

2012

BASEL II PILLAR 3 DISCLOSURE



YEAR ENDED 30 SEPTEMBER 2012

APS 330: CAPITAL ADEQUACY &
RISK MANAGEMENT IN ANZ

Important Notice

This document has been prepared by Australia and New Zealand Banking Group Limited (ANZ) to meet its disclosure obligations under the Australian Prudential Regulation Authority (APRA) ADI Prudential Standard (APS) 330 Capital Adequacy: Public Disclosure of Prudential Information.

This disclosure was prepared as at 30 September 2012. ANZ has a continuous disclosure policy, under which ANZ will immediately notify the market of any material price sensitive information concerning the Group, in accordance with legislative and regulatory disclosure requirements.

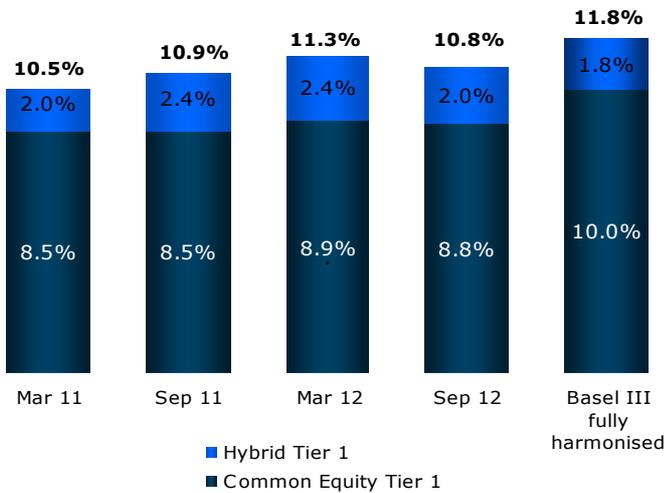
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¹ Each Table reference adopted in this document aligns to those required by APS 330 to be disclosed at year end.

Chapter 1 – Highlights

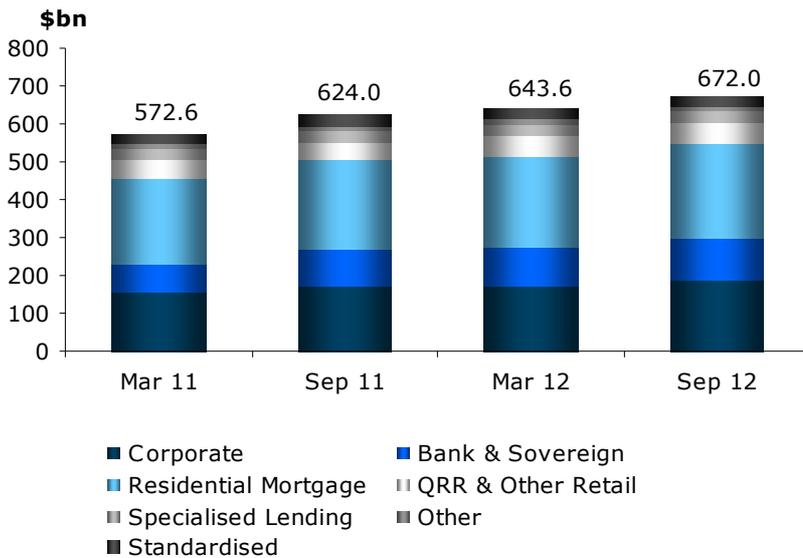
Capital ratios



Strengthening capital position through organic capital generation

- Solid organic capital generation underpins strong CET1 position on a YoY basis.
- ANZ well capitalised and positioned to manage transition to Basel III.
- Decline in Hybrid Tier 1 position HoH was driven by buy back and cancellation of UK stapled securities.
- Decline in Common Equity Tier 1 position HoH was driven by increased Operational Risk RWA following implementation of Operational Risk model change.

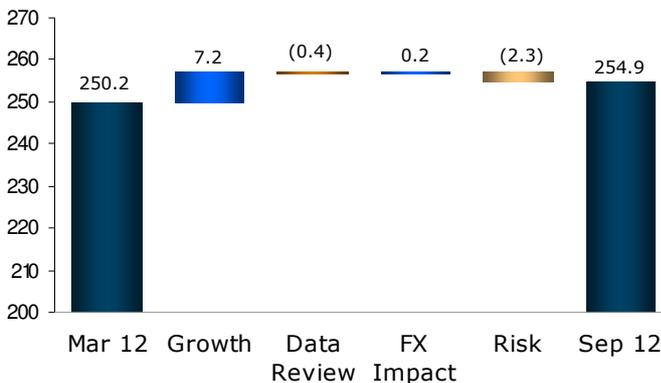
Exposure at Default (\$bn)



Growth in EAD of 4.4% HoH to \$672bn as at 30 September 2012

- Growth was driven by increases in Corporate (IIB in Manufacturing and Wholesale Trade industry), Residential Mortgage (across Australia and New Zealand) and Bank & Sovereign asset classes

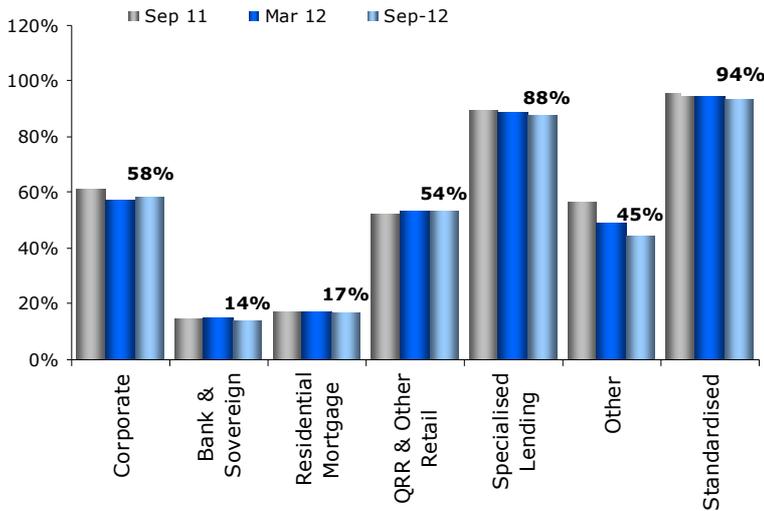
Movement in Credit Risk Weighted Assets (\$bn)



Credit Risk Weighted Assets (CRWA) up by \$4.7bn HoH

- Growth in CRWA has been driven by increases in Corporate (portfolio growth in IIB and Australia segment), Standardised and Bank (growth in Asia) asset classes, partially offset by Risk improvement (primarily by reduction in the tenor).

Average Risk Weights (CRWA/EAD)



Portfolio average risk weight decreased by 90bps HoH to 38% as at 30 September 2012

- Driven by growth in lower risk weighted asset classes of Bank & Sovereign and Residential Mortgages during this half. Reduction in tenor in Corporate asset class also contributed to the improved risk weight.

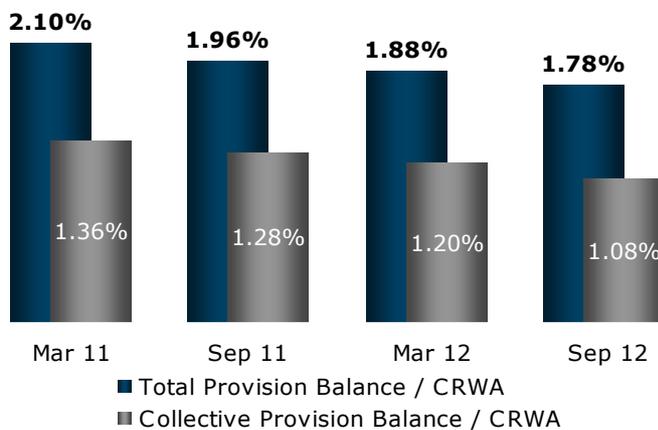
Impaired Assets (\$m)



Impaired Assets have declined 7% across the financial year.

- Gross impaired assets decreased by 2.8% HoH, driven by the reduction in impaired loans in New Zealand, partially offset by an increase in restructured items associated with a few customers in IIB division.

Provision ratios (Provisions/CRWA)



Provision coverage ratios decreased

- ANZ remains appropriately provided with the total provision coverage ratio at 1.78% and the collective provision ratio at 1.08%.

Chapter 2 – Introduction

Purpose of this document

This document has been prepared in accordance with the Australian Prudential Regulation Authority (APRA) ADI Prudential Standard (APS) 330 Capital Adequacy: Public Disclosure of Prudential Information (APS 330).

APS 330 mandates the release to the investment community and general public of information relating to capital adequacy and risk management practices. APS 330 has been established to implement Pillar 3 of the Basel Committee on Banking Supervision's framework for bank capital adequacy, known as 'Basel II'². In simple terms, Basel II consists of three mutually reinforcing 'Pillars':

Pillar 1	Pillar 2	Pillar 3
Minimum capital requirement	Supervisory review process	Market discipline
Minimum capital requirements for Credit Risk, Operational Risk, Market Risk and Interest Rate Risk in the Banking Book	Firm-wide risk oversight, Internal Capital Adequacy Assessment Process (ICAAP), consideration of additional risks, capital buffers and targets and risk concentrations, etc	Regular disclosure to the market of qualitative and quantitative aspects of risk management, capital adequacy and underlying risk metrics

APS 330 requires the publication of various levels of information on a quarterly, semi-annual and annual basis. This document is the annual disclosure, which has the most comprehensive requirements.

Basel II in ANZ

In December 2007, ANZ received accreditation for the most advanced approaches permitted under Basel II for credit risk and operational risk, complementing its existing accreditation for market risk.

Verification of disclosures

These Pillar 3 disclosures have been verified in accordance with Board approved policy, including ensuring consistency with information contained in ANZ's Annual Report and in Pillar 1 returns provided to APRA. This Pillar 3 disclosure is not audited by ANZ's external auditor.

Comparison to ANZ's Annual Report

These disclosures have been produced in accordance with regulatory capital adequacy concepts and rules, rather than in accordance with accounting policies adopted in ANZ's Annual Report. As such, there are differences in some common areas of disclosures. These differences are most pronounced in the credit risk disclosures, for instance:

- The principal method for measuring the amount at risk is Exposure at Default (EAD), which is the estimated amount of exposure likely to be owed on a credit obligation at the time of default. Under the Advanced Internal Ratings Based (AIRB) approach in APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk, banks are accredited to provide their own estimates of EAD for all exposures (drawn, commitments or contingents) reflecting the current balance as well as the likelihood of additional drawings prior to default.
- Loss Given Default (LGD) is an estimate of the amount of losses expected in the event of default. LGD is essentially calculated as the amount at risk (EAD) less expected net recoveries from realisation of collateral as well as any post default repayments of principal and interest.
- Most credit risk disclosures split ANZ's portfolio into regulatory asset classes, which span areas of ANZ's internal divisional and business unit organisational structure.

Unless otherwise stated, all amounts are rounded to AUD millions.

² Basel Committee on Banking Supervision, International Convergence of Capital Measurement and Capital Standards: A Revised Framework, 2004.

Chapter 3 – Risk appetite and governance

Risk types

ANZ is exposed to a broad range of interrelated business risks. The main risks that directly impact determination of regulatory capital are as follows:

- Credit risk - the risk of financial loss resulting from the failure of ANZ's customers and counterparties to honour or perform fully the terms of a loan or contract.
- Market risk - the risk to ANZ's earnings arising from changes in interest rates, currency exchange rates and credit spreads, or from fluctuations in bond, commodity or equity prices. ANZ has grouped market risk into two broad categories to facilitate the measurement, reporting and control of market risk:
 - Traded market risk - the risk of loss from changes in the value of financial instruments due to movements in price factors for physical and derivative trading positions. Trading positions arise from transactions where ANZ acts as principal with clients or with the market.
 - Non-traded market risk (or balance sheet risk) - comprises Interest Rate Risk in the Banking Book and the risk to the AUD denominated value of ANZ's capital and earnings due to foreign exchange rate movements.
- Operational risk - the risk of loss resulting from inadequate or failed internal controls or from external events, including legal risk but excluding reputation risk³.
- Equity risk - is the potential loss that may be incurred on equity investments in the banking book.
- Securitisation risk - the risk of credit related losses greater than expected due to a securitisation failing to operate as anticipated, or of the values and risks accepted or transferred, not emerging as expected.

Other key risks faced by ANZ, but which do not directly impact determination of regulatory capital, include:

- Strategic risk - is defined to be the potential for loss arising from a failure in ANZ's strategies. These include strategies designed to address or anticipate changes in the competitive, client, political or regulatory environments.
- Business risk - the risk of financial loss due to unexpected movements in volume, profit margin, and operating expenses (excluding risks elsewhere defined) arising from unexpected changes in the business environment, customer preferences and/or competitor actions.
- Liquidity risk - the risk that ANZ has insufficient capacity to fund increases in assets, or is unable to meet its payment obligations as they fall due, including repaying depositors or maturing wholesale debt.
- Compliance risk - is defined as the probability and impact of an event that results in a failure to act in accordance with laws or codes of conduct applicable to ANZ's businesses.
- Reputation risk - is defined as the risk of loss caused by adverse perceptions of ANZ held by the public, shareholders, investors, regulators, or rating agencies that directly or indirectly impact earnings, capital adequacy or value.

Risk Appetite Framework

ANZ's risk appetite is set by the Board and integrated within ANZ's strategic objectives. The risk appetite framework underpins fundamental principles of strong capitalisation, robust balance sheet and sound earnings, which protects ANZ's franchise and supports the development of an enterprise-wide risk culture.

³ Regulatory Capital is calculated in accordance with the definition of Operational Risk outlined in APS 115 Capital Adequacy: Advanced Measurement Approaches to Operational Risk, and therefore excludes reputation risk considerations.

The framework provides an enforceable risk statement, on the amount of risk ANZ is willing to accept. It supports strategic and core business activities and customer relationships ensuring that:

- Only permitted activities are engaged in.
- The scale of permitted activities, and subsequent risk profile, does not lead to potential losses or earnings volatility that exceeds ANZ’s approved risk appetite.
- Risk is expressed quantitatively via limits and tolerances.
- Management focus is brought to bear on key and emerging risk issues and mitigating actions.
- Risk is linked to the business by informing, guiding and empowering the business in executing strategy.

Risk management governance

ANZ’s Board has ultimate responsibility for risk management, and has three key committees focused on risks that impact regulatory capital.

Risk Committee	Assists the Board in the effective discharge of the Board’s responsibilities for business, market, credit, equity and other investment, financial, operational, liquidity, compliance and reputation risk management.
Audit Committee	In addition to its role reviewing financial reporting principles and policies, controls and procedures, the Audit Committee also reviews prudential supervision procedures required by regulatory bodies to the extent relating to financial reporting and oversees the work of Global Internal Audit.
Governance Committee	Ensures an appropriate Board and Committee structure is in place. Reviews the development of and approves corporate governance policies and principles applicable to ANZ.

The Chair and members of these committees are non - executive directors, and are appointed by the Board. Global Internal Audit provides independent and objective assurance around ANZ’s risk management and control effectiveness, and its primary reporting line is to the Audit Committee.

ANZ’s Chief Executive Officer (CEO) creates and delegates powers to various executive management committees, several of which perform functions that support the Risk Committee. The executive committees most relevant to the risks described above and overall capital management at ANZ are as follows:

<p>Group Asset and Liability Committee (GALCO)</p> <p>GALCO is responsible for the oversight and strategic management of ANZ’s balance sheet, liquidity and funding positions and capital management activities. This ensures they are aligned to adding shareholder value by managing and positioning the balance sheet consistent with ANZ’s appetite for risk, maintaining ANZ’s preferred AA rating category, and striving for best-practice corporate governance. Specifically, GALCO co-ordinates, approves and, where necessary, directs:</p> <ul style="list-style-type: none"> • Liquidity and funding activities, to ensure that these are managed in a way consistent with ANZ’s strategy and within ANZ’s appetite for liquidity risk. • The management of ANZ’s capital management framework to ensure that ANZ is adequately capitalised to cover its material risks and exposures in an efficient and effective manner. • Balance sheet management activities including management of non-traded related risks and exposures. <p>In all cases this is in accordance with ANZ’s risk appetite and limits defined by the Board, regulatory requirements, and international best practice.</p> <p>GALCO is chaired by ANZ’s Chief Financial Officer (CFO) and meets at least six times per year. GALCO is supported by specialist committees that cover capital management and non-traded market risk, as well as regional asset and liability management committees.</p>
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<p>Capital Management Policy Committee (CMPC)</p> <p>CMPC is a sub-committee of GALCO, with responsibility for the oversight and control of ANZ's capital and portfolio measurement framework, addressing economic and regulatory capital requirements. CMPC is also responsible for making capital management and portfolio measurement related recommendations to the Risk Committee and ANZ Board.</p> <p>The Committee's main objective is to ensure ANZ's regulatory and economic capital management activities are aligned with ANZ and GALCO's objectives, with focus on:</p> <ul style="list-style-type: none"> • Internal Capital Adequacy Assessment Process (ICAAP), aligning capital levels and targets to risk appetite and policies and processes by which ANZ identifies, measures, monitors and manages risks. • Analysing economic capital in context of changes in material risks, emerging risks and/or methodology changes. • Stress testing reviews and updates. <p>CMPC is chaired by ANZ's CFO (or in absence, ANZ's Chief Risk Officer (CRO)) and shall normally meet six times a year.</p>
<p>Credit and Market Risk Committee (CMRC)</p> <p>CMRC is the senior executive management forum responsible for the oversight and control of credit and market risk. Its responsibilities and duties include:</p> <ul style="list-style-type: none"> • Approve Level 2 credit and market risk management policy, propose Level 1 policy changes to the Risk Committee. • Approve take up of equity interest within its discretion. • Ensure comprehensive credit and market risk control. • Oversee credit portfolio composition including large exposures, risk grade migration, risk concentrations and changes to delinquency patterns. • Set Value at Risk, Earnings at Risk and other limits within discretions. • Oversee market risk limits. • Assess reputation, tax, environmental and social risks. <p>CMRC is chaired by ANZ's CRO and meets as required, and is supported by a specialist committee that covers credit ratings systems.</p>
<p>Credit Ratings System Oversight Committee (CRSOC)</p> <p>CRSOC is the senior executive management forum responsible for the oversight and control of the Internal Ratings System for credit risk across ANZ including credit model approvals and performance monitoring. This delegation is intended to encompass all aspects of model governance including:</p> <ul style="list-style-type: none"> • Approving the content and design of the rating system, including models and methodology for Probability of Default (PD), LGD and EAD. • Prioritising, monitoring and approval of model changes, enhancements and re-builds. • Performance monitoring of internal rating system models. • Monitor annual independent validation of use and performance of all models. <p>CRSOC is chaired by the CRO Australia and shall normally meet six times a year. It supports CMPC and CMRC, and in turn is supported by working groups.</p>
<p>Operational Risk Executive Committee (OREC)</p> <p>OREC is the primary senior executive management forum responsible for oversight of operational risk and compliance risk expected and unexpected risk profile and the related Control Environment. Its main responsibilities and duties include:</p> <ul style="list-style-type: none"> • Endorse ANZ's Operational Risk Measurement and Management Framework (ORMMF) for approval by the Board Risk Committee. • Approve ANZ's Group Compliance Framework. • Approve Operational Risk policies and Compliance policies. • Approve extreme operational risks treatment plans. <p>OREC is chaired by ANZ's CRO and will meet a minimum of four times per year.</p>
<p>Reputation Risk Committee (RRC)</p> <p>The purpose of the RRC is to assist ANZ businesses, Risk and Compliance, and Legal in partnership to effectively manage reputation risk in relation to environmental, social, business and regulatory issues across ANZ.</p> <p>RRC is chaired by ANZ's CRO and will meet a minimum five times a year.</p>

Chapter 4 – Group structure and capital adequacy

Table 1 Scope of application

Top corporate entity

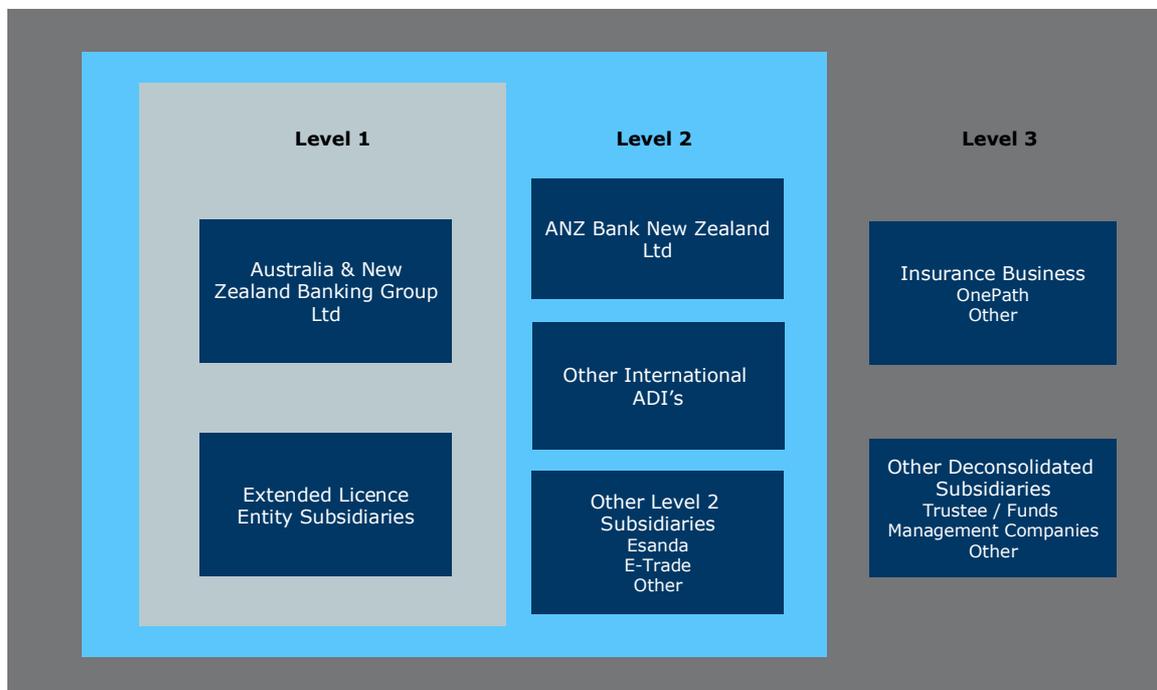
The top corporate entity in the reporting group is Australia and New Zealand Banking Group Limited.

