to 31 March 2017			
	VaR over the current reporting period				VaR over the previous reporting period			
	Mean value \$m	Max value \$m	Min value \$m	VaR (30-Sep) \$m	Mean value \$m	Max value \$m	Min value \$m	VaR (31-Mar) \$m
Commodities	16	34	9	17	24	54	12	13
Equities ¹	14	18	11	11	19	24	17	18
Foreign Exchange	5	8	1	3	5	12	1	5
Interest Rates	9	12	7	7	12	18	8	8
Aggregate	19	36	13	17	29	59	16	19

¹ Equities figures incorporate the Equity specific risk amount.

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

APS 330 Table 14(f)

	For the 6 months to 30 September 2017				For the 6 months to 31 March 2017			
	VaR over the current reporting period				VaR over the previous reporting period			
	Mean value \$m	Max value \$m	Min value \$m	VaR (30-Sep) \$m	Mean value \$m	Max value \$m	Min value \$m	VaR (31-Mar) \$m
Commodities	39	58	24	36	47	64	20	42
Equities ¹	45	55	31	35	51	63	41	52
Foreign Exchange	7	15	1	10	9	32	1	6
Interest Rates	38	44	29	33	30	35	24	28
Aggregate	58	76	34	49	63	88	42	56

¹ Equities figures incorporate the Equity specific risk amount.

12.0 Market Risk

continued

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 30 September 2017 \$m	As at 31 March 2017 \$m
Debt specific risk	56	45

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

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 market risk limits. The residual risks in the banking book are not material but are nevertheless monitored and controlled by RMG and reported to senior management monthly. Macquarie measures interest rate risk on a monthly basis using an APRA approved repricing gap model with monthly bucketing of exposures.

The total IRRBB capital is calculated by adding the change in economic value derived from the worst-case of extreme parallel and non-parallel moves in the yield curves of each currency to the embedded gains and losses as defined in APS 117 Capital Adequacy: Interest Rate Risk in the Banking Book (Advanced ADIs) for each currency.

The IRRBB RWA as at 30 September 2017 is \$nil million (31 March 2017: \$82 million).

APS 330 Table 17(b)

	As at 30 September 2017 Change in economic value \$m	As at 31 March 2017 Change in economic value \$m
Stress testing: interest rate shock applied		
AUD		
200 basis point parallel increase	(34.2)	(39.1)
200 basis point parallel decrease	36.4	41.3
CAD		
200 basis point parallel increase	(0.1)	(3.1)
200 basis point parallel decrease	0.1	1.9
EUR		
200 basis point parallel increase	1.8	3.9
200 basis point parallel decrease	5.3	2.9
GBP		
200 basis point parallel increase	(3.8)	(1.7)
200 basis point parallel decrease	4.6	3.8
USD		
200 basis point parallel increase	(6.4)	(10.1)
200 basis point parallel decrease	11	16.9

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

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
IRRBB regulatory capital requirement – AUD	-	6.6

13.0 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 semi-annually and reports the results of the review to the Group Risk and Compliance Committee (GRCC) and the Board.

Additional GRCC approved limits manage concentration risk in the equity portfolio. These include limits on:

- property equity investments; and
- investments in the resources sector.

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;
- available for sale (AVS) equity investments; and
- held for sale (HFS) measured at the lower of the carrying amount and fair value less costs to sell.

In addition to equity investment positions in the Banking Book, Macquarie has equity investments held at Fair Value through Profit and Loss, which are generally included in the Market Risk calculation.

13.1.1 Investments in Associates

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. 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 reserves in Macquarie's Consolidated Statement of Comprehensive Income. Investments accounted for using equity accounting are subject to recurring review and assessment for possible impairment. At each balance date, if there is an indication that an investment in an associate may be impaired, then the entire carrying amount of the investment in associate is tested for impairment by comparing the recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount. Any impairment losses are recognised in the Income Statement. Impairment losses recognised in the Income Statement for investments in associates are subsequently reversed through the Income Statement if there has been a change in the estimates used to determine the recoverable amount since the impairment loss was recognised.

13.1.2 AVS Equity Investments

Where an equity investment is not subject to the significant influence or joint control of Macquarie, it is held as a direct equity investment. These direct investments are classified as AVS. AVS securities are initially carried at fair value plus transaction costs. Gains and losses arising from subsequent changes in fair value are recognised directly in the AVS reserve in equity, until the asset is derecognised or impaired, at which time the cumulative gain or loss is recognised in the Income Statement.

At each balance sheet date, an assessment is performed to determine whether there is any objective evidence that available for sale financial assets have been impaired. Impairment exists if there is objective evidence of impairment as a result of one or more events (loss event) which have an impact on the estimated future cash flows of the financial asset that can be reliably estimated. For equity securities, classified as AVS, the main indicators of impairment are: significant changes in the market, economic or legal environment; and a significant or prolonged decline in fair value below cost.

Fair values of quoted investments in active markets are based on current bid prices. If the relevant market is not considered active (or the securities are unlisted), fair value is established by using valuation techniques, including recent arm's length transactions, discounted cash flow analysis, option pricing models and other valuation techniques commonly used by market participants.

