2018 BASEL III PILLAR 3 DISCLOSURE

AS AT 30 SEPTEMBER 2018

APS 330:
PUBLIC DISCLOSURE

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: Public Disclosure.

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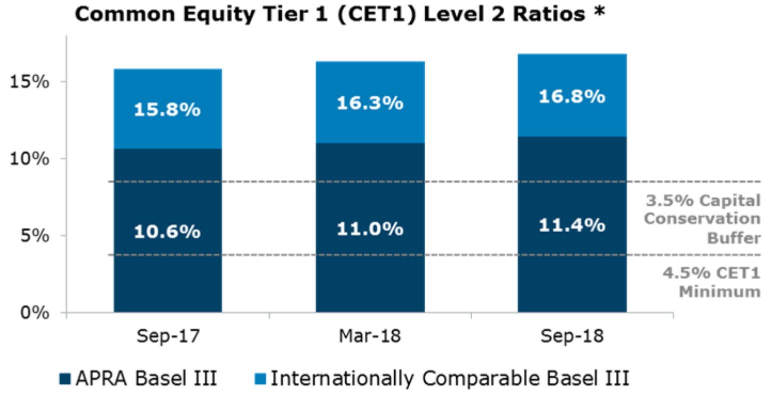
[1] Each table reference adopted in this document aligns to those required by APS 330 to be disclosed at half year.

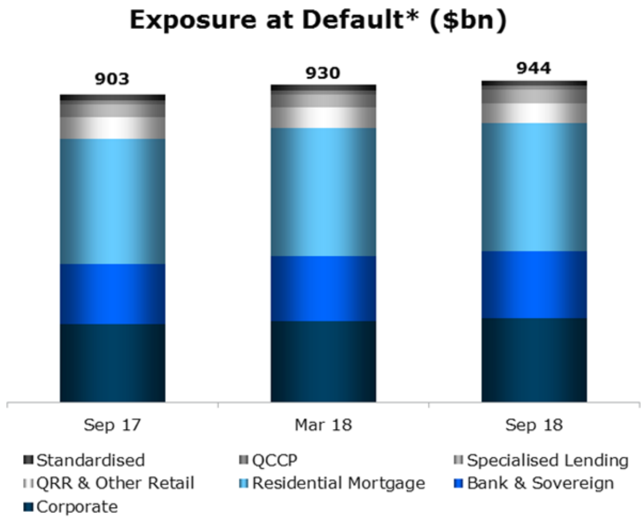
Chapter 1 – Highlights



* Internationally Comparable methodology aligns with APRA's information paper titled International Capital Comparison Study (13 July 2015).

Strong capital position at September 2018

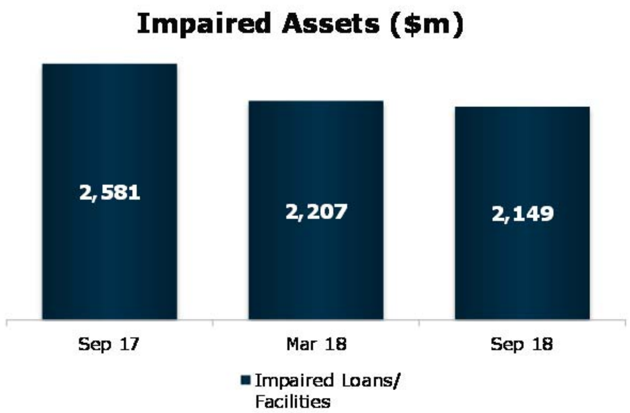
- CET1 ratios have increased in the half to September 2018 mainly due to cash profit generation in 2H18 and net reduction in underlying RWA growth (excluding foreign exchange impacts, regulatory changes and other one-offs). This was partially offset by the payment of the March 2018 interim dividend.
- The APRA CET1 ratio is currently in excess of APRA's 'unquestionably strong' benchmark and well ahead of the 2020 implementation date.



*Exposure at Default is post Credit Risk Mitigation (CRM) and does not include Securitisation, Equities or Other Assets.