Capital reporting and measurement

To ensure that an Authorised Deposit-taking Institution (ADI) is adequately capitalised on both a stand alone and group basis, APRA adopts a tiered approach to the measurement of an ADI’s capital adequacy by assessing the ADI’s financial strength at three levels:

- Level 1 - being the ADI i.e. Australia and New Zealand Banking Group Limited, consolidated with APRA approved subsidiaries, to form the ADI’s Extended Licensed Entity (ELE).
- Level 2 - being the consolidated group for financial reporting purposes adjusted to exclude associates activities and certain subsidiaries excluded under APS 110 Capital Adequacy that undertake the following business activities:
 - Insurance businesses (including friendly societies and health funds).
 - Acting as manager, responsible entity, approved trustee, trustee or similar role in relation to funds management.
 - Non-financial (commercial) operations.
 - Securitisation special purpose vehicles to which assets have been transferred in accordance with APRA’s requirements as set out in APS 120: Securitisation.
- Level 3 - the consolidated group for financial reporting purposes.

ANZ measures capital adequacy monthly and reports for prudential purposes on a Level 1 and Level 2 basis, however is not required to report on a Level 3 basis. This Pillar 3 report is based on the Level 2 prudential structure.



Refer to Note 38 of ANZ’s 2012 Annual Report for a list of all material subsidiaries and a brief description of their key activities.

Accounting consolidation

The financial statements consolidate the financial statements of the company and all its subsidiaries where it is determined that there is a capacity to control. Where subsidiaries have been sold or acquired during the year, their operating results have been included to the date of disposal or from the date of acquisition. Control means the power to govern, directly or indirectly, the financial and operating policies of an entity so as to obtain benefits from its activities. All the facts of a particular situation are considered when determining whether control exists. Control is usually present when an entity has:

- Power over more than one-half of the voting rights of the other entity; or
- Power to govern the financial and operating policies of the other entity; or
- Power to appoint or remove the majority of the members of the board of directors or equivalent governing body; or
- Power to cast the majority of votes at meetings of the board of directors or equivalent governing body of the entity.

In addition, potential voting rights that are presently exercisable or convertible are taken into account in determining whether control exists.

In relation to special purpose entities, control is deemed to exist where in substance:

- The majority of the residual risks and rewards from their activities accrue to the Group; or
- The Group control decision making powers so as to obtain the majority of the risks and rewards from their activities.

Refer to Note 1 of ANZ's 2012 Annual Report for a description of the principal accounting policies adopted in the preparation of ANZ's financial report.

Entities excluded from Level 2

Investments in entities deconsolidated from the Level 3 group to determine Level 2 for prudential purposes are deducted from regulatory capital and the assets of those entities are excluded from aggregate Risk Weighted Assets (RWA).

The material entities excluded from Level 3 to determine Level 2 are:

- **Insurance entities**
OnePath (AU) Life Limited and OnePath (AU) General Insurance Limited
OnePath (NZ) Insurance Holdings Limited and One Path (NZ) Life Limited
ANZcover Insurance Pty Limited
ANZ Lenders Mortgage Insurance Pty Limited
- **Trustee/Fund Manager**
OnePath Funds Management Limited and OnePath Custodians Limited
ANZ Trustees Limited

Restrictions on Transfers of Capital within ANZ

ANZ operates branches and locally incorporated subsidiaries in many countries. These operations are capitalised at an appropriate level to cover the risks in the business and to meet local prudential requirements. This level of capitalisation may be enhanced to meet local taxation and operational requirements. Any repatriation of capital from subsidiaries or branches is subject to meeting the requirements of the local prudential regulator and/or the local central bank.

Apart from ANZ's operations in New Zealand, local country capital requirements do not impose any material call on ANZ's capital base. ANZ undertakes banking activities in New Zealand principally through its wholly owned subsidiary, ANZ Bank New Zealand Limited, which is subject to minimum capital requirements as set by the Reserve Bank of New Zealand (RBNZ). The RBNZ has adopted the Basel II framework, effective from 1 January 2008, and ANZ Bank New Zealand Limited has been accredited to use the advanced approach for the calculation of credit risk and operational risk. ANZ Bank New Zealand Limited maintains a buffer above the minimum capital base required by the RBNZ. This capital buffer has been calculated via the ICAAP undertaken for ANZ Bank New Zealand Limited, to ensure ANZ Bank New Zealand Limited is appropriately capitalised under stressed economic scenarios.

Capital deficiencies in non-consolidated subsidiaries

The aggregate amount of any under-capitalisation of any non-consolidated subsidiary (or subsidiaries) that is required to be deducted from capital is nil (March 2012 and September 2011: nil).

Table 2 Capital structure

ANZ's regulatory capital calculation is governed by APRA's prudential standards which adopt a risk-based capital assessment framework, based on the Basel II capital measurement standards. This risk based approach requires eligible capital to be divided by total RWA, with the resultant ratio being used as a measure of an ADI's capital adequacy. APRA determines Prudential Capital Ratios (PCRs) for Tier 1 and Total Capital, with capital as the numerator and RWAs as the denominator.

APRA determines PCRs for Tier 1 and Total Capital at both Level 1 and Level 2 under its prudential standards APS 110. Eligible capital is defined by APS 111 – Capital Adequacy: Measurement of Capital, and the RWA calculations are predominantly contained in APS 113 – Capital Adequacy: Internal Ratings-based Approach to Credit Risk, APS 115 – Capital Adequacy: Advanced Measurement Approach to Operational Risk, APS 116 Capital Adequacy: Market Risk and APS 117 – Capital Adequacy: Interest Rate Risk in the Banking Book.

Regulatory capital is divided into Tier 1, carrying the highest capital elements, and Tier 2, which has lower capital elements, but still adds to the overall strength of the ADI.

Tier 1 capital is comprised of 'Fundamental' capital, 'Residual' capital, and 'Tier 1 deductions'. Fundamental capital comprises shareholders' equity adjusted for items which APRA does not allow as regulatory capital or classifies as lower forms of regulatory capital.

Fundamental capital includes the following significant adjustments:

- Residual Tier 1 capital instruments included within shareholders' equity are excluded.
- Reserves exclude the Hedging reserve and Available-for-Sale revaluation reserve, and reserves of insurance, funds management and securitisation subsidiaries and associates excluded for Level 2 purposes.
- Retained earnings excludes retained earnings of insurance, funds management and securitisation subsidiaries and associates excluded for Level 2 purposes, but includes capitalised deferred fees forming part of loan yields that meet the criteria set out in the prudential standard.
- Current year (net of tax) earnings is net of any interim and special dividends paid during the current year and the expected dividend payments (net of the expected dividend reinvestment under the Dividend Reinvestment Plan and Bonus Option Plan) for ordinary shares and Residual capital instruments, and excludes profits of insurance, funds management and securitisation subsidiaries and associates excluded for Level 2 purposes.

Residual capital covers 'Non-innovative' and 'Innovative' hybrid Tier 1 instruments with limits restricting the volume that can be counted as Tier 1 capital.

ANZ has on issue three outstanding Non-innovative hybrid Tier 1 capital instruments:

- **ANZ Convertible Preference Shares.** On 30 September 2008 ANZ issued \$1,081 million of convertible preference shares (CPS1), on 17 December 2009 ANZ issued \$1,969 million of convertible preference shares (CPS2) and on 28 September 2011 ANZ issued \$1,340 million of convertible preference shares (CPS3) that mandatorily convert into ordinary shares on 16 June 2014, 15 December 2016 and 1 September 2019 respectively, subject to certain conditions being satisfied. They may also convert earlier under certain circumstances and ANZ, subject to APRA's approval, has a right to convert CPS3 in its discretion on each semi-annual dividend payment date from 1 September 2017. In particular, CPS3 will mandatorily convert into ordinary shares if ANZ's Common Equity Capital Ratio⁴ is equal to or less than 5.125% (or APRA determines that to be the case). The number of shares issued to a CPS3 holder on conversion following a breach of that ratio is limited to the Maximum Conversion Number of 10.2407 ordinary shares per CPS3 (although the CPS3 terms in respect of the Maximum Conversion Number may be amended once APRA's Basel III regulations are finalised). CPS3 may also be redeemed for cash on each semi-annual dividend payment date from 1 September 2017, subject to APRA's approval. The distributions are preferred, non-cumulative, payable quarterly (in respect of CPS1 and CPS2) and semi-annually (in respect of CPS3) and based on the 90 day (in respect of CPS1 and CPS2) and 180 day (in respect of CPS3) Australian Bank Bill Rate plus a margin of 250 basis points (in respect of CPS1) and 310 basis points (in respect of CPS2 and CPS3) and are subject to ANZ's Directors resolving to pay in their absolute discretion and other payment tests being satisfied. In a winding-up of ANZ, the convertible preference shares will rank equal with other preference shares, but behind all depositors and creditors and ahead of ordinary shareholders.

⁴ Common Equity Tier 1 is Tier 1 less Residual Tier 1 Capital.

ANZ has on issue two Innovative hybrid Tier 1 capital instruments:

- **US Trust Securities.** On 27 November 2003, ANZ issued USD750 million of non-cumulative trust securities with an initial call date of 15 December 2013 and a coupon rate of 5.36%. On 15 December 2013, ANZ has the right to redeem the US Trust Securities for cash, subject to APRA approval. If ANZ does not exercise this right, holders are entitled to require ANZ to exchange the US Trust Securities into ordinary shares. The distributions are non-cumulative payable semi-annually. In a winding-up of ANZ, the ANZ preference shares forming part of the US Trust Securities will rank equal with other preference shares, but behind all depositors and creditors and ahead of ordinary shareholders.
- **Euro Trust Securities.** On 13 December 2004, ANZ issued EUR500 million of non - cumulative trust securities raising \$871 million, at the spot rate on the date of issue. Distributions are non-cumulative payable quarterly based upon the three month EURIBOR rate plus a margin of 66 basis points up until 15 December 2014, at which date ANZ has the right to redeem the Euro Trust Securities for cash (subject to APRA approval). After this date, the distribution rate is a rate based on the three month EURIBOR rate plus a margin of 166 basis points. In a winding-up of ANZ, the ANZ preference shares forming part of the Euro Trust securities will rank equal with other preference shares, but behind all depositors and creditors and ahead of ordinary shareholders.

For more information on these instruments, refer to the Loan Capital and Share Capital notes (Notes 28 and 29 respectively) in ANZ's 2012 Annual Report.

Tier 1 deductions include amounts deducted solely from Tier 1, mainly intangible assets i.e. goodwill, value in force as to insurance/investment business portfolios; capitalised software, capitalised brokerage and borrowing expenses, net deferred tax assets and deductions taken 50% from Tier 1 and 50% from Tier 2, which mainly include the tangible component of investment in other subsidiaries and investments in associates regulated by APRA, or their overseas equivalent, and the amount of Expected Losses (EL) in excess of Eligible Provisions for Loan Losses (net of tax).

Tier 2 capital is comprised of Upper and Lower Tier 2 capital, less capital deductions taken 50% from Tier 2 capital. Upper Tier 2 capital mainly comprises perpetual subordinated debt instruments, whilst Lower Tier 2 comprises dated subordinated debt instruments which have a minimum term of 5 years at issue date.

ANZ has two instruments that qualify as Upper Tier 2 capital:

- USD300 million note issued by ANZ on 30 October 1986 which pays a rate of 6 month LIBOR plus 15 basis points.
- NZD835 million note issued by ANZ Bank New Zealand Limited on 17 April 2008 which pays a fixed rate of 9.66% (incorporating a margin of 200 basis points) for five years payable semi-annually. At the first call date of 18 April 2013, if not called, the interest rate resets to a fixed rate at the five year swap rate plus 200 basis points. At the second call date of 18 April 2018, if not called, the interest rate resets to a floating rate at the 3 month Forward Rate Agreement rate plus 300 basis points. The Notes are callable on any interest payment date thereafter.

To qualify as Lower Tier 2 capital, the instrument must have a minimum original term of five years and the amount eligible for inclusion in capital is amortised on a straight line basis at a rate of 20% per annum over the last four years to maturity. For more details on these Lower Tier 2 capital instruments, refer to the Subordinated Notes section of the Loan Capital note (Note 28) in ANZ's 2012 Annual Report.

Total Capital is the sum of Tier 1 capital and Tier 2 capital.

Table 2 Capital structure

	Sep 12	Mar 12	Sep 11
	\$M	\$M	\$M
Tier 1 capital			
Paid-up ordinary share capital	23,203	22,396	21,577
Reserves	(2,653)	(2,673)	(2,266)
Retained earnings	16,771	16,507	15,123
Non-controlling interest	42	43	41
Fundamental Tier 1 capital	37,363	36,273	34,475
Innovative Tier 1 capital	1,587	1,592	1,641
Non-innovative Tier 1 capital	4,390	5,081	5,111
Gross Tier 1 capital	43,340	42,946	41,227
Goodwill	(3,008)	(2,966)	(2,968)
Other deductions from Tier 1 capital only	(5,017)	(4,675)	(4,572)
50/50 deductions from Tier 1 capital	(2,814)	(3,217)	(3,071)
Deductions from Tier 1 capital	(10,839)	(10,858)	(10,611)
Net Tier 1 capital	32,501	32,088	30,616
Tier 2 capital			
Upper Tier 2 capital			
Perpetual subordinated notes	953	946	965
General reserve for impairment of financial assets net of attributable deferred tax asset ⁵	234	230	266
Lower Tier 2 capital	5,728	5,782	5,042
Gross Tier 2 capital	6,915	6,958	6,273
Upper and lower Tier 2 capital deductions	(28)	(28)	(28)
50/50 deductions from Tier 2 capital	(2,814)	(3,217)	(3,071)
Deductions from Tier 2 capital	(2,842)	(3,245)	(3,099)
Net Tier 2 capital	4,073	3,713	3,174
Total capital base	36,574	35,801	33,790

Further information on Capital Structure can be found in Appendix 1.

⁵ Under Basel II, "General reserve for impairment of financial assets net of attributable deferred tax asset" consists of the surplus of the general reserve for impairment of financial assets net of tax and/or the provisions attributable to the standardised portfolio.

Table 3 Capital adequacy

Capital management approach

ANZ pursues an active approach to capital management, which is designed to protect the interests of depositors, creditors and shareholders. This involves the ongoing review and Board approval of the level and composition of ANZ's capital base, assessed against the following key policy objectives:

- Regulatory compliance⁶ such that capital levels exceed APRA's PCRs both at Level 1 and Level 2 for Tier 1 and Total Capital, and the US Federal Reserve's minimum Tier 1 and Total Capital adequacy requirements at Level 2 via ANZ's Foreign Holding Company licence in the United States of America.
- Capital levels are aligned with the risks in the business and to meet strategic and business development plans through ensuring that available capital exceeds the level of Economic Capital required to support the Ratings Agency 'default frequency' confidence level for a "AA" credit rating category bank. Economic Capital is an internal estimate of capital levels required to support risk and unexpected losses above a desired target solvency level.
- Capital levels are commensurate with ANZ maintaining its preferred "AA" credit rating category for senior long-term unsecured debt given its risk appetite outlined in its strategic plan.
- An appropriate balance between maximising shareholder returns and prudent capital management principles.

ANZ achieves these objectives through the ICAAP whereby ANZ conducts detailed strategic and capital planning over a medium term time horizon.

Annually, ANZ conducts a detailed strategic planning process over a three-year time horizon. This process involves forecasting key economic variables which Divisions use to determine key financial data for their existing business. New strategic initiatives to be undertaken over the planning period and their financial impact are then determined. These processes are used for the following:

- A review of capital ratios, targets, and levels of different classes of capital against ANZ's risk profile and risk appetite outlined in the Strategic Plan. ANZ's capital targets reflect the key policy objectives above, and the desire to ensure that under specific stressed economic scenarios, capital levels are sufficient to remain above both Economic Capital and PCR requirements.
- Stress tests are performed under different economic conditions to ensure a comprehensive review of ANZ's capital position both before and after mitigating actions. The stress tests determine the level of additional capital (i.e. the 'capital buffer' above Pillar 1 minimum capital) needed to absorb losses that may be experienced during an economic downturn.
- Stress testing is integral to strengthening the predictive approach to risk management and is a key component in managing risks and business writing strategies. It creates greater understanding of the impacts on financial performance through modelling relationships and sensitivities between geographic, industry and business unit exposures under a range of macro economic scenarios. ANZ has a dedicated stress testing team within Risk Management that models and reports to management and the Board Risk Committee on a range of scenarios and stress tests.
- Results are subsequently used to:
 - Recalibrate ANZ's management targets for minimum and operating ranges for its respective classes of capital such that ANZ will remain compliant with APRA's PCRs and the US Federal Reserve's minimum Tier 1 and Total Capital requirements.
 - Identify the level of organic capital generation and hence determine current and future capital requirements for the Company (Level 1) and the Group (Level 2).

From these processes, a capital plan is developed and approved by the Board which identifies the capital issuance requirements, capital securities maturity profile and options around capital products, timing and markets to execute the Capital Plan under differing market and economic conditions.

The Capital Plan is maintained and updated through a monthly review of forecast financial performance, economic conditions and development of business initiatives and strategies. The Board and senior management are provided with monthly updates of ANZ's capital position. Any actions required to ensure ongoing prudent capital management are submitted to the Board for approval.

⁶ In addition to the prudential capital oversight by APRA, ANZ's branch operations and major banking subsidiary operations are overseen by local regulators such as the Reserve Bank of New Zealand, the US Federal Reserve, the UK Financial Services Authority, the Monetary Authority of Singapore, the Hong Kong Monetary Authority and the China Banking Regulatory Commission who may impose minimum capitalisation rates on those operations.

Capital targets

Target ratios are set to be consistent with ANZ's risk appetite and Economic Capital methodology, plus an allowance for the impact of relevant stress testing on the capital position. The approach ensures capital requirements are manageable and consistent with long term credit ratings and minimum prudential capital requirements, even during periods of stress.

Throughout the financial year, ANZ maintained compliance with the minimum Tier 1 and Total Capital ratios at Level 1 and Level 2 set by APRA, and the US Federal Reserve for Level 2, as well as applicable capitalisation rates set by local regulators in countries where ANZ operates branches and subsidiaries.

ANZ has adopted the Common Equity Tier 1 and Tier 1 capital ratios as its principal capital management targets at Level 2. Given recent difficult economic and financial market conditions, ANZ has maintained both ratios well above its minimum target.

Regulatory change

APRA released prudential capital standards in September and November 2012 detailing the implementation of the majority of Basel III capital reforms in Australia. APRA is adopting the Basel III reforms with increased capital deductions from Common Equity Tier 1 (CET1) capital; an increase in capitalisation rates, including prescribed minimum capital buffers, tighter requirements around additional Tier 1 and Tier 2 securities; and transitional arrangements for existing Tier 1 and Tier 2 securities that do not conform to the new regulations.

In addition, APRA is proposing an accelerated implementation timetable for the Basel III capital reforms around minimum capital ratios and deductions effective 1 January 2013. Introduction of all the prescribed minimum capital buffers will be fully effective 1 January 2016 and the Leverage Ratio from 1 January 2015.

APRA is still to finalise capital standards on the Basel III reforms dealing with the improvements in capital disclosures; leverage ratio; contingent capital and measures to address systematic and inter-connected risks.

Capital Reconciliation

	Common Equity Tier 1 Capital	Tier 1 Capital	Total Capital
APRA September 2012 Basel II	8.8%	10.8%	12.2%
Plus: Dividend not provided for (net of DRP)	0.5%	0.5%	0.5%
Less: Tier 2 capital deductions moved to Common Equity Tier 1			
Investment in banking associates	(0.4%)	(0.4%)	-
Investment in ANZ insurance entities including OnePath	(0.3%)	(0.3%)	-
Expected losses in excess of eligible provisions ⁷	(0.2%)	(0.2%)	-
Other	-	(0.1%)	(0.1%)
Less: 10% reduction of existing hybrid Tier 1 and Tier 2 securities ⁸	-	(0.2%)	(0.4%)
Less: Estimated increase in RWA ⁹	(0.4%)	(0.4%)	(0.5%)
APRA September 2012 Basel III	8.0%	9.7%	11.7%
Plus: Adjustments to fully align to Basel III			
10% allowance for investments in insurance entities and banking associates	0.7%	0.7%	0.7%
Up to 5% allowance for deferred tax asset	0.2%	0.2%	0.2%
Other capital items	0.2%	0.2%	0.2%
Plus: additional APRA Basel 2 conservative RWA methodologies			
Mortgage 20% LGD floor and others	0.5%	0.6%	0.6%
IRRBB RWA (APRA Pillar 1 approach)	0.4%	0.4%	0.5%
International fully harmonised September 2012 Basel III	10.0%	11.8%	13.9%

⁷ APRA alignment to Basel treatment of Expected Losses in excess of Eligible Provisions, gross of associated deferred tax asset.

⁸ From 1 January 2013 transitional treatment for existing securities on issue will apply. The maximum that can be included in the respective capital base is 90% of the volume of eligible transitional Tier 1 and Tier 2 securities on issue at 1 January 2013. The cap will reduce by 10 percentage points each year until 1 January 2022.

⁹ Excludes potential impacts arising from APRA's yet to be released Basel III liquidity reforms.

International capital ratio comparisons

One of the main purposes of the Pillar 3 disclosures is to facilitate comparisons of banks, both within and across jurisdictions.

International investors should be aware that there are a number of features of APRA's implementation of Basel II that have the effect of making key capital adequacy ratios appear lower than would be the case if they were calculated under the rules in other jurisdictions. The following table shows ANZ's estimation of its Common Equity Tier 1, Tier 1 and Total Capital adequacy ratios under UK rules (set by the FSA).

	As At			
	Sep 12 FSA	Sep 12	Mar 12	Sep 11
Common Equity Tier 1	11.80%	8.80%	8.90%	8.50%
Tier 1	13.90%	10.80%	11.30%	10.90%
Tier 2	1.20%	1.40%	1.30%	1.20%
Total capital	15.10%	12.20%	12.60%	12.10%
Risk weighted assets \$M	275,957	300,119	284,836	279,964

For Tier 1 capital, the major reasons for the differences are that FSA:

- Does not require a deduction for accrued dividends (although APRA does give credit for expected shares to be issued under a dividend reinvestment plan).
- Does not require a Tier 1 deduction for certain capitalised expenses and net deferred tax assets.
- Allows the comparison of EL to Eligible Provisions for Loan Loss to be made on a gross basis and any excess is then tax effected, whereas APRA require EL to be compared to Eligible Provisions for Loan Losses net of tax, and any excess to be taken as 50% Tier 1 deduction and a 50% Tier 2 deduction.
- Has a more favourable treatment for investments in associates and insurance and funds management subsidiaries.