13.1.3 Held for Sale (HFS) Investments

HFS assets include subsidiaries and interests in associates or joint ventures whose carrying amount will be recovered principally through a sale transaction rather than continuing use. The policy of management is to classify these assets as held for sale when it is highly probable that the asset will be sold within the twelve months subsequent to being classified as such. Where there is a planned partial disposal of a subsidiary resulting in loss of control, all of the assets and liabilities of the subsidiary are classified as held for sale. Assets classified as HFS investments are measured at the lower of their carrying amount and fair value less costs to sell. These assets are not depreciated.

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 carrying value is stated net of any charge for impairment. 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 30 September 2017		As at 31 March 2017	
	Carrying value ² \$m	Fair value ³ \$m	Carrying value ² \$m	Fair value ³ \$m
Equity investments				
Value of listed (publicly traded) equities ¹	53	44	56	47
Value of unlisted (privately held) equities ¹	772	772	777	777
Total	825	816	833	824

¹ At MBL accounting consolidated group purposes.

² Net of any impairment charges recognised

³ Fair value is:

- listed market value for all listed equity investments;
- carrying value (after any impairment charges) for all unlisted equity investments.

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)

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Deduction amount		
Equity investments ¹	822	833

¹ At Level 2 regulatory group.

13.0 Equity Risk

continued

13.4 Gains and Losses on Equity Investments

APS 330 Table 16(d) and (e)

	As at 30 September 2017 \$m	As at 31 March 2017 \$m
Gains / (losses) on equity investments		
Cumulative realised gains in 6 months to the period end ¹	14	153
Total unrealised gains/(losses) ²	40	106
Total unrealised gains/(losses) included in Tier 1	40	106

¹ Gains are defined as proceeds on sale less costs net of provisions

² Includes gains / (losses) that have not gone through the Income Statement. These are primarily the amounts recognised in the Available for Sale Reserve.

14.0 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 Capital Framework

Operational Risk Objectives

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

- risk identification, analysis and acceptance.
- execution and monitoring of risk management practices.
- reporting and escalation of risk information on a routine and exception basis.

Operational Risk Management Process

Operating and Central Service Groups carry out elements of the *ORMF* in a manner that is tailored to their specific operational risk profile. However, to ensure consistency and minimum standards the framework includes 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
- An operational risk self-assessment process to identify operational risks at the business level, evaluate controls and develop action plans to address deficiencies
- 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 all 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 operational risk representatives 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. These Business Operational Risk Managers (BORMs) are responsible for embedding operational risk management within their business. 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 ensuring the Framework

remains appropriate and that skilled resources are available to support it. It is also responsible for Macquarie's operational risk capital measurement methodology.

RMG regularly reports on the operational risk profile and the effectiveness of the Framework to the BRIC and to senior management.

14.2 Operational Risk Capital Calculation

APRA approved Macquarie's use of the AMA for assessing operational risk capital in December 2007.

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

Macquarie's operational risk capital framework has two main elements:

- an annual scenario approach for modelling operational risk losses and to determine operational risk capital
- a process for allocating capital to businesses based on risk exposures.

Operational risk scenarios identify key risks that, while very low in probability may, if they occurred, result in very high impact losses. When identifying the potential for such losses, consideration is given to the individual statistical distribution for each scenario, external loss data, internal loss data, risk and control factors determined by the operational risk self-assessments and the contribution of expert opinion from Operating and Central Service Groups. Scenario estimates are then modelled to determine the operational risk component of regulatory capital required to be held by Macquarie at the 99.9th percentile.

Over time, changes in operational risk capital reflect:

- new or significantly changed business activity or growth
- changes in the external environment such as new regulations or movements in the economic cycle.

Mitigation of Operational Risk through Insurance

Macquarie does not currently use insurance in its AMA model for the purpose of operational risk capital reduction.

Operational Risk - RWA

The operational risk RWA as at 30 September 2017 is \$10,025 million (31 March 2017: \$9,979 million).

15.0 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. As of September 2017, Basel III APRA leverage ratio is a disclosure requirement and APRA has not proposed a minimum leverage ratio requirement.

Macquarie Bank Group's September 2017 APRA leverage ratio has decreased by 0.3% from March 2017 APRA leverage ratio of 6.4% due to net capital reduction driven by hybrid capital buyback and increased leverage exposures during the half year.

Summary leverage ratio

Capital and total exposures	30 September 2017	30 June 2017	31 March 2017	31 December 2016
Tier 1 Capital	11,518	11,310	11,994	11,004
Total exposures	190,150	191,891	187,987	205,716
Leverage ratio				
Level 2 Macquarie Bank Group Leverage ratio	6.1%	5.9%	6.4%	5.3%