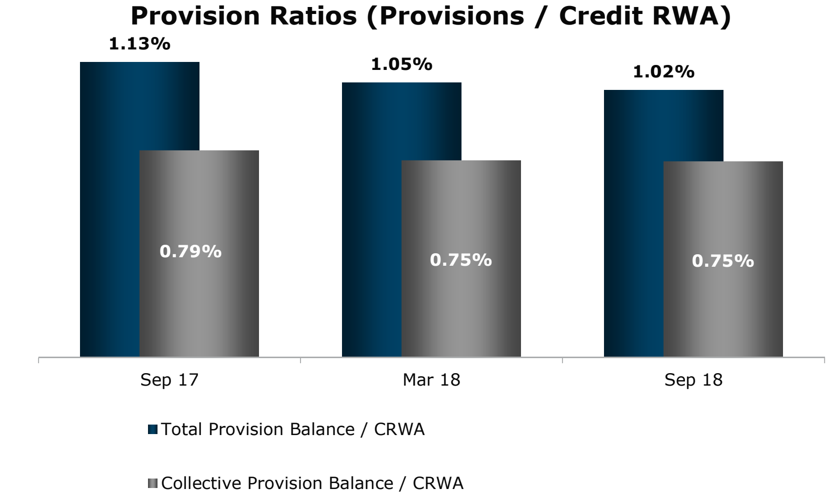
EAD up $14bn to $944bn for 2H18

- Underlying movement primarily driven by growth in Corporate, Sovereign and Bank asset classes, partially offset by reduction in Other Retail, Qualifying Revolving Retail and Standardised portfolio.



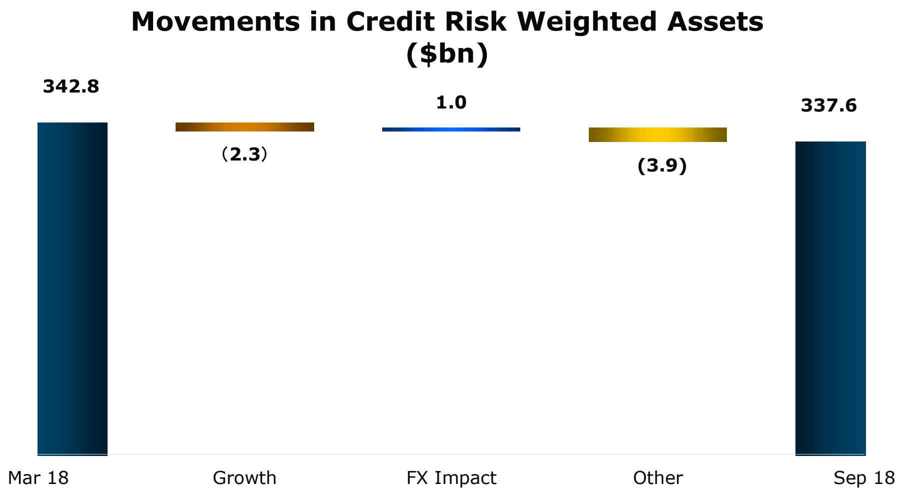
Impaired Assets down $58m, 3% HoH

- Decreased in Impaired Asset HOH is driven by repayments and upgrades in the Institutional division offset by an increase in the Australia Division driven by a single name restructured loan.