For RWA, the major reasons for the differences are:

- APRA has set a 20% floor on the downturn LGD for mortgages (as compared with the 10% minimum set by the FSA).
- FSA does not require IRRBB to be a Pillar I requirement so it is excluded from prudential capital adequacy ratios.
- Differences in the treatment of specialised property lending, equity and margin lending products.

The Australian Bankers' Association (ABA) has released a detailed fact sheet¹⁰ documenting the differences between the Australian and UK rules and the implications for prudential capital ratios.

Level 3 Conglomerates (Level 3)

APRA has announced that it will proceed with implementing Level 3 Conglomerates Prudential Standards in 2014, with an update to the March 2010 discussion paper expected in early 2013.

The standards will regulate a bancassurance group such as ANZ as a single economic entity with minimum capital requirements and additional reporting on risk exposure levels. Based on APRA's March 2010 Discussion Paper, ANZ is not expecting any material impact on its operations.

¹⁰ bankers.asn.au

Table 3: Capital Ratios and Risk Weighted Assets ^{11 12}

	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Risk weighted assets			
Subject to Advanced Internal Rating Based (IRB) approach			
Corporate	111,796	101,280	106,120
Sovereign	4,088	4,669	4,365
Bank	10,964	10,195	9,456
Residential Mortgage	42,959	42,684	41,041
Qualifying Revolving Retail	7,092	7,610	7,468
Other Retail	21,277	20,087	19,240
Credit risk weighted assets subject to Advanced IRB approach	198,176	186,525	187,690
Credit risk Specialised Lending exposures subject to slotting approach	27,628	27,903	27,757
Subject to Standardised approach			
Corporate	18,281	24,922	22,484
Residential Mortgage	1,812	1,445	845
Qualifying Revolving Retail	2,028	1,933	2,344
Other Retail	1,165	1,124	1,650
Credit risk weighted assets subject to Standardised approach	23,286	29,424	27,323
Credit risk weighted assets relating to securitisation exposures	1,170	1,225	1,136
Credit risk weighted assets relating to equity exposures	1,030	1,235	1,399
Other assets	3,585	3,853	3,523
Total credit risk weighted assets	254,875	250,165	248,828
Market risk weighted assets	4,664	4,201	3,046
Operational risk weighted assets	28,125	20,005	19,651
Interest rate risk in the banking book (IRRBB) risk weighted assets	12,455	10,465	8,439
Total risk weighted assets	300,119	284,836	279,964
Capital ratios (%)			
Level 2 Total capital ratio	12.2%	12.6%	12.1%
Level 2 Tier 1 capital ratio	10.8%	11.3%	10.9%
Level 1: Extended licensed entity Total capital ratio	12.7%	12.9%	12.3%
Level 1: Extended licensed entity Tier 1 capital ratio	11.4%	11.8%	11.5%
Other significant Authorised Deposit-taking Institution (ADI) or overseas bank subsidiary:			
ANZ Bank New Zealand Limited - Total capital ratio	12.5%	13.4%	12.7%
ANZ Bank New Zealand Limited - Tier 1 capital ratio	10.8%	10.9%	10.0%

¹¹ Specialised Lending exposures subject to slotting approach are those where the main servicing and repayment is from the asset being financed, and includes specified commercial property development/investment lending, project finance and object finance.

¹² ANZ Bank New Zealand Limited's capital ratios have been calculated in accordance with Reserve Bank of New Zealand prudential standards.

Credit Risk Weighted Assets (CRWA)

Total CRWA increased by \$6.0 billion (2.4%) from September 2011 to \$254.9 billion. The key impacts on CRWA were increases of \$5.7 billion (5.3%) in IRB Corporate, \$2.0 billion (10.6%) in IRB Other Retail and \$1.9 billion (4.7%) in IRB Residential Mortgage asset classes, partially offset by a decrease of \$4.0 billion in the Standardised asset class. Increases in the IRB Corporate asset class were driven by growth in Institutional assets and the reclassification of certain Institutional customers from Standardised to IRB Corporate after the introduction of improved models and systems. This reclassification was also the main driver for the reduction in the Standardised asset class. The increase in IRB Other Retail and IRB Residential Mortgages was driven by growth in Australia.

Operational Risk and IRRBB Risk Weighted Assets (RWA)

Operational risk RWA has increased by \$8.5 billion (43.1%) to \$28.1 billion since September 2011 and includes operational model risk. IRRBB RWA increased over the year by \$4.0 billion (47.6%) to \$12.5 billion due to greater repricing and yield curve risk.

Types of exposures in each Basel asset class

The following table details the types of exposures in each Basel asset class:

Basel Asset Class	Typical Types of Exposures
Corporate	Individually rated and managed exposures not covered under other categories – mainly lending and off-balance sheet facilities provided to larger companies, partnerships and other bodies
Sovereign	Exposures to sovereigns and central banks. Includes direct exposures e.g. bond holdings and indirect e.g. exposures guaranteed by sovereign Export Credit Agencies (ECAs)
Bank	Exposures to non-Group bank counterparties. Includes bond holdings and deposits with other banks, trade finance exposures and guarantees provided by other banks
Residential Mortgages	Retail exposures secured by residential properties – mainly home loans, investment loans and equity manager facilities
Qualifying Revolving Retail	Retail managed consumer credit card exposures with customer limits less than \$100,000
Other Retail	Retail managed exposures other than mortgage and qualifying revolving – includes personal loans, consumer and small business lending, retail small business lending
Specialised Lending	Exposures where the main servicing and repayment is from the asset being financed. Includes specified commercial property development/investment lending, project finance and object finance
Standardised	Lending exposures where IRB models cannot be applied – mainly local business lending and personal lending in Asia and the Pacific
Securitisation	Exposures to securitisation vehicles – mainly liquidity and funding facilities provided to third party securitisations and securitisation bond exposures
Equity	Holding of third party equities where not consolidated or deducted from capital
Other Assets	Mainly fixed assets and margin lending

Chapter 5 – Credit risk

Table 4 Credit risk – General disclosures

Definition of credit risk

Credit risk is defined as the risk of financial loss resulting from the failure of ANZ's customers and counterparties to honour or perform fully the terms of a loan or contract.

Regulatory approval to use the Advanced Internal Ratings-based approach

ANZ has been given approval by APRA to use the Advanced Internal Ratings-based approach to credit risk, under APS 113. There are however several small portfolios (mainly retail and local corporates in Asia Pacific) where ANZ applies the Standardised approach to credit risk, under APS 112 Capital Adequacy: Standardised Approach to Credit Risk.

Credit risk management framework and policies

ANZ has a comprehensive framework to manage credit risk and support sound growth for appropriate returns. The framework is top down, being defined by credit principles and policies. Credit policies and procedures cover all aspects of the credit life cycle such as transaction structuring, risk grading, initial approval, ongoing management and problem debt management, as well as specialist policy topics. The effectiveness of the credit risk management framework is assessed through various compliance and monitoring processes. These, together with portfolio selection, define and guide the credit process, organisation and staff.

Organisation

As described in Chapter 3, the CMRC is a senior executive level credit risk committee. The CRSOC supports the CMRC, by providing group-wide oversight of ANZ's credit rating system.

The primary responsibility for prudent and profitable management of credit risk assets and customer relationships rests with the business units. An independent credit risk management function is staffed by risk specialists. Independence is achieved by having all credit risk staff ultimately report to the CRO, even where they are embedded in business units. Risk provides independent credit assessment and approval on lending decisions, and also performs key roles in portfolio management such as development and validation of credit risk measurement systems, loan asset quality reporting, and development of credit policies.

The authority to make credit decisions is delegated by the Board to the CEO who in turn delegates authority to the CRO. The CRO in turn delegates some of his credit discretion to individuals as part of a 'cascade' of authority from senior to the most junior credit officers. Within ANZ, credit approval for material judgemental lending is made on a 'dual approval' basis, jointly by the business writer in the business unit and the respective independent credit risk officer. Individuals must be suitably skilled and accredited in order to be granted and retain a credit discretion. Credit discretions are reviewed on an annual basis, and may be varied based on the holder's performance.

Programmed credit assessment typically covers retail and some small business lending, and refers to the automated assessment of credit applications using a combination of scoring (application and behavioural), policy rules and external credit reporting information. Where an application does not meet the automated assessment criteria it will be referred out for manual assessment, with assessors considering the decision tool recommendation.

Portfolio direction and performance

The credit risk management framework contains several important portfolio direction and performance tools which enable Risk to play a fundamental role in monitoring the direction and performance of the portfolio. These include:

- Business writing strategies that are prepared by the businesses and set out appetite, planned portfolio growth, capital usage and risk/return profile, and also identify areas that may require attention to mitigate and improve risk management.
- Regular portfolio reviews.
- Exposure concentration limits, covering single customers, industries and cross border risk, to ensure a diversified portfolio.

ANZ uses portfolio monitoring and analysis tools, technologies and techniques to assist with portfolio risk assessment and management. These assist in:

- Monitoring, analysing and reporting ANZ's credit risk profile and progress in meeting portfolio objectives.
- Calculating and reporting ANZ's collective provision, economic capital, EL, regulatory RWA and regulatory expected loss.
- Assessing impact of emerging issues, and conducting ad hoc investigations and analysis.
- Validating rating/scoring tools and credit estimates.
- Ongoing review and refinement of ANZ's credit risk measurement and policy framework.

Reporting – overview and definitions

Credit risk management information systems, reporting and analysis are managed centrally and at the divisional and business unit level.

Periodic reporting provides confirmation of the effectiveness of processes, highlights emerging issues requiring attention and allows monitoring of portfolio trends by all levels of management and the Board.

Examples of reports include EAD, portfolio mix, risk grade profiles and migrations, RWAs, large exposure reporting, credit watch and control lists, impaired assets and provisions. Within the retail segments, monthly reporting packs are prepared that focus on such aspects as scoring and delinquency/slippage monitoring.

Past due facilities

Facilities where a contractual payment has not been met or the customer is outside of contractual arrangements are deemed past due. Past due facilities include those operating in excess of approved arrangements or where scheduled repayments are outstanding but do not include impaired assets.

Impaired assets

Facilities are classified as impaired when there is doubt as to whether the contractual amounts due, including interest and other payments, will be met in a timely manner. Impaired assets include impaired facilities, and impaired derivatives. Impaired derivatives have a credit valuation adjustment (CVA), which is a market assessment of the credit risk of the relevant counterparties.

Restructured items

Restructured items comprise facilities in which the original contractual terms have been modified for reasons related to the financial difficulties of the customer. Restructuring may consist of reduction of interest, principal or other payments legally due, or an extension in maturity beyond those typically offered to new facilities with similar risk.

Collective provisions

As well as holding individual provisions for credit loss, ANZ also holds a collective provision to cover credit losses which have been incurred but have not yet been specifically identified.

Calculation of the collective provision involves placing exposures in pools of similar assets with similar risk characteristics. The required collective provision is estimated on the basis of historical loss experience for assets with credit risk characteristics similar to those in the collective pool and includes

an allowance for inherent risk associated with the design and use of models. The initial calculation from historical loss experience may be adjusted based on current observable data such as changed economic conditions, and to take account of the impact of inherent risk of large concentrated losses within the portfolio.

The methodology underpinning calculation of collective provision from historical experience is predominantly based around the product of an exposure's PD, LGD and EAD ANZ uses slightly different PD, LGD and EAD factors in the calculation of regulatory capital and regulatory EL, due to the different requirements of APRA and accounting standards. The key differences are:

- ANZ must use more conservative LGD assumptions for regulatory capital purposes, such as the 20% LGD floor for retail mortgages and downturn LGD factors.
- ANZ must use cycle-adjusted PDs for regulatory capital purposes, but uses point-in-time estimates to calculate provisions.

Essentially these differences reflect the effects of the credit cycle on credit losses. Point-in-time refers to losses at any given point in the credit cycle, cycle-adjusted refers to adjusting estimates to reflect a full credit cycle and downturn refers to losses at the worst of the cycle and is the most conservative estimate to use. Regardless of the adjustments, the starting point for all estimates is the output of the rating/scoring models and tools to satisfy the in use test¹³.

Individual provisions

Individual provisions are assessed on a case-by-case basis for all individually managed impaired assets taking into consideration factors such as the realisable value of security (or other credit mitigants), the likely return available upon liquidation or bankruptcy, legal uncertainties, estimated costs involved in recovery, the market price of the exposure in secondary markets and the amount and timing of expected receipts and recoveries.

Write-offs

Facilities are written off against the related provision for impairment when they are assessed as partially or fully uncollectable, and after proceeds from the realisation of any collateral have been received. Where individual provisions recognised in previous periods have subsequently decreased or are no longer required, such impairment losses are reversed in the current period income statement.

Basel II definition of default

ANZ uses the standard APRA definition of default, so that a default is considered to have occurred with regard to a particular obligor when either or both of the two following events have taken place:

- ANZ considers that the obligor is unlikely to pay¹⁴ its credit obligations to ANZ in full, without recourse by ANZ to actions such as realising available security.
- The obligor is at least 90 days past due on a credit obligation to ANZ.

Specific provision and general reserve for credit losses

Due to definitional differences, there is a difference in the split between ANZ's individual provision and collective provision for accounting purposes and the specific provision and general reserve for credit losses (GRCL) for regulatory purposes. This does not impact total provisions, and essentially relates to the classification of collectively assessed provisions on defaulted accounts. The disclosures in this document are based on individual provision and collective provision, for ease of comparison with other published results.

¹³ One of the key criteria for regulatory acceptance of a rating model is that the outputs must be used in a wide range of ongoing management activities, to demonstrate that the model is used in day-to-day management of exposures and not just for regulatory capital calculation.

¹⁴ Elements to be taken as indications of unlikelihood to pay include the factors relating to impairment (irrespective of whether the credit obligations are well secured) or ANZ selling the credit obligation at a material credit-related economic loss.

Table 4(b) part (i): Period end and average Exposure at Default^{15 16}

	Sep 12				
	Risk Weighted Assets \$M	Exposure at Default \$M	Average Exposure at Default for half year \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Advanced IRB approach					
Corporate	111,796	191,628	183,549	416	320
Sovereign	4,088	63,914	60,010	-	-
Bank	10,964	43,451	42,347	-	-
Residential Mortgage	42,959	250,839	247,515	39	42
Qualifying Revolving Retail	7,092	20,912	21,150	133	161
Other Retail	21,277	31,954	31,219	148	178
Total Advanced IRB approach	198,176	602,698	585,790	736	701
Specialised Lending	27,628	31,505	31,440	123	78
Standardised approach					
Corporate	18,281	17,933	21,123	45	20
Residential Mortgage	1,812	3,775	3,457	6	1
Qualifying Revolving Retail	2,028	2,021	1,973	15	30
Other Retail	1,165	1,146	1,125	(38)	11
Total Standardised approach	23,286	24,875	27,678	28	62
Total	249,090	659,078	644,908	887	841

¹⁵ Exposure at Default in Table 4 includes Advanced IRB, Specialised Lending and Standardised exposures, however does not include Securitisation, Equities or Other Assets exposures. Exposure at Default in Table 4 is net of credit risk mitigation such as guarantees, credit derivatives, netting and financial collateral.

¹⁶ Average Exposure at Default for half year is calculated as the simple average of the balances at the start and the end of each six month period.

	Mar 12				
	Risk Weighted Assets \$M	Exposure at Default \$M	Average Exposure at Default for half year \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Advanced IRB approach					
Corporate	101,280	175,471	174,358	236	178
Sovereign	4,669	56,106	54,323	-	-
Bank	10,195	41,243	41,776	-	-
Residential Mortgage	42,684	244,192	239,537	44	46
Qualifying Revolving Retail	7,610	21,387	21,303	121	146
Other Retail	20,087	30,485	30,024	117	148
Total Advanced IRB approach	186,525	568,884	561,321	518	518
Specialised Lending	27,903	31,374	31,147	168	86
Standardised approach					
Corporate	24,922	24,313	23,579	(1)	5
Residential Mortgage	1,445	3,140	2,947	5	1
Qualifying Revolving Retail	1,933	1,924	2,012	25	37
Other Retail	1,124	1,103	999	(25)	15
Total Standardised approach	29,424	30,480	29,537	4	58
Total	243,852	630,738	622,005	690	662

	Sep 11				
	Risk Weighted Assets \$M	Exposure at Default \$M	Average Exposure at Default for half year \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Advanced IRB approach					
Corporate	106,120	173,245	166,079	150	151
Sovereign	4,365	52,540	44,759	-	-
Bank	9,456	42,308	38,641	32	-
Residential Mortgage	41,041	234,882	230,771	41	44
Qualifying Revolving Retail	7,468	21,219	21,120	130	154
Other Retail	19,240	29,563	29,051	150	173
Total Advanced IRB approach	187,690	553,757	530,421	503	522
Specialised Lending	27,757	30,921	30,064	85	114
Standardised approach					
Corporate	22,832	22,844	21,997	6	15
Residential Mortgage	1,457	2,754	2,350	8	8
Qualifying Revolving Retail	2,111	2,101	2,052	26	42
Other Retail	923	895	736	(8)	17
Total Standardised approach	27,323	28,594	27,135	32	82
Total	242,770	613,272	587,620	620	718

Table 4(b) part (ii): Exposure at Default by portfolio type

Portfolio Type	Sep 12	Mar 12	Sep 11	Average for half year Sep12
	\$M	\$M	\$M	\$M
Cash and liquid assets	26,435	24,605	15,945	25,520
Contingents liabilities, commitments, and other off-balance sheet exposures	121,752	120,925	119,456	121,338
Derivatives	27,339	25,230	29,815	26,285
Due from other financial institutions	8,721	9,745	12,053	9,233
Investment securities	18,116	18,584	21,438	18,350
Loans, advances and acceptances	426,803	410,311	389,619	418,557
Other assets	839	1,210	2,015	1,024
Trading securities	29,073	20,128	22,931	24,601
Total exposures	659,078	630,738	613,272	644,908

Table 4(c): Geographic distribution of Exposure at Default

Sep 12				
Portfolio Type	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	Total \$M
Corporate	116,649	36,652	56,260	209,561
Sovereign	17,992	9,373	36,549	63,914
Bank	20,412	2,860	20,179	43,451
Residential Mortgage	203,664	47,178	3,772	254,614
Qualifying Revolving Retail	20,912	-	2,021	22,933
Other Retail	24,469	7,538	1,093	33,100
Specialised Lending	24,394	6,491	620	31,505
Total exposures	428,492	110,092	120,494	659,078

Mar 12				
Portfolio Type	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	Total \$M
Corporate	112,859	36,783	50,142	199,784
Sovereign	11,252	7,336	37,518	56,106
Bank	19,914	3,322	18,007	41,243
Residential Mortgage	199,454	44,743	3,135	247,332
Qualifying Revolving Retail	21,387	-	1,924	23,311
Other Retail	23,259	7,287	1,042	31,588
Specialised Lending	24,675	6,081	618	31,374
Total exposures	412,800	105,552	112,386	630,738

Sep 11				
Portfolio Type	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	Total \$M
Corporate	112,912	36,839	46,338	196,089
Sovereign	15,728	7,732	29,080	52,540
Bank	21,211	4,852	16,245	42,308
Residential Mortgage	190,811	44,071	2,754	237,636
Qualifying Revolving Retail	21,219	-	2,101	23,320
Other Retail	22,175	7,388	895	30,458
Specialised Lending	24,224	5,929	768	30,921
Total exposures	408,280	106,811	98,181	613,272

Table 4(d): Industry distribution of Exposure at Default ^{17 18 19}

Portfolio Type	Sep 12														Total \$M
	Agriculture, Forestry, Fishing & Mining \$M	Business Services \$M	Construction \$M	Electricity, Gas & Water Supply \$M	Entertainment, Leisure & Tourism \$M	Financial, Investment & Insurance \$M	Government and Official Institutions \$M	Manufacturing \$M	Personal \$M	Property Services \$M	Wholesale Trade \$M	Retail Trade \$M	Transport & Storage \$M	Other \$M	
Corporate	34,896	8,511	6,304	8,900	10,517	17,387	2,291	36,515	1,468	17,885	24,231	13,927	11,569	15,160	209,561
Sovereign	527	3	98	688	2	35,714	25,058	367	2	668	57	-	452	278	63,914
Bank	9	48	1	4	4	43,165	-	30	7	2	70	4	46	61	43,451
Residential Mortgage	-	-	-	-	-	-	-	-	254,614	-	-	-	-	-	254,614
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	22,933	-	-	-	-	-	22,933
Other Retail	2,822	1,828	2,626	84	903	330	8	923	16,782	856	638	2,046	1,039	2,215	33,100
Specialised Lending	462	-	-	2,070	137	-	173	241	-	26,350	-	11	1,634	427	31,505
Total exposures	38,716	10,390	9,029	11,746	11,563	96,596	27,530	38,076	295,806	45,761	24,996	15,988	14,740	18,141	659,078
% of Total	5.9%	1.6%	1.4%	1.8%	1.8%	14.6%	4.2%	5.8%	44.8%	6.9%	3.8%	2.4%	2.2%	2.8%	100.0%

¹⁷ Property Services includes Commercial property operators, Residential property operators, Retirement village operators/developers, Real estate agents, Non-financial asset investors and Machinery and equipment hiring and leasing.

¹⁸ Other industry includes Health & Community Services, Education, Communication Services and Personal & Other Services.

¹⁹ Some prior period numbers have been restated due to reclassification.