15.1 Leverage Ratio Disclosure Template

APS 330 Table 18

Item	As at 30 September 2017
On-balance sheet exposures	
	\$m
1 On-balance sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	123,324
2 (Asset amounts deducted in determining Tier 1 capital)	(1,970)
3 Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 and 2)	121,354
Derivative exposures	
4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	7,302
5 Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	17,100
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)	(786)
8 (Exempted central counterparty (CCP) leg of client-cleared trade exposures)	(5,192)
9 Adjusted effective notional amount of written credit derivatives	1,943
10 (Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(856)
11 Total derivative exposures (sum of rows 4 to 10)	19,511
SFT exposures	
12 Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	34,743
13 (Netted amounts of cash payables and cash receivables of gross SFT assets)	-
14 CCR exposure for SFT assets	1,480
15 Agent transaction exposures	-
16 Total SFT exposures (sum of rows 12 to 15)	36,223
Other off-balance sheet exposures	
17 Off-balance sheet exposure at gross notional amount	17,261
18 (Adjustments for conversion to credit equivalent amounts)	(4,199)
19 Other off-balance sheet exposures (sum of rows 17 and 18)	13,062
Capital and total exposures	
20 Tier 1 Capital	11,518
21 Total exposures (sum of rows 3, 11, 16 and 19)	190,150
Leverage ratio	
22 Leverage ratio	6.1%

15.2 Summary Comparison of Accounting Assets versus Leverage Ratio Exposure Measure

APS 330 Table 19

		As at 30 September 2017 \$m
Item		
1	Total consolidated assets as per published financial report	171,217
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(1,011)
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	7,372
5	Adjustment for SFTs (i.e. repos and similar secured lending)	1,480
6	Adjustment for off-balance sheet exposures (i.e. Conversion to credit equivalent amounts of off-balance sheet exposures)	13,062
7	Other adjustments	(1,970)
8	Leverage ratio exposure	190,150

16.0 Liquidity Coverage Ratio Disclosures

Liquidity Coverage Ratio disclosure template APS 330 Table 20

		For the 3 months to 30 September 2017		For the 3 months to 30 June 2017	
		Total unweighted value (average) \$m	Total weighted value (average) \$m	Total unweighted value (average) \$m	Total weighted value (average) \$m
Liquidity Coverage Ratio disclosure template					
Liquid assets, of which:					
1	High quality liquid assets (HQLA)	*	13,458	*	12,659
2	Alternative liquid assets (ALA)	*	4,576	*	4,576
3	Reserve Bank of New Zealand (RBNZ) securities	*	-	*	-
Cash outflows					
4	Retail deposits and deposits from small business customers, of which:	35,096	3,403	34,182	3,252
5	Stable deposits	11,879	594	12,192	610
6	Less stable deposits	23,217	2,809	21,990	2,642
7	Unsecured wholesale funding, of which:	15,735	10,574	14,453	9,331
8	Operational deposits (all counterparties) and deposits in networks for cooperative banks	4,916	1,220	4,559	1,131
9	Non-operational deposits (all counterparties)	7,504	6,039	7,847	6,153
10	Unsecured debt	3,315	3,315	2,047	2,047
11	Secured wholesale funding	*	1,726	*	1,426
12	Additional requirements, of which	17,458	8,447	13,685	8,103
13	Outflows related to derivatives exposures and other collateral requirements	6,917	6,917	7,154	7,154
14	Outflows related to loss of funding on debt products	589	589	18	18
15	Credit and liquidity facilities	9,952	941	6,513	931
16	Other contractual funding obligations	12,906	12,845	13,554	13,511
17	Other contingent funding obligations	6,515	354	7,719	408
18	Total cash outflows	*	37,349	*	36,031
Cash Inflows					
19	Secured lending (e.g. reverse repos)	20,936	6,627	15,817	5,929
20	Inflows from fully performing exposures	3,449	3,042	3,171	2,778
21	Other cash inflows	15,913	15,913	16,723	16,723
22	Total cash inflows	40,298	25,582	35,711	25,430
23	Total liquid assets	*	18,034	*	17,235
24	Total net cash outflows	*	11,767	*	10,601
25	Liquidity Coverage Ratio (%)¹	*	153%	*	163%

* Undisclosed

¹ The LCR for the 3 months to 30 September 2017 is calculated from 64 daily LCR observations (3 months to 30 June 2017 was calculated from 61 daily LCR observations).

The Liquidity Coverage Ratio (LCR)

The LCR requires sufficient levels of unencumbered, high-quality liquid assets (HQLA) to be held to meet expected net cash outflows (NCOs) under a regulatory-defined stress scenario lasting 30 calendar days. Macquarie has been compliant with the LCR at all times since the ratio was introduced as a minimum requirement in January 2015. Macquarie's 3 month average LCR to 30 September 2017 was 153% (based on 64 daily observations).

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 all major currencies in which it operates, with the HQLA portfolio being denominated and held in both Australian Dollars and a range of other currencies to ensure Macquarie's liquidity requirements are broadly matched by currency.

Whilst the LCR is a regulatory minimum, Macquarie also models a number of additional internal liquidity scenarios covering both market-wide and Macquarie name-specific crises. The most binding of all scenarios (LCR and internal) determines Macquarie's absolute minimum required level of cash and liquid assets.

Macquarie actively considers the impact of business decisions on the LCR, as well as other 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 pre-funding 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.

High Quality Liquid Assets (HQLA) and the Committed Liquidity Facility (CLF)

For the half year ended 30 September 2017, Macquarie's HQLA portfolio was comprised of Level 1 qualifying AUD and non-AUD HQLA, Level 2 qualifying non-AUD HQLA, as well as AUD CLF eligible collateral.

