MACQUARIE BANK
PILLAR 3 DISCLOSURES
SEPTEMBER 2011

MACQUARIE BANK

MACQUARIE BANK LIMITED ACN 008 583 542

Cover image: A stylised contemporary version of the Holey Dollar
In 1813 Governor Lachlan Macquarie overcame an acute currency shortage by purchasing Spanish silver dollars (then worth five shillings), punching the centres out and creating two new coins – the 'Holey Dollar' (valued at five shillings) and the 'Dump' (valued at one shilling and three pence).

This single move not only doubled the number of coins in circulation but increased their worth by 25 per cent and prevented the coins leaving the colony. Governor Macquarie's creation of the Holey Dollar was an inspired solution to a difficult problem and for this reason it was chosen as the symbol for Macquarie.

Contents

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 for market risk and the internal model approach for 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.

MBL's accreditation requires compliance with APRA Prudential Standard APS 330 Capital Adequacy: Public Disclosure of Prudential Information (APS 330). This report details MBL's APS 330 disclosures as at 30 September 2011 together with the 31 March 2011 comparative disclosures.

This report 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), market risk, operational risk and equity risk. 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 Banking Group capital ratios and relevant comparatives are set out in the table below.

Capital Ratios	**30 September 2011**	31 March 2011
Level 2 Macquarie Banking Group Tier 1 capital ratio	**12.1%**	10.7%
Level 2 Macquarie Banking Group Total capital ratio	**15.2%**	12.4%

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

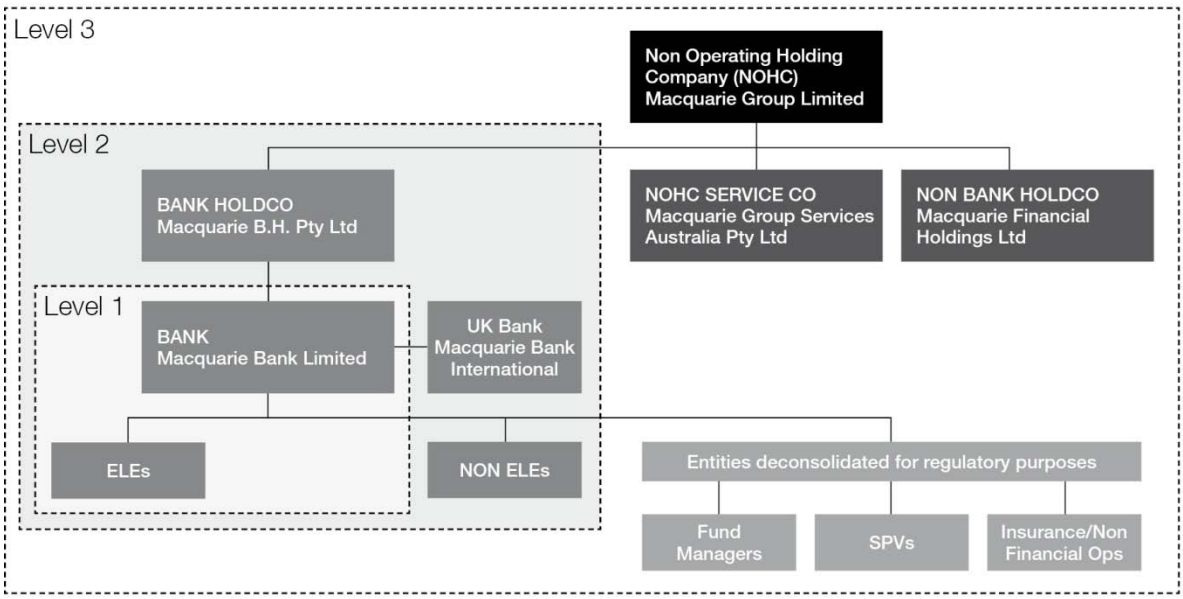
1.0 Overview

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 Prudential Standard APS 110: Capital Adequacy (APS 110).

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 capital (50% from Tier 1 and 50% from Tier 2) under APRA Prudential Standard APS 111 Capital Adequacy: Measurement of Capital (APS 111). 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 the MBL Group for accounting purposes. Therefore, the disclosures made in this report are for a different group of entities to those made in the Macquarie Bank Limited financial statements. A list of entities deconsolidated for Level 1 and Level 2 reporting purposes is included in Appendix 2.

References in this report to Macquarie or Banking 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.

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.

The MGL Group includes one other licensed bank. Macquarie Bank International Limited (MBI), a subsidiary of MBL, is a licensed bank in the United Kingdom and is regulated by the Financial Services Authority (FSA). The disclosures in this report relate to the Level 2 Macquarie Banking Group however, they constitute comparable disclosures for MBI for the purposes of FSA BIPRU 11: Disclosure (Pillar 3).

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 2011 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 APRA Prudential Standard APS 310, 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.

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

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

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

1.4 Overview of the Basel II Regulatory Capital Framework

Basel II 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 allow use of internal models to calculate regulatory capital. A bank may be accredited to use the advanced approaches when it can demonstrate the integrity and sophistication of its risk management framework. It must also ensure that its internal estimates of risk are fully integrated into corporate governance functions as well as internal calculations of capital. Further to this, the most advanced approaches are available if a bank has sufficient depth and history of default data to enable it to generate its own Probability of Default (PD) estimates based on its own loss experience.

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

1.4.1 Pillar 1

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

The standardised approach is broadly similar to the previous Basel I regulation but permits the use of external ratings where available and relevant.

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 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 II 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 II 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 Framework
- Capital Management
- Credit Risk Measurement
- Market Risk
- Securitisation
- Equity Risk, and
- Operational Risk

2.0 Risk Management Policies and Objectives

Risk is an integral part of Macquarie's business. The main risks faced by Macquarie are market risk, equity risk, credit risk and operational risk.

Responsibility for management of these risks resides with the individual businesses that give rise to them. It is the responsibility of the Risk Management Group (RMG) to ensure appropriate assessment and management of these risks. RMG is independent of all other areas of Macquarie.

2.1 Risk Governance Structure

Risk management is sponsored by the Board and is a top priority for senior managers, starting with the Managing Director and Chief Executive Officer. The Head of RMG, as Macquarie's Chief Risk Officer, is a member of the Executive Committee of MGL and MBL and reports directly to the Managing Director and Chief Executive Officer. The Chief Risk Officer has a secondary reporting line to the Board Risk Committee which approves the replacement, appointment, reassignment or dismissal of the Chief Risk Officer.

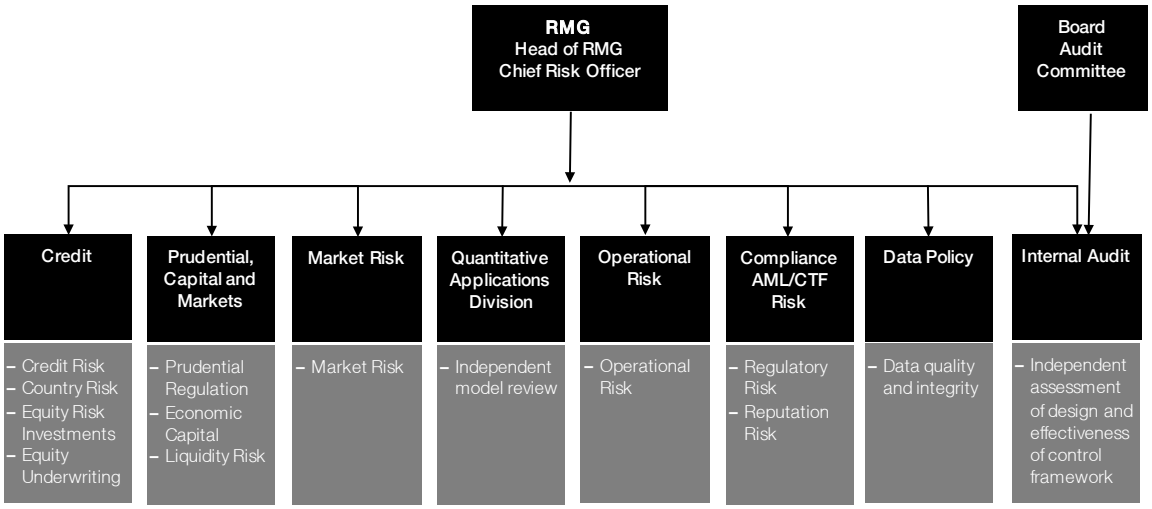
The Board oversees the risk appetite and profile of Macquarie and ensures that business developments are consistent with the risk appetite and goals of Macquarie.

All Board members are members of the Board Risk Committee. The Board Risk Committee has responsibility for ensuring an appropriate risk management framework, including establishment of policies for the control of risk, is in place. The Board Risk Committee receives information on the risk profile of Macquarie, breaches of the policy framework, and external developments which may have some impact on the effectiveness of the risk management framework. It also approves significant changes to risk management policies and the framework, and approves Macquarie's risk appetite. The Board Risk Committee is assisted by the following Committees:

- The Board Audit Committee (BAC) assesses the effectiveness of internal controls in its role of oversight of the quality and integrity of Macquarie's accounting, auditing and financial reporting. The Board Audit Committee monitors and reviews the effectiveness of Internal Audit and Credit Assurance.
- The Board Remuneration Committee liaises with the Board Risk Committee and the Chief Risk Officer to ensure there is a properly integrated approach to remuneration that appropriately reflects risk.
- The Board Corporate Governance Committee (BCGC) reviews Macquarie's corporate governance and compliance matters.

Committees exist at the executive management level to ensure that the necessary elements of expertise are focused on specific risk areas. The MGL and MBL Executive Committees and the MGL Operations Review Committee focus on strategic issues, operational issues, material transactions and review the performance of Macquarie on a monthly basis. Beneath this level, other committees exist where senior specialists focus on specific risks as appropriate (e.g. the Market Risk Committee, Asset and Liability Committee).

Risk Management Group Structure:



2.0 Risk Management Policies and Objectives
continued

2.2 Internal Audit

Internal Audit provides independent assurance to senior management and the Board on the adequacy and effectiveness of Macquarie's financial control and risk management framework. Internal Audit forms an independent and objective assessment as to whether:

- risks have been adequately identified;
- adequate internal controls are in place to manage those risks; and
- those controls are working effectively.

Internal Audit is independent of both business management and of the activities it reviews. The Head of Internal Audit is jointly accountable to the BAC and the Chief Risk Officer, has free access at all times to the BAC and cannot be removed or replaced without the approval of the BAC.

In addition to the regular review cycle by Internal Audit, Credit Assurance (CA) provides independent oversight of the quality of credit decision making and the credit rating process. This function is described in detail in section 5.2.4.

3.0 Capital Structure

The capital disclosures in this section of the report are calculated in accordance with APRA requirements under Pillar 1 of the Basel II Framework.