Mar 12															
Portfolio Type	Agriculture, Forestry, Fishing & Mining \$M	Business Services \$M	Construction \$M	Electricity, Gas & Water Supply \$M	Entertainment, Leisure & Tourism \$M	Financial, Investment & Insurance \$M	Government and Official Institutions \$M	Manufacturing \$M	Personal \$M	Property Services \$M	Wholesale Trade \$M	Retail Trade \$M	Transport & Storage \$M	Other \$M	Total \$M
Corporate	33,941	8,200	6,102	8,029	10,611	16,872	2,501	34,176	1,220	16,947	22,952	13,864	9,550	14,819	199,784
Sovereign	333	1	86	839	2	32,902	20,140	251	249	520	50	-	419	314	56,106
Bank	12	45	5	2	4	40,884	-	39	55	2	70	3	61	61	41,243
Residential Mortgage	-	-	-	-	-	-	-	-	247,332	-	-	-	-	-	247,332
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	23,311	-	-	-	-	-	23,311
Other Retail	2,818	1,770	2,537	78	843	318	7	892	15,853	848	630	2,001	1,010	1,983	31,588
Specialised Lending	287	-	-	1,731	90	-	-	217	-	25,651	-	-	2,980	418	31,374
Total exposures	37,391	10,016	8,730	10,679	11,550	90,976	22,648	35,575	288,020	43,968	23,702	15,868	14,020	17,595	630,738
% of Total	5.9%	1.6%	1.4%	1.7%	1.8%	14.4%	3.6%	5.6%	45.7%	7.0%	3.8%	2.5%	2.2%	2.8%	100.0%

Sep 11															
Portfolio Type	Agriculture, Forestry, Fishing & Mining \$M	Business Services \$M	Construction \$M	Electricity, Gas & Water Supply \$M	Entertainment, Leisure & Tourism \$M	Financial, Investment & Insurance \$M	Government and Official Institutions \$M	Manufacturing \$M	Personal \$M	Property Services \$M	Wholesale Trade \$M	Retail Trade \$M	Transport & Storage \$M	Other \$M	Total \$M
Corporate	33,844	8,160	5,796	7,764	10,080	20,309	1,724	34,296	865	16,272	19,079	13,232	9,406	15,262	196,089
Sovereign	85	-	89	632	-	25,272	25,220	223	177	497	28	-	27	290	52,540
Bank	-	-	-	18	-	42,151	-	16	-	42	10	-	42	29	42,308
Residential Mortgage	-	-	-	-	-	-	-	-	237,636	-	-	-	-	-	237,636
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	23,320	-	-	-	-	-	23,320
Other retail	2,420	1,757	2,490	76	823	307	8	878	15,111	824	638	1,984	1,007	2,135	30,458
Specialised Lending	309	-	298	2,016	145	186	-	247	6	24,706	-	-	2,724	284	30,921
Total exposures	36,658	9,917	8,673	10,506	11,048	88,225	26,952	35,660	277,115	42,341	19,755	15,216	13,206	18,000	613,272
% of Total	6.0%	1.6%	1.4%	1.7%	1.8%	14.4%	4.4%	5.8%	45.2%	6.9%	3.2%	2.5%	2.2%	2.9%	100.0%

Table 4(e): Residual contractual maturity of Exposure at Default ²⁰

Sep 12					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	88,976	99,660	20,817	108	209,561
Sovereign	38,970	14,977	9,967	-	63,914
Bank	25,868	16,644	939	-	43,451
Residential Mortgage	653	3,549	221,393	29,019	254,614
Qualifying Revolving Retail	-	-	-	22,933	22,933
Other Retail	10,760	14,334	8,006	-	33,100
Specialised Lending	11,175	17,772	2,506	52	31,505
Total exposures	176,402	166,936	263,628	52,112	659,078

Mar 12					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	84,454	94,318	20,860	152	199,784
Sovereign	37,623	14,884	3,599	-	56,106
Bank	23,720	16,332	1,191	-	41,243
Residential Mortgage	2,415	4,727	209,664	30,526	247,332
Qualifying Revolving Retail	-	-	-	23,311	23,311
Other Retail	10,971	13,808	6,490	319	31,588
Specialised Lending	11,003	17,282	3,048	41	31,374
Total exposures	170,186	161,351	244,852	54,349	630,738

Sep 11					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	89,257	87,175	19,544	113	196,089
Sovereign	22,399	25,598	4,543	-	52,540
Bank	23,341	18,843	124	-	42,308
Residential Mortgage	2,303	4,586	201,673	29,074	237,636
Qualifying Revolving Retail	-	-	-	23,320	23,320
Other Retail	10,725	13,123	6,307	303	30,458
Specialised Lending	11,922	15,407	3,550	42	30,921
Total exposures	159,947	164,732	235,741	52,852	613,272

²⁰ No Maturity Specified predominately includes credit cards and residential mortgage equity manager accounts.

Table 4(f) part (i): Impaired assets^{21 22}, Past due loans²³, Provisions and Write-offs by Industry sector²⁴

Industry Sector	Sep 12					
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans \geq 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Agriculture, Forestry, Fishing & Mining	-	1,142	229	312	70	54
Business Services	-	158	41	70	24	47
Construction	-	149	49	66	141	124
Electricity, gas and water supply	2	273	27	5	6	2
Entertainment Leisure & Tourism	-	156	45	41	17	11
Financial, Investment & Insurance	-	210	26	28	(15)	6
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	9	489	26	234	163	105
Personal	-	798	970	412	256	359
Property Services	11	796	133	211	51	73
Retail Trade	-	112	85	64	20	16
Transport & Storage	94	383	19	158	103	7
Wholesale Trade	-	241	29	130	29	21
Other	-	173	34	42	22	16
Total	116	5,080	1,713	1,773	887	841

²¹ Impaired derivatives is net of credit valuation adjustment (CVA) of \$105 million, being a market value based assessment of the credit risk of the relevant counterparties (March 2012: \$74 million; September 2011: \$68 million).

²² Impaired loans / facilities include restructured items of \$525 million for customer facilities in which the original contractual terms have been modified for reasons related to the financial difficulties of the customer. Restructuring may consist of reduction of interest, principal or other payments legally due, or an extension in maturity materially beyond those typically offered to new facilities with similar risk (March 2012: \$340 million; September 2011: \$700 million).

²³ Past due loans \geq 90 days includes \$1,475 million well secured loans (March 2012: \$1,736 million; September 2011: \$1,593 million).

²⁴ Some prior period comparatives have been restated to reflect reclassification between industries.

Mar 12

Industry Sector	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Agriculture, Forestry, Fishing & Mining	-	1,135	195	309	53	21
Business Services	-	275	26	112	11	19
Construction	-	117	53	49	17	13
Electricity, gas and water supply	-	249	2	2	-	-
Entertainment Leisure & Tourism	-	157	35	32	2	8
Financial, Investment & Insurance	-	215	23	30	98	79
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	1	322	31	177	73	20
Personal	-	925	1,226	481	264	353
Property Services	74	927	163	252	137	110
Retail Trade	-	83	56	52	14	14
Transport & Storage	76	376	22	71	44	5
Wholesale Trade	-	260	20	116	(26)	9
Other	-	151	24	31	3	11
Total	151	5,192	1,876	1,714	690	662

Sep 11

Industry Sector	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Agriculture, Forestry, Fishing & Mining	-	1,122	174	288	71	17
Business Services	-	311	29	102	34	18
Construction	-	103	42	49	27	30
Electricity, gas and water supply	-	83	1	2	(24)	-
Entertainment Leisure & Tourism	-	198	29	37	(9)	6
Financial, Investment & Insurance	-	229	10	40	(17)	14
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	768	30	132	1	63
Personal	-	1,012	1,296	525	303	397
Property Services	35	1,031	113	232	124	116
Retail Trade	-	113	44	63	13	16
Transport & Storage	2	88	14	35	11	12
Wholesale Trade	-	300	23	150	71	13
Other	1	185	29	42	15	16
Total	38	5,543	1,834	1,697	620	718

Table 4(f) part (ii): Impaired asset, Past due loans, Provisions and Write-offs

	Sep 12					
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Portfolios subject to Advanced IRB approach						
Corporate	15	2,461	358	803	416	320
Sovereign	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	491	898	173	39	42
Qualifying Revolving Retail	-	-	83	1	133	161
Other Retail	-	403	198	210	148	178
Total Advanced IRB approach	15	3,355	1,537	1,187	736	701
Specialised Lending	99	1,373	117	333	123	78
Portfolios subject to Standardised approach						
Corporate	2	209	30	143	45	20
Residential Mortgage	-	23	4	14	6	1
Qualifying Revolving Retail	-	65	13	65	15	30
Other Retail	-	55	12	31	(38)	11
Total Standardised approach	2	352	59	253	28	62
Total	116	5,080	1,713	1,773	887	841

Mar 12						
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Portfolios subject to Advanced IRB approach						
Corporate	66	2,360	331	729	236	178
Sovereign	-	-	-	-	-	-
Bank	-	78	-	50	-	-
Residential Mortgage	-	560	1,041	185	44	46
Qualifying Revolving Retail	-	-	93	-	121	146
Other Retail	-	385	202	216	117	148
Total Advanced IRB approach	66	3,383	1,667	1,180	518	518
Specialised Lending	85	1,475	136	299	168	86
Portfolios subject to Standardised approach						
Corporate	-	123	23	66	(1)	5
Residential Mortgage	-	23	5	16	5	1
Qualifying Revolving Retail	-	77	22	75	25	37
Other Retail	-	111	23	78	(25)	15
Total Standardised approach	-	334	73	235	4	58
Total	151	5,192	1,876	1,714	690	662

Sep 11						
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Individual provision charge for half year \$M	Write-offs for half year \$M
Portfolios subject to Advanced IRB approach						
Corporate	25	2,767	206	611	150	151
Sovereign	-	-	-	-	-	-
Bank	-	83	-	53	32	-
Residential Mortgage	-	599	1,150	189	41	44
Qualifying Revolving Retail	-	-	86	-	130	154
Other Retail	-	341	153	210	150	173
Total Advanced IRB approach	25	3,790	1,595	1,063	503	522
Specialised Lending	13	1,106	75	225	85	114
Portfolios subject to Standardised approach						
Corporate	-	397	120	188	6	15
Residential Mortgage	-	20	4	15	8	8
Qualifying Revolving Retail	-	91	27	91	26	42
Other Retail	-	139	13	115	(8)	17
Total Standardised approach	-	647	164	409	32	82
Total	38	5,543	1,834	1,697	620	718

Table 4(g): Impaired assets^{25 26}, Past due loans²⁷ and Provisions by Geography

Geographic region	Sep 12				
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	111	3,335	1,473	1,128	1,788
New Zealand	-	1,157	181	368	496
Asia Pacific, Europe and America	5	588	59	277	481
Total	116	5,080	1,713	1,773	2,765

Geographic region	Mar 12				
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	150	3,249	1,570	985	2,025
New Zealand	-	1,320	232	403	503
Asia Pacific, Europe and America	1	623	74	326	466
Total	151	5,192	1,876	1,714	2,994

Geographic region	Sep 11				
	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	35	3,457	1,523	908	2,147
New Zealand	-	1,421	242	402	528
Asia Pacific, Europe and America	3	665	69	387	501
Total	38	5,543	1,834	1,697	3,176

²⁵ Impaired derivatives is net of credit valuation adjustment (CVA) of \$105 million, being a market value based assessment of the credit risk of the relevant counterparties (March 2012: \$74 million; September 2011: \$68 million).

²⁶ Impaired loans / facilities include restructured items of \$525 million for customer facilities in which the original contractual terms have been modified for reasons related to the financial difficulties of the customer. Restructuring may consist of reduction of interest, principal or other payments legally due, or an extension in maturity materially beyond those typically offered to new facilities with similar risk (March 2012: \$340 million; September 2011: \$700 million).

²⁷ Past due loans ≥ 90 days includes \$1,475 million well secured loans (March 2012: \$1,736 million; September 2011: \$1,593 million).

Table 4(h): Provision for Credit Impairment

	Half year Sep 12	Half year Mar 12	Half year Sep 11
	\$M	\$M	\$M
Collective Provision			
Balance at start of period	2,994	3,176	3,177
Charge to income statement	(227)	(152)	(58)
Disposal	(4)	-	-
Adjustments for exchange rate fluctuations	2	(30)	57
Total Collective Provision	2,765	2,994	3,176
Individual Provision			
Balance at start of period	1,714	1,697	1,717
New and increased provisions	1,270	1,023	1,051
Write-backs	(286)	(251)	(322)
Adjustment for exchange rate fluctuations	(5)	(29)	51
Discount unwind	(79)	(64)	(82)
Bad debts written off	(841)	(662)	(718)
Total Individual Provision	1,773	1,714	1,697
Total Provisions for Credit Impairment	4,538	4,708	4,873

Specific Provision Balance and General Reserve for Credit Losses²⁸

	Sep 12		
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	Total \$M
Collective Provision	334	2,431	2,765
Individual Provision	1,773	-	1,773
Total Provision for Credit Impairment			4,538

	Mar 12		
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	Total \$M
Collective Provision	312	2,682	2,994
Individual Provision	1,714	-	1,714
Total Provision for Credit Impairment			4,708

	Sep 11		
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	Total \$M
Collective Provision	375	2,801	3,176
Individual Provision	1,697	-	1,697
Total Provision for Credit Impairment			4,873

²⁸ Due to definitional differences, there is a variation in the split between ANZ's Individual Provision and Collective Provision for accounting purposes and the Specific Provision and General Reserve for Credit Losses (GRCL) for regulatory purposes. This does not impact total provisions, and essentially relates to the classification of collectively assessed provisions on defaulted accounts. The disclosures in this document are based on Individual Provision and Collective Provision, for ease of comparison with other published results.

Table 5 Credit risk – Disclosures for portfolios subject to the Standardised approach and supervisory risk weights in the IRB approach

Use of external rating agencies (External Credit Assessment Institutions)

ANZ portfolios under the Standardised approach are mainly Retail portfolios and hence are not rated by external rating agencies. However, there are a small number of local corporate counterparties that are externally rated. For these counterparties, external ratings by Standard & Poor's and Moody's Investors Service are used as inputs into the RWA calculation. As described in the section on the ANZ rating system, ANZ has mapped its master scale to the gradings of these two External Credit Assessment Institutions (ECAIs).

Table 5(b): Exposure at Default by risk bucket

Risk weight	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Standardised approach exposures			
0%	-	-	-
20%	-	111	4
35%	2,434	2,407	1,939
50%	375	268	61
75%	971	1	68
100%	20,248	26,229	26,439
150%	847	1,464	84
>150%	-	-	-
Capital deductions	-	-	-
Total	24,875	30,480	28,594
Other Asset exposures			
0%	-	-	-
20%	1,092	1,150	1,431
35%	-	-	-
50%	-	-	-
75%	-	-	-
100%	3,367	3,623	3,237
150%	-	-	-
>150%	-	-	-
Capital deductions	-	-	-
Total	4,459	4,773	4,668
Specialised Lending exposures			
0%	1,478	1,528	1,508
70%	9,954	10,439	10,221
90%	15,102	14,001	13,211
115%	3,970	4,088	4,623
250%	1,001	1,318	1,358
Total	31,505	31,374	30,921
Equity exposures			
300%	58	21	1
400%	214	293	349
Total	272	314	350

Table 6 Credit risk – Disclosures for portfolios subject to Advanced IRB approaches

Portfolios subject to the Advanced IRB (AIRB) approach

The following table summarises the types of borrowers and the rating approach adopted within each of ANZ's AIRB portfolios:

IRB Asset Class	Borrower Type	Rating Approach
Corporate	Corporations, partnerships or proprietorships that do not fit into any other asset class	AIRB
Sovereign	Central governments Central banks Certain multilateral development banks	AIRB
Bank	Banks ²⁹ In Australia only, other authorised deposit taking institutions (ADI) incorporated in Australia	AIRB
Residential mortgages	Exposures secured by residential property	AIRB
Qualifying revolving retail	Consumer credit cards <\$100,000 limit	AIRB
Other retail	Small business lending Other lending to consumers	AIRB
Specialised Lending	Income Producing Real Estate ³⁰ Project finance Object finance	AIRB – Supervisory Slotting ³¹
Equity		AIRB – fixed risk weights
Other assets	All other assets not falling into the above classes e.g. margin lending, fixed assets	AIRB – fixed risk weights

In addition, ANZ has applied the Standardised approach to some portfolio segments (mainly retail and local corporates in Asia Pacific) where currently available data does not enable development of advanced internal models for PD, LGD and EAD estimates. Under the Standardised approach, exposures are mapped to several regulatory risk weights, mainly based on the type of counterparty and its external rating.

ANZ applies its full normal risk measurement and management framework to these segments for internal management purposes, such as for economic capital. Standardised segments will be migrated to AIRB if they reach a volume that generates sufficient data for development of advanced internal models.

ANZ has not applied the Foundation IRB approach to any portfolios.

The ANZ rating system

As an AIRB bank, ANZ's internal models generate the inputs into regulatory capital adequacy to determine the risk weighted exposure calculations for both on and off-balance sheet exposures, including undrawn portions of credit facilities, committed and contingent exposures and EL calculations. ANZ's internal models are used to generate the three key risk components that serve as inputs to the IRB approach to credit risk:

- PD is an estimate of the level of the risk of borrower default. Borrower ratings are derived by way of rating models used both at loan origination and for ongoing monitoring.
- EAD is defined as the expected facility exposure at the date of default.

²⁹ The IRB asset classification of investment banks is Corporate, rather than Bank.

³⁰ Since 2009, APRA has agreed that some large, well-diversified commercial property exposures may be treated as corporate exposures, in line with the original Basel Committee's definition of Specialised Lending.

³¹ ANZ uses an internal assessment which is mapped to the appropriate Supervisory Slot.

- LGD is an estimate of the potential economic loss on a credit exposure, incurred as a consequence of obligor default and expressed as a percentage of the facility's EAD. When measuring economic loss, all relevant factors are taken into account, including material effects of the timing of cash flows and material direct and indirect costs associated with collecting on the exposure, including realisation of collateral.

Effective maturity is also calculated as an input to the risk weighted exposure calculation for bank, sovereign and corporate IRB asset classes.

ANZ's rating system has two separate and distinct dimensions that:

- Measure the PD, which is expressed by the Customer Credit Rating (CCR), reflecting the ability to service and repay debt.
- Measure the LGD as expressed by the Security Indicator (SI) ranging from A to G. The SI is calculated by reference to the percentage of loan covered by security which can be realised in the event of default. This calculation uses standard ratios to adjust the current market value of collateral items to allow for historical realisation outcomes. The security-related SIs are supplemented with a range of other SIs which cover such factors as cash cover, mezzanine finance, intra-group guarantees and sovereign backing as ANZ's LGD research indicates that these transaction characteristics have different recovery outcomes. ANZ's LGD also includes recognition of the different legal and insolvency regimes in different countries, where this has been shown to influence recovery outcomes.

ANZ's corporate PD master scale is made up of 27 rating grades. Each level/grade is separately defined and has a range of default probabilities attached to it. The PD master scale enables ANZ's rating system to be mapped to the gradings of external rating agencies, using the PD as a common element after ensuring that default definitions and other key attributes are aligned. The following table demonstrates this alignment (for one year PDs):

ANZ CCR	Moody's	Standard & Poor's	PD Range
0+ to 1-	Aaa to < A1	AAA to < A+	0.0000 - 0.0346%
2+ to 3+	A1 to < Baa2	A+ to < BBB	0.0347 - 0.1636%
3= to 4=	Baa2 to < Ba1	BBB to < BB+	0.1637 - 0.5108%
4- to 6-	Ba1 to < B1	BB+ to < B+	0.5109 - 3.4872%
7+ to 8+	B1 to < Caa	B+ to < CCC	3.4873 - 10.0928%
8=	Caa	CCC	10.0929 - 99.9999%
8-, 9 and 10	Default	Default	100%

In the retail asset classes, most facilities utilise credit rating scores. The scores are calibrated to PD, so the PD master scale gives ANZ a common language to understand and manage credit risk. For retail asset class exposures, the LGD dimension is recognised through the process of pooling retail exposures into homogenous groups.

ANZ also uses specialised PD master scale/mappings for the sovereign and bank asset classes, based predominantly on the corporate master scale.

Use of internal estimates other than for regulatory capital purposes

ANZ's rating system is a fundamental part of credit management and plays a key role in:

- Lending discretions.
- Minimum origination standards.
- Concentration limits.
- Portfolio reporting.
- Customer profitability measurement.
- Collective provision measurement.
- Management of deteriorating customers (where certain CCR/SI combinations trigger increasing scrutiny).
- Pricing decisions.

PD, LGD and EAD are used in the calculation of economic capital and in the collective provisioning process. Regulatory and economic capital are calculated from the same data sources and starting from the same basis, however there are some differences between the factors used because several aspects of ANZ's rating system are adjusted in accordance with APRA requirements for regulatory capital purposes. The most significant of these adjustments are the use for regulatory capital purposes

of downturn LGDs; the imposition of a 20% LGD floor for exposures secured by Australian residential real estate and the mandatory use of the supervisory slotting approach for project finance and most commercial real estate exposures.

Controls surrounding the ratings system

ANZ's rating system and credit risk estimates are governed by the Board Risk Committee and several executive management committees, and are underpinned by a comprehensive framework of controls that operate throughout ANZ. All policies, methodologies, model designs, model reviews, validations, responsibilities, systems and processes supporting the ratings systems are documented, and subject to review by Global Internal Audit.

The design, build and implementation of credit rating models resides with a specialist Group-level team. The use (including overrides) and performance of credit rating models is monitored by the relevant business and their counterparts in Risk, and validated regularly by a separate specialist Group-level function. This cycle of design, build, implementation, monitoring and validation is overseen by the CRSOC, and informs the need for new models or recalibration of existing models.

Risk grades are an integral part of reporting to the Board and executives.

In addition, the use of the rating system's outputs in key business unit performance measures in processes such as provisioning and the allocation of economic capital ensures that the rating system receives robust input from the business units, not just the specialist modelling teams.

Rating process by asset class

Building reliable and accurate rating tools requires balancing of many factors including data availability (external data may be used in some circumstances, where it is relevant), the size of the segment (the more customers within the segment, the more likely that statistically reliable models can be built), and the need to be able to validate the model. Rating tool approaches include:

- Statistical models producing a PD or a LGD, which are developed from internal or external data on defaults.
- Statistical models producing an internal rating, which involve calibrating ANZ's models to external rating data where data on defaults is insufficient for statistical purposes (such as banks).
- Hybrid statistical and expert models producing an internal rating, which use a mixture of default data and expert input.
- Expert models/processes that produce an internal rating, including external rating agency replication models.

Ongoing data collection and testing processes ensure enhanced or new models are introduced as required to maintain and improve the accuracy and reliability of rating processes.