Macquarie's CLF allocation for calendar year 2017 is \$5,000 million, which is reflected in the disclosure template under 'Alternative Liquid Assets (ALA)'. Note the disclosed balance of \$4,576 million reflects the required 'open-repo' of internal self-securitised RMBS with the RBA (which increases cash balances in the Exchange Settlement Account (ESA) with the RBA but is considered an ongoing 'utilisation' of the CLF).

Net Cash Outflows (NCOs)

Net Cash Outflows (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. Note that any superannuation deposits received through a self-managed trust are required by APRA to be classified as 'less stable', even though the majority of these deposits are covered by the FCS.

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, however are comprised of two balances in particular:

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 small portion on deposit with Macquarie. Although these funds are segregated from Macquarie, the balances are recorded on a gross basis on Macquarie's balance sheet and APRA require them to be profiled as offsetting 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.

It is important to note that in both of the cases above, the profiled outflow must be viewed in conjunction with the profiled inflow and the net effect of these balances on Macquarie's LCR is negligible.

Disclaimer

- The material in this document has been prepared by Macquarie Bank Limited ABN 46 008 583 542 (MBL) purely for the purpose of explaining the basis on which MBL has prepared and disclosed certain capital requirements and information about the management of risks relating to those requirements and for no other purpose. Information in this document should not be considered as advice or a recommendation to investors or potential investors in relation to holding, purchasing or selling securities or other financial products or instruments and does not take into account your particular investment objectives, financial situation or needs. Before acting on any information you should consider the appropriateness of information having regard to the matters, any relevant offer document and in particular, you should seek independent financial advice. No representation or warranty is made as to the accuracy, completeness or reliability of the information. All securities and financial product or instrument transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments and, in international transactions, currency risk.
- This document may contain forward looking statements that is, statements related to future, not past, events or other matters – including, without limitation, statements regarding our intent, belief or current expectations with respect to MBL's businesses and operations, market conditions, results of operation and financial condition, capital adequacy, provisions for impairments and risk management practices. Readers are cautioned not to place undue reliance on these forward looking statements. Macquarie does not undertake any obligation to publicly release the result of any revisions to these forward looking statements or to otherwise update any forward looking statements, whether as a result of new information, future events or otherwise, after the date of this document. Actual results may vary in a materially positive or negative manner. Forward looking statements and hypothetical examples are subject to uncertainty and contingencies outside MBL's control. Past performance is not a reliable indication of future performance.

Unless otherwise specified all information is at 30 September 2017.
- Although Pillar 3 disclosures are intended to provide transparent capital 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).

Appendix 1 Regulatory Capital Reconciliation

1.1 Common Disclosures Template

The capital disclosures detailed in the template below represents the post 1 January 2018 Basel III common disclosure requirements. Macquarie Bank Group is applying the Basel III regulatory adjustments in full as implemented by APRA. 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.

		As at 30 September 2017 \$m	Table Reference
	Common Equity Tier 1 capital: instruments and reserves \$m		
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	9,523	Table f
2	Retained earnings	2,348	
3	Accumulated other comprehensive income (and other reserves)	355	
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	12,226	
	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)	203	Table b
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	54	Table a
11	Cash-flow hedge reserve	(70)	
12	Shortfall of provisions to expected losses	339	
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	(16)	
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
	APRA Specific Regulatory Adjustments	-	
26	National specific regulatory adjustments (sum of rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i and 26j)	1,778	
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	-	
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23	345	Table c
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	113	Table a
26f	of which: capitalised expenses	503	
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	792	Table c
26h	of which: covered bonds in excess of asset cover in pools	-	
26i	of which: undercapitalisation of a non-consolidated subsidiary	-	

Appendix 1 Regulatory Capital Reconciliation

continued

		As at 30 September 2017 \$m	Table Reference
	Common Equity Tier 1 capital: instruments and reserves \$m		
26j	of which: other national specific regulatory adjustments not reported in rows 26a to 26i	25	
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	2,327	
29	Common Equity Tier 1 Capital (CET1)	9,899	
	Additional Tier 1 Capital: instruments		
30	Directly issued qualifying Additional Tier 1 instruments	1,386	
31	of which: classified as equity under applicable accounting standards	-	
32	of which: classified as liabilities under applicable accounting standards	1,386	
33	Directly issued capital instruments subject to phase out from Additional Tier 1	233	
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 AT1)	-	
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	Additional Tier 1 Capital before regulatory adjustments	1,619	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	-	
44	Additional Tier 1 capital (AT1)	1,619	
45	Tier 1 Capital (T1=CET1+AT1)	11,518	
	Tier 2 Capital: instruments and provisions		
46	Directly issued qualifying Tier 2 instruments	957	Table e
47	Directly issued capital instruments subject to phase out from Tier 2	862	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	50	
51	Tier 2 Capital before regulatory adjustments	1,869	
	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	-	