3.1 Total Available Capital

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

APS 330 Table 2 (b) to (d)

	30 September 2011 $m	31 March 2011 $m
Tier 1 capital		
Paid-up ordinary share capital	**7,689**	7,379
Reserves	**(185)**	(457)
Retained earnings	**1,260**	1,142
Innovative Tier 1 capital	**457**	455
Gross Tier 1 capital	**9,221**	8,519
Deductions from Tier 1 capital:		
Goodwill	**143**	181
Deferred tax assets	**123**	291
Changes in the ADI's own creditworthiness on banking book liabilities	**82**	51
Intangible component of investments in non-consolidated subsidiaries and other non-Level 2 entities	**631**	583
Loan and lease origination fees and commissions paid to mortgage originators and brokers	**97**	97
Other Tier 1 capital deductions	**279**	231
Deductions from Tier 1 capital only	**1,355**	1,434
50/50 deductions from Tier 1 capital:		
Non-subsidiary entities exceeding prescribed limits (50%)	**295**	347
Non-consolidated subsidiaries (50%)	**217**	276
All other deductions relating to securitisation (50%)	**260**	277
Shortfall in provisions for credit losses (50%)	**58**	141
Other 50/50 deductions from Tier 1 capital (50%)	**69**	112
Total 50/50 deductions from Tier 1 capital	**899**	1,153
Total Tier 1 capital deductions	**2,254**	2,587
Net Tier 1 capital	**6,967**	5,932
Tier 2 capital		
Upper Tier 2 capital:		
Other Upper Tier 2 capital instruments	**136**	212
Lower Tier 2 capital:		
Term subordinated debt	**2,557**	1,871
Gross Tier 2 capital	**2,693**	2,083
Deductions from Tier 2 capital:		
50/50 deductions from Tier 2 capital	**899**	1,153
Total Tier 2 capital deductions	**899**	1,153
Net Tier 2 capital	**1,794**	930
Total capital base	**8,761**	6,862

3.0 Capital Structure
continued

3.2 Tier 1 Capital

Tier 1 capital is defined in paragraphs 17 to 22 of APS 111.

Macquarie's Tier 1 capital consists of ordinary share capital, retained earnings, certain reserves, and innovative Tier 1 capital, being Macquarie Income Securities (MIS) and Macquarie Income Preferred Securities (MIPS). MIS and MIPS are included as Tier 1 capital subject to APRA imposed limits with any excess included as Upper Tier 2 capital.

Ordinary share capital was increased by $300 million in June 2011. This capital injection from the Bank's parent entity was undertaken to support growth in the bank.

Reserves included in Tier 1 capital are the share based payment and foreign currency translation reserves.

Innovative Tier 1 capital includes MIS and MIPS. 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) on 19 October 1999 and became redeemable (in whole or in part) at Macquarie's discretion on 19 November 2004. 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.

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 30 September 2011, Macquarie Bank had £42.5 million of MIPS on issue which are held by parties not associated with Macquarie.

3.3 Tier 2 Capital

Tier 2 capital is defined in paragraphs 23 to 29 of APS 111.

Macquarie's Upper Tier 2 capital consists of a portion of certain equity reserves.

Lower Tier 2 capital consists of subordinated debt issued to financial institutions, subject to limits imposed by APRA based on Tier 1 capital. Repayment of this debt is subordinated to the claims of depositors and other creditors but ranks ahead of equity instruments. During the half year ended 30 September 2011, the Group issued $955 million, repurchased $39 million, and redeemed $302 million of subordinated debt instruments. Remaining movements related to changes in value as a result of foreign currency fluctuations.

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 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 ADI Prudential Standard APS 222: Associations with Related Entities (APS 222).

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 has developed an economic capital model that is used to quantify MGL'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'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 and the Banking 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-Banking Group. The ECAM is based on similar principles and models as the Basel II 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
MBL	Internal model, covering exposures of the Banking Group	Capital to cover RWA and regulatory deductions, according to APRA's banking prudential standards
MGL	Internal model, covering all exposures of the Group	Bank regulatory capital requirement plus economic capital requirement of the Non-Banking Group

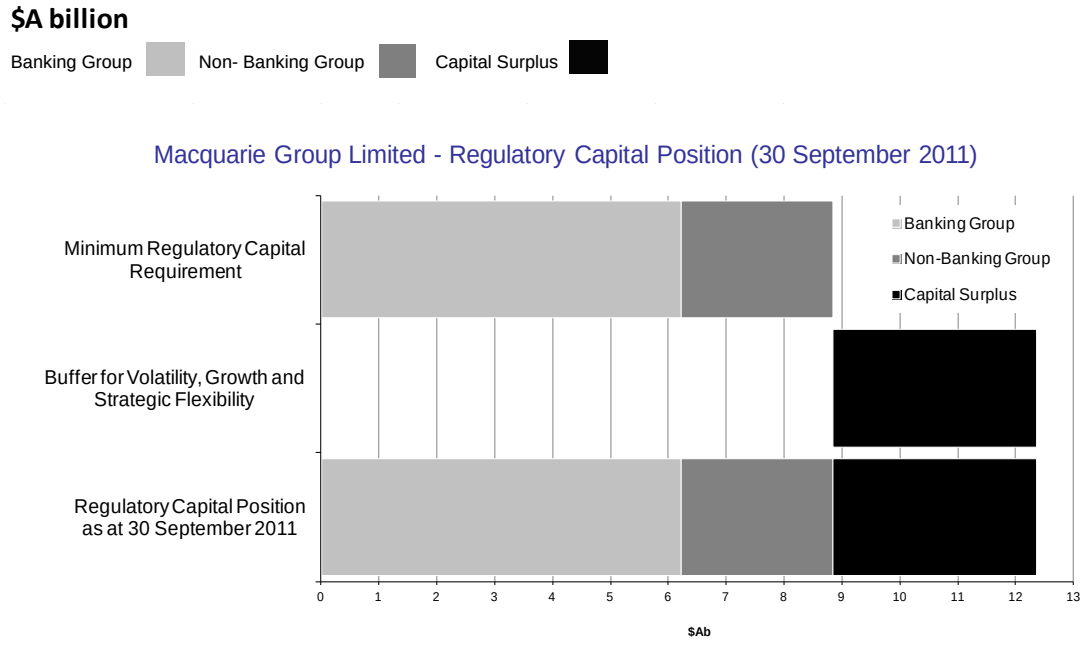
4.0 Capital Adequacy
continued

Risk	Basel II	ECAM
Credit	Capital requirement determined by Basel II formula, with some parameters specified by the regulator (e.g. LGD)	Capital requirement determined by Basel II formula, with internal estimates of some parameters
Equity	Simple risk-weight approach or deductions. Capital requirement between 24% and 50% of face value[1]	Extension of Basel II credit model to cover equity exposures. Capital requirement between 39% and 82% of face value; average 52%
Market	3 times 10 day 99.9% Value at Risk (VaR) plus a specific risk charge	Scenario-based approach
Operational	Basel II Advanced Measurement Approach	Basel II Advanced Measurement Approach

[1] Assuming an 8% Tier 1 ratio, the 300% and 400% risk weightings for equity exposures under Basel II equate to a capital requirement of 24% or 32%. Any deductions required for equity exposures are 50/50 Tier 1 and Tier 2, hence a 50% Tier 1 capital requirement.

The regulatory capital adequacy of MGL is shown below.

Macquarie Group Limited – Regulatory Capital Position (30 September 2011)



Macquarie is currently well capitalised – a substantial regulatory capital surplus exists. An element of this surplus is set aside as a buffer against volatility in the drivers of capital adequacy. The remaining capital surplus is available to support growth and provide strategic flexibility.

In order to reduce volatility in Macquarie's capital adequacy, Macquarie actively manages the sensitivity of its capital position to foreign currency movements. This is achieved by leaving specific investments in core foreign operations exposed to foreign currency translation movements. The resultant change in the Australian dollar value of the foreign investment is captured in the Foreign Currency Translation Reserve, a component of regulatory capital. This offsets the corresponding movement in the capital requirements of these investments.

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

Risk appetite is the nature and amount of risk that the Group is willing to accept. At Macquarie, this is expressed through the Board approved: (i) aggregate and specific risk limits, (ii) relevant policies, and (iii) requirement to consider risk adjusted returns.

The Board reviews Macquarie's risk appetite and approves the Global Risk Limit as part of the annual corporate strategy review process.

(i) Limits

These consist of specific risk limits given to various businesses and products or industry sectors and also a Global Risk Limit which constrains Macquarie's aggregate level of risk. The Global Risk Limit is set to protect earnings and ensure Macquarie emerges from a downturn with sufficient capital to operate. The Risk Appetite Test, which is discussed below, measures usage against this limit.

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

(ii) Relevant policies

There are numerous Macquarie-wide policies which set out the principles that govern the acceptance and management of risks. A key policy is the New Product and Business Approval policy which ensures that a proposed transaction or operation can be handled properly and will not create unknown or unwanted risks for Macquarie in the future.

(iii) Requirement to consider risk-adjusted returns

At Macquarie, proposals for all significant new deals, products and businesses must contain an analysis of risk-adjusted returns. These returns are considered together with other relevant factors by RMG, the Executive Committee and Board in assessing these proposals. Achieving an appropriate return for the additional risk that is proposed is a key focus in deciding whether to accept the risk.

Risk-adjusted performance metrics for each division are prepared on a regular basis and distributed to the Operations Review Committee, the Board and the divisions. Risk-adjusted performance metrics for each division are a significant input into performance based remuneration.

The Risk Appetite Test – An aggregate stress test

The key tool that the Board uses to aggregate risk appetite is the Risk Appetite Test. This is a Macquarie-wide stress test which considers losses and earnings under a severe economic downturn scenario.

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.

Downturn forward earnings capacity is estimated by the operating groups with reference to a three year downturn scenario provided to them by RMG.

Aggregate risk can be therefore broken down into two categories:

– **Business risk**, meaning decline in earnings through deterioration in volumes and margins due to market conditions; and
– **Potential losses**, meaning 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 earnings estimates.

Potential losses are quantified using a version of the Economic Capital Model.

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, lease residuals and other equity investments. Any changes to the ERL are sized to ensure that even under full utilisation 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 Banking 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 Banking Group.

APS 330 Table 3 (b) to (g)

	30 September 2011 $m	31 March 2011 $m
Credit risk		
Subject to IRB approach		
Corporate	**20,229**	20,468
Sovereign	**899**	826
Bank	**3,279**	2,713
Residential Mortgage	**1,539**	1,691
Other Retail	**2,340**	1,544
Total RWA subject to IRB approach[1]	**28,286**	27,242
Specialised lending exposures subject to slotting criteria[2]	**3,713**	3,020
Subject to Standardised approach		
Corporate	**2,998**	3,067
Bank	**-**	3
Residential Mortgage	**608**	524
Other Retail	**2,065**	3,326
Total RWA subject to Standardised approach	**5,671**	6,920
Credit risk RWA for securitisation exposures	**1,228**	1,117
RWA for Other Assets	**4,477**	2,684
Total Credit risk RWA	**43,375**	40,983
Equity risk exposures RWA	**2,173**	1,912
Market risk RWA	**3,889**	3,834
Operational risk RWA	**6,467**	7,037
Interest rate risk in the banking book RWA	**-**	-
APRA Scaling factor (6%) applied to IRB exposures	**1,697**	1,634
Total RWA	**57,601**	55,400

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

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

Ratios for Tier 1 and Total capital of Macquarie Banking Group and MBI are set out below.

Capital Ratios	30 September 2011	31 March 2011
Level 2 Macquarie Banking Group Tier 1 capital ratio	**12.1%**	10.7%
Level 2 Macquarie Banking Group Total capital ratio	**15.2%**	12.4%
Level 1 Macquarie ELE Tier 1 capital ratio	**12.7%**	10.8%
Level 1 Macquarie ELE Total capital ratio	**15.0%**	12.1%
Macquarie Bank International Ltd[1] Tier 1 capital ratio	**>100%**	>100%
Macquarie Bank International Ltd[1] Total capital ratio	**>100%**	>100%

[1] MBI is a licensed bank in the United Kingdom and is regulated by the FSA. Tier 1 and Total capital ratios for MBI are calculated in accordance with Basel II FSA Prudential Standards. MBI has a significant level of excess capital relative to risk exposures to provide flexibility to take advantage of opportunities that may arise.