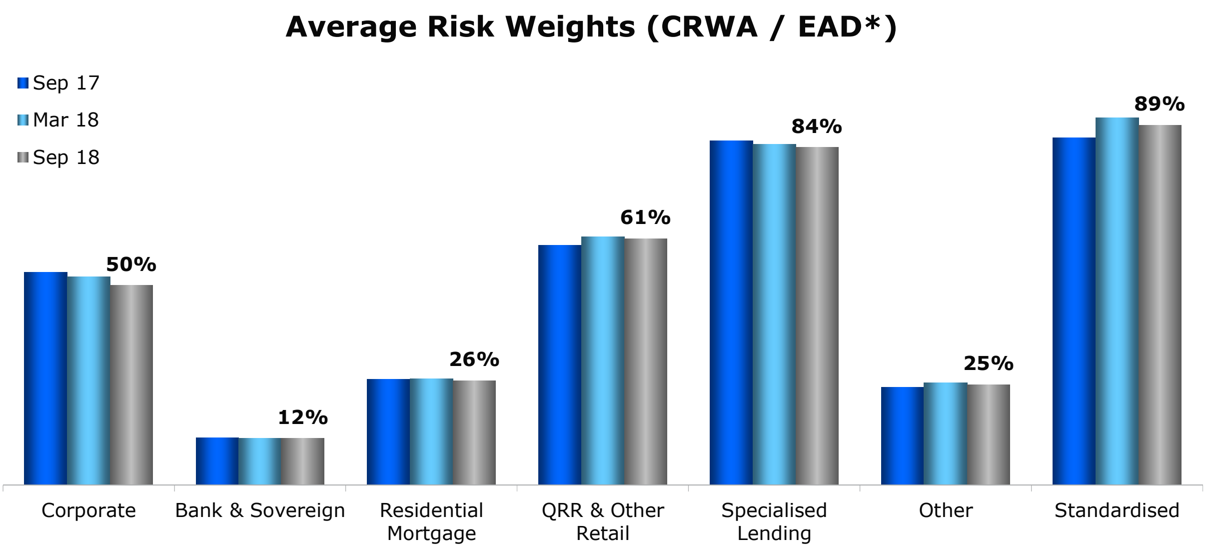
Provision coverage remains sound

- The total provision ratio decreased by 3bps HOH to 1.02%. Collective Provision ratio remains flat and continues to provide adequate coverage.



Credit Risk Weighted Assets (CRWA) decreased by $5.2bn HoH.

- Driven by reductions in volume to non-mortgage Retail portfolios as well as Standardised Corporate exposures combined with improved credit profile within the AIRB Corporate asset class. Offset by increased exposure to Sovereign, Banks and Residential Mortgages. Reduction in "Other" category reflects improved credit migration.



*Exposure at Default is post Credit Risk Mitigation (CRM) and does not include Securitisation, Equities or Other Assets.

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: Public Disclosure.

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

Pillar 1 Minimum capital requirement	**Pillar 2** Supervisory review process	**Pillar 3** 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.

Basel in ANZ

In December 2007, ANZ received accreditation for the most advanced approaches permitted under Basel for credit risk and operational risk, complementing its accreditation for market risk. Effective January 2013, ANZ adopted APRA requirements for Basel III with respect to the measurement and monitoring of regulatory capital.

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 Financial Report and in Pillar 1 returns provided to APRA. In addition ANZ's external auditor has performed an agreed upon procedure review with respect to these disclosures.

Comparison to ANZ's Financial Reporting

These disclosures have been produced in accordance with regulatory capital adequacy concepts and rules, rather than with accounting policies adopted in ANZ's financial reports. As such, there are different areas of focus and measures 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 different 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 inter-related business risks.

- **Capital Adequacy risk** is the risk of loss arising from the Group failing to maintain the level of capital required by prudential regulators and other key stakeholders (shareholders, debt investors, depositors, rating agencies, etc.) to support ANZ's consolidated operations and risk appetite.
- **Compliance risk** is the risk of failure to act in accordance with laws, regulations, industry standards and codes, internal policies and procedures and principles of good governance as applicable to ANZ's businesses.
- **Credit risk** is the risk of financial loss resulting from a counterparty failing to fulfil its obligations or a decrease in credit quality of a counterparty resulting in a financial loss. Credit Risk incorporates the risks associated with us lending to customers who could be impacted by climate change or by changes to laws, regulations, or other policies adopted by governments or regulatory authorities, including carbon pricing and climate change adaptation or mitigation policies.
- **Equity risk** is the risk of financial loss arising from the unexpected reduction in value of equity investments not held in the trading book including those of the Group's associates.
- **Insurance risk** is risk of unexpected losses resulting from worse than expected claims experience, including any of the following that expose an insurer to financial loss: inadequate or inappropriate underwriting, claims management, reserving, insurance concentrations, reinsurance management, product design and pricing.
- **Market risk** is the risk to the Group's earnings arising from changes in any interest rates, foreign exchange rates, credit spreads, volatility, and correlations or from fluctuations in bond, commodity or equity prices.
- **Liquidity and Funding risk** is the risk that the Group is unable to meet its payment obligations as they fall due, including repaying depositors or maturing wholesale debt or the Group having insufficient capacity to fund increases in assets.
- **Operational risk** is risk of loss and/or non-compliance with laws resulting from inadequate or failed internal processes, people and/or 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.
- **Reinsurance risk** - Reinsurance is an agreement in which one insurer ('the reinsurer') indemnifies another insurer for all or part of the risk of a policy originally issued and assumed by that other insurer. Reinsurance is a risk transfer tool between the insurer and reinsurer. The main risk that arises with reinsurance is counterparty credit risk. This is the risk that a reinsurer fails to meet its contractual obligations, that is, to pay us reinsurance claims when due, which in turn creates a counterparty credit risk.
- **Reputation risk**[3] is defined as the risk of loss that directly or indirectly impacts earnings, capital adequacy or value, that is caused by adverse perceptions of the Group held by any of customers, the community, shareholders, investors, regulators, or rating agencies, conduct risk associated with the Group's employees or contractors (or both) or the social or environmental (or both) impacts of our lending decisions.
- **Securitisation risk** is 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.
- **Strategic risk** is the risk that the Group's business strategy and strategic objectives may lead to an increase in other key Material Risks — for example: Credit Risk, Market Risk and Operational Risk.
- **Technology risk** is the risk of loss and/or non-compliance with laws resulting from inadequate or failed internal processes, people and systems or from external events impacting on IT assets, including the compromise of an IT asset's confidentiality, integrity or availability.