		As at 30 September 2017 \$m	Table Reference
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)	1,869	
59	Total capital (TC=T1+T2)	13,387	
60	Total risk-weighted assets based on APRA standards	89,625	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	11.0%	
62	Tier 1 (as a percentage of risk-weighted assets)	12.9%	
63	Total capital (as a percentage of risk-weighted assets)	14.9%	
64	Buffer requirement (minimum CET1 requirement of 4.5% plus capital conservation buffer of 2.5% plus any countercyclical buffer requirements expressed as a percentage of risk-weighted assets)	7.0%	
65	of which: capital conservation buffer requirement	2.5%	
66	of which: ADI-specific countercyclical buffer requirements	0.0% ¹	
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)	11.0%	
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	45	Table c
73	Significant investments in the ordinary shares of financial entities	300	Table c
74	Mortgage servicing rights (net of related tax liability)	N/A	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	113	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)	50	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	148	
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	383	
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	N/A	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	N/A	
82	Current cap on AT1 instruments subject to phase out arrangements	233	
83	Amount excluded from AT1 instruments due to cap (excess over cap after redemptions and maturities)	167	
84	Current cap on T2 instruments subject to phase out arrangements	862	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	871	

¹ At 30 September 2017, the countercyclical capital buffer requirement for Level 2 Macquarie Bank Group is less than 0.01%.

Appendix 1 Regulatory Capital Reconciliation

continued

1.2 Regulatory Balance Sheet as at 30 September 2017

	Macquarie Bank Group Consolidated ¹ \$m	Adjustment ² \$m	Level 2 Regulatory Balance Sheet \$m	Template/ Reconciliation Table Reference
Assets				
Receivables from financial institutions	38,360	(58)	38,302	
Trading portfolio assets	18,179	-	18,179	
Derivative assets	12,161	(22)	12,139	
Investment securities available for sale	3,909	(31)	3,878	
Other assets	9,335	(1,252)	8,083	
Loan assets held at amortised cost	75,833	(84)	75,749	
Other financial assets at fair value through profit or loss	692	-	692	
Due from related body corporate entities	1,075	663	1,738	
Property, plant and equipment	10,673	(520)	10,153	
Interests in associates and joint ventures accounted for using the equity method	579	-	579	
Intangible assets ³	242	-	242	Table b
Investments in regulatory non-consolidated subsidiaries ¹	-	305	305	Table c (Footnote 2)
Deferred tax assets	179	(12)	167	Table a
Total Assets	171,217	(1,011)	170,206	
Liabilities				
Trading portfolio liabilities	7,209	-	7,209	
Derivative liabilities	10,663	(39)	10,624	
Deposits	58,987	(1)	58,986	
Other liabilities	9,211	(1,147)	8,064	
Payables to financial institutions	15,341	(245)	15,096	
Due to related body corporate entities	5,101	517	5,618	
Debt issued at amortised cost	45,648	(132)	45,516	
Other financial liabilities at fair value through profit or loss	1,789	-	1,789	
Deferred tax liabilities	461	(24)	437	
Total liabilities excluding loan capital	154,410	(1,071)	153,339	
Loan capital	4,246	-	4,246	Table d
Total liabilities	158,656	(1,071)	157,585	
Net Assets	12,561	60	12,621	
Equity				
Contributed equity	9,915	(1)	9,914	Table f
Reserves	312	43	355	Row 3
Retained earnings	2,329	19	2,348	Row 2
Total capital and reserves attributable to equity holders of Macquarie Bank Limited	12,556	61	12,617	
Non-controlling Interests	5	(1)	4	Table g
Total equity	12,561	60	12,621	

¹ As per Macquarie Bank Limited financial report as at 30 September 2017.

² Reflects the deconsolidation of certain subsidiaries for APRA reporting purposes. The subsidiaries which are deconsolidated for regulatory purposes include mortgage and leasing special purpose vehicles (SPV) which Macquarie has not made an APS120 Attachment B Para 25 election to be included in the Level 2 regulatory group, and entities conducting insurance, funds management and non-financial operations. Asset and Liabilities of mortgage and leasing special purpose vehicles (SPV) where Macquarie has made an APS 120 Attachment B Para 25 election are included in the Level 2 regulatory group.

³ The intangible component of investments in non-consolidated subsidiaries is included in intangible assets.