APRA requires ADIs to have a minimum ratio of capital to risk weighted assets of 8%, with at least 4% of this capital in the form of Tier 1 capital. In addition, APRA imposes ADI specific minimum capital ratios which may be higher than these levels. The Macquarie internal capital policy set by the Board requires capital floors above this regulatory required level.

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 paid back, or the loss incurred in replicating a trading contract with a new counterparty.

Macquarie maintains a comprehensive and robust framework for the identification, analysis and monitoring of its credit risk exposure arising within each business. Key aspects of the framework are detailed below.

5.2 Credit Risk

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

All 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

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 exercise authority prudently has been adequately assessed.

Operating groups are assigned modest levels of credit discretions. Credit exposures above those levels are assessed independently by RMG and approved by senior 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 credit exposures are subject to annual review.

5.2.2 Macquarie Ratings

All customer limits and exposures are allocated a Macquarie Group rating (MG rating) on a 1 to 13 scale, which broadly correspond with Standard and Poor's, Fitch's and Moody's Investor Services credit ratings. Each MG rating has been assigned a PD derived from the long term average of S&P 1 year default rates for similarly rated obligors. A Loss Given Default percentage (LGD) rate 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 below outlines the internal MG Ratings relative to ECAI ratings.

MG ratings are used to:

- assess the default risk and loss severity 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 MG rating band is associated with an estimate of the PD by the counterparty on its financial obligations and provides a consistent measure across the Banking Group. Applicable at either the borrower or transaction level, a rating must be justified and set as part of the credit approval and review process.

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

Rating System

Macquarie	S&P	Fitch	Moody's
M1	AAA	AAA	Aaa
M2	AA+	AA+	Aa1
	AA	AA	Aa2
	AA-	AA-	Aa3
M3	A+	A+	A1
	A	A	A2
	A-	A-	A3
M4	BBB+	BBB+	Baa1
M5	BBB	BBB	Baa2
M6	BBB-	BBB-	Baa3
M7	BB+	BB+	Ba1
M8	BB	BB	Ba2
M9	BB-	BB-	Ba3
M10	B+	B+	B1
	B	B	B2
	B-	B-	B3
M11	CCC+	CCC+	Caa1
	CCC	CCC	Caa2
	CCC-	CCC-	Caa3
M12	CC	CC	Ca
	C	C	
M13	D	RD/D	C

5.0 Credit Risk Measurement
continued

For corporate, sovereign and bank counterparties, Macquarie utilises a number of industry templates and a sovereign template to assess the appropriate PD ratings. These industry templates are designed to ensure that Macquarie ratings take into account the different risk factors which affect different industries. Analysts are required to input a range of quantitative and qualitative factors and then consider the MG rating output. At the same time as considering the appropriate MG rating, analysts are also required to consider the appropriate LGD rating. 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 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 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 policy based on APRA standards.

All templates and models are validated annually by Credit Assurance (CA). CA is an independent function, and the validation tasks are outlined in a detailed framework. Refer to section 5.2.4 for further detail of this function. Annually, CA undertakes the following:

- review of Corporate, Bank and Sovereign templates;
- validation of wholesale PD estimates;
- validation of wholesale LGD estimates;
- ratings migration analysis of wholesale PD ratings;
- validation of retail PDs;
- validation of retail LGDs; and
- approval of any changes to retail models.

Macquarie has developed extensive 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 monthly overview by Credit Team Leaders and monitoring by CA.

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 MG 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 also based on calculations of 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 full face value whereas derivative contracts are measured according to both internal and regulatory measures of Credit Equivalent Amount (CEA). This form of risk refers to the estimate of the replacement cost of the contract should the counterparty default prior to the maturity of the trade.

Each of these measures is based on mark-to-market values which are reported daily to RMG Credit.

For regulatory purposes, CEA is calculated according to the methodology outlined in the APRA ADI 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 exposure is calculated as a function of market movements. These values are assessed by assuming that low probability (worst case) stressed market movements occur and that Macquarie has to go to the market to replace a defaulting deal at the worst possible time during the term of the transaction. The level of stress that is applied to individual markets is reviewed and approved by RMG at least every two years or when volatility or market conditions dictate. Credit limits are set in relation to the internal measure of counterparty exposure.

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 DVP (delivery vs payment) 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 included in Board reporting semi-annually.

All counterparties with credit exposures are subject to a full annual review to ensure any deterioration is identified and reflected in an adjustment to limits and/or their MG rating. Furthermore, other indicators of deterioration in credit quality are monitored daily, such as share price and credit default swap spread movements, covenant breaches and credit ratings downgrades. Where appropriate, these are reported to senior management and where recoverability is in doubt, appropriate provisions are held.

Macquarie's policies to manage credit risk include avoidance of unacceptable concentrations of risk either to an economic sector or to an individual counterparty. Policies are in place to limit large exposures to single counterparties or groups of counterparties. A review of the Credit Portfolio analysing credit concentrations by counterparty, country, risk type, industry and credit quality is carried out and reported to the Boards semi-annually.

5.2.4 Credit Assurance

CA is the centralised function within RMG which independently verifies the effectiveness of Macquarie's credit risk management. It provides an independent assurance of the quality of Macquarie's credit processes and decisions.

CA fulfils its responsibilities by regular monitoring of the exercise of discretions, sample testing of credit decisions and reviewing ratings overrides. It is involved in the Creditwatch process. Oversight and validation of the internal rating system and credit risk estimates for the retail portfolios is conducted through the monitoring of actual defaults and losses against all estimates. Additionally CA performs annual reviews of ratings template usage, applicability and overrides so as to ensure that the industry templates remain appropriate.

CA is constituted as a distinct unit within RMG with direct reporting to the Head of Credit. To ensure the independence of CA, when performing reviews of RMG Credit, CA reports directly to the Head of RMG, whereas reviews of all other groups within Macquarie are reported to the Head of Credit. In addition to regular reporting to senior management and the MGL Board, CA is required to report semi-annually to, and have an annual private session with, the BAC.

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 ADI Prudential Standards.

Exposures have been based on a regulatory Level 2 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 statements 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:

- netting and credit risk mitigation (discussed in section 8);
- securitisation exposures (discussed in section 9);
- trading book exposures (discussed in section 10); and
- equity exposures (discussed in section 11).

APS 330 Table 4(b)

Portfolio Type	**30 September 2011 $m**	31 March 2011 $m
Corporate	**34,333**	36,115
Sovereign	**6,036**	6,252
Bank	**18,187**	13,167
Residential Mortgages	**15,333**	15,772
Other Retail	**7,405**	7,795
Other Assets	**9,550**	4,846
Total Gross Credit Exposure	**90,844**	83,947

APS 330 Table 4(b) (continued)

	30 September 2011				
		Off Balance sheet			
Portfolio Type	On Balance Sheet $m	Non-market related $m	Market related $m	Total $m	Average Exposures for the 6 months $m
Subject to IRB approach					
Corporate	15,172	2,289	7,419	24,880	26,899
Sovereign	5,668	-	368	6,036	6,144
Bank	12,783	69	5,335	18,187	15,676
Residential Mortgages	6,297	154	-	6,451	6,724
Other Retail	4,912	-	-	4,912	4,529
Total IRB approach	44,832	2,512	13,122	60,466	59,972
Specialised Lending	2,520	807	814	4,141	3,581
Subject to Standardised approach					
Corporate	4,488	824	-	5,312	4,744
Sovereign	-	-	-	-	-
Bank	-	-	-	-	2
Residential Mortgages	8,882	-	-	8,882	8,828
Other Retail	2,473	20	-	2,493	3,073
Total Standardised approach	15,843	844	-	16,687	16,647
Other Assets	9,550	-	-	9,550	7,198
Total Gross Credit Exposures	72,745	4,163	13,936	90,844	87,398

5.0 Credit Risk Measurement
continued

APS 330 Table 4(b) (continued)

	31 March 2011				
		Off Balance sheet			
Portfolio Type	On Balance Sheet $m	Non-market related $m	Market related $m	Total $m	Average Exposures for the 6 months $m
Subject to IRB approach					
Corporate	16,312	3,264	9,342	28,918	28,711
Sovereign	5,971	19	262	6,252	6,418
Bank	8,932	81	4,151	13,164	14,178
Residential Mortgages	6,749	248	-	6,997	6,547
Other Retail	4,143	-	-	4,143	3,790
Total IRB approach	42,107	3,612	13,755	59,474	59,644
Specialised Lending	2,001	1,019	-	3,020	2,875
Subject to Standardised approach					
Corporate	3,201	976	-	4,177	4,665
Sovereign	-	-	-	-	-
Bank	3	-	-	3	42
Residential Mortgages	8,775	-	-	8,775	8,513
Other Retail	3,632	20	-	3,652	3,766
Total Standardised approach	15,611	996	-	16,607	16,986
Other Assets	4,846	-	-	4,846	4,838
Total Gross Credit Exposures	64,565	5,627	13,755	83,947	84,343

APS 330 Table 17(b) & (c)

	As at 30 September 2011				For the 6 months to 30 September 2011	
	Gross Credit Exposure $m	Impaired Facilities[1] $m	Past Due >90 days[2] $m	Specific Provisions[1] $m	Charges for Specific Provisions[1] $m	Write-offs $m
IRB						
Corporate	29,021	670	26	(261)	(17)	(1)
Sovereign	6,036	-	-	-	-	-
Bank	18,187	42	-	(27)	(8)	-
Residential Mortgage	6,451	66	68	(27)	(4)	-
Other Retail	4,912	12	-	(4)	-	(16)
Total IRB	64,607	790	94	(319)	(29)	(17)
Standardised						
Corporate	5,312	53	21	(26)	(4)	-
Sovereign	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	8,882	-	28	-	-	-
Other Retail	2,493	40	-	(11)	(2)	(13)
Total Standardised	16,687	93	49	(37)	(6)	(13)
Other Assets	9,550	337	-	(11)	-	-
Total	90,844	1,220	143	(367)	(35)	(30)

	30 September 2011 $m
General reserve for credit losses[3]	143

1 In accordance with Attachment B (Paragraph 4) of APS330, the table above excludes securitisation exposures. Macquarie has impaired securitised facilities of $116 million with specific provisions of $81 million as at 30 September 2011, and charges for specific provisions of $5 million for the 6 months to 30 September 2011.

2 In accordance with APRA prudential definitions, Past Due does not form part of Impaired Facilities as they are well secured.

3 The General reserve for credit losses is equivalent to the net collective provisions for regulatory purposes after tax.

5.0 Credit Risk Measurement
continued

To facilitate an understanding of the differences between the MBL consolidated accounting group and the Macquarie Level 2 regulatory group, the table below provides a high level reconciliation between total assets as disclosed in the financial statements and the gross credit exposures disclosed above.

	30 September 2011 $m	31 March 2011 $m
Consolidated MBL Financial Statements Total Assets	**158,504**	140,362
Adjusted for the following:		
Deconsolidated Entities for APRA reporting purposes	**(13,055)**	(14,148)
Segregated funds excluded for APRA reporting purposes[1]	**(3,004)**	(3,093)
Trading Book Assets assessed for capital in Market Risk calculation	**(27,337)**	(29,394)
Capital Deductions	**(928)**	(1,542)
Equity Investments assessed for capital in Equity Risk calculations	**(1,580)**	(1,685)
Derivative financial instruments – positive values[2]	**(34,075)**	(21,203)
Assets assessed for capital in Securitisation Risk calculations	**(5,954)**	(5,004)
Other	**174**	272
Total Gross On Balance Sheet Exposure	**72,745**	64,565
Off Balance Sheet Exposure[2]	**18,099**	19,382
Total Gross Credit Exposure	**90,844**	83,947

1 Segregated funds represent monies receivable from exchanges or clearing houses on clients' futures trading accounts. Macquarie has no credit exposure to segregated fund assets.