Regardless of what credit risk rating tool is used, lending staff rating a customer are required to review the model-generated PD (or CCR) and take into account any out-of-model factors or policy overlays to decide whether or not to override the model rating. Overrides of a rating model to a better rating require approval from the independent credit risk function. The significance of the model for risk grading varies with the customer segment: models will dominate risk grading of homogenous, simple and data-rich segments such as in Retail, however for complex, specialised business segments expert knowledge and the highly customised nature of transactions will influence the rating outcome.

The following table summarises the types of internal rating approaches used in ANZ:

IRB Asset Class	Borrower type	Rating Approach
Corporate	Corporations, partnerships or proprietorships that do not fit into any other asset class	Mainly statistical models Some use of expert models and policy processes
Sovereign	Central governments Central banks Certain multilateral development banks	External rating and expert judgement
Bank	Banks In Australia only, other ADIs incorporated in Australia	Statistically-based models Review of all relevant and material information including external ratings
Residential Mortgages	Exposures secured by residential property	Statistical models
Qualifying Revolving Retail	Consumer credit cards <\$100,000 limit	Statistical models
Other Retail	Small business lending Other lending to consumers	Statistical models
Specialised Lending	Income Producing Real Estate Project finance Object finance	Supervisory Slotting ³²

For the Retail Basel asset class (Residential Mortgages, Qualifying Revolving Retail and Other Retail Exposures) the large number of relatively homogenous exposures enable the development of statistically robust application scoring models for use at origination and behavioural scoring for ongoing management. The scores are calibrated to PD, so the PD master scale gives ANZ a common language to understand and discuss credit risk. LGD is recognised through the process of pooling retail exposures into homogenous groups.

Estimation of LGD and EAD

ANZ's LGD modelling takes into account data on secured recovery, unsecured recovery rates and debt seniority, geography and internal management costs from several major data sources. Internal data is used as the basis for LGD estimation in the retail asset class, and is supplemented by external data for the corporate asset class. Given the scarcity of internal data for Bank and Sovereign Basel asset classes, LGD modelling for these classes is primarily based on external data.

EAD represents the expected facility exposure at the date of default, including an estimate of additional drawings prior to default, as well as post-default drawings that were legally committed to prior to default.

³² Specialised Lending exposures are rated with internal rating tools to produce a PD and LGD. These are used in internal processes, but not for regulatory capital purposes where the exposures are mapped to Supervisory Slots.

Table 6(d): Non Retail Exposure at Default subject to Internal Ratings Based (IRB) approach^{33 34 35 36}

	Sep 12							Total \$M
	AAA < A+ \$M	A+ < BBB \$M	BBB < BB+ \$M	BB+ < B+ \$M	B+ < CCC \$M	CCC \$M	Default \$M	
Exposure at Default								
Corporate	8,462	41,966	66,480	65,730	3,637	1,874	3,479	191,628
Sovereign	58,526	1,727	421	3,176	62	2	-	63,914
Bank	33,544	3,665	4,880	1,354	6	2	-	43,451
Total	100,532	47,358	71,781	70,260	3,705	1,878	3,479	298,993
% of Total	33.6%	15.8%	24.0%	23.5%	1.3%	0.6%	1.2%	100.0%
Undrawn commitments (included in above)								
Corporate	3,803	17,247	18,026	11,483	398	138	100	51,195
Sovereign	639	327	42	61	-	-	-	1,069
Bank	98	81	18	14	1	-	-	212
Total	4,540	17,655	18,086	11,558	399	138	100	52,476
Average Exposure at Default								
Corporate	0.171	2.671	1.079	0.375	0.560	0.276	1.003	0.600
Sovereign	54.544	27.858	8.592	13.344	4.776	0.245	-	44.416
Bank	7.125	2.754	3.011	1.454	0.291	0.076	-	5.034
Exposure-weighted average Loss Given Default (%)								
Corporate	56.5%	59.7%	46.8%	38.5%	37.5%	40.4%	37.2%	46.8%
Sovereign	2.5%	4.8%	29.4%	54.1%	58.9%	55.5%	-	5.4%
Bank	64.5%	65.7%	72.8%	73.5%	62.7%	65.8%	-	65.8%
Exposure-weighted average risk weight (%)								
Corporate	18.5%	36.1%	52.2%	72.8%	117.1%	179.1%	140.9%	58.3%
Sovereign	0.5%	1.8%	30.2%	110.7%	207.7%	469.8%	-	6.4%
Bank	14.7%	22.9%	72.9%	118.7%	232.1%	329.9%	-	252.3%

³³ In accordance with APS 330, EAD in Table 6(d) includes Advanced IRB exposures; however does not include Specialised Lending, Standardised, Securitisation, Equities or Other Assets exposures. Specialised Lending is excluded from Table 6(d) as it follows the Supervisory Slotting treatment, and a breakdown of risk weightings is provided in Table 5(b).

³⁴ Average EAD is calculated as total EAD divided by the total number of credit risk generating exposures.

³⁵ Exposure-weighted average risk weight (%) is calculated as RWA divided by EAD.

³⁶ Some prior period comparatives have been restated.

	Mar 12							
	AAA < A+ \$M	A+ < BBB \$M	BBB < BB+ \$M	BB+ < B+ \$M	B+ < CCC \$M	CCC \$M	Default \$M	Total \$M
Exposure at Default								
Corporate	7,008	39,391	59,626	60,041	4,019	2,396	2,990	175,471
Sovereign	50,310	1,625	213	3,896	59	3	-	56,106
Bank	32,066	3,592	4,186	1,314	6	1	78	41,243
Total	89,384	44,608	64,025	65,251	4,084	2,400	3,068	272,820
% of Total	32.8%	16.3%	23.5%	23.9%	1.5%	0.9%	1.1%	100.0%
Undrawn commitments (included in above)								
Corporate	3,462	17,795	18,086	10,958	249	298	103	50,951
Sovereign	640	280	31	95	-	-	-	1,046
Bank	575	41	14	9	1	-	-	640
Total	4,677	18,116	18,131	11,062	250	298	103	52,637
Average Exposure at Default								
Corporate	0.134	2.495	0.918	0.309	0.540	0.360	0.802	0.515
Sovereign	36.510	26.638	3.081	13.767	3.909	0.300	-	30.878
Bank	7.731	4.211	3.047	1.371	0.354	0.080	1.987	5.571
Exposure-weighted average Loss Given Default (%)								
Corporate	56.5%	59.4%	46.1%	35.5%	39.5%	43.1%	36.6%	45.5%
Sovereign	2.6%	5.2%	21.5%	52.9%	58.2%	50.5%	-	6.3%
Bank	64.6%	61.2%	72.4%	73.9%	60.4%	69.3%	61.3%	65.4%
Exposure-weighted average risk weight (%)								
Corporate	17.9%	36.8%	52.0%	67.5%	124.5%	196.6%	142.5%	57.7%
Sovereign	0.4%	1.9%	21.7%	109.5%	207.7%	393.0%	-	8.3%
Bank	14.9%	21.8%	68.6%	118.2%	208.6%	335.0%	161.5%	24.7%
Sep 11								
	AAA < A+ \$M	A+ < BBB \$M	BBB < BB+ \$M	BB+ < B+ \$M	B+ < CCC \$M	CCC \$M	Default \$M	Total \$M
Exposure at Default								
Corporate	7,201	40,330	56,956	58,128	5,276	1,897	3,457	173,245
Sovereign	46,017	2,772	40	3,343	366	-	2	52,540
Bank	33,733	2,988	4,267	1,171	2	80	67	42,308
Total	86,951	46,090	61,263	62,642	5,644	1,977	3,526	268,093
% of Total	32.4%	17.2%	22.9%	23.4%	2.1%	0.7%	1.3%	100.0%
Undrawn commitments (included in above)								
Corporate	2,296	19,103	17,295	10,118	490	196	125	49,623
Sovereign	962	208	7	38	2	-	-	1,217
Bank	217	66	80	13	-	1	-	377
Total	3,475	19,377	17,382	10,169	492	197	125	51,217
Average Exposure at Default								
Corporate	0.527	1.017	0.378	0.218	0.460	0.244	0.797	0.275
Sovereign	13.725	6.688	0.728	6.182	16.718	-	0.149	7.610
Bank	0.665	0.857	2.367	1.472	0.051	14.973	1.868	0.615
Exposure-weighted average Loss Given Default (%)								
Corporate	56.9%	60.9%	48.4%	35.8%	40.7%	46.0%	33.6%	46.9%
Sovereign	2.7%	5.3%	27.6%	55.3%	40.7%	-	54.8%	6.4%
Bank	62.4%	64.2%	65.2%	65.3%	35.0%	69.9%	64.2%	62.9%
Exposure-weighted average risk weight (%)								
Corporate	15.8%	37.9%	54.7%	70.4%	130.0%	215.7%	193.5%	61.3%
Sovereign	0.4%	1.9%	35.3%	109.1%	124.5%	-	724.5%	8.3%
Bank	14.1%	19.3%	59.0%	105.8%	115.0%	326.6%	160.5%	22.4%

Table 6(d): Retail Exposure at Default subject to Advanced Internal Ratings Based (IRB) approach by risk grade

	Sep 12						Default \$M	Total \$M
	0.00% <0.11% \$M	0.11% <0.30% \$M	0.30% <0.51% \$M	0.51% <3.49% \$M	3.49% <10.09% \$M	10.09% >100.0% \$M		
Exposure at Default								
Residential Mortgage	2,392	165,193	18,283	52,735	7,404	3,318	1,514	250,839
Qualifying Revolving Retail	11,068	121	1,891	4,932	1,778	962	160	20,912
Other Retail	747	3,190	1,849	18,362	5,988	904	914	31,954
Total	14,207	168,504	22,023	76,029	15,170	5,184	2,588	303,705
% of Total	4.7%	55.4%	7.3%	25.0%	5.0%	1.7%	0.9%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	882	17,887	992	2,909	179	65	2	22,916
Qualifying Revolving Retail	8,705	121	1,227	2,182	510	114	19	12,878
Other Retail	659	2,208	1,162	2,457	195	46	5	6,732
Total	10,246	20,216	3,381	7,548	884	225	26	42,526
Average Exposure at Default								
Residential Mortgage	0.025	0.214	0.141	0.176	0.223	0.242	0.182	0.186
Qualifying Revolving Retail	0.011	0.006	0.010	0.009	0.009	0.008	0.009	0.010
Other Retail	0.007	0.007	0.008	0.015	0.010	0.006	0.022	0.012
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	16.6%	19.6%	18.6%	22.8%	21.1%	20.0%	24.1%	20.2%
Qualifying Revolving Retail	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%
Other Retail	57.0%	51.8%	59.1%	43.8%	50.6%	63.9%	58.3%	47.8%
Exposure-weighted average risk weight (%)								
Residential Mortgage	4.3%	6.5%	13.5%	31.8%	77.8%	109.4%	225.3%	17.1%
Qualifying Revolving Retail	4.9%	11.4%	14.1%	38.9%	105.8%	206.8%	329.4%	33.9%
Other Retail	14.9%	22.7%	40.0%	57.3%	79.5%	155.2%	254.6%	66.2%

	Mar 12							
	0.00% < 0.11%	0.11% < 0.30%	0.30% < 0.51%	0.51% < 3.49%	3.49% < 10.09%	10.09% < 100.0%	Default	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Exposure at Default								
Residential Mortgage	2,272	156,148	18,495	55,199	6,701	3,606	1,771	244,192
Qualifying Revolving Retail	10,951	355	1,872	4,997	1,939	1,104	169	21,387
Other Retail	282	3,410	1,727	17,527	5,713	964	862	30,485
Total	13,505	159,913	22,094	77,723	14,353	5,674	2,802	296,064
% of Total	4.6%	54.0%	7.5%	26.3%	4.8%	1.9%	0.9%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	815	17,490	1,083	2,671	161	63	2	22,285
Qualifying Revolving Retail	8,526	354	1,195	2,159	516	120	18	12,888
Other Retail	200	2,550	950	2,368	280	56	3	6,407
Total	9,541	20,394	3,228	7,198	957	239	23	41,580
Average Exposure at Default								
Residential Mortgage	0.025	0.207	0.138	0.176	0.210	0.240	0.180	0.181
Qualifying Revolving Retail	0.011	0.006	0.010	0.009	0.009	0.008	0.008	0.010
Other Retail	0.023	0.010	0.011	0.014	0.009	0.006	0.020	0.012
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	20.0%	20.0%	21.3%	23.4%	21.3%	20.0%	22.0%	20.9%
Qualifying Revolving Retail	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%
Other Retail	36.7%	64.1%	50.9%	44.5%	51.6%	65.7%	59.1%	49.4%
Exposure-weighted average risk weight (%)								
Residential Mortgage	5.1%	6.7%	15.2%	31.9%	78.9%	108.7%	209.4%	17.5%
Qualifying Revolving Retail	4.7%	11.1%	13.7%	38.4%	103.6%	205.8%	351.6%	35.6%
Other Retail	9.9%	30.1%	34.5%	57.8%	81.3%	159.2%	247.1%	65.9%
Sep 11								
	0.00% < 0.11%	0.11% < 0.30%	0.30% < 0.51%	0.51% < 3.49%	3.49% < 10.09%	10.09% < 100.0%	Default	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Exposure at Default								
Residential Mortgage	4,685	152,771	19,362	44,367	7,035	4,765	1,897	234,882
Qualifying Revolving Retail	10,800	319	1,884	4,956	2,069	1,035	156	21,219
Other Retail	38	3,669	1,452	17,359	5,429	890	726	29,563
Total	15,523	156,759	22,698	66,682	14,533	6,690	2,779	285,664
% of Total	5.4%	54.9%	7.9%	23.3%	5.1%	2.3%	1.0%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	576	18,062	1,286	3,296	291	279	4	23,794
Qualifying Revolving Retail	8,374	318	1,208	2,120	576	114	17	12,727
Other Retail	35	2,593	905	2,670	275	67	4	6,548
Total	8,985	20,973	3,398	8,086	1,141	461	25	43,069
Average Exposure at Default								
Residential Mortgage	0.102	0.223	0.182	0.180	0.187	0.175	0.256	0.193
Qualifying Revolving Retail	0.011	0.006	0.010	0.009	0.008	0.008	0.008	0.010
Other Retail	0.006	0.010	0.012	0.014	0.009	0.007	0.034	0.012
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	22.9%	20.2%	21.4%	20.7%	20.4%	20.6%	21.3%	20.4%
Qualifying Revolving Retail	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%
Other Retail	72.1%	61.4%	56.0%	44.5%	51.6%	65.2%	57.8%	49.4%
Exposure-weighted average risk weight (%)								
Residential Mortgage	5.1%	6.9%	14.6%	27.8%	74.6%	113.2%	238.9%	17.5%
Qualifying Revolving Retail	4.7%	11.1%	13.8%	38.5%	104.8%	205.4%	294.2%	35.2%
Other Retail	18.1%	29.0%	38.3%	58.1%	81.3%	158.4%	236.5%	65.1%

Table 6(e): Actual Losses by portfolio type

Basel Asset Class	Half year Sep 12	
	Individual provision charge \$M	Write-offs \$M
Corporate	416	320
Sovereign	-	-
Bank	-	-
Residential Mortgage	39	42
Qualifying Revolving Retail	133	161
Other Retail	148	178
Total Advanced IRB	736	701
Specialised Lending	123	78
Standardised approach	28	62
Total	887	841

Basel Asset Class	Half year Mar 12	
	Individual provision charge \$M	Write-offs \$M
Corporate	236	178
Sovereign	-	-
Bank	-	-
Residential Mortgage	44	46
Qualifying Revolving Retail	121	146
Other Retail	117	148
Total Advanced IRB	518	518
Specialised Lending	168	86
Standardised approach	4	58
Total	690	662

Basel Asset Class	Half year Sep 11	
	Individual provision charge \$M	Write-offs \$M
Corporate	150	151
Sovereign	-	-
Bank	32	-
Residential Mortgage	41	44
Qualifying Revolving Retail	130	154
Other Retail	150	173
Total Advanced IRB	503	522
Specialised Lending	85	114
Standardised approach	32	82
Total	620	718

Table 6(f): Average estimated vs actual PD, EAD and LGD – Advanced IRB

Portfolio Type	Sep 12				
	Average Estimated PD %	Average Actual PD %	Average estimated to actual EAD ratio	Average Estimated LGD %	Average Actual LGD %
Corporate	1.43	1.07	1.11	42.3	31.1
Sovereign	0.41	nil	n/a	n/a	nil
Bank	0.45	0.09	0.93	44.2	58.2
Specialised Lending	n/a	2.59	1.17	n/a	27.1
Residential Mortgage	0.84	0.82	1.00	20.7	3.9
Qualifying Revolving Retail	2.84	2.18	1.04	73.2	71.7
Other Retail	3.33	3.35	1.06	48.1	44.6

APS 330 Table 6f compares internal credit risk estimates used in calculating regulatory capital with realised outcomes by portfolio types averaged from 2009 to 2012 financial years. It covers the PD, EAD and LGD estimates for the IRB portfolios.

Estimated PD and LGD for Specialised Lending exposures have not been provided, since APRA requires the use of supervisory slotting for Regulatory EL calculations.

Actual PD, EAD ratio, Estimated LGD and Actual LGD for Sovereign exposures have not been provided, since there was no Sovereign default observed in ANZ Sovereign exposures for the observation period.

The estimated PD is based on the average of the internally estimated long-run PD's for obligors that are not in default at the beginning of each financial year over the four years of observation. The actual PD is based on the number of defaulted obligors compared to the total number of obligors measured at the beginning of each financial year over the four years of observation.

The EAD ratio compares internally estimated EAD prior to default to realised EAD for defaulted obligors over the four years of observation. A ratio greater than 1.0 signifies that on average, the actual defaulted exposures are lower than the estimated exposures at the time of default.

The estimated LGD is the internal estimates of downturn LGD for accounts that defaulted at the beginning of each year during the observation period. The actual LGD is based on the average realised losses over the period for the accounts that defaulted at the beginning of each year during the observation period. For non-retail portfolios, the estimated and actual LGDs are based on accounts that defaulted in 2009 and 2010 financial years. For retail portfolios, the estimated and actual LGDs are based on accounts that defaulted in 2009 to 2011 financial years. For non-retail portfolios, defaults occurring in the 2011 and 2012 have been excluded from the analysis, to allow sufficient time for workout period. Defaults occurring in 2012 have been also excluded for retail portfolios. For non-retail portfolios, actual LGD for defaults where workouts were not finalised have been estimated to approximate the final actual loss. For the retail portfolios, defaults with non finalised workout have been excluded from the analysis.

In assessing the accuracy of the credit risk estimates, it should be noted that the period of analysis does not cover a full economic cycle.

Table 7 Credit risk mitigation disclosures

Main types of collateral taken by ANZ

Collateral is used to mitigate credit risk, as the secondary source of repayment in case the counterparty cannot meet its contractual repayment obligations.³⁷ Types of collateral typically taken by ANZ include:

- Security over residential, commercial, industrial or rural property.
- Charges over business assets.
- Security over specific plant and equipment.
- Charges over listed shares, bonds or securities.
- Charges over cash deposits.
- Guarantees and pledges.

In some cases, such as where the customer risk profile is considered very sound or by the nature of the product (for instance, small limit products such as credit cards), a transaction may not be supported by collateral.

Credit policy and processes set out the acceptable types of collateral, as well as a process by which additional instruments and/or asset types can be considered for approval. ANZ's credit risk modelling teams use historical internal loss data and other relevant external data to assist in determining the discount that each type would be expected to incur in a forced sale. The discounted value is used in the determination of a SI for LGD purposes.

Policies and processes for collateral valuation and management

ANZ has well established policies and processes around collateral valuation and management. The concepts of legal enforceability, certainty and current valuation are central to collateral management.

In order to achieve legal enforceability and certainty, ANZ uses standard collateral instruments or has specific documentation drawn up by external legal advisers, and where applicable, security interests are registered. The use of collateral management systems also provides certainty that the collateral has been properly taken, registered and stored.

In order to rely on the valuation of collateral assets, ANZ has developed comprehensive rules around acceptable types of valuations (including who may value an asset), the frequency of revaluations and standard extension ratios for typical asset types. Upon receipt of a new valuation, the information is used to recalculate the SI (or to reassess the adequacy of the provision, in the case of an impaired asset), thereby ensuring that the exposure has an updated LGD attached to it for risk quantification purposes.

Guarantee support

Guarantee support for lending proposals are an integral component in transaction structuring for ANZ. The guarantee of a financially strong party can help improve the PD of a transaction through its explicit support of the weaker rated borrower.

Guarantees that are recognised for risk rating purposes may be provided by parties that include associated entities, banks, sovereigns or individuals. Credit policy provides threshold parameters to determine acceptable counterparties in achieving risk grade enhancement of the transaction.

The suitability of the guarantor is determined by risk rating that guarantor. Not all guarantees or guarantors are recognised for risk grade enhancement purposes.

Use of credit derivatives for risk mitigation

ANZ uses purchased credit derivatives to mitigate credit risk by lowering exposures to reference entities that generate high concentration risk exposures or to improve risk return performance.

Only certain credit derivatives such as credit default swaps (CDS) are recognised for risk mitigation purposes in the determination of regulatory capital. A CDS entails the payment by one party in

³⁷ For some products, the collateral provided is fundamental to its structuring so is not strictly the secondary source of repayment. For example, lending secured by trade receivables is typically repaid by the collection of those receivables.

exchange for credit default protection payment if a credit default event on a reference asset occurs. Standard, legally enforceable documentation applies.

For regulatory capital purposes, ANZ only recognises protection using credit derivatives where they meet several policy and regulatory requirements around the strength of the protection offered such as being irrevocable.

A CDS may only be transacted with banks and non-bank financial institutions that have been credit assessed and approved by a designated specialist credit officer. All parties must meet minimum credit standards and be allocated a related credit limit. In the event that the creditworthiness of a credit protection provider falls below the minimum required to provide effective protection, the protection is no longer recognised as an effective risk mitigant for regulatory purposes.

The use of netting

Netting is a form of credit risk mitigation in that it reduces EAD, by offsetting a customer's positive and negative balances with ANZ.

In order to apply on-balance sheet netting, the arrangement must be specifically documented with the customer and meet a number of legally enforceable requirements.