1.3 Reconciliation between Common Disclosures Template and Level 2 Regulatory Balance Sheet

Table a	30 September 2017 \$m	Template Reference
Deferred Tax Assets		
Total Deferred Tax Assets per Level 2 Regulatory Balance Sheet	167	
Less: Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	(54)	Row 10
Less: Deferred tax assets (temporary differences) - Amounts below prescribed threshold	(113)	Row 26e, 75
Total per Common Disclosure Template – Deferred Tax Asset – amount exceed 10%/15% threshold	-	Row 21 / 25
Table b	30 September 2017 \$m	Template Reference
Intangible Assets		
Total Intangible Assets as per Level 2 Regulatory Balance Sheet	242	
Less: capitalised software and other intangibles	(152)	Row 9
Less: intangible component of deconsolidated subsidiaries	(51)	Row 9
Total per Common Disclosure Template – Goodwill	39	Row 8
Table c	30 September 2017 \$m	Template Reference
Equity Investments		
Significant investment in financial entities ^{1,2}	300	Row 73
Non-significant investment in financial entities ¹	45	Row 72
Total Investments in financial institutions	345	Row 26d
Investment in commercial entities ^{1,2}	792	Row 26g
Total Equity Investments before applying prescribed threshold	1,137	
Less: amounts risk weighted under Harmonised Basel III guidelines	(1,137)	
Total per Common Disclosure Template – Equity Investments	-	Row 18, 19, 23
Table d	30 September 2017 \$m	Template Reference
Additional Tier 1 Capital		
Total Loan Capital per Level 2 Regulatory Balance Sheet	4,246	
Less: Accrued interest	(4)	
Add: Capitalised expenses deducted in Common Equity Tier 1 Capital ³	13	Included in Row 26f
Less: Tier 2 capital instruments reported in Table e	(2,869)	Table e
Additional Tier 1 Capital (MACS and BCN)	1,386	
Add: Other Equity Instruments (MIS) included in contributed equity	400	Table f
Less: Basel III transitional amortisation	(167)	
Total per Common Disclosure Template – Additional Tier 1 Capital	1,619	Row 36

¹ Equity Investments are classified in the Level 2 Regulatory Balance Sheet across Investments in Associates, Available-for-Sale Securities and Investment in regulatory non-consolidated subsidiaries. In addition, the Bank 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 \$173 million of equity investments in regulatory non-consolidated subsidiaries. Included in investment in commercial entities is \$132 million of equity investments in regulatory non-consolidated subsidiaries.

³ 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.

Appendix 1 Regulatory Capital Reconciliation

continued

Table d (continued)	30 September 2017 \$m	Template Reference
Additional Tier 1 Capital Instruments		
Macquarie Income Securities	233	
Macquarie Bank Capital Notes	429	
Macquarie Additional Capital Securities	957	
Total per Common Disclosure Template – Additional Tier 1 Capital	1,619	Row 36

Table e	30 September 2017 \$m	Template Reference
Total Tier 2 Capital per Balance Sheet		
Total Tier 2 Capital per Balance Sheet	2,869	Table d
Less: Fair value hedge adjustments ¹	(136)	
Less: Accrued Interest	(48)	
Add: Foreign Exchange Gain Included in Balance Sheet	5	
Less: Basel III transitional amortisation	(871)	
Total per Common Disclosure Template – Tier 2 Capital	1,819	Row 46+47

Tier 2 Capital Instruments		
Subordinated Debt - EUR600m – eligible for transition	(381)	
Subordinated Debt - USD1.0bn – eligible for transition	(481)	
Subordinated Debt - USD750m – fully qualified Tier 2 instruments	(957)	
Total per Common Disclosure Template – Tier 2 Capital	(1,819)	Row 46+47

Details on the main features of Capital instruments included in the Bank 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:

<https://www.macquarie.com/au/about/investors>

Table f	30 September 2017 \$m	Template Reference
Contributed Equity		
Total Contributed Equity as per Level 2 Regulatory Balance Sheet	9,914	
Less: Additional tier 1 instruments (MIS) included in share capital	(400)	Table d
Add: Capitalised expenses deducted in Common Equity Tier 1 Capital	9	Included in Row 26f
Total per Common Disclosure Template – Contributed Equity	9,523	Row 1

¹ For regulatory capital purposes, APRA requires these instruments to be included as if they were unhedged.

Table g	30 September 2017 \$m	Template Reference
Non Controlling Interests		
Total Non Controlling Interests as per Level 2 Regulatory Balance Sheet	4	
Less: other non controlling interests not included in capital	(4)	
Total per Common Disclosure Template – Non Controlling Interests	-	Row 5

Appendix 2 List of Entities Deconsolidated from the Level 1 and Level 2 Regulatory Group for APRA Reporting Purposes

30 September 2017	Total Assets ^{1,2,3,4}	Total Liabilities ^{1,2,3,4}
Securitisation		
PUMA Master Fund S-8	149	(149)
Funds Management		
Macquarie Alternative Assets Management Limited	29	(18)
Macquarie Asset Management Inc.	4	-
Macquarie Australia Securities Pty Limited	1	(1)
Macquarie Financial Products Management Limited	18	(1)
Macquarie Investment Management Ltd	174	(22)
Macquarie Investment Services Limited	1	-
Macquarie Management GmbH	1	-
Macquarie Master Geared Growth Fund	-	-
Macquarie Master Small Companies Fund	3	(3)
Macquarie Prism Pty Limited	2	-
Macquarie Private Capital Management Limited	-	-
Macquarie Private Portfolio Management Limited	4	-
Macquarie Securities Management Pty Limited	1	-
MIDF UK1 Guernsey GP Limited	1	(1)
MGIDF Guernsey GP Limited	2	(1)
Macquarie Private Debt Europe Limited	2	(1)
Macquarie Professional Series Global Equity Fund	1	(1)
Elise Nominees Pty Limited	-	-
Macquarie Fonds GmbH	-	-
Macquarie Fondsmanagement GmbH	-	-
Macquarie Global Bond Fund	-	-
Macquarie NRAS Trust	6	(6)
Macquarie Treu Vermögen GmbH	-	-
Macquarie Vermögenstreuhand GmbH	-	-
MIDF UK1 LLP	-	-
MIDF UK1B Guernsey GP Limited	-	-
Macquarie Investment Management (NZ) Limited	-	-
MIDF UK2 Guernsey GP Limited	-	-
Non-Financial Operations		
Advantage Funding Services LLC	9	(9)
Avenal Power Center, LLC	23	(10)
Arbor Village Property Owner LLC	44	(28)
Bella Holdings LLC	21	(9)
Bella Property Owner LLC	83	(60)
Capital Meters Limited	81	(78)
Cheeryble Developments Limited	34	(27)
CMC Railroad, Inc.p	39	(9)
Comercializadora Energia de la Reforma S. de R.L. de C.V.	38	(38)
Corona Energy Limited	44	(11)
Corona Energy Retail 1 Limited	52	(32)