2 The gross credit exposure on derivatives is included in the off balance sheet exposure.

5.4 Credit Risk by Geographic Distribution

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

APS 330 Table 4(c)

	30 September 2011				
Portfolio Type	**Asia $m**	**Australia $m**	**EMEA[1] $m**	**Americas $m**	**Total $m**
Corporate	**1,450**	**11,940**	**10,111**	**10,832**	**34,333**
Sovereign	**74**	**5,103**	**662**	**197**	**6,036**
Bank	**1,369**	**6,566**	**7,771**	**2,481**	**18,187**
Residential Mortgages	**4**	**6,130**	**41**	**9,158**	**15,333**
Other Retail	**-**	**6,994**	**5**	**406**	**7,405**
Other Assets	**121**	**2,459**	**5,934**	**1,036**	**9,550**
Total Gross Credit Exposure	**3,018**	**39,192**	**24,524**	**24,110**	**90,844**

[1] EMEA represents Europe, Middle East and Africa

	31 March 2011				
Portfolio Type	Asia $m	Australia $m	EMEA[1] $m	Americas $m	Total $m
Corporate	1,503	12,378	10,289	11,945	36,115
Sovereign	116	4,884	679	573	6,252
Bank	997	3,111	7,029	2,030	13,167
Residential Mortgages	4	6,504	58	9,206	15,772
Other Retail	-	7,267	4	524	7,795
Other Assets	82	1,603	1,167	1,994	4,846
Total Gross Credit Exposure	2,702	35,747	19,226	26,272	83,947

[1] 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 II risk type (Portfolio Type) below have been classified on a counterparty split consistent with the Macquarie Bank Limited Consolidated financial statements.

APS 330 Table 4(d)

	30 September 2011				
Portfolio Type	**Financial Institution $m**	**Government $m**	**Corporate $m**	**Retail $m**	**Total $m**
Corporate	**6,759**	**125**	**26,645**	**804**	**34,333**
Sovereign	**3,061**	**2,975**	**-**	**-**	**6,036**
Bank	**18,187**	**-**	**-**	**-**	**18,187**
Residential Mortgages	**-**	**-**	**478**	**14,855**	**15,333**
Other Retail	**-**	**-**	**560**	**6,845**	**7,405**
Other	**-**	**924**	**8,608**	**18**	**9,550**
Total Gross Credit Exposure	**28,007**	**4,024**	**36,291**	**22,522**	**90,844**

	31 March 2011				
Portfolio Type	Financial Institution $m	Government $m	Corporate $m	Retail $m	Total $m
Corporate	9,014	288	26,072	741	36,115
Sovereign	2,749	3,503	-	-	6,252
Bank	13,167	-	-	-	13,167
Residential Mortgages	-	-	421	15,351	15,772
Other Retail	-	-	529	7,266	7,795
Other	-	672	3,779	395	4,846
Total Gross Credit Exposure	24,930	4,463	30,801	23,753	83,947

5.6 Credit Risk by Maturity Profile

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

APS 330 Table 4(e)

	30 September 2011			
Portfolio Type	**≤1 year $m**	**1 ≤ 5 years $m**	**> 5 years $m**	**Total $m**
Corporate	**18,705**	**11,777**	**3,851**	**34,333**
Sovereign	**831**	**2,177**	**3,028**	**6,036**
Bank	**12,164**	**5,159**	**864**	**18,187**
Residential Mortgages	**868**	**8,454**	**6,011**	**15,333**
Other Retail	**599**	**6,715**	**91**	**7,405**
Other Assets	**9,550**	**-**	**-**	**9,550**
Total Gross Credit Exposure	**42,717**	**34,282**	**13,845**	**90,844**

	31 March 2011			
Portfolio Type	≤1 year $m	1 ≤ 5 years $m	> 5 years $m	Total $m
Corporate	19,005	12,955	4,155	36,115
Sovereign	640	3,484	2,128	6,252
Bank	7,331	4,986	850	13,167
Residential Mortgages	870	8,426	6,476	15,772
Other Retail	647	7,019	129	7,795
Other Assets	4,685	161	-	4,846
Total Gross Credit Exposure	33,178	37,031	13,738	83,947

5.0 Credit Risk Measurement
continued

Macquarie is approved by APRA to use the Basel II Foundation Internal Ratings Based (FIRB) Approach for credit risk for its Corporate, Sovereign and Bank 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 non-retail portfolios 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 assets 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 asset types 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
All credit exposures to Corporate, Bank and Sovereign counterparties.	IRB	MG rating is mapped to the S&P ratings scale. S&P historical default data is used to estimate a PD for each rating grade.
All exposures subject to Supervisory Slotting Treatment.	IRB	Exposures are pooled based on MG ratings with APRA determined risk weights assigned to each pool.
Auto and equipment lease exposures in Australia.	IRB	Through-the-cycle PDs and LGDs based on historic data.
Exposures to mortgage insured prime Residential Mortgages in Australia.	IRB	Loans are pooled according to key risk drivers including loan-to-value ratio, documentation type and loan purpose. A PD for each pool is estimated using the historical average default rate. An adjustment is made to convert it into a through-the-cycle PD. LGDs are estimated using a scenario approach that assumes a market value decline, distressed sale discount and selling costs to estimate the recoverable value on each loan. The regulatory floor of 20% applies to the LGD in each pool.
Exposures to prime Residential Mortgages in the USA. Loans with higher loan-to-value ratios have mortgage insurance.	IRB	A PD for each loan is estimated using assumptions based on Fitch RMBS ratings criteria. The key risk drivers are loan-to-value ratio and FICO score. Adjustments are also made for other variables such as documentation type and loan purpose. Loans are then pooled according to loan-to-value and FICO score. PDs are then validated against the portfolios historical average default rates each year. LGDs are estimated using a scenario approach that assumes a market value decline at regional level, distressed sale discount and selling costs to estimate the recoverable value on each loan. The regulatory floor of 20% applies to the LGD in each pool.
All SME exposures. Some secured by commercial property.	Standardised	100% risk-weighted.
Exposures to mortgage insured prime Residential Mortgages in Canada.	Standardised	Mortgage insurance is provided by a corporate and government insurer. In the event of wind up of the corporate insurer, the Canadian government will guarantee all but 10% of the initial exposure. Accordingly, this 10% of original exposure to the Corporate insurer is risk weighted. The remaining 90% is risk weighted at 0%.
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 II portfolio class as required by APRA under APS 330.

APS 330 Table 4(i)

Portfolio Type	**30 September 2011 $m**	31 March 2011 $m
IRB		
Corporate	**29,021**	31,938
Sovereign	**6,036**	6,252
Bank	**18,187**	13,164
Residential Mortgage	**6,451**	6,997
Other Retail	**4,912**	4,143
IRB	**64,607**	62,494
Standardised		
Corporate	**5,312**	4,177
Sovereign	**-**	-
Bank	**-**	3
Residential Mortgage	**8,882**	8,775
Other Retail	**2,493**	3,652
Total Standardised	**16,687**	16,607
Other Assets[1]	**9,550**	4,846
Total Gross Credit Exposure	**90,844**	83,947

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

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 and equity exposures.

The disclosure of Standardised exposures below shows gross credit exposures before and after the impact of risk mitigation by collateral and guarantees. The breakdown of collateral is provided in further detail in section 8.2.

APS 330 Table 5(b)

Standardised Approach Exposures

	30 September 2011		31 March 2011	
Risk Weight	**Total Gross Credit Exposure $m**	**Gross Credit Exposure after mitigation by eligible collateral & guarantees[1] $m**	Total Gross Credit Exposure $m	Gross Credit Exposure after mitigation by eligible collateral & guarantees[1] $m
0%[2]	**9,293**	**144**	8,548	129
> 0% ≤ 20%[3]	**531**	**531**	401	401
> 20% ≤ 35%	**342**	**342**	308	308
> 35% ≤ 50%	**245**	**245**	265	265
> 50% ≤ 75%	**-**	**-**	-	-
> 75% ≤ 100%	**6,276**	**6,276**	7,085	5,727
> 100% ≤ 150%	**-**	**-**	-	-
> 150%	**-**	**-**	-	-
Total	**16,687**	**7,538**	16,607	6,830

1 Refer to section 8.2 for details of eligible collateral and guarantees.

2 0% - RWA includes a portion of Canadian Prime Residential Mortgages. These loans are mortgage insured, with the majority guaranteed by the Canadian government.

3 0% ≤ 20% - includes Margin Lending at 20% risk weighting as required by APRA.

IRB Approach Exposures

Specialised lending exposures subject to supervisory slotting	**Gross Credit Exposure**	
Risk Weight	**30 September 2011 $m**	31 March 2011 $m
70%	**667**	210
90%	**1,304**	968
115%	**1,509**	949
250%	**135**	364
Default[1]	**526**	529
Total	**4,141**	3,020

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

Equity Exposures	**Total Exposure**	
Risk Weight	**30 September 2011 $m**	31 March 2011 $m
300%	**210**	208
400%	**386**	322
Total	**596**	530

6.0 Calculation of Credit Risk Exposures
continued

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 II FIRB classes of Corporate, Bank and Sovereign as shown in section 6.1.

APS 330 Table 6(d)

	30 September 2011 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	**801**	**3,160**	**7,387**	**10,398**	**2,503**	**452**	**179**	**24,880**
Sovereign	**5,791**	**187**	**35**	**23**	**-**	**-**	**-**	**6,036**
Bank	**7,903**	**8,944**	**1,298**	**12**	**9**	**2**	**19**	**18,187**
Total Gross Credit Exposure	**14,495**	**12,291**	**8,720**	**10,433**	**2,512**	**454**	**198**	**49,103**

	31 March 2011 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	2,265	4,267	9,093	11,007	3,786	812	708	31,938
Sovereign	6,075	118	31	5	1	22	-	6,252
Bank	4,405	7,471	1,231	51	1	4	1	13,164
Total Gross Credit Exposure	12,745	11,856	10,355	11,063	3,788	838	709	51,354

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

	30 September 2011 PD Grade							
Undrawn Commitments	**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 $m**
Corporate	**1**	**294**	**272**	**887**	**415**	**38**	**3**	**1,910**
Sovereign	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Bank	**-**	**67**	**2**	**-**	**-**	**-**	**-**	**69**
Total Undrawn Commitments	**1**	**361**	**274**	**887**	**415**	**38**	**3**	**1,979**

	31 March 2011 PD Grade							
Undrawn Commitments	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 $m
Corporate	28	89	717	2,049	771	196	19	3,869
Sovereign	19	-	-	-	-	-	-	19
Bank	31	48	-	-	-	-	-	79
Total Undrawn Commitments	78	137	717	2,049	771	196	19	3,967

6.0 Calculation of Credit Risk Exposures
continued

The tables below provide a breakdown of gross credit exposures into each EL category for the Retail portfolios under the Basel II classes of Residential Mortgage and Other Retail as shown in section 6.1.