Netting is also used where the credit exposure arises from off-balance sheet market related transactions. For close-out netting to be utilised with counterparties, a legally enforceable eligible netting agreement in an acceptable jurisdiction must be in place. This means that each transaction is aggregated into a single net amount and transactions are netted to arrive at a single overall sum.

Transaction structuring to mitigate credit risk

Besides collateral, guarantee support and derivatives described above, credit risk mitigation can also be furthered by prudent transaction structuring. For example, the risk in project finance lending can be mitigated by lending covenants, loan syndication and political risk insurance.

Concentrations of credit risk mitigation

Taking collateral raises the possibility that ANZ may inadvertently increase its risk by becoming exposed to collateral concentrations. For example, in the same way that an over-exposure to a particular industry may mean that a bank is more sensitive to the fortunes of that industry, an over-exposure to a particular collateral asset type may make ANZ more sensitive to the performance of that asset type.

ANZ does not believe that it has any material concentrations of collateral types, given the well diversified nature of its portfolio and conservative asset extension ratios.

Table 7(b): Credit risk mitigation on Standardised approach portfolios – collateral³⁸

Sep 12					
	Exposure \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Standardised approach					
Corporate	18,271	338	-	17,933	1.8%
Residential Mortgage	3,776	1	-	3,775	0.0%
Qualifying Revolving Retail	2,021	-	-	2,021	0.0%
Other Retail	1,146	-	-	1,146	0.0%
Total	25,214	339	-	24,875	1.3%
Mar 12					
	Exposure \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Standardised approach					
Corporate	25,126	813	-	24,313	3.2%
Residential Mortgage	3,152	12	-	3,140	0.4%
Qualifying Revolving Retail	1,924	-	-	1,924	0.0%
Other Retail	1,103	-	-	1,103	0.0%
Total	31,305	825	-	30,480	2.6%
Sep 11					
	Exposure \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Standardised approach					
Corporate	23,666	822	-	22,844	3.5%
Residential Mortgage	2,798	44	-	2,754	1.6%
Qualifying Revolving Retail	2,101	-	-	2,101	0.0%
Other Retail	896	1	-	895	0.1%
Total	29,461	867	-	28,594	2.9%

³⁸ Eligible Collateral can include cash collateral (cash, certificates deposits and bank bills issued by the lending ADI), gold bullion and highly rated debt securities

Table 7(c): Credit risk mitigation – guarantees and credit derivatives³⁹

	Sep 12				
	Exposure \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Advanced IRB					
Corporate (incl. Specialised Lending)	226,871	16,259	150	223,133	7.2%
Sovereign	54,253	227	-	63,914	0.4%
Bank	49,524	6,417	-	43,451	13.0%
Residential Mortgage	250,839	-	-	250,839	0.0%
Qualifying Revolving Retail	20,912	-	-	20,912	0.0%
Other Retail	31,954	-	-	31,954	0.0%
Total	634,353	22,903	150	634,203	3.6%
Standardised approach					
Corporate	17,933	-	-	17,933	0.0%
Residential Mortgage	3,775	-	-	3,775	0.0%
Qualifying Revolving Retail	2,021	-	-	2,021	0.0%
Other Retail	1,146	-	-	1,146	0.0%
Total	24,875	-	-	24,875	0.0%
	Mar 12				
	Exposure \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Advanced IRB					
Corporate (incl. Specialised Lending)	216,383	13,831	206	206,845	6.5%
Sovereign	41,366	213	-	56,106	0.5%
Bank	46,652	5,768	2	41,243	12.4%
Residential Mortgage	244,192	-	-	244,192	0.0%
Qualifying Revolving Retail	21,387	-	-	21,387	0.0%
Other Retail	30,485	-	-	30,485	0.0%
Total	600,465	19,812	208	600,258	3.3%
Standardised approach					
Corporate	24,313	-	-	24,313	0.0%
Residential Mortgage	3,140	-	-	3,140	0.0%
Qualifying Revolving Retail	1,924	-	-	1,924	0.0%
Other Retail	1,103	-	-	1,103	0.0%
Total	30,480	-	-	30,480	0.0%

³⁹ Table 7(c) shows the exposure amount by asset class gross and net of the impact of guarantees and credit derivatives.

	Sep 11				
	Exposure \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	Total Exposure post Credit Risk Mitigation \$M	% Coverage
Advanced IRB					
Corporate (incl. Specialised Lending)	206,904	14,844	126	204,166	7.2%
Sovereign	45,967	108	-	52,540	0.2%
Bank	46,269	4,336	-	42,308	9.4%
Residential Mortgage	234,882	-	-	234,882	0.0%
Qualifying Revolving Retail	21,219	-	-	21,219	0.0%
Other Retail	29,563	-	-	29,563	0.0%
Total	584,804	19,288	126	584,678	3.3%
Standardised approach					
Corporate	22,844	-	-	22,844	0.0%
Residential Mortgage	2,754	-	-	2,754	0.0%
Qualifying Revolving Retail	2,101	-	-	2,101	0.0%
Other Retail	895	-	-	895	0.0%
Total	28,594	-	-	28,594	0.0%

Table 8 General disclosures for derivatives and counterparty credit risk**Definition of counterparty credit risk**

Counterparty credit risk in derivative transactions arises from the risk of counterparty default before settlement date of the derivatives contract and the counterparty will not be able to fulfil present and future contractual payments obligations. The amount at risk may change over time as a function of the underlying market parameters up to the positive value of the contract in favour of ANZ.

Counterparty credit risk is present in market instruments (derivatives and forward contracts), and comprises:

- Settlement risk, which arises where one party makes payment or delivers value in the expectation but without certainty that the counterparty will perform the corresponding obligation in a bilateral contract at settlement date.
- Market replacement risk (pre-settlement risk), which is the risk that a counterparty will default during the life of a derivative contract and that a loss will be incurred in covering the position.

ANZ transacts market instruments with the following counterparties:

- End users – would typically use over the counter derivative instruments provided by ANZ to manage price movement risk associated with their core business activity.
- Professional counterparties – ANZ may hedge price movement risks by entering into transactions with professional counterparties that conduct two way (buy and sell) business.

Counterparty credit risk requires a different method to calculate exposure at default because actual and potential market movements impact ANZ's exposure or replacement cost. The markets covered by this treatment include the derivative activities associated with interest rates, foreign exchange, CDS, equities, commodities and repurchase agreement (repo) products.

Counterparty credit risk governance

ANZ's counterparty credit risk management is governed by its credit principles, policies and procedures. The Counterparty Credit Risk function is responsible for determining the counterparty credit risk exposure methodology applied to market instruments, in the framework for counterparty credit limit management, measurement and reporting.

The counterparty credit risk associated with derivatives transactions is governed by credit limit setting consistent with all credit exposures to the ANZ Group. Counterparty credit limits are approved by the appropriate credit delegation holders.

Counterparty credit risk measurement and reporting

The general approach is to calculate future exposure as the sum of the mark-to-market value of the exposure, plus the sum of the notional principal multiplied by the potential credit risk exposure (PCRE) add-on factor for the remaining period of the transaction.

ANZ measures counterparty credit risk exposure for positive mark-to-market positions i.e. the replacement cost of an outstanding contract with a counterparty based on its current market value.

PCRE factors recognise that prices may change over the remaining period to maturity, and that risk decreases as the contract's remaining term to maturity decreases. In general terms PCRE is calculated by applying a risk weighting or volatility factor to the face value of the notional principal of individual trades.

PCRE factors are also used by credit officers to establish credit limits, to ensure the potential volatility of the transaction values is recognised. Counterparty credit risk is calculated daily and excesses above approved limits are reported to account controllers and risk officers for action.

Credit valuation adjustment

Over the life of a derivative instrument, ANZ uses a CVA model to adjust fair value to take into account the impact of counterparty credit quality. The methodology calculates the present value of expected losses over the life of the financial instrument as a function of PD, LGD, expected credit risk exposure and an asset correlation factor.

Impaired derivatives are also subject to a CVA.

Wrong way risk

ANZ's management of counterparty credit risk also considers the possibility of wrong way risk, which emerges when PD is adversely correlated with market risk factors. ANZ's credit policies and independent transaction evaluation by Credit Risk are central to managing wrong way risk.

Counterparty credit risk mitigation and credit enhancements

ANZ's primary tools to mitigate counterparty credit risk include:

- A bilateral netting master agreement (e.g. an International Swaps and Derivatives Association - ISDA) allowing close-out netting of exposures in a portfolio with offsetting contracts, with a single net payment with the same legal counterparty.
- Use of collateral agreements in some transactions based on standard market documentation (i.e. ISDA master agreement with credit support annex) that governs the amount of collateral required to be posted or received by ANZ throughout the life of the contract. Some agreements are linked to external credit ratings which means in the event of a party's (ANZ or a counterparty) external rating being downgraded, it would likely be required to lodge collateral.
- Use of right to break clauses in master agreement or in trade confirmation to reduce term of long dated derivative trades.
- Independent limit setting, credit exposure control, monitoring and reporting of excesses against approved credit limits.
- Additional termination triggers (close out of exposure) such as credit rating downgrade clauses and change in ownership clauses being included in documentation.
- Linking covenants and events of default in existing loan facility agreement to master agreement.
- Use of credit derivatives to hedge counterparty credit risk exposure.
- Settlement through Continuous Linked Settlement (CLS) to eliminate settlement risk for foreign exchange transactions with CLS members.
- Clearing certain derivative transactions through central counterparty clearing houses.

In the event of a downgrading of ANZ's rating by one notch from AA- to A+, as at 30 September 2012, ANZ would be required to lodge USD697 million additional collateral with its counterparties. This represents a small percentage of ANZ's overall liquidity portfolio.

Chapter 6 – Securitisation

Table 9 Securitisation disclosures

Definition of securitisation and resecuritisation

A securitisation is a financial structure where the cash flow from a pool of assets is used to service obligations to at least two different tranches or classes of creditors,⁴⁰ typically holders of debt securities, with each class or tranche reflecting a different degree of credit risk. This stratification of credit risk means that one class of creditors is entitled to receive payments from the pool before another class. A resecuritisation exposure is a securitisation exposure in which the risk associated with an underlying pool of exposures is tranching and at least one of the underlying exposures is a securitisation exposure.

Securitisations may be categorised as:

- Traditional securitisations, where legal ownership of the underlying asset pool is transferred into a Special Purpose Vehicle (SPV), which finances the purchase by issuing debt instruments (notes) to investors, with principal and interest paid from realisation of or regular cash flows from the assets. The SPV assets are insulated from bankruptcy of the seller or servicer.
- Synthetic securitisations, where credit risk is transferred to a third party but legal ownership of the underlying assets remain with the originator e.g. by using credit derivatives or guarantees.

Regulatory capital approaches used in ANZ's securitisation activities

For securitisation exposures held in ANZ's banking book⁴¹, ANZ applies an IRB approach (as outlined in APS 120) to determine the regulatory capital charge.

Chapter 7 outlines regulatory capital treatment for securitisation exposures held in ANZ's trading book.

Securitisation activities

ANZ's key securitisation activities are:

- Securitisation of ANZ originated assets (including self securitisation) – use of securitisation as a funding, liquidity and capital management tool which may or may not involve the transfer of credit risk i.e. may or may not provide regulatory capital relief.
- Securitisation of third-party originated assets.
- Provision of facilities and services to securitisations or resecuritisations (where the underlying assets may be ANZ or third-party originated) e.g. liquidity, funding derivatives and/or credit support, structuring and arranging services, conduit management and (via ANZ Capel Court Limited) trust management services.
- Investment in securities - ANZ may purchase notes issued by securitisation programmes.

Similar to other exposures, securitisation exposures are subject to credit, market, operational and legal risks. Roles and responsibilities are clearly outlined in ANZ's established risk management framework of policies and procedures, including:

- Appropriate risk management systems to identify, measure, monitor and manage the risks arising from its involvement in securitisation exposures;
- Impact of ANZ's involvement in securitisation exposures on its risk profile; and
- How ANZ ensures that it does not provide any implicit support to its securitisation exposures.

Historically, ANZ utilised a conduit structure to facilitate the securitising of third party originated assets via the issuance of asset backed commercial paper (ABCP). The conduit is no longer issuing ABCP due to changes in regulatory and market conditions. Funding is instead provided on third party originated exposures via warehouse arrangements where such arrangements satisfy ANZ's credit, due diligence and other business requirements.

⁴⁰ APRA's definition of securitisation includes certain cases where only one tranche or class of creditors is serviced by the cash flow from the pool of assets.

⁴¹ Exposures are classified into either the trading book or the banking book. In general terms, the trading book consists of positions in financial instruments and commodities held with trading intent or in order to hedge other elements of the trading book, and the banking book contains all other exposures. Banking book exposures are typically held to maturity, in contrast to the shorter term, trading nature of the trading book.

ANZ has no affiliated entities that ANZ manages or advises and that invests in securitisation exposures that ANZ has securitised or in SPV's that ANZ sponsors.

Governance of securitisation activities

Governance of securitisation activities is overseen by the Board and executive committees described in Chapter 3, and managed in accordance with the credit risk and market risk frameworks described in Chapters 5 and 7.

Many functions within ANZ are involved in securitisation activities given the range of activities undertaken and risks that need to be managed. For origination and structuring, ANZ has a specialist securitisation team with independent risk personnel overseeing operations. Credit decisions require joint risk and business approval. The securitisation team must be involved in all non-trading securitisation transactions across ANZ, which ensures consistent expert treatment.

When ANZ invests in instruments issued by securitisation programs, the relevant business area manages these exposures until the securitisation or resecuritisation exposures are repaid in full or traded.

Risk measurement and reporting of securitisation exposures

In accordance with APS 120, ANZ has a hierarchy of approaches available to quantify the credit risk of banking book securitisation exposures. The most common approaches used are the Ratings Based Approach (specifically utilising the external ratings of ECAI's) and the Internal Assessment Approach (IAA).

When utilising the IAA, ANZ uses a rating agency-type methodology which specifies certain stress factors, takes into account historical performance of assets and other (asset-specific) considerations such as underwriting standards. IAA methodology is applied in accordance with APRA's requirements and it forms part of ANZ's overall securitisation risk-grading framework.

All facilities provided to or investments in securitisation programs (across both the banking and trading books) undergo initial and ongoing due diligence. This due diligence is completed with input from the Risk function and includes analysing the structure of the transaction and monitoring of the performance of the underlying assets of the transaction. In addition, such exposures are formally reviewed at least annually, including the risk grade.

The type and frequency of reporting on ANZ's securitisation exposures is as follows:

- Facilities provided to securitisation programs are reported using standard credit reporting systems, distinguished by appropriate product codes. The regular reporting frequency for most of these systems is monthly.
- Investments in securitisations are reported through the banking book or the trading book on a monthly basis.

The use and treatment of Credit Risk Mitigation ("CRM") techniques with respect to securitisation exposures is assessed on a case-by-case basis in a manner consistent with the bank-wide CRM methodology.⁴²

Accounting policies

The principal accounting policies governing ANZ's securitisation activities are outlined in ANZ's 2012 Annual Report, Notes to the Financial Statements. These include the valuation, derecognition, consolidation and income recognition principles outlined in Note 1 – Significant Accounting Policies and the critical judgments applied to these policies outlined in Note 2 – Critical Estimates and Judgments Used in Applying Accounting Policies. ANZ applies these group accounting policies to its securitisation activities, as appropriate. The policies as they apply to ANZ's securitisation activities have not changed since the prior period. Note 40 – Securitisations and Covered Bonds also provides details about the nature of ANZ's securitisation activities and certain accounting policies as they specifically apply to these activities.

Any SPV used in ANZ's securitisation activities are assessed for control under the requirements of AASB Interpretation 112 Consolidation – Special Purpose Entities. Where control is determined to exist, the SPV is consolidated into ANZ's financial statements. Financial instruments held and issued either by SPVs consolidated by ANZ or those held or issued to a non-consolidated SPV are recognised and valued using the principles of AASB 139 Financial Instruments: Recognition and Measurement.

⁴² For example, various types of analysis including quantitative analysis of credit enhancements are performed for non-externally rated transactions. Factors such as geography, facility / transaction type and ANZ's role will determine the applicable CRM techniques to apply.

For synthetic securitisations, any transferred credit exposure is recognised through the fair value measurement of the segregated embedded or stand-alone credit derivative established within the structure.

To the extent that ANZ has exposures intended to be securitised, they could reside in either the banking or trading book.

To the extent that ANZ has entered into contractual arrangements that could require it to provide financial support for securitised assets e.g. liquidity facilities, these are recognised in accordance with the accounting policies set out in ANZ's 2012 Annual Report.

Use of external rating agencies

Where the use of external rating agencies is relevant, ANZ applies the ratings or the rating methodologies provided by Standard & Poor's, Moody's Investor Services and/or Fitch Ratings as appropriate.

Significant changes in quantitative information

During the reporting period, securitisation exposures have increased by \$300 million, largely due to increase in investment of securities issued by securitisation programmes. Over this period, no securitisation exposures were transferred from the trading book to the banking book, however a number of facilities within the Banking Book were restructured causing changes on the categorisation of facilities in Table 9(k).

Banking Book**Table 9(g): Banking Book: Traditional and synthetic securitisation exposures**

	Sep 12		
Traditional securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	-	45,499	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	45,499	-
Synthetic securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	-	-
Aggregate of traditional and synthetic securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	-	45,499	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	45,499	-

Mar 12			
Traditional securitisations	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Underlying asset			
Residential mortgage	145	33,859	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	145	33,859	-

Synthetic securitisations	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Underlying asset			
Residential mortgage	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	-	-

Aggregate of traditional and synthetic securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	145	33,859	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	145	33,859	-

Sep 11			
Traditional securitisations	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Underlying asset			
Residential mortgage	162	36,257	479
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	162	36,257	479

Synthetic securitisations	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Underlying asset			
Residential mortgage	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	-	-

Aggregate of traditional and synthetic securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	162	36,257	479
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	162	36,257	479

Table 9(h): Banking Book: Impaired and Past due loans relating to ANZ originated securitisations

Underlying asset	Sep 12				Losses recognised for the six month ended \$M
	ANZ Originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	
Residential mortgage	-	45,499	-	50	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	-	45,499	-	50	-

Underlying asset	Mar 12				Losses recognised for the six month ended \$M
	ANZ Originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	
Residential mortgage	145	33,859	-	115	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	145	33,859	-	115	-

Underlying asset	Sep 11				Losses recognised for the six month ended \$M
	ANZ Originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	
Residential mortgage	162	36,257	-	110	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	162	36,257	-	110	-

Table 9(i): Banking Book: Total amount of outstanding exposures intended to be securitised

No assets from ANZ's Banking Book were intended to be securitised as at the reporting date.

Table 9(j): Banking Book: Securitisation - Summary of current year's activity by underlying asset type and facility

Sep 12				
Original value securitised				
Securitisation activity by underlying asset type	ANZ Originated \$M	ANZ Self Securitized \$M	ANZ Sponsored \$M	Recognised gain or loss on sale \$M
Residential mortgage	-	11,640	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	-	11,640	-	-

Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities	-	-	-	-
Funding facilities	-	-	-	396
Underwriting facilities	-	-	-	-
Lending facilities	-	-	-	-
Credit enhancements	-	-	-	-
Holdings of securities (excluding trading book)	-	-	-	609
Other	-	-	-	-
Total	-	-	-	1,005

Mar 12				
Original value securitised				
Securitisation activity by underlying asset type	ANZ Originated \$M	ANZ Self Securitized \$M	ANZ Sponsored \$M	Recognised gain or loss on sale \$M
Residential mortgage	-	839	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	-	839	-	-

Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities	-	-	-	-
Funding facilities	-	-	-	1,269
Underwriting facilities	-	-	-	-
Lending facilities	-	-	-	-
Credit enhancements	-	-	-	-
Holdings of securities (excluding trading book)	-	-	-	1,788
Other	-	-	-	42
Total	-	-	-	3,099

Sep 11				
Securitisation activity by underlying asset type	Original value securitised			Recognised gain or loss on sale \$M
	ANZ Originated \$M	ANZ Self Securitized \$M	ANZ Sponsored \$M	
Residential mortgage	-	6,254	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	-	6,254	-	-
Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities	-	-	-	-
Funding facilities	-	-	-	98
Underwriting facilities	-	-	-	-
Lending facilities	-	-	-	-
Credit enhancements	-	-	-	-
Holdings of securities (excluding trading book)	-	-	-	625
Other	-	-	-	-
Total	-	-	-	723

Table 9(k) : Banking Book: Securitisation – Regulatory credit exposures by exposure type

Securitisation exposure type - On balance sheet	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	128	1,333	787
Funding facilities	5,007	3,202	2,684
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	2,925	2,689	1,213
Protection provided	-	-	-
Other	-	-	-
Total	8,060	7,224	4,684

Securitisation exposure type - Off balance sheet	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	233	704	961
Funding facilities	60	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	-	-	-
Protection provided	-	-	-
Other	-	25	25
Total	293	729	986

Total Securitisation exposure type	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	361	2,037	1,748
Funding facilities	5,067	3,202	2,684
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	2,925	2,689	1,213
Protection provided	-	-	-
Other	-	25	25
Total	8,353	7,953	5,670

Table 9(l) part (i): Banking Book: Securitisation - Regulatory credit exposures by risk weight band

Securitisation risk weights	Sep 12		Mar 12		Sep 11	
	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M
≤ 25%	7,610	820	7,048	741	4,588	494
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	154	80	220	121	162	83
>75 ≤ 100%	108	108	199	199	389	390
>100 ≤ 650%	38	57	45	68	51	89
1250% (Deduction)	160	-	170	-	190	-
Total	8,070	1,065	7,682	1,129	5,380	1,056

Resecuritisation risk weights	Sep 12		Mar 12		Sep 11	
	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M
≤ 25%	151	30	153	31	164	11
>25 ≤ 35%	86	30	81	28	87	30
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	-	-
>75 ≤ 100%	45	45	37	37	39	39
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	282	105	271	96	290	80

Total Securitisation risk weights	Sep 12		Mar 12		Sep 11	
	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M	Regulatory credit exposure \$M	Risk weighted assets \$M
≤ 25%	7,761	850	7,201	772	4,752	505
>25 ≤ 35%	86	30	81	28	87	30
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	154	80	220	121	162	83
>75 ≤ 100%	153	153	236	236	428	429
>100 ≤ 650%	38	57	45	68	51	89
1250% (Deduction)	160	-	170	-	190	-
Total	8,352	1,170	7,953	1,225	5,670	1,136

Table 9(l) part (ii): Banking Book: Securitisation - Aggregate securitisation exposures deducted from Capital

Sep 12			
Securitisation exposures deducted from Capital	Deductions from Tier I Capital \$M	Deductions from Tier II Capital \$M	Deductions from Total Capital \$M
Residential mortgage	80	80	160
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	80	80	160

Mar 12			
Securitisation exposures deducted from Capital	Deductions from Tier I Capital \$M	Deductions from Tier II Capital \$M	Deductions from Total Capital \$M
Residential mortgage	85	85	170
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	85	85	170

Sep 11			
Securitisation exposures deducted from Capital	Deductions from Tier I Capital \$M	Deductions from Tier II Capital \$M	Deductions from Total Capital \$M
Residential mortgage	95	95	190
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	95	95	190

Table 9(m): Banking Book: Securitisations subject to early amortisation treatment

ANZ does not have any Securitisations subject to early amortisation treatment or using Standardised approach.