30 September 2017	Total Assets ^{1,2,3,4}	Total Liabilities ^{1,2,3,4}
Corona Energy Retail 2 Limited	38	(15)
Corona Energy Retail 3 Limited	5	-
Corona Energy Retail 4 Limited	67	(56)
Corona Energy Retail 5 Limited	-	(3)
Corona Gas Management Limited	2	(1)
East Inwood Arbor, LLC	40	(26)
Energetics Design & Build Limited	52	(105)
Energetics Electricity Limited	60	(47)
Energetics Gas Limited	49	(38)
Energetics Holdco Limited	63	(28)
Energetics Midco Limited	44	-
Energetics Topco Limited	47	(1)
Energetics Networked Energy Ltd.	19	(13)
Keba Energy LLC	1	(1)
Levantera Developments Limited	70	(61)
Liberty Green Renewables Indiana, LLC	2	-
Macquarie Commodities (Singapore) Pte Limited	1	-
Macquarie Agricultural Services Pty Limited	-	-
Macquarie Business Solutions Pty Limited	1	-
Macquarie Corona Energy Holdings Limited	21	(2)
Macquarie Farm Assets and Resources Management Pty Limited	-	-
Macquarie Rotorcraft Leasing, Inc.	2	-
Outplan Pty Limited	-	-
PT Macquarie Commodities Indonesia	1	(1)
PT MPM Indonesia	1	-
Resources Marine Pte. Limited	8	-
Shelby Energy Holdings, LLC	-	-
Sterling TC Holdings LLC	9	-
Sterling TC Property Owner LLC	57	(46)
Summerset Holdings LLC	51	(20)
Summerset Property Owner LLC	26	(16)
Integra Springs Property Owner LLC	54	(45)
Energetics Networks UK Limited	1	(1)
Energetics Asset Management UK Limited	2	(2)
Macquarie (Bermuda) Limited	13	(11)
NASU Energy Storage Limited	-	(1)
Insurance		
Macquarie Life Limited	712	(686)

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 30 September 2017. The financial report under local GAAP of certain entities may be subjected to separate review/audit 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. Asset balances are shown as positive and liability balances are shown as negative.

⁴ The assets and liabilities for deconsolidated subsidiaries includes receivable from and payable to related entities.

Appendix 3 List of APRA Quantitative Tables

APS 330 Table	Title	Section No
Attachment A	Common Disclosures Template	Appendix 1
Attachment D		
6 (b) to (f)	Risk Weighted Assets (RWA)	4.3
6 (g)	Capital Ratios	4.3
7 (b)	Macquarie's Credit Risk Exposures	5.3
7 (c)	Credit Risk by Geographic Distribution	5.4
7 (d)	Credit Risk Distribution by Counterparty Type	5.5
7 (e)	Credit Risk by Maturity Profile	5.6
7 (f)	Provisions by Counterparty Type	5.3 & 7.6
7 (g)	Provisions by Geographic Region	7.7
7 (h)	Movement in Provisions	7.9
7 (i)	Credit Risk Exposures by Measurement Approach	5.3 & 6.1
7 (j)	General Reserve for Credit Losses	7.8
8 (b)	Credit Risk Exposures by Risk Weight	6.2
9 (d)	Credit Risk Exposures by Risk Grade	6.3
9 (e)	Provisions by Counterparty Type	7.6
9 (f)	Analysis of Expected Credit Model Performance versus Actual Results	7.10
10 (b) & (c)	Exposures Mitigated by Eligible Collateral	8.2
11 (b)	Credit Equivalent Amounts for Counterparty Exposures	8.3
11 (c)	Notional Amount of Credit Derivatives	8.3
12 (g) & (o)	Originating ADI Securitisation Exposures	9.2.1
12 (h)	Performance of Assets Securitised	9.2.2
12 (i) & (p)	Summary of Outstanding Exposures Intended to be Securitised	9.2.3
12 (j), (q) & (r)	Securitisation Activity	9.2.4
12 (k) & (s)	Exposure by Type of Asset	9.3.1
12 (l)	Exposure by Risk Weight Band – Banking Book	9.3.2
12 (t)	Exposure by Risk Weight Band – Trading Book	9.3.2
12 (u)	RWA by Risk Weight Band – Trading Book	9.3.3
12 (n) & (w)	Re-securitisation Exposure	9.3.4
13 (b)	Debt Security Specific Risk Figures	12.2.3
14 (f)	Value at Risk Figures	12.2.1
14 (f)	Stressed Value at Risk Figures	12.2.2
16 (b) & (c)	Equity Investments	13.2
16 (d) & (e)	Gains and Losses on Equity Investments	13.4
16 (f)	Capital Requirements Arising from Equity Risks	13.3
17 (b)	Interest Rate Risk in the Banking Book	12.2.4
Attachment E		
18	Leverage Ratio Disclosure Template	15.1
19	Summary Comparison of Accounting Assets versus Leverage Ratio Exposure Measure	15.2
Attachment F		
20	Liquidity Coverage Ratio Disclosure Template	16.0