APS 330 Table 6(d)

	30 September 2011 Expected Loss Categories						
Retail	**0 < 0.1% $m**	**0.1% < 0.3% $m**	**0.3% < 0.5% $m**	**0.5% < 3% $m**	**3% < 10% $m**	**10% < 100% $m**	**Total Gross Credit Exposure $m**
Residential Mortgage	**3,650**	**1,644**	**489**	**533**	**-**	**135**	**6,451**
Other Retail	**-**	**-**	**2,642**	**2,262**	**-**	**8**	**4,912**
Total Gross Credit Exposure	**3,650**	**1,644**	**3,131**	**2,795**	**-**	**143**	**11,363**

	31 March 2011 Expected Loss Categories						
Retail	0 < 0.1% $m	0.1% < 0.3% $m	0.3% < 0.5% $m	0.5% < 3% $m	3% < 10% $m	10% < 100% $m	Total Gross Credit Exposure $m
Residential Mortgage	2,438	2,987	746	670	-	156	6,997
Other Retail	-	-	3,589	546	-	8	4,143
Total Gross Credit Exposure	2,438	2,987	4,335	1,216	-	164	11,140

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

	30 September 2011 Expected Loss Categories						
Undrawn Commitments	**0 < 0.1% $m**	**0.1% < 0.3% $m**	**0.3% < 0.5% $m**	**0.5% < 3% $m**	**3% < 10% $m**	**10% < 100% $m**	**Total $m**
Residential Mortgage	**105**	**32**	**16**	**1**	**-**	**-**	**154**
Other Retail	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Total Undrawn Commitments	**105**	**32**	**16**	**1**	**-**	**-**	**154**

	31 March 2011 Expected Loss Categories						
Undrawn Commitments	0 < 0.1% $m	0.1% < 0.3% $m	0.3% < 0.5% $m	0.5% < 3% $m	3% < 10% $m	10% < 100% $m	Total $m
Residential Mortgage	61	101	72	14	-	-	248
Other Retail	-	-	-	-	-	-	-
Total Undrawn Commitments	61	101	72	14	-	-	248

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 Specific Provisions

Facilities that are assessed as impaired are subject to a recoverability test. Specific provisions are calculated in accordance with Australian Accounting Standards and are recognised as 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 specific 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 facilities, the collective provision calculation applies the PD and LGD estimates to the EAD. For portfolio managed 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

EL represents the estimated future credit losses expected to be incurred in a portfolio. Similar to collective provisions, EL is calculated as a function of the outstanding exposure, PD and LGD. LGDs are defined by APRA for Corporate, Bank, Sovereign and Specialised Lending exposures. For the remaining IRB exposures for which EL is required to be calculated, the LGD is based on historical loss experience using economic downturn scenario assumptions.

The excess of EL over eligible provisions is required by APRA to be deducted from capital, 50% from Tier 1 capital and 50% from Tier 2 capital. Eligible provisions include specific provisions and collective provisions, net of deferred tax assets. As at 30 September 2011, the total EL was $678 million (31 March 2011: $677 million), with the excess of EL over eligible provisions resulting in a Tier 1 deduction of $58 million (31 March 2011: $141 million) and a Tier 2 deduction of $58 million (31 March 2011: $141 million).

7.5 Impaired facilities and specific 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 statements – impaired loans and other financial assets is provided below:

	As at 30 September 2011		As at 31 March 2011	
	Impaired Facilities $m	**Specific Provisions $m**	Impaired Facilities $m	Specific Provisions $m
Total - APS220 impaired facilities	**1,336**	**448**	1,427	439
Impaired debt investment securities[1]	**(116)**	**(81)**	(113)	(79)
Impaired loans without provisions[2]	**(149)**	**-**	(161)	-
Real estate and Other Assets acquired through security enforcement[3]	**(337)**	**-**	(411)	-
Off balance sheet exposures	**(2)**	**-**	(3)	-
Other exposures	**7**	**2**	(16)	(1)
Total – Impaired loans & other financial assets with specific provisions for impairment per MBL consolidated financial statements	**739**	**369**	723	359

1 Disclosed separately in MBL consolidated financial statements. These exposures are included in "IRB - Other" in other tables in this section.

2 Comprises secured exposures where no loss is anticipated, and which are not impaired in the MBL consolidated financial statements. Collective provisions of $21 million ($21 million as at 31 March 2011) relating to these exposures which are treated as specific provisions for regulatory purposes, are not presented in this table (refer to section 7.8).

3 Real estate acquired through security enforcement is classified as Other Assets in the MBL consolidated financial statements and in other tables in this section.

7.0 Provisioning
continued

7.6 Provisions by Counterparty Type

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

APS 330 Table 4(f)

	As at 30 September 2011			As at 31 March 2011		
	Impaired Facilities $m	**Past Due >90 days[1] $m**	**Specific Provisions $m**	Impaired Facilities $m	Past Due >90 days[1] $m	Specific Provisions $m
IRB						
Corporate	**670**	**26**	**(261)**	689	34	(266)
Bank	**42**	**-**	**(27)**	40	-	(18)
Residential Mortgage	**66**	**68**	**(27)**	56	86	(21)
Other Retail	**12**	**-**	**(4)**	14	-	(6)
Other[2]	**116**	**-**	**(81)**	113	-	(79)
Total IRB	**906**	**94**	**(400)**	912	120	(390)
Standardised						
Corporate	**53**	**21**	**(26)**	77	-	(24)
Residential Mortgage	**-**	**28**	**-**	-	30	-
Other Retail	**40**	**-**	**(11)**	38	-	(12)
Total Standardised	**93**	**49**	**(37)**	115	30	(36)
Other Assets[3]	**337**	**-**	**(11)**	400	-	(13)
Total	**1,336**	**143**	**(448)**	1,427	150	(439)

1 In accordance with APRA prudential definitions, Past Due do not form part of impaired facilities as they are well secured.
2 IRB "Other" includes impaired debt investment securities.
3 Other Assets impaired facilities include other real estate owned subsequent to facility foreclosure.

APS 330 Table 6(e)

	For the 6 months to 30 September 2011		For the 6 months to 31 March 2011	
	Charges for Specific provisions $m	**Write-offs $m**	Charges for Specific provisions $m	Write-offs $m
IRB				
Corporate	**(17)**	**(1)**	(101)	(16)
Bank	**(8)**	**-**	(17)	-
Residential Mortgage	**(4)**	**-**	(2)	-
Other Retail	**-**	**(16)**	(4)	-
Other	**(5)**	**-**	(17)	-
Total IRB	**(34)**	**(17)**	(141)	(16)
Standardised				
Corporate	**(4)**	**-**	(6)	-
Other Retail	**(2)**	**(13)**	(2)	(3)
Total Standardised	**(6)**	**(13)**	(8)	(3)
Total	**(40)**	**(30)**	(149)	(19)

7.0 Provisioning
continued

7.7 Provisions by Geographic Region

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

APS 330 Table 4(g)

	30 September 2011			
Geographic Region	**Impaired Facilities $m**	**Past due > 90 days $m**	**Specific Provisions $m**	**Collective Provisions $m**
Australia	**426**	**95**	**(111)**	**(124)**
EMEA	**138**	**13**	**(72)**	**(24)**
Americas	**737**	**35**	**(252)**	**(78)**
Asia	**35**	**-**	**(13)**	**-**
Total	**1,336**	**143**	**(448)**	**(226)**

	31 March 2011			
Geographic Region	Impaired Facilities $m	Past due > 90 days $m	Specific Provisions $m	Collective Provisions $m
Australia	509	100	(151)	(136)
EMEA	134	13	(53)	(10)
Americas	751	37	(227)	(70)
Asia	33	-	(8)	(1)
Total	1,427	150	(439)	(217)

7.8 General reserve for credit losses

APS 330 Table 17(c)

	30 September 2011 $m	31 March 2011 $m
Collective provisions	**226**	217
Collective provisions treated as specific provisions for regulatory purposes	**(21)**	(21)
Net Collective provisions for regulatory purposes	**205**	196
Tax Effect	**(62)**	(59)
General reserve for credit losses[1]	**143**	137

[1] The General reserve for credit losses is equivalent to the net collective provisions for regulatory purposes after tax.

7.0 Provisioning
continued

7.9 Movement in Provisions

The table below shows the movement of provisions over the 6 months to 30 September 2011.

APS 330 Table 4(h)

	$m
Total Provisions as at 31 March 2011	**656**
Collective Provisions	
Balance at start of the period	217
Provided for during the period	59
Written back during the period	(51)
Adjustments for foreign exchange fluctuations	1
Total Collective Provisions	**226**
Specific Provisions	
Balance at start of the period	439
Charge to income statement	40
Assets written off, previously provided for	(41)
Recovery of loans, previously provided for	(9)
Adjustments for foreign exchange rate fluctuations	19
Total Specific Provisions	**448**
Total Provisions as at 30 September 2011	**674**

7.10 Historical Losses

The table below relates only to Macquarie's portfolios measured under the IRB approach. Regulatory EL is calculated in accordance with APRA ADI Prudential Standard APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk (APS 113). This disclosure excludes the impact of equities, securitisation and assets measured under the standardised approach.

This table compares actual losses (adjusted for recoveries) for the 6 month periods to 30 September 2011 and 31 March 2011, to average regulatory expected loss for those respective periods.

APS 330 Table 6(f)

	For the 6 month period to 30 September 2011			Average to 30 September 2011
Portfolio Type	**Write-offs $m**	**Charges to Specific Provisions $m**	**Actual Loss[1] $m**	**Regulatory Expected Loss $m**
Corporate	**-**	**14**	**14**	**597**
Sovereign	**-**	**-**	**-**	**2**
Bank	**-**	**8**	**8**	**11**
Residential Mortgage	**-**	**4**	**4**	**43**
Other Retail	**12**	**(2)**	**10**	**25**
Total	**12**	**24**	**36**	**678**

[1] Actual loss relates to charges for specific provisions and write-off for portfolios measured under the IRB approach (reported in Section 7.6), adjusted for recoveries ($10 million) and excluding charges against securitisation exposures ($5 million).

	For the 6 month period to 31 March 2011			Average to 31 March 2011
Portfolio Type	Write-offs $m	Charges to Specific Provisions $m	Actual Loss[1] $m	Regulatory Expected Loss $m
Corporate	16	49	65	644
Sovereign	-	-	-	2
Bank	-	17	17	6
Residential Mortgage	-	2	2	43
Other Retail	(4)	6	2	19
Total	12	74	86	714

[1] Actual loss relates to charges for specific provisions and write-off for portfolios measured under the IRB approach (reported in Section 7.6), adjusted for recoveries ($54 million) and excluding charges against securitisation exposures ($17 million).

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 ADI 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 at a gross level before taking any collateral into consideration. 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 through the capital allocation process as collateral will 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 used as a major 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 agreements where the Credit Support Annex can contain provisions whereby margining thresholds will vary in relation to the credit ratings of the respective parties. These thresholds are incorporated into one of 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. All properties taken as security must be independently valued. Standard instructions exist for the valuation of residential property but specific instructions are given formally and in writing for the valuation of commercial, industrial, retail and all construction and development.

In all cases, valuations whose execution date is greater than 90 days old at the time the property transaction 'settles' on the balance sheet, are not acceptable.

Prior to acceptance of any valuation it 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. 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

Wrong way risk occurs when exposure to the client is adversely correlated with the credit quality of that client. This could arise through transactions where lending to a company or principal was collateralised by its own or related party shares. Macquarie actively considers these matters when approval is given and LGD estimates would be modified to reflect the increased risks associated with this. General wrong way risk can occur when a macroeconomic event affects both the creditworthiness of the counterparty as well as the value of their derivatives position. Once again, the credit assessment process looks to identify these correlations and the LGD values will be adjusted to reflect this relationship. These types of collateral are specifically ineligible under APS 112.