[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.

Risk Appetite Framework

ANZ's Board is ultimately responsible for ANZ's risk management framework, which includes the Group Risk Appetite Statement (RAS). The Group RAS is the document which clearly and concisely sets out the Board's expectations regarding the degree of risk that ANZ is prepared to accept in pursuit of its strategic objectives and business plan.

The articulation of risk appetite and risk tolerances is central to the risk appetite statement. ANZ's Group RAS conveys the following:

- The degree of risk (risk appetite) that ANZ is prepared to accept in pursuit of its strategy, objectives and business plans with consideration of its shareholders' and customers' best interests.
- For each material risk, ANZ has set the maximum level of risk (risk tolerance) that it is willing to operate within, expressed as a risk limit and based on its risk appetite, risk profile and capital strength. Risk tolerances translate risk appetite into operational limits for the day-to-day management of material risks, where possible.
- The process for ensuring that risk tolerances are set at an appropriate level, based on an estimate of the impact in the event that a risk tolerance is breached, and the likelihood that each material risk is realised.
- The process for monitoring compliance with each risk tolerance and for taking appropriate action in the event that it is breached; and
- The timing and process for review of the risk appetite and risk tolerances.

Risk management governance

The Board is principally responsible for overseeing the establishment by Management of a sound risk management culture with an operational structure and the necessary resources to facilitate effective risk management throughout ANZ, and which in turn supports the ability of ANZ to operate consistently within its risk appetite and approves the risk appetite within which management is expected to operate and including ANZ's risk appetite statement and risk management strategy. The Committees and their purpose are:

Risk Committee

The purpose of the Risk Committee is to assist the Board of Directors in the effective discharge of its responsibilities for business, market, credit, equity and other investment, financial, operational, liquidity and reputational risk management and for the management of the Group's compliance obligations. The Risk Committee also assists the Board by providing an objective non-executive oversight of the implementation by management of ANZ's risk management framework and its related operation and by enabling an institution-wide view of ANZ's current and future risk position relative to its risk appetite and capital strength. The Committee meets at least four times annually.

Audit Committee

Assists the Board of Directors in reviewing: financial reporting principles and policies, controls and procedures; the effectiveness of ANZ's internal control and risk management framework; the work of Internal Audit which reports directly to the Board Audit Committee; the integrity of ANZ's financial statements and the independent audit thereof and compliance with related legal and regulatory requirements; due diligence procedures; prudential supervision procedures and other regulatory requirements to the extent relating to financial reporting and for reviewing reports from major subsidiary audit committees. It's also responsible for the appointment and evaluation of the external auditor. The committee meets at least four times annually.

Digital Business and Technology Committee

The purpose of the Digital Business and Technology Committee is to assist the Board of Directors in the effective discharge of its responsibilities in connection with the oversight of ANZ's information technology, digitalisation and technology-related innovation strategies. The Committee meets at least three times annually.

Human Resource Committee

The Committee is responsible for, among other matters, reviewing and making recommendations to the Board with regard to the remuneration of ANZ Board Appointees and ANZ Material Risk Takers, the design of executive remuneration structures and significant incentive plans and the Group's Remuneration Policy. It also approves the appointment and termination of ANZ Board Appointees (excluding the CEO, CRO and GGM-IA[4]), reviews senior executive succession plans and monitors the effectiveness of ANZ's culture, employee engagement and diversity and inclusion programs. The Committee meets at least four times annually.

Ethics, Environment, Social and Governance Committee

Amongst other matters, the Committee reviews the development of and approves all other corporate governance policies and principles applicable to ANZ and seeks to ensure an appropriate Board and Committee structure is in place. It seeks to ensure there is a robust and effective process for evaluating the performance of the Board, Board Committee and Non-