Appendix 4 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: <ul style="list-style-type: none"> – 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 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
AMA	Advanced Measurement Approach (for determining operational risk).
APRA	Australian Prudential Regulation Authority.
ADI Prudential Standards (APS)	APRA's ADI Prudential Standards. For more information refer to APRA web site.
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 investments 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 or losses is recognised in the Consolidated Income Statement and its share of post-acquisition movements in the Consolidated Statement of Comprehensive Income.
AVC multiplier	Asset Value Correlation multiplier. A loading introduced as part of Basel III which is added to the correlation factor when calculating the RWA on exposures to certain financial institutions.
AVS assets	Available for sale. AVS assets are investments where Macquarie does not have significant influence or control and are intended to be held for an indefinite period. AVS investments are initially recognised at fair value and revalued in subsequent periods to recognise changes in the assets' fair value with these revaluations included in the AVS reserve in equity. If and when the AVS asset is derecognised or impaired, the cumulative gain or loss will be recognised in the income statement.
Bank Group	Level 2 regulatory group
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.
BCN	On 8 October 2014, MBL issued 4.3 million Macquarie Bank Capital Notes (BCN) at face value of \$A100 each. BCN are subordinated, unsecured notes that pay discretionary, non-cumulative, semi-annual floating rate cash distributions and may be redeemed at face value on 24 March 2020, 24 September 2020 or 24 March 2021 (subject to certain conditions being satisfied) or earlier in specified circumstances. BCN can be converted into a variable number of MGL ordinary shares (subject to certain conditions being satisfied) on these redemption dates; mandatorily exchanged on 24 March 2023; exchanged earlier upon 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).
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.

Appendix 4 Glossary of Terms

continued

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	A capital measure defined by APRA comprising the highest quality components of capital that fully satisfy all the following essential characteristics: <ul style="list-style-type: none"> - 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 Ratio	Common Equity Tier 1 Capital net of Common Equity Tier 1 deductions expressed as a percentage of RWA.
Common Equity Tier 1 deductions	An amount deducted in determining Common Equity Tier 1 Capital, as defined in Prudential Standard APS 111 Capital Adequacy: Measurement of Capital.
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) that are not consolidated for the APRA regulatory reporting group.
DPS Plan	Deferred Profit Share Plan
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.
ECS	On 26 March 2012, MBL, acting through its London Branch, issued \$US250 million of Exchangeable Capital Securities (ECS). ECS were subordinated, unsecured notes that paid discretionary, non-cumulative, semi-annual floating rate cash distributions. ECS were bought back on 20 June 2017.
EL	Expected Loss, which is a function of EAD, PD and LGD.
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.
Executive Key Management Personnel (Executive KMP)	Members of Executive Committee of MBL
Executive Voting Director	An Executive Board Member
FCS	Financial Claims Scheme
FICO	Fair Isaac Corporation
FIRB	Foundation Internal Ratings Based Approach (for determining credit risk)
GAAP	Generally Accepted Accounting Principles
Gross credit risk exposure	The potential loss that Macquarie would incur as a result of a default by an obligor excluding the impact of netting and credit risk mitigation.
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 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.
LVRs	Loan to Value Ratio
Macquarie	Level 2 regulatory group
Macquarie Income Preferred Securities (MIPS)	MIPS were issued when the London branch of the Bank issued 7,000 reset subordinated convertible debentures, each with a face value of £50,000, to Macquarie Capital Funding LP, a controlled entity of the Bank. The convertible debentures currently pay a fixed return of 6.177% until April 2020. As at 31 March 2014, Macquarie Bank had £42.5 million of MIPS on issue which are held by parties not associated with Macquarie. MIPS were fully redeemed by Macquarie Bank Group on 22 June 2015.
Macquarie Income Securities (MIS)	The Macquarie Income Securities (MIS) are perpetual and carry no conversion rights. Distributions are paid quarterly, based on a floating rate of BBSW plus 1.7%. Subject to limitations on the amount of hybrids eligible for inclusion as Tier 1 Capital, they qualify as Tier 1 Capital and are treated as equity on the balance sheet. There are four million \$A100 face value MIS on issue.
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
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 Profit Share which is deferred to future periods and held as a notional investment in Macquarie Group 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
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.

Appendix 4 Glossary of Terms

continued

Senior Management	Members of Macquarie Group's Executive Committee and Executive Directors who have significant management or risk responsibility in the organisation.
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.
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