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 deducted from the gross credit exposure and this net balance used as the basis of 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 II portfolio (Corporate, Sovereign and Bank) under the FIRB and Standardised approach and the amount of risk exposure which is mitigated by APRA defined eligible collateral, guarantees or credit derivatives.

APS 330 Table 7(b) & (c)

	30 September 2011			
Measurement Approach	**Total Gross Credit Exposure $m**	**Eligible Financial Collateral $m**	**Other Eligible Collateral $m**	**Exposures Covered by Guarantees $m**
IRB				
Corporate	**29,021**	**272**	**321**	**66**
Sovereign	**6,036**	**-**	**-**	**2,249**
Bank	**18,187**	**789**	**-**	**198**
Total IRB	**53,244**	**1,061**	**321**	**2,513**
Standardised				
Corporate	**5,312**	**731**	**1,025**	**-**
Total Standardised	**5,312**	**731**	**1,025**	**-**

	31 March 2011			
Measurement Approach	Total Gross Credit Exposure $m	Eligible Financial Collateral $m	Other Eligible Collateral $m	Exposures Covered by Guarantees $m
IRB				
Corporate	31,938	467	282	94
Sovereign	6,252	-	-	2,852
Bank	13,164	317	-	174
Total IRB	51,354	784	282	3,120
Standardised				
Corporate	4,180	61	949	-
Total Standardised	4,180	61	949	-

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 a large number of Macquarie originated and third party securitisations;
- Swap Counterparty to a large number of 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 a warehouse SPV that issues and holds Residential Mortgage Backed Securities (RMBS) eligible for repurchase with the RBA.

9.1.1 Securitisation Risk Management

RMG is responsible for overseeing the management of the risk arising from these securitisation activities. RMG approves all securitisation transactions and exposures arising from securitisation activity. RMG Prudential, Capital & Markets (PCM) reviews transactions 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. Macquarie's primary risk mitigant is the limit framework and approval process governing exposures to securitisations.

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

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

- the Ratings Based approach;
- the Inferred Ratings Based approach; and
- the approach for eligible facilities under APS 120 Attachment D paragraph 37.

If the exposure is not covered by one of the above approaches it is a deduction from capital, although in all cases the capital charge is capped at the on-balance sheet equivalent.

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.

9.1.2 Accounting for Securitisation

Securitisation transactions undertaken by Macquarie are accounted for in accordance with Australian Accounting Standards (AAS). 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 AAS to determine whether these SPVs should be considered part of the consolidated accounting group.

In Macquarie's case, it has been determined that under accounting rules, 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. However in most cases, these SPVs are deconsolidated for APRA reporting purposes.

Securitised assets consolidated by Macquarie are held on the balance sheet at amortised cost. Macquarie accounts for securitisation transactions at fair value, which means that no gain or loss is booked on the sale of the mortgage assets to the SPVs.

9.2 Securitisation activity

9.2.1 Originating ADI Securitisation Exposures

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

APS 330 Table 9(d)

	30 September 2011		
Underlying asset	**ADI originated assets[1] $m**	**Facilities provided[2] $m**	**Other $m**
Residential Mortgage	**11,008**	**36**	**-**
Credit cards and other personal loans	**129**	**-**	**-**
Auto and equipment finance	**4,392**	**-**	**-**
Total	**15,529**	**36**	**-**

1 Included in the above are assets of $9,137 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be included in the Banking Regulatory Group.

2 Included in the above are $11million of facilities provided to securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be included in the Banking Regulatory Group.

	31 March 2011		
Underlying asset	ADI originated assets[1] $m	Facilities provided[2] $m	Other $m
Residential Mortgage	11,683	30	-
Credit cards and other personal loans	138	-	-
Auto and equipment finance	3,553	-	-
Total	15,374	30	-

1 Included in the above are assets of $6,425 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be included in the Banking Regulatory Group.

2 Included in the above are $8 million of facilities provided to securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be included in the Banking Regulatory Group.

9.0 Securitisation
continued

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 9(e)

	30 September 2011 Total outstanding exposures securitised			
Underlying Asset	**Total outstanding exposure[1] $m**	**Impaired[2] $m**	**Past due[3] $m**	**ADI recognised loss from exposures securitised $m**
Residential Mortgage	**11,008**	**37**	**200**	**-**
Credit cards and other personal loans	**129**	**-**	**-**	**-**
Auto and equipment finance	**4,392**	**7**	**7**	**-**
Total	**15,529**	**44**	**207**	**-**

1 Included in the above are assets of $9,137 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.
2 Included in the above are impaired facilities of $14 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.
3 Included in the above are past due facilities of $60 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.

	31 March 2011 Total outstanding exposures securitised			
Underlying Asset	Total outstanding exposure[1] $m	Impaired[2] $m	Past due[3] $m	ADI recognised loss from exposures securitised $m
Residential Mortgage	11,683	23	162	-
Credit cards and other personal loans	138	-	-	-
Auto and equipment finance	3,553	8	10	-
Total	15,374	31	172	-

1 Included in the above are assets of $6,425 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.
2 Included in the above are impaired facilities of $14 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.
3 Included in the above are past due facilities of $43 million in securitisation entities which Macquarie has made an APS 120 Attachment B paragraph 23 election to be include in the Banking Regulatory Group.

9.2.3 Securitisation activity

Over the 6 months to 30 September 2011 and 6 months to 31 March 2011, 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 9(j)

	6 months to 30 September 2011		
	Book Value of loans sold or originated into securitisations		
Underlying Asset	**ADI originated $m**	**Third party originated $m**	**Recognised gain or loss on sale $m**
Residential Mortgage	**1,660**	**-**	**-**
Credit cards and other personal loans	**-**	**-**	**-**
Auto and equipment finance	**633**	**-**	**-**
Total	**2,293**	**-**	**-**

	6 months to 31 March 2011		
	Book Value of loans sold or originated into securitisations		
Underlying Asset	ADI originated $m	Third party originated $m	Recognised gain or loss on sale $m
Residential Mortgage	36	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	1,879	-	-
Total	1,915	-	-

Securitisation Type	**6 months to 30 September 2011 New Facilities Provided $m**	6 months to 31 March 2011 New Facilities Provided $m
Liquidity facilities	**29**	328
Funding facilities	**-**	-
Underwriting facilities	**-**	-
Lending facilities	**-**	-
Credit enhancements	**-**	-
Derivative transactions[1]	**667**	1,292
Total	**696**	1,620

[1] The above exposures have been calculated using the face value or notional amount (derivatives) at the time of the transaction.

9.0 Securitisation
continued

9.3 Exposures arising from Securitisation Activity

9.3.1 Exposure by Type of Asset

As described in section 9.1, Macquarie also provides various facilities to external securitisation participants and holds other securitisation assets. The table below shows the nature of securitisation exposures as at 30 September 2011 and 31 March 2011.

APS 330 Table 9(f)

Securitisation Exposure Type	**30 September 2011 $m**	31 March 2011 $m
Liquidity facilities	**-**	-
Funding facilities	**332**	296
Underwriting facilities	**-**	-
Lending facilities	**-**	-
Credit enhancements	**-**	1
Derivative transactions	**528**	485
Holdings of securities	**6,009**	5,568
Total	**6,869**	6,350

9.3.2 Exposure by Risk Weight

This table sets out the aggregate amount of securitisation gross credit exposures and after risk weighting, the RWA by Risk Weight banding.

APS 330 Table 9(g)

	30 September 2011		31 March 2011	
Risk Weight Banding	**Gross Credit Exposure $m**	**Risk Weighted Assets $m**	Gross Credit Exposure $m	Risk Weighted Assets $m
≤ 25%	**6,176**	**874**	5,405	782
>25 ≤ 35%	**43**	**15**	102	36
>35 ≤ 50%	**15**	**7**	15	8
>50 ≤ 75%	**47**	**35**	224	118
>75 ≤ 100%	**5**	**5**	8	8
>100 ≤ 650%	**63**	**292**	42	165
1250% (Deduction)	**520**	**-**	554	-
Total	**6,869**	**1,228**	6,350	1,117

9.3.3 Deductions from Capital

The table below highlights securitisation exposures that have been deducted from capital, split by underlying asset class.

APS 330 Table 9(g)

	30 September 2011			
	Deductions relating to ADI originated assets securitised		**Deductions relating to other securitisation exposures**	
Securitisation exposures deducted from capital	**Residential Mortgage $m**	**Auto and equipment finance $m**	**Other $m**	**Total $m**
Deductions from Tier 1 capital	**2**	**-**	**258**	**260**
Deductions from Tier 2 capital	**2**	**-**	**258**	**260**
Total	**4**	**-**	**516**	**520**

	31 March 2011			
	Deductions relating to ADI originated assets securitised		Deductions relating to other securitisation exposures	
Securitisation exposures deducted from capital	Residential Mortgage $m	Auto and equipment finance $m	Other $m	Total $m
Deductions from Tier 1 capital	2	33	242	277
Deductions from Tier 2 capital	2	33	242	277
Total	4	66	484	554

10.0 Market Risk

10.1 Market Risk

Market risk is the exposure to adverse changes in the value of Macquarie's trading portfolios as a result of 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: changes in spot and forward exchange rates and the volatility of exchange rates;
- interest rates and debt securities: changes in the level, shape and volatility of yield curves, the basis between different interest rate securities and derivatives and credit spreads;
- equities: changes in the price and volatility of individual equities, equity baskets and equity indices, including the risks arising from equity underwriting activity;
- commodities: changes in the price and volatility of precious and base metals, agricultural commodities and energy products; and
- the correlation of market prices and rates within and across markets.

It is recognised that 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.

10.1.1 Traded Market Risk

RMG monitors positions within Macquarie according to a limit structure which sets limits for all exposures in all markets. Limits are for both individual trading desks and divisions as well as in aggregate. Trigger limits for the consolidated entity as a whole ensure that if several trading book limits are being used simultaneously, the aggregate level of risk is in line with the global risk appetite articulated in the economic capital model.

RMG sets three complementary limit structures:

- Contingent Loss Limits: a wide range of price and volatility scenarios, including comprehensive worst case, or stress scenarios. Worst case scenarios include market movements larger than have occurred historically. Multiple scenarios are set for each market to capture the non-linearity and complexity of exposures arising from derivatives. A wide range of assumptions about the correlations between markets is applied;
- Position Limits: volume, maturity and open position limits are set on a large number of market instruments and positions in order to constrain concentration risk and to avoid the accumulation of risky, illiquid positions; and
- 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.

10.1.2 Aggregate Measures of Market Risk

Aggregate market risk is constrained by two risk measures, Value at Risk (VaR) and the Macro-Economic-Linkages (MEL) scenario. 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 utilises the contingent loss approach to capture simultaneous, worst case contingent loss 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 per cent level of confidence. For this reason, stress testing remains the predominant focus of RMG as it is viewed to be the most effective mechanism to reduce Macquarie's exposure to unexpected market events.

10.1.3 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 1400 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 equity specific risk modelling incorporated 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.

10.1.4 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.

10.0 Market Risk
continued

10.2 Market Risk Capital Requirement

The regulatory capital requirement is based upon:

Value at Risk using a 10 day time horizon at a 99% confidence level. In determining the capital charge required for prudential purposes VaR (excluding Equity Specific risk) is scaled at 3:1 and Equity Specific Risk is scaled at 4:1 in accordance with APRA policy.