Table 9(n): Banking Book: Resecuritisation - Aggregate amount of resecuritisation exposures retained or purchased

	Sep 12		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	92	92
Credit cards and other personal loans	-	145	145
Auto and equipment finance	-	45	45
Commercial loans	-	-	-
Other	-	-	-
Total	-	282	282

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	-
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	-

	Mar 12		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	87	87
Credit cards and other personal loans	-	146	146
Auto and equipment finance	-	37	37
Commercial loans	-	-	-
Other	-	-	-
Total	-	270	270

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	-
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	-

	Sep 11		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	95	95
Credit cards and other personal loans	-	156	156
Auto and equipment finance	-	39	39
Commercial loans	-	-	-
Other	-	-	-
Total	-	290	290

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	-
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	-

Trading Book**Table 9(o): Trading Book: Traditional and synthetic securitisation exposures**

No assets from ANZ's Trading Book were securitised during the reporting period.

Table 9(p): Trading Book: Total amount of outstanding exposures intended to be securitised

No assets from ANZ's Trading Book were intended to be securitised as at the reporting date.

Table 9(q): Trading Book: Securitisation - Summary of current year's activity by underlying asset type and facility

No assets from ANZ's Trading Book were securitised during the reporting period.

Table 9(r): Trading Book: Traditional and synthetic securitisation exposures

No assets from ANZ's Trading Book were securitised during the reporting period.

Table 9(s): Trading Book: Securitisation – Regulatory credit exposures by exposure type

Securitisation exposure type - On balance sheet	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	10	37	58
Protection provided	-	-	-
Other	-	-	-
Total	10	37	58

Securitisation exposure type - Off balance sheet	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	-	-	-
Protection provided	-	-	-
Other	-	-	-
Total	-	-	-

Total Securitisation exposure type	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	10	37	58
Protection provided	-	-	-
Other	-	-	-
Total	10	37	58

Table 9(t)(i) & Table 9(u)(i): Trading Book: Aggregate securitisation exposures subject to Internal Models Approach (IMA) and the associated Capital requirements

ANZ does not have any aggregate Securitisation exposures subject to IMA for specific risk.

Table 9(t)(ii) & Table 9(u)(ii): Trading Book: Aggregate securitisation exposures subject to APS 120 and the associated Capital requirements

ANZ does not have any aggregate Securitisation exposures subject to APS 120 for specific risk.

Table 9(u)(iii): Trading Book: Securitisation - Aggregate securitisation exposures deducted from Capital

ANZ does not have any Securitisation exposures deducted from Capital.

Table 9(v): Trading Book: Securitisations subject to early amortisation treatment

ANZ does not have any Securitisation exposures subject to early amortisation or using Standardised approach.

Table 9(w): Trading Book: Resecuritisation - Aggregate amount of resecuritisation exposures retained or purchased

	Sep 12		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	-	-
Credit cards and other personal loans	-	8	8
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	8	8

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	8
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	8

	Mar 12		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	-	-

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	-
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	-

	Sep 11		Total \$M
	Exposures subject to CRM \$M	Exposures not subject to CRM \$M	
Resecuritisation exposures retained or purchased			
Residential mortgage	-	-	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	-	-	-

	Exposures to Guarantors \$M
Resecuritisation exposures by credit worthiness of guarantors	
Credit Rating Level 1	-
Credit Rating Level 2	-
Credit Rating Level 3	-
Credit Rating Level 4	-
Credit Rating Level 5 or below	-
No Guarantor	-
Total	-

Chapter 7 – Market risk

Table 11 Market risk – Internal models approach

Definition and scope of market risk

Market risk may stem from ANZ's trading and balance sheet activities and is the risk to ANZ's earnings arising from changes in interest rates, foreign exchange rates and credit spreads, or from fluctuations in bond, commodity or equity prices.

Market risk management of IRRBB is described in Chapter 10 and therefore excluded from this Chapter.

Regulatory approval to use the Internal Models Approach

ANZ has been approved by APRA to use the Internal Models Approach (IMA) under APS 116 for all trading portfolios except for specific interest rate risk, equity specific risk and electricity trading. ANZ uses the Standardised approach to market risk capital for these subsets.

Governance of market risk

The Board Risk Committee oversight of market risk is supported by the CMRC as described in Chapter 3.

The Market Risk function is a specialist risk management unit independent of the business that is responsible for:

- Designing and implementing policies and procedures to ensure market risk exposures are managed within the appetite and limit framework set by the Board.
- Measuring and monitoring market risk exposures, and approving counterparty and associated risks.
- The ongoing effectiveness and appropriateness of the risk management framework.

Traded market risk

The Traded, Foreign Exchange and Commodity Market Risk Policy and accompanying procedures (together the "TFC Framework") governs the management of traded market risk and its key components include:

- A clear definition of the trading book.
- A comprehensive set of requirements that promote the proactive identification and communication of risk.
- A robust Value at Risk (VaR) quantification approach supplemented by comprehensive stress testing.
- A comprehensive limit framework that controls all material market risks.
- An independent Markets Risk function with specific responsibilities.
- Regular and effective reporting of market risk to executive management and the Board.

Measurement of market risk

ANZ's traded market risk management framework incorporates a risk measurement approach to quantify the magnitude of market risk within trading books. This approach and related analysis identifies the range of possible outcomes that can be expected over a given period of time and establishes the relative likelihood of those outcomes.

ANZ's key tools to measure and manage traded market risk on a daily basis are VaR estimates, sensitivities measures and stress tests. VaR is calculated using a historical simulation with a 500 day observation period for standard VaR, and a one-year stressed period for stressed VaR. Traded VaR is calculated at a 99% confidence level for one and ten-day holding periods for standard VaR, and a ten-day holding period for stressed VaR. All material market risk factors and all trading portfolios are captured within the VaR model, with the exception of interest rate risk, equity specific risk and electricity trading, for which capital is calculated using the Standardised approach described in Table 10(b).

ANZ also undertakes a wide range of stress tests to the Group trading portfolio and to individual trading portfolios. Standard stress tests are applied daily and measure the potential loss impact arising from applying the largest market movements during the previous seven years over specific holding periods. Holding periods used to calculate stress parameters differ and reflect the relative liquidity of each product type.

Results from stress testing on plausible severe scenarios are calculated monthly and potential losses are reported to the CMRC.

VaR and stress tests are also supplemented by cumulative loss limits and detailed control limits. Cumulative loss limits ensure that in the event of continued losses from a trading activity, the trading activity is stopped and senior management reviews before trading is resumed. Where necessary, detailed control limits such as sensitivity or position limits are also in place to ensure appropriate control is exercised over a specific risk or product.

Comparison of VaR estimates to gains/losses

Back testing involves the comparison of calculated VaR exposures with profit and loss data to identify the frequency of instances when trading losses exceed the calculated VaR. For APRA backtesting purposes, VaR is calculated at the 99% confidence interval with a one-day holding period.

Back testing is conducted daily, and outliers are analysed to understand if the issues are the result of trading decisions, systemic changes in market conditions or issues related to the VaR model i.e. historical data or model calibration.

ANZ uses actual and hypothetical profit and loss data. Hypothetical data is designed to remove the impacts of intraday trading and sales margins. It is calculated as the difference between the value of the prior day portfolio at prior day closing rates and the value at current day closing rates. Markets Finance calculates actual profit and loss while Market Risk calculates hypothetical profit and loss.

Total Traded market risk backtesting exceptions were within the APS 116 green zone for the period.

The following table discloses the high, mean and low VaR values over the reporting period and at period end.

Table 11(d): Value at Risk (VaR) over the reporting period^{43 44}

Six months ended 30 Sep 12				
Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	5.5	10.0	3.5	3.5
Interest Rate	4.6	8.1	2.8	4.5
Credit	4.7	7.5	2.6	4.0
Commodity	2.9	4.2	1.4	1.7
Equity	1.3	2.7	0.7	1.2

Six months ended 31 Mar 12				
Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	6.2	8.9	4.3	4.9
Interest Rate	6.1	8.0	4.7	6.4
Credit	4.7	7.2	3.6	5.9
Commodity	3.2	4.7	1.6	3.1
Equity	1.9	4.0	1.1	1.4

Six months ended 30 Sep 11				
Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	4.7	10.9	2.4	7.8
Interest Rate	11.1	20.3	5.4	7.0
Credit	7.0	10.5	4.9	4.9
Commodity	3.2	6.4	1.5	2.1
Equity	1.5	3.5	0.8	3.4

⁴³ Regulatory VaR is calculated at 99% confidence level for a one-day holding period. Tables for March 12 and September 11 have been restated using 99% VaR inline with the change to monitoring VaR limits at a 99% Confidence interval.

⁴⁴ The Foreign exchange VaR excludes foreign exchange translation exposures outside of the trading book.

Reporting of market risk

Market Risk reports results of daily VaR and stress testing to senior management in Market Risk and the Global Markets business. Market Risk will escalate details of any limit breach to the appropriate discretion holder within Market Risk and to Group Risk expediently, and report to the CMRC monthly.

Market Risk monitors and analyses back testing results daily and reports results to the CMRC quarterly.

Mitigation of market risk

The Market Risk team's responsibilities, including the reporting and escalation processes described above, is fundamental to how market risk is managed. Market Risk has presence in all the major dealing operations centres in Australia, New Zealand, Asia, Europe and America.

Commodities risk

Commodity price risk arises as a result of movement in prices of various commodities. All exposures are transferred to the trading book and centrally managed by the Global Markets business and monitored by Market Risk in accordance with the TFC framework.

Foreign exchange risk

Foreign exchange risk arises as a result of movements in relative values of various currencies.

Exposures from ANZ's normal operating business and trading activities are recorded in core multi-currency systems and managed within the trading book in accordance with the TFC framework.

Structural exposures from foreign investments and capital management activities are managed in accordance with policies approved by the Board Risk Committee, with the main objective of ensuring that ANZ's capital ratio is largely protected from changes in foreign exchange. As at 30 September 2012, ANZ's investment in ANZ Bank New Zealand Limited is the main source of the structural foreign exchange exposure.

Table 10 Market risk – Standard approach

ANZ uses the standard model approach to measure market risk capital for interest rate risk – specific risk⁴⁵, equity specific risk and electricity trading risk factors. For internal purposes only ANZ also uses an internal model for electricity.

For interest rate risk – specific risk, ANZ's internal VaR model captures general interest rate and credit spread risk for all products, but not the credit spread risk associated with individual issuers of interest rate products.

Table 10(b): Market risk – Standard approach⁴⁶

	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Interest rate risk	110	114	141
Equity position risk	4	4	4
Foreign exchange risk	-	-	-
Commodity risk	3	2	15
Total	117	120	160
Risk Weighted Assets equivalent	1,463	1,500	2,000

⁴⁵ Specific risk is the risk that the value of a security will change due to issuer-specific factors. It applies to interest rate and equity positions related to a specific issuer.

⁴⁶ RWA equivalent is the capital requirement multiplied by 12.5 in accordance with APS 110.

Chapter 8 – Operational risk

Table 12 Operational risk

Definition of operational risk

Within ANZ, operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, and the risk of reputation loss or damage arising from inadequate or failed internal processes, people and systems, but excludes strategic risk.

The objective of operational risk management is to ensure that risks are identified, assessed, measured, evaluated, treated, monitored and reported in a structured environment with appropriate governance oversight. ANZ does not expect to eliminate all risks, but to ensure that the residual risk exposure is managed as low as reasonably practical based on a sound risk/reward analysis in the context of an international financial institution.

ANZ has been authorised by APRA to use the advanced measurement approach (AMA) for calculation of operational risk capital requirements under APS 115. This methodology applies across all of ANZ.

Operational risk governance and structure

The three lines of defence are business first line, divisional and group risk functions second line and Global Internal Audit the third line. The first and second lines of defence have defined roles, responsibilities and escalation paths to support effective two way communication and management of operational risk at ANZ. There are also on-going review mechanisms in place to ensure the ORMMF and Compliance frameworks continue to meet organisational needs and regulatory requirements.

Responsible area		Key responsibilities
First line of defence	Business / Enablement	<ul style="list-style-type: none"> Primary accountability for the understanding of key risks and related control environment Undertake day-to-day management of risks, related decision-making and reporting Promote a strong risk culture of adhering to thresholds, managing risk exposure and making sustainable risk decisions Ensure operational risk information is up to date and reflective of the true operational risk position
Second line of defence	Divisional Risk	<ul style="list-style-type: none"> Provide independent oversight and guidance to enable consistent application of the ORMMF Coordinate, oversight and report on material operational risks and change initiatives Contribute to the identification of systemic issues and risk collation across the Division
	Group Risk	<ul style="list-style-type: none"> Independent function responsible for overarching risk oversight across the bank Set Group operational risk appetite statements Develop and maintain relevant policies and procedures to support consistent execution and continuing appropriateness of ORMMF Monitor and report compliance with ORMMF, consider and approve any exception requests Source external loss data Lead scenario analysis and operational risk capital calculation process Central point of contact with regulators Provide global insight and commentary on consolidated bank wide view; and identify group wide exposures and trends
Third line of defence	Global Internal Audit	<ul style="list-style-type: none"> Provide independent and objective assurance to management and ANZ Board regarding compliance with policy and regulatory requirements Perform objective assessments across all geographies, Divisions, Lines of Business and processes Ensure independent review of the adequacy of the ORMMF is undertaken

Operational risk principles

ANZ has developed a comprehensive framework to manage operational risk and compliance which includes the following operational risk management principles:

Principle 1: Risk Governance	ANZ recognises operational risk as a primary risk category and has an effective and embedded operational risk governance structure. This includes a dedicated and independent operational risk management function and an executive committee for oversight of operational risk across ANZ, supported by organisation wide policies, procedures and systems.
Principle 2: Risk Culture	ANZ believes risk management is everyone's responsibility and encourages a culture of prompt escalation of risk to staff sufficiently senior to drive resolution. This culture is supported by clearly articulated roles and responsibilities to ensure effective measurement and management of operational risk.
Principle 3: Risk Appetite and Objective Setting	ANZ's Board is responsible for the overall operational risk profile and accordingly has an approved operational risk appetite, including thresholds for risk assessment and reporting that determines the risk boundaries within which the business must operate to set its strategy.
Principle 4: Risk and Control Assessment	ANZ periodically identifies and assesses its exposure to material operational risk within all existing and new products, processes, projects and systems, and assesses the key controls in place to manage these risks.
Principle 5: Loss and Incident Management	ANZ incorporates analysis of loss, incident and control failure into improving the underlying control environment by defining clearly articulated risk response strategies. This includes effective contingency and business continuity plans that enable it to operate on an ongoing basis and limit losses in the event of severe business disruption.
Principle 6: Capital Calculation	ANZ holds capital commensurate with its operational risk, and maintains comprehensive and well documented operational risk capital processes for calculating its operational risk capital, including monitoring for material changes to capital exposure.
Principle 7: Risk Monitoring and Reporting	ANZ maintains a comprehensive and sustainable approach for monitoring and reporting relevant operational risk data, and monitors material changes to operational risk exposure, including Key Risk Indicators (KRIs), to support the proactive management of operational risk across the Group.
Principle 8: Assurance and Continuous Improvement	ANZ has appropriate review processes to continuously evaluate the effectiveness and relevance of its operational risk measurement and management processes to meet organisational needs and regulatory requirements.
Principle 9: Risk Based Decision Making	ANZ ensures effective integration of day to day operational risk management with outputs from the operational risk measurement processes, to support risk based decision making.

ANZ's operational risk framework is delivered through:

- Level 1 ANZ Board Operational Risk Policy (the Principles) – approved by the Board Risk Committee, sets the operational risk principles for governing the overall measurement and management of operational risk across ANZ.
- Level 2 Global Operational Risk Measurement and Management Policy (the Policy) – approved by the Board Risk Committee, outlines the core standards, roles and responsibilities and minimum

requirements of the way in which operational risk is measured and managed, in line with Level 1 ANZ Board Operational Risk Policy and APS 115.

- Level 2A Global Operational Risk Procedures (the Procedures) – owned by Group Operational Risk, provide the procedures to support the consistent application of Level 1 and Level 2 Global Operational Risk Policies across ANZ. The procedures are further augmented by tools, templates, systems and on-going training.

Operational risk management

Risk and Controls are managed as part of business as usual right across the organisation. Risk management, supported by a strong Risk Culture, ensures all staff are thinking about and managing risk on a daily basis – “Risk is Everyone’s Responsibility”. However, Senior Management need visibility of the key risks. These are the risks that if they materialised, would adversely affect the achievement of business objectives, ANZ’s reputation, regulatory compliance or impact key processes (i.e. the risks that really matter, not all risks) and are typically inherent high and extreme risks.

Day-to-day management of operational risk is the responsibility of business unit line management and staff. This includes:

- Primary accountability for the understanding of key risks and related control environment.
- Analysis of identified risks, including assessing the inherent and residual risk after consideration of controls currently in place. This requires analysis of the potential consequences of failing to deal with the risks, the likelihood of the risks being realised and the effectiveness of the key controls in place to prevent or mitigate the risk.
- Evaluation of the risk to determine whether it is within Board approved risk appetite.
- Identification and implementation of risk treatment options to improve the key controls over the risk for those risks that are outside the risk appetite. When the preferred risk treatment option is selected the risk treatment plan is documented.
- Ensure operational risk information is up to date and reflective of the true operational risk position.
- Monitoring and review of treatment plans, operational risks and controls, including testing the key controls and reporting on the current operational risk profile.
- Promote a strong risk culture of adhering to thresholds, managing risk exposure and making sustainable risk decisions.
- Dedicated Divisional and Group Corporate Centre Risk Governance teams play a support, monitoring, oversight and challenge role with Global Internal Audit providing independent assurance and review.

Operational risk mitigation

In line with industry practice, ANZ obtains insurance to cover those operational risks where cost-effective premiums can be obtained. In conducting their business, business units are advised to act as if uninsured and not to use insurance as a guaranteed mitigant for operational risk. ANZ’s AMA to operational risk regulatory capital calculation does not utilise insurance as a risk mitigation.

ANZ has business continuity, recovery and crisis management plans. The intention of the business continuity and recovery plans is to ensure critical business functions can be maintained, or restored in a timely fashion, in the event of material disruptions arising from internal or external events.

Crisis management planning at Group and country levels supplement business continuity plans in the event of a broader group or country crisis. Crisis management plans include crisis team structures, roles, responsibilities and contact lists, and are subject to testing.

Operational risk reporting

ANZ’s operational risk management includes a system for capturing internal losses, case management and reporting. Operational risk and compliance events (including actual losses, near misses and breaches) are recorded and managed to ensure timely, complete and accurate reporting.

The Corporate Centre and business unit risk functions prepare reporting. Given the ANZ Board’s low risk appetite for operational risk, the reporting thresholds are set relatively low for escalation to OREC. OREC’s role is to review, and if appropriate, approve the risk mitigation and monitor associated action plans.

ANZ's advanced measurement approach

Group Operational Risk is responsible for maintaining ANZ's AMA for operational risk measurement and capital allocation.

Operational risk capital is held to protect depositors and shareholders of the bank from rare and severe unexpected losses. In order to quantify the overall operational risk profile, ANZ maintains and calculates operational risk capital (including regulatory and economic capital), on at least a six monthly basis. The capital is calculated using scaled external loss data, internal loss data and scenarios as a direct input and risk registers as an indirect input.

ANZ typically models capital at a divisional or geographic layer. Once calculated, the capital is allocated to lines of business according to risk exposure (key allocation drivers). Understanding the make up of the key allocation drivers allows lines of business to consider capital impacts when making decisions. Accordingly, capital allocations are structured to encourage businesses to effectively manage their operational risk exposures e.g. improve controls, reduce losses etc.

In the event of an 'off cycle' scenario review, a recalculation is performed within the relevant cell of the model, to judge the sensitivity of the change on capital. The outcomes of the off cycle calculation are shared with executive management and decisions are made as to whether to adjust capital or incorporate a scenario change in to the next capital update. This ensures that capital levels are responsive to material changes in risk levels across ANZ.

Capital modelling uses the following expected and unexpected losses as data inputs:

- Minimum of five years of historical internal losses captured and reported in the Bank-wide Operational Loss Database (BOLD).
- Relevant external losses, sourced from Algo First Op Data (includes losses >USD1 million) a recognised industry database. This data is suitably scaled using internally developed rules to ensure relevance to ANZ's size and operations.
- Scenario analysis, unexpected potential loss estimates for severe but plausible risk events.

ANZ does not use expected loss offsets for the purposes of regulatory capital modelling and does not recognise the risk-mitigating effect of insurance in determining operational risk capital.

Operational risk modelling is performed at the divisional or geographic level for applicable Basel risk event types. Operational risk capital is derived using probability distributions and calculated using Monte Carlo simulations using a mathematical method called a loss distribution approach.

Operational risk modelling is performed by a specialist central function. Operational risk capital is derived using probability distributions and calculated using Monte Carlo simulations at the division and event type level referred to as a modelling cell. The data inputs are combined for each cell using a loss distribution approach and include the following:

- Historical internal losses captured and reported in an internal loss database.
- Relevant external losses sourced from a reputable industry supplier. This data is suitably scaled using internally developed rules to ensure relevance to ANZ's size and operations.
- Scenario analysis data for severe but plausible risk events, elicited in workshops with risk and business professionals.

Capital outcomes include:

- Operational risk regulatory capital to meet the regulatory capital soundness standard based on a 99.9% confidence interval in accordance with APS 115.
- Economic Capital based on a 99.97% confidence interval.