Regulatory capital for debt security specific risk is calculated using the APRA standardised method (see section 10.2.2).

The sum of the VaR and debt security specific risk amounts are scaled by 12.5 in accordance with APRA policy and added to the banking book interest rate risk to arrive at the regulatory capital requirement.

The market risk RWA as at 30 September 2011 is $3,889 million (31 March 2011: $3,834 million).

There was one hypothetical trading loss that exceeded the 1-day 99% VaR calculated for the six-months ended 30 September 2011. There was also one actual trading loss that exceeded the 1-day 99% VaR during this period.

10.2.1 Value at Risk figures

APS 330 Table 11(d)

	30 September 2011				31 March 2011			
	VaR over the current reporting period				VaR over the previous reporting period			
	Mean value $m	**Max value $m**	**Min value $m**	**VaR $m**	Mean value $m	Max value $m	Min value $m	VaR $m
Commodities	**25**	**33**	**17**	**30**	34	46	24	36
Equities[1]	**16**	**22**	**12**	**16**	21	33	8	10
Foreign Exchange	**13**	**29**	**3**	**13**	8	18	3	14
Interest Rates	**30**	**40**	**24**	**40**	21	34	14	23
Aggregate	**42**	**60**	**25**	**42**	42	61	29	39

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

10.2.2 Debt Security Specific Risk figures

Regulatory capital for Macquarie's debt security specific risk is calculated using the APRA standardised method.

APS 330 Table 10(b)

	30 September 2011 $m	31 March 2011 $m
Debt specific risk	**175**	165

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

10.2.3 Interest Rate Risk in the Banking Book

Macquarie Bank policy is to minimise interest rate risk in the banking book (IRRBB). This policy protects banking book products such as loans and deposits from changes in value caused by interest rate fluctuations. The policy applies to all currencies and yield curves where Macquarie Bank has interest rate exposure.

Interest rate exposures, where possible, are transferred into the trading books of the Fixed Income, Currencies and Commodities Group 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. Fixed-rate mortgage prepayment assumptions are used for each market based on historical observation.

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.

10.0 Market Risk
continued

APS 330 Table 14(b)

Stress testing: interest rate shock applied	**30 September 2011 Change in economic value $m**	31 March 2011 Change in economic value $m
AUD		
200 basis point parallel increase	**(5.8)**	0.3
200 basis point parallel decrease	**5.6**	(0.2)
CAD		
200 basis point parallel increase	**(2.7)**	0.6
200 basis point parallel decrease	**(0.7)**	1.0
EUR		
200 basis point parallel increase	**0.4**	(1.5)
200 basis point parallel decrease	**(0.3)**	1.1
GBP		
200 basis point parallel increase	**1.8**	(1.3)
200 basis point parallel decrease	**(2.1)**	0.6
USD		
200 basis point parallel increase	**4.3**	14.7
200 basis point parallel decrease	**8.4**	(11.4)
IRRBB regulatory capital requirement – AUD	**0.0**	0.0

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

11.0 Equity Risk

Equity risk is the exposure to loss arising from banking book equity-type positions. These exposures include:

- holdings in Macquarie – managed funds;
- principal exposures, including direct investments in entities external to Macquarie and assets held for sale;
- property equity, including property trusts and direct property equity investments; and
- other equity, including lease residuals and investment in resource companies.

Macquarie's equity risk positions are managed within the constraints of the Board imposed Equity Risk Limit (ERL). In setting the limit, the Board gives consideration to the level of earnings, capital and market conditions. The ERL is reviewed semi-annually by RMG and the review results are reported to the Executive Committee and the Board.

Concentrations within the equity portfolio are managed by a number of additional limits approved by the Executive Committee and / or Board. These include limits on:

- property equity investments;
- investments in the resource sector;
- lease residuals (by type of leased asset); and
- acquisition of seed assets.

11.1 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
- investments in subsidiaries and held for sale (HFS) associates held at lower of cost or net realisable value.

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

11.1.1 Investments in Associates

Equity accounting is applied to investments in which Macquarie has significant influence or joint control. 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 Income Statement. 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.

11.1.2 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.

11.1.3 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. Assets classified as HFS investments are carried at the lower of carrying amount and fair value less costs to sell.

11.0 Equity Risk
continued

11.2 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 13(b) and (c)

	30 September 2011		31 March 2011	
Equity investments	**Carrying value[1] $m**	**Fair value[2] $m**	Carrying value[1] $m	Fair value[2] $m
Value of listed (publicly traded) equities	**487**	**525**	614	617
Value of unlisted (privately held) equities	**1,093**	**1,093**	1,071	1,071
Total	**1,580**	**1,618**	1,685	1,688

[1] Net of any impairment charges recognised

[2] Fair value is:

– listed market value for all listed equity investments;
– for all available for sale equity investments, the carrying value after impairment charge is equal to fair value; and
– carrying value (after any impairment charges) for all unlisted equity investments.

11.3 Capital requirements arising from equity risks

The RWA equivalent of the equity exposures are stated below.

APS 330 Table 13(f)

RWA requirements	**30 September 2011 $m**	31 March 2011 $m
Equity investments subject to a 300% risk weight	**631**	624
Equity investments subject to a 400% risk weight	**1,542**	1,288
Total RWA requirement for equity exposures	**2,173**	1,912

Equity investments are subject to the above risk weighting to the extent of an APRA imposed limit. The limit is:

– 0.15% of Macquarie's Tier 1 total capital base before deductions for an individual investment; and
– 5% of Macquarie's Tier 1 total capital base before deductions for aggregate equity investments.
– Equity investments above these limits are taken as capital deductions. As at 30 September 2011 and 31 March 2011, equity investment related deductions are included in the following line items in section 3.1 of this report:
  - Non-subsidiary entities exceeding prescribed limits (50%); and
  - 50/50 deductions from Tier 2 capital.

11.4 Gains and losses on equity investments

APS 330 Table 13(d) and (e)

Gains / (losses) on equity investments	30 September 2011 $m	31 March 2011 $m
Cumulative realised gains / (losses) in 6 months to the period end[1]	**67**	127
Total unrealised gains / (losses)[2]	**115**	221
Total unrealised gains / (losses) included in Tier 1 / Tier 2 Capital[2]	**63**	99

[1] Gains/(losses) 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.

12.0 Operational Risk

Operational risk is an inherent part of Macquarie's business. Operational risk is the risk of loss from inadequate or failed internal processes, people, systems or from external events. This includes the failure or inadequate management of other risk types.

12.1 Macquarie's Operational Risk Capital Framework

Operational Risk Objectives

Macquarie has developed an Operational Risk Management Framework designed to identify, assess and manage operational risks. The framework is also designed to identify and monitor risks and controls, report and escalate information.

Operational Risk Management Process

Macquarie Operational Risk Management Framework includes regular self-assessments, the recording and analysis of internal incidents, the use of indicators and a robust change management process to ensure risks associated with new activities or products are identified, addressed and managed prior to implementation.

Consistent with Macquarie's philosophy of 'Freedom within Boundaries', the Operational Risk Management Framework includes a number of Macquarie wide policies which require a consistent approach and minimum standards on specific operational risk matters. External operational risk events are also monitored in order to learn lessons from other organisations.

Structure and Organisation of the Operational Risk Function

The majority of Macquarie's operational risk staff reside at the business level. These Business Operational Risk Managers (BORMs) are responsible for embedding the management of operational risk within their business and report directly to the relevant business head and also 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 an appropriate framework exists to identify, assess and manage operational risk and that dedicated skilled resources are available to support it. It is also responsible for Macquarie's operational risk capital measurement methodology. In general, Macquarie's operational risk profile increases as a result of greater innovation and is offset by constant gradual adaptation and development of the control environment to new risks. Macquarie's risk profile can also change as a result of external changes such as new legislation or market conditions.

RMG regularly provides reports on the operational risk profile and the effectiveness of the framework to senior management, the BAC and the BRC. The BRC is responsible for establishing an appropriate operational risk management framework and for reviewing Macquarie's operational risk profile and the BAC is responsible for assessing the effectiveness of the group's internal controls.

12.2 Operational Risk Capital Calculation

Macquarie received APRA approval for use of the AMA for assessing operational risk capital in December 2007. Macquarie's operational risk capital is calculated using a scenario based approach together with statistical modelling of potential losses. Operational risk scenarios identify key risks that, while low in probability, may result in high impact losses. In identifying and quantifying such events, consideration is given to individual statistical distributions 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 businesses. Scenarios are updated when business or market factors indicate, at a minimum annually.

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 confidence level. Monte Carlo techniques are used to aggregate individual scenario distributions to determine a group-wide operational risk loss distribution.

Over time operational risk capital changes to reflect:

- New business activity, businesses growth and significant change in activity which may require new or revised loss scenarios and / or a revised loss probability;
- As business changes stabilise and the control environment continues to mature, the probability of loss decreases, reducing the capital requirement; and
- Changes in the external environment such as new regulations or movements in the economic cycle can also influence scenario estimates.

Macquarie allocates capital to individual businesses through quarterly scorecards. This enables each business to understand their operational risk profile and the impact changes in their businesses make to that profile. The capital allocation effectively rewards positive risk behaviour and penalises increased risk. The scorecards measure changes in a number of key factors covering the size and complexity of the business, risk and control assessments, incident and exception management and governance.

The quarterly change in the sum of divisional capital is also used as an estimate to update the bank level capital requirement between assessments.

Mitigation of Operational Risk

Insurance is not currently used in Macquarie's AMA model for the purpose of operational risk capital reduction.

Operational Risk - RWA

The operational risk RWA as at 30 September 2011 is $6,467 million (31 March 2011: $7,037 million).

Disclaimer

General areas of disclaimer:

- The information has been prepared purely for the purpose of explaining the basis on which Macquarie has prepared and disclosed certain capital requirements and information about the management of risks relating to those requirements and for no other purpose. It therefore does not constitute any form of financial statement on the Business nor does it constitute any form of contemporary or forward looking record or opinion of any of the Businesses.
- 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;
  - The different waivers applied for and allowed by regulators; and
  - 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.

Appendices

Appendix 1 List of APRA Quantitative Tables

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n/a – Not applicable as the Macquarie table would contain only nil values.

Appendix 2 List of entities deconsolidated from the Level 1 and Level 2 regulatory groups for APRA reporting purposes

#	Legal Entity	#	Legal Entity
1	Almond Holdco Pty Limited	44	Delaware Management Business Trust
2	ARES Capital Management International Pty Limited	45	Delaware Management Company
3	ARES Capital Management International Trust	46	Delaware Management Company, Inc.
4	ARES Capital Management Pty Limited	47	Delaware Management Holdings, Inc.
5	ARES Capital Management Trust	48	Delaware Management Trust Company
6	ARES International Research Pty Ltd	49	Delaware Service Company, Inc.
7	ARES Research Pty Ltd	50	Delaware Structured Assets Parnters, Inc.
8	Avenal Power Center, LLC	51	Disciplined International Growth Fund
9	BE Geothermal GmbH	52	DMH Corp.
10	Belike Nominees Pty. Limited	53	Elements Trust
11	Bernried Erdwärme Kraftwerk GmbH	54	Elise Nominees Pty Limited
12	Bond Street Custodians Limited	55	Energy Assets Limited
13	Brook Asset Management Limited	56	Energy Assets (Meters) Limited
14	Brook Asset Management Pty Limited	57	Focus Global Growth Fund
15	Capital Meters Limited	58	Four Corners Capital Management, LLC
16	CMC Industries Inc.	59	Garrison Energy Center LLC
17	CMC Railroad III-A, Inc.	60	Generator Bonds Limited
18	CMC Railroad III-B, Inc.	61	Generator Investments Australia Limited
19	CMC Railroad III-C, Inc.	62	Goldman Sachs Commodity Alpha Beta Portfolio class C
20	CMC Railroad III-D, Inc.	63	Harris Dairies Limited
21	CMC Railroad III, Inc.	64	Innovest Kapitalanlage AG
22	CMC Railroad Inc.	65	Keba Energy LLC
23	Coin Software Pty Limited	66	Lawson Grains Limited
24	Corona Energy Limited	67	LG Biomass Missouri LLC
25	Corona Energy Retail 1 Limited	68	Macquarie-Globalis BRIC Advantage Fund (Unhedged)
26	Corona Energy Retail 2 Limited	69	Macquarie Agricultural Funds Management Ltd
27	Corona Energy Retail 3 Limited	70	Macquarie Agricultural Services Pty Limited
28	Corona Energy Retail 4 Limited	71	Macquarie Allegiance Capital, LLC
29	Corona Gas Management Limited	72	Macquarie Alternative Assets Management Limited
30	Cruzeiro do Sul Graos Ltda (f/k/a Lawson Graos Limitada)	73	Macquarie Asia New Stars Fund
31	Delaware Alternative Strategies	74	Macquarie Asia Pacific Private Equity Offshore Fund, L.P.
32	Delaware Asset Advisers	75	Macquarie Asian Leaders Segregated Portfolio
33	Delaware Capital Management	76	Macquarie Asset Management Inc.
34	Delaware Capital Management Advisers, Inc.	77	Macquarie Australia Securities Limited
35	Delaware Distributors, Inc.	78	Macquarie Australian Pure Indexed Equities Fund
36	Delaware Distributors, L.P.	79	Macquarie Bank Superannuation Pty Ltd
37	Delaware Diversified Floating Rate Fund	80	Macquarie Barnett LLC
38	Delaware Foundation Equity Fund	81	Macquarie Beteiligungsverwaltungs GmbH
39	Delaware General Management, Inc.	82	Macquarie Capital investment management LLC
40	Delaware Global Opportunities Partners, Inc.	83	Macquarie Capital investment management (Australia) Limited
41	Delaware Investment Advisers	84	Macquarie Capital Products (NZ) Limited
42	Delaware Investments U.S., Inc.	85	Macquarie Commodities Fund Limited
43	Delaware Lincoln Cash Management	86	Macquarie Consultoria Agricola E Representacoes Ltda.

#	Legal Entity	#	Legal Entity
87	Macquarie Corona Energy Holdings Limited	126	Macquarie Pastoral Services Ltd
88	Macquarie Crop Partners Feeder, L.P.	127	Macquarie Precision Marketing Pty Ltd
89	Macquarie Crop Partners GP, LLC	128	Macquarie Prism Pty Limited
90	Macquarie Crop Partners, L.P.	129	Macquarie Private Capital Management Limited
91	Macquarie Energy Assets Holdings Limited	130	Macquarie Private Markets Fund GP S.à r.l
92	Macquarie Enhanced Global Bond Fund	131	Macquarie Private Portfolio Management Limited
93	Macquarie Enhanced Properties Securities Fund	132	Macquarie Samchully Asset Management Company Limited
94	Macquarie Equipment Leasing Fund Two, LLC	133	Macquarie Securities Management Pty Limited
95	Macquarie Farm Assets and Resources Management Limited	134	Macquarie Servicos Agricolas Limitada
96	Macquarie Financial Products Management Limited	135	Macquarie Structured and Specialist Investments Holdings Pty Limited
97	Macquarie Fortress Investments Limited	136	Macquarie Treuvermoegen GmbH
98	Macquarie Fund Solutions	137	Macquarie True Index Australian Equities Fund
99	Macquarie Funds Management Hong Kong Limited	138	Macquarie True Index Australian Share Fund
100	Macquarie Funds Management SPC	139	Macquarie True Index Cash Fund
101	Macquarie Funds Management (USA) Inc.	140	Macquarie True Index Fixed Interest
102	Macquarie Generation Management II, Inc.	141	Macquarie True Index Global Bond Fund
103	Macquarie Generation Management I, Inc.	142	Macquarie True Index Global Infrastructure Securities Fund
104	Macquarie Global Infrastructure Trust	143	Macquarie True Index International Equities Fund
105	Macquarie Global Multi Events Segregated Portfolio	144	Macquarie True Index Listed Property
106	Macquarie Global Property Funds Pty Limited	145	Macquarie True Index Plus Australian Equity
107	Macquarie Global Resources Master Hedge Fund LP	146	Melro Holdco Pty Limited
108	Macquarie Global Resources Offshore Hedge Fund Limited	147	MMUSA Warehouse No. 1 LLC
109	Macquarie Global Sovereign Bond Fund	148	MQ Absolute Return Strategies - Asia
110	Macquarie HiTIP Management I, Inc.	149	MQ Absolute Return Strategies - Asia LLC
111	Macquarie Income Investments Limited	150	MQ Capital Pty Limited
112	Macquarie Index Linked Property Securities Fund	151	MQ Portfolio Management Limited
113	Macquarie Investment Management Ltd	152	MQ Specialist Investment Management Limited
114	Macquarie Investment Management S.à r.l.	153	Olicc Technologies Pty Ltd
115	Macquarie Investment Management (NZ) Limited	154	Omni Leisure Operations Pty Limited
116	Macquarie Investment Services Limited	155	Outplan Pty Limited
117	Macquarie Life Limited	156	Parents at Work Investment Unit Trust
118	Macquarie Management GmbH	157	Parents at Work Operative Unit Trust
119	Macquarie Master Geared Growth Fund	158	Parents@Work Freehold Unit Trust
120	Macquarie Master Small Companies Fund	159	Parents@Work Pty Limited
121	Macquarie Media Fund Management Pty Limited	160	Pareto Global Risk Adjusted Alpha Trust
122	Macquarie NM Management II, Inc.	161	Pelican Warehouse Trust No.1
123	Macquarie NM Management I, Inc	162	Peregrine Seller Trust
124	Macquarie Oil Services Canada Ltd	163	Peregrine Series Trust 2009-1
125	Macquarie PA TAP Management I, Inc.	164	Polar Finance Limited

Appendix 2 List of entities deconsolidated from the Level 1 and Level 2 regulatory groups for APRA reporting purposes continued

#	Legal Entity	#	Legal Entity
165	PT Macquarie Commodities Indonesia	192	PUMA Masterfund S-9
166	PT MPM Indonesia	193	PUMA Masterfund S3
167	Pulse 24 Limited	194	PUMA Sub Fund CP4
168	PUMA Global Trust No. 4	195	PUMA Sub Fund CRS
169	PUMA Global Trust No. S1	196	PUMA Sub Fund GSF
170	PUMA Global Trust NO.5	197	PUMA Sub Fund Span
171	PUMA Masterfund E-3	198	PUMA Subfund B-1
172	PUMA Masterfund P-10	199	PUMA Subfund Commbank
173	PUMA Masterfund P-11	200	Relational Technology Services, Inc.
174	PUMA Masterfund P-6	201	Retirement Financial Services, Inc.
175	PUMA Masterfund P-7	202	Rismark International Funds Management Ltd
176	PUMA Masterfund P-8	203	Rismark International Funds Management Trust
177	PUMA Masterfund P-9	204	SMART ANZ Warehouse Trust
178	PUMA Masterfund S-2	205	Smart J Warehouse Trust
179	PUMA Masterfund H-1	206	Smart Rbs Warehouse Trust
180	PUMA Masterfund P-13	207	SMART Series 2007-3E Trust
181	PUMA Masterfund P-14	208	SMART Series 2008-1E Trust
182	PUMA Masterfund P-15	209	Smart Series 2008-2 Trust
183	PUMA Masterfund P-16	210	Smart Series 2008-3 Trust
184	PUMA Masterfund P-17	211	SMART Series 2009-1 Trust
185	PUMA Masterfund P-18	212	Smart Series 2010-1Us Trust
186	PUMA Masterfund P12	213	Smart Series 2010-2 Trust
187	PUMA Masterfund S-10	214	Smart Series 2011-1Us Trust
188	PUMA Masterfund S-5	215	Smart Series 2011-2Us Trust
189	PUMA Masterfund S-6	216	Texas Rail Terminal LLC
190	PUMA Masterfund S-7	217	Value Loan Mortgage LLC
191	PUMA Masterfund S-8		

Appendix 3 Glossary of terms

ADI	Authorised Deposit-taking Institution.
AMA	Advanced Measurement Approach for determining operational risk.
APRA	Australian Prudential Regulation Authority.
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 income statement and its share of post-acquisition movements in reserves is recognised within equity.
AVS assets	Available-for-sale assets 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 cost 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 sold or impaired, the cumulative unrealised gain or loss will be recognised in the income statement.
BAC	Board Audit Committee.
Contingent liabilities	Defined in AASB 137 *Provisions, Contingent Liabilities and Contingent Assets* as a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity; or a present obligation that arises from past events but is not recognised because it is not probable to occur or the amount cannot be reliably measured.
CCE	Current Credit Exposure. The sum of the positive mark-to-market value (or replacement cost) of market-related contracts entered into by the ADI.
CEA	Credit Equivalent Amount. The on-balance sheet equivalent value of an off balance sheet transaction.
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.
EAD	Exposure at Default – the gross exposure under a facility (the amount that is legally owed to the ADI) upon default of an obligor.
ECAI	External Credit Assessment Institution.
ECAM	Economic Capital Adequacy Model.
EL	Expected Loss, which is a function of 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.
FICO	Fair Isaac Corporation.
FIRB	Foundation Internal Ratings Based Approach whereby PD and Maturity are internally estimated by the ADI and LGD is set by APRA.
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.
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.
Level 2 MBL Regulatory Group	MBL, its parent Macquarie B.H. Pty Ltd and MBL's subsidiaries but excluding deconsolidated entities for APRA reporting purposes.

Appendix 3 Glossary of terms continued

Level 3 Regulatory Group	MGL and its subsidiaries.
LGD	Loss given default is defined as the economic loss which arises upon default of the obligor.
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.
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.
MBI	Macquarie Bank International Limited.
MBL	Macquarie Bank Limited.
MGL	Macquarie Group Limited.
PCE	Potential Credit Exposure. 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.
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.
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 statements and may be included in Tier 2 Capital.
Tier 1 Capital	A capital measure defined by APRA, comprising the highest quality components of capital that fully satisfy all the following essential characteristics: - provide a permanent and unrestricted commitment of funds, - are freely available to absorb losses, - do not impose any unavoidable servicing charge against earnings; and - rank behind the claims of depositors and other creditors in the event of winding up.
Tier 1 Capital Deductions	An amount deducted in determining Tier 1 Capital, as defined in Prudential Standard APS 111 Capital Adequacy: Measurement of Capital. Tier 1 deductions are divided into deductions from Tier 1 capital only (paragraph 44) and other 50/50 deductions from Tier 1 capital (paragraph 46).
Tier 1 Capital Ratio	Tier 1 Capital 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. Tier 2 deductions are divided into deductions from Tier 2 capital only (paragraph 45) and other 50/50 deductions from Tier 2 capital (paragraph 46).
Total Capital	Tier 1 Capital plus Tier 2 Capital less Total Capital Deductions.
Total Capital Ratio	Total Capital expressed as a percentage of RWA.

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