Compliance

Group Compliance has global oversight responsibility for the ANZ Compliance Framework, and each division has responsibility for embedding the framework into its business operations, identifying all regulatory compliance obligations, and escalating when breaches occur. The Compliance framework fosters an integrated approach where staff are responsible and accountable for compliance, either within their job role, or within their area of influence.

Chapter 9 – Equities

Table 13 Equities – Disclosures for banking book positions

Definition and categorisation of equity investments held in the banking book

Equity risk is the potential loss that may be incurred on equity investments in the banking book. ANZ's equity exposures in the banking book are primarily categorised as follows:

- Equity investments that are taken for strategic reasons - These transactions represent strategic business initiatives and include ANZ's investments in partnership arrangements with financial institutions in Asia. These investments are undertaken only after extensive analysis and due diligence by Group Strategy, internal specialists and external advisors, where appropriate. Board approval is required prior to committing to any investments over delegated authorities, and all regulatory notification requirements are met. Performance of these investments is monitored by both the owning business unit and Group Strategy to ensure that it is within expectations and the values of the investments are tested at least annually for impairment.
- Equity investments on which capital gains are expected - These transactions are originated and managed by dedicated equity finance teams. These transactions represent funding solutions for known customers of ANZ and are governed by specific policies. ANZ ensures that the investment in these entities does not constitute a controlling interest in the relevant business.
- Equity investments made as the result of a work out of a problem exposure - From time to time, ANZ will take an equity stake in a customer as part of a work out arrangement for problem exposures. These investments are made only where there is no other viable option available and form an immaterial part of ANZ's equity exposures.

Valuation of and accounting for equity investments in the banking book

In line with Group Accounting Policy the accounting treatment of equity investments depends on whether ANZ has significant influence over the investee.

Investments in associates

Where significant influence is assessed, the investment is classified as an Investment in Associate in the financial statements. ANZ adopts the equity method of accounting for associates. ANZ's share of the results of associates is included in the consolidated income statement. The associate investments are recognised at cost plus ANZ's share of post acquisition net assets. Interests in associates are reviewed annually for impairment, using either market value, or a discounted cash flow methodology to assess value in-use.

APRA requires that equity accounted earnings from associates, including strategic investments in partnerships are excluded from regulatory capital until received in the form of a dividend.

Available-for-Sale Investments

Where ANZ does not have significant influence over the investee, the investment is classified as Available-for-Sale (AFS). The investment is initially recognised at fair value plus transaction costs. Changes in the fair value of the investments are recognised in an equity reserve with any impairment recognised in the income statement. When the asset is sold the cumulative gain or loss relating to the asset held in the AFS revaluation reserve is transferred to the income statement.

Table 13(b) and 13(c): Equities – Types and nature of Banking Book investments

Equity investments	Sep 12	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	1,943	2,169
Value of unlisted (privately held) equities	1,694	1,731
Total	3,637	3,900

Equity investments	Mar 12	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	1,876	2,322
Value of unlisted (privately held) equities	2,031	2,067
Total	3,907	4,389

Equity investments	Sep 11	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	1,985	2,179
Value of unlisted (privately held) equities	1,976	2,011
Total	3,961	4,190

Table 13(d) and 13(e): Equities – gains (losses)

	Half Year Sep 12	Half Year Mar 12	Half Year Sep 11
	\$M	\$M	\$M
Realised gains (losses) on equity investments			
Cumulative realised gains (losses) from disposals and liquidations in the reporting period	233	29	24
Cumulative realised losses from impairment and writedowns in the reporting period	(4)	(37)	(15)
Gain on dilution of shareholding	10	-	-
	239	(8)	9
Unrealised gains (losses) on equity investments			
Total unrealised gains (losses)	9	71	49
Reversal of prior period unrealised gains (losses) from disposals and liquidations in the reporting period	(196)	(5)	-
Total unrealised gains (losses) included in Gross Tier 1/Tier 2 capital	-	-	-
	(187)	66	49

Table 13(f): Equities Risk Weighted Assets

	Sep 12	Mar 12	Sep 11
	\$M	\$M	\$M
Risk Weighted Assets			
Equity investments subject to a 300% risk weight	174	62	3
Equity investments subject to a 400% risk weight	856	1,173	1,396
Total RWA - Equity	1,030	1,235	1,399

Chapter 10 – Interest Rate Risk in the Banking Book

Table 14 Interest Rate Risk in the Banking Book

Definition of interest rate risk in the banking book

Interest rate risk in the banking book (IRRBB) relates to the potential adverse impact of changes in market interest rates on ANZ's future net interest income. The risk generally arises from:

- Repricing and yield curve risk - the risk to earnings or market value as a result of changes in the overall level of interest rates and/or the relativity of these rates across the yield curve.
- Basis risk - the risk to earnings or market value arising from volatility in the interest margin applicable to banking book items.
- Optionality risk - the risk to earnings or market value arising from the existence of stand-alone or embedded options in banking book items.

Regulatory capital approach

ANZ has received approval from APRA to use the IMA for the calculation of regulatory capital for IRRBB, under APS 117.

Governance

The Board Risk Committee has established a risk appetite for IRRBB and delegated authority to the GALCO to manage the strategic position (capital investment term) and oversee the interest rate risk arising from the repricing of asset and liabilities (mismatch risk) in the banking book. GALCO has delegated the management of this mismatch risk to the Global Markets business.

Market Risk is the independent function responsible for:

- Designing and implementing policies and procedures to ensure that IRRBB exposure is managed within the limit framework set by the Board Risk Committee.
- Monitoring and measuring IRRBB market risk exposure, compliance with limits and policies.
- Ensuring ongoing effectiveness and appropriateness of the risk management framework.

Management framework

IRRBB is managed under a comprehensive measurement and reporting framework, supported by an independent Market Risk function. Key components of the framework include:

- A comprehensive set of policies that promote proactive risk identification and communication.
- Funds Transfer Pricing framework to transfer interest rate risk from business units so it can be managed by the Global Markets business and monitored by Market Risk.
- Quantifying the magnitude of risks and controlling the potential impact that changes in market interest rates can have on the net interest income and balance sheet fair value of ANZ.
- An independent Market Risk function with specific responsibilities.
- Regular and effective reporting of IRRBB to executive management and the Board.

Measurement of interest rate risk in the banking book

ANZ uses the following principal techniques to quantify and monitor IRRBB:

- Interest Rate Sensitivity - this is an estimate of the change in economic value of the banking book due to a 1 basis point move in a specific part of the yield curve.
- Earnings at risk (EaR) - this is an estimate of the amount of income that is at risk from interest rate movements over a given holding period, expressed to a 97.5% or 99% level of statistical confidence.
- Value at risk (VaR) - this is an estimate of the impact of interest rate changes on the banking book's market value, expressed to a 99% level of statistical confidence for a given holding period.
- Market Value loss limits - this mitigates the potential for embedded losses within the banking book.
- Stress testing - standard and extraordinary tests are used to highlight potential risk which may not be captured by VaR, and how the portfolio might behave under extraordinary circumstances.

The calculations used to quantify IRRBB require assumptions to be made about the repricing term of exposures that do not have a contractually defined repricing date, such as deposits with no set maturity dates, and prepayments. Changes to these assumptions require GALCO approval.

Where relevant, IRRBB techniques recognise foreign currency effects as all measures are expressed in Australian dollars.

Basis and optionality risks are measured using Monte Carlo simulation techniques, to generate a theoretical worst outcome at a specified confidence level (typically 99%) less the average outcome.

Reporting of interest rate risk in the banking book

Market Risk analyses the output of ANZ's VaR and EaR calculations daily. Stress tests are calculated monthly. Compliance with the risk appetite and limit framework is reported to CMRC, GALCO and the Board Risk Committee.

IRRBB regulatory capital is calculated monthly.

ANZ's interest rate risk in the banking book capital requirement

The IRRBB regulatory capital requirements includes a value for repricing and yield curve risk, basis and optionality risks based on a 99% confidence interval, one year holding period and a six year historical data set.

Embedded losses also make up the capital requirement and are calculated as the difference between the book value of banking book items and the current economic value.

Results of standard shock scenario

The Basel II framework sets out a standard shock scenario of a 200 basis point parallel shift change in interest rates, in order to establish a comparable test across banks.

Table 14(b) that follows shows the results of this test by currency of the exposures outside the trading book.

Table 14(b): Interest Rate Risk in the Banking Book

Standard Shock Scenario Stress Testing: Interest rate shock applied	Change in Economic Value		
	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
AUD			
200 basis point parallel increase	(18)	154	53
200 basis point parallel decrease	20	(158)	(54)
NZD			
200 basis point parallel increase	(3)	51	22
200 basis point parallel decrease	(4)	(61)	(25)
USD			
200 basis point parallel increase	(1)	9	(30)
200 basis point parallel decrease	8	4	12
GBP			
200 basis point parallel increase	(6)	(10)	(6)
200 basis point parallel decrease	2	5	3
Other			
200 basis point parallel increase	17	19	20
200 basis point parallel decrease	1	(1)	1
IRRBB regulatory capital	996	837	675
IRRBB regulatory RWA	12,455	10,465	8,439

IRRBB stress testing methodology

Stress tests within ANZ include standard and extraordinary tests. These tests are used to highlight potential risk which may not be captured by VaR, and how the portfolio might behave under extraordinary circumstances. Standard stress tests include statistically derived scenarios based on historical yield curve movements. These combine parallel shocks with twists and bends in the curve to produce a wide range of hypothetical scenarios at high statistical confidence levels, with the single worst scenario identified and reported. Extraordinary stress tests include interest rate moves from historical periods of stress as well as stresses to assumptions made about the repricing term of exposures. The rate move scenarios include daily changes over the stressed periods and the worst theoretical losses over the selected periods are each reported. Stresses of the repricing term assumptions investigate scenarios where actual repricing terms are vastly different to those modelled.

Chapter 11 – Liquidity risk

Overview

Liquidity risk is the risk that ANZ has insufficient capacity to fund increases in assets or is unable to meet its payment obligations as they fall due, including repaying depositors or maturing wholesale debt. The timing mismatch of cash flows and the related liquidity risk is inherent in all banking operations and is closely monitored by ANZ.

Governance

The management of ANZ's liquidity and funding risk is overseen by the Board Risk Committee and GALCO, in accordance with ANZ's liquidity policy framework.

Scenario modelling

The global financial crisis highlighted the importance of differentiating between stressed and normal market conditions in a name-specific crisis and the different behaviour that offshore and domestic wholesale funding markets can exhibit during market stress events. ANZ's short term liquidity scenario modelling stresses cash flow projections against multiple 'survival horizons' over which the Group is required to remain cash flow positive. In addition, longer term scenarios are also in place that measure the structural liquidity position of the balance sheet. Scenarios modelled are either prudential requirements or Board mandated scenarios. Under these scenarios, customer and wholesale balance sheet asset/liability flows are stressed.

Wholesale Funding

ANZ targets a diversified funding base, avoiding undue concentrations by investor type, maturity, market source and currency. Diversification was further enhanced during the year ended September 2012 with the introduction of a covered bond funding programme.

As at September 2012, the composition of the Group's funding profile was:

- Term wholesale funding with a remaining maturity of more than one year of \$68.4 billion (12% of total funding)
- Term wholesale funding with a remaining maturity of one year or less of \$25.4 billion (5% of total funding)
- Short-term wholesale funding (including central bank deposits) of \$78.9 billion (14% of total funding)
- Shareholders equity and hybrids of \$46.3 billion (8% of total funding)

\$25.8 billion of term wholesale debt (with a remaining term greater than one year as at 30 September 2012) was issued during the September 2012 financial year, of which \$4.5 billion is pre-funding for the September 2013 financial year.

ANZ maintained access to all major global wholesale funding markets during 2012.

- Benchmark term debt issues were completed in AUD, USD, EUR, JPY, CHF, GBP, CNH and NZD.
- All short-term wholesale funding needs were comfortably met.
- The weighted average tenor of new term debt issuance remained relatively flat at 4.6 years (4.7 years in 2011).
- The weighted average cost of new term debt issuance increased further in 2012 as a result of volatility in global markets. Conditions improved towards the end of the year, however average portfolio costs remain substantially above pre-crisis levels and continue to increase as maturing term wholesale funding is replaced at higher spreads.

Liquidity portfolio

The Group holds a diversified portfolio of cash and high credit quality securities that may be sold or pledged to provide same-day liquidity. This portfolio helps protect the Group's liquidity position by providing cash in a severely stressed environment. All assets held in the prime portfolio are securities eligible for repurchase under agreements with the applicable central bank (i.e. 'repo eligible').

The liquidity portfolio is well diversified by counterparty, currency and tenor. Under the liquidity policy framework, securities purchased for ANZ's liquidity portfolio must be of a similar or better credit quality to ANZ's external long-term or short-term credit ratings and continue to be repo eligible.

Supplementing the prime liquid asset portfolio, the Group holds additional liquidity;

- Central bank deposits with the US Federal Reserve, Bank of England, Bank of Japan and European Central Bank of \$18.0 billion.
- Australian Commonwealth and State Government securities and gold of \$12.6 billion.
- Cash and other securities to satisfy local country regulatory liquidity requirements.

Appendix 1 – Detail of capital structure

Fundamental Tier 1 capital	Sep 12	Mar 12	Sep 11
	\$M	\$M	\$M
Paid-up ordinary share capital	23,203	22,396	21,577
Reserves			
Foreign currency translation reserve	(2,831)	(2,830)	(2,418)
Share and share option reserve	201	180	174
Transactions with non-controlling interest reserve	(23)	(23)	(22)
Total reserves	(2,653)	(2,673)	(2,266)
Prudential retained earnings			
Retained earnings including current year earnings	19,728	18,758	17,787
Accumulated retained profits and reserves of insurance, funds management and securitisation entities and associates	(1,653)	(1,438)	(1,679)
Dividend not provided for	(2,149)	(1,769)	(1,999)
Deferred fee revenue including fees deferred as part of loan yields	415	425	414
Accrual for Dividend Reinvestment Plans	430	531	600
Total prudential retained earnings	16,771	16,507	15,123
Non-controlling interests	42	43	41
Total	37,363	36,273	34,475

Deductions from Tier 1 capital	Sep 12	Mar 12	Sep 11
	\$M	\$M	\$M
Goodwill	(3,008)	(2,966)	(2,968)
Other deductions from Tier 1 capital			
Intangible component of investment in OnePath Australia and New Zealand (excluding prudential goodwill)	(2,074)	(2,071)	(2,071)
Capitalised software and other intangible assets	(1,746)	(1,711)	(1,549)
Capitalised expenses including loan and lease origination fees, capitalised securitisation establishment costs and costs associated with debt raisings	(850)	(761)	(688)
Applicable deferred tax assets (excluding the component relating to the general reserve for impairment of financial assets)	(301)	(92)	(136)
Mark-to-market impact of own credit spread	(44)	(40)	(128)
Negative Available-for-sale reserve	(2)		
Total other deductions from Tier 1 capital	(5,017)	(4,675)	(4,572)
50/50 deductions from Tier 1 capital			
Investment in ANZ insurance subsidiaries	(300)	(300)	(200)
Investment in funds management entities	(27)	(27)	(29)
Investment in OnePath Australia and New Zealand	(721)	(922)	(906)
Investment in other Authorised Deposit-taking Institutions and overseas equivalents	(1,070)	(1,118)	(1,151)
Expected loss in excess of eligible provisions	(542)	(524)	(475)
Other	(154)	(326)	(310)
Total 50/50 deductions from Tier 1 capital	(2,814)	(3,217)	(3,071)
Total deductions from Tier 1 capital	(10,839)	(10,858)	(10,611)

Deductions from Tier 2 capital	Sep 12 \$M	Mar 12 \$M	Sep 11 \$M
Upper and lower Tier 2 capital deductions	(28)	(28)	(28)
50/50 deductions from Tier 2 capital			
Investment in ANZ insurance subsidiaries	(300)	(300)	(200)
Investment in funds management entities	(27)	(27)	(29)
Investment in OnePath Australia and New Zealand	(721)	(922)	(906)
Investment in other Authorised Deposit Taking Institutions and overseas equivalents	(1,070)	(1,118)	(1,151)
Expected loss in excess of eligible provisions	(542)	(524)	(475)
Other	(154)	(326)	(310)
Total 50/50 deductions from Tier 2 capital	(2,814)	(3,217)	(3,071)
Total deductions from Tier 2 capital	(2,842)	(3,245)	(3,099)

Appendix 2 – ANZ Bank (Europe) Limited

ANZ Bank (Europe) Limited (ANZBEL) is a 100% owned and controlled subsidiary of ANZ, and is regulated by the Financial Services Authority (FSA). ANZBEL is subject to similar Pillar 3 requirements as ANZ, under the FSA's Prudential Source Book for Banks, Building Societies and Investment Firms (BIPRU). The FSA has granted ANZBEL a Pillar 3 Disclosure waiver direction, which can be found on the FSA website: fsa.gov.uk/pubs/waivers/bipru_waivers.pdf.

In line with the FSA waiver direction, ANZBEL will rely on disclosures in this document to satisfy most of its Pillar 3 disclosure obligations. The following FSA requirements are not mirrored in APS 330 or included in this disclosure document, and as such are required by the FSA to be reported on an individual basis in the annual ANZBEL Statutory Accounts:

- BIPRU 11.5.4R (4) - Disclosure of the firm's minimum capital requirements covering position, foreign exchange, commodity, counterparty and concentration risks.
- BIPRU 11.5.12R – Disclosure: Market Risk.

Glossary

Collective provision (CP)	Collective provision is the provision for credit losses that are inherent in the portfolio but not able to be individually identified. A collective provision may only be recognised when a loss event has already occurred. Losses expected as a result of future events, no matter how likely, are not recognised.
Credit Default Swaps (CDS)	A sequence of payments by one party (often called the "Buyer") in exchange for an obligation of the other party (often called the "Seller") to make a payment to the buyer if a credit default event occurs in relation to a specified reference entity (and possibly a specified obligation of that reference entity).
Credit exposure	The aggregate of all claims, commitments and contingent liabilities arising from on- and off-balance sheet transactions (in the banking book and trading book) with the counterparty or group of related counterparties.
Credit risk	The risk of financial loss resulting from the failure of ANZ's customers and counterparties to honour or perform fully the terms of a loan or contract.
Credit Valuation Adjustment (CVA)	Over the life of a derivative instrument, ANZ uses a CVA model to adjust fair value to take into account the impact of counterparty credit quality. The methodology calculates the present value of expected losses over the life of the financial instrument as a function of probability of default, loss given default, expected credit risk exposure and an asset correlation factor. Impaired derivatives are also subject to a CVA.
Days past due	The number of days a credit obligation is overdue, commencing on the date that the arrears or excess occurs and accruing for each completed calendar day thereafter.
Equity risk	Is the potential loss that may be incurred on equity investments in the banking book.
Expected loss (EL)	Expected loss is determined based on the expected average annual loss of principal over the economic cycle for the current risk profile of the lending portfolio.
Exposure at Default (EAD)	Exposure At Default is defined as the expected facility exposure at the date of default.
Impaired assets (IA)	Facilities are classified as impaired when there is doubt as to whether the contractual amounts due, including interest and other payments, will be met in a timely manner. Impaired assets include impaired facilities, and impaired derivatives. Impaired derivatives have a credit valuation adjustment (CVA), which is a market assessment of the credit risk of the relevant counterparties.
Impaired loans (IL)	Impaired loans comprise of drawn facilities where the customer's status is defined as impaired.
Individual provision charge (IPC)	Impaired provision charge is the amount of expected credit losses on financial instruments assessed for impairment on an individual basis (as opposed to on a collective basis). It takes into account expected cash flows over the lives of those financial instruments.
Individual provisions (IP)	Individual provisions are assessed on a case-by-case basis for all individually managed impaired assets taking into consideration factors such as the realisable value of security (or other credit mitigants), the likely return available upon liquidation or bankruptcy, legal uncertainties, estimated costs involved in recovery, the market price of the exposure in secondary markets and the amount and timing of expected receipts and recoveries.

Loss Given Default (LGD)	Loss Given Default is an estimate of the potential economic loss on a credit exposure, incurred as a consequence of obligor default and expressed as a percentage of the facility's EAD.
Market risk	<p>The risk to ANZ's earnings arising from changes in interest rates, currency exchange rates and credit spreads, or from fluctuations in bond, commodity or equity prices. ANZ has grouped market risk into two broad categories to facilitate the measurement, reporting and control of market risk:</p> <p>Traded market risk - the risk of loss from changes in the value of financial instruments due to movements in price factors for physical and derivative trading positions. Trading positions arise from transactions where ANZ acts as principal with clients or with the market.</p> <p>Non-traded market risk (or balance sheet risk) - comprises interest rate risk in the banking book and the risk to the AUD denominated value of ANZ's capital and earnings due to foreign exchange rate movements.</p>
Operational risk	The risk of loss resulting from inadequate or failed internal controls or from external events, including legal risk but excluding reputation risk.
Past due facilities	Facilities where a contractual payment has not been met or the customer is outside of contractual arrangements are deemed past due. Past due facilities include those operating in excess of approved arrangements or where scheduled repayments are outstanding but do not include impaired assets.
Probability of Default (PD)	Probability of Default is an estimate of the level of the risk of borrower default.
Recoveries	Payments received and taken to profit for the current period for the amounts written off in prior financial periods.
Regulatory Expected Loss	Regulatory Expected Loss is a measure of expected credit losses at the start of the year, whereas write-offs relate to a fluctuating portfolio and are recorded throughout the year.
Restructured items	Restructured items comprise facilities in which the original contractual terms have been modified for reasons related to the financial difficulties of the customer. Restructuring may consist of reduction of interest, principal or other payments legally due, or an extension in maturity materially beyond those typically offered to new facilities with similar risk.
Risk Weighted Assets (RWA)	Assets which are weighted for credit risk according to a set formula (APS 112/113).
Securitisation risk	The risk of credit related losses greater than expected due to a securitisation failing to operate as anticipated, or of the values and risks accepted or transferred, not emerging as expected.
Write-Offs	Facilities are written off against the related provision for impairment when they are assessed as partially or fully uncollectable, and after proceeds from the realisation of any collateral have been received. Where individual provisions recognised in previous periods have subsequently decreased or are no longer required, such impairment losses are reversed in the current period income statement.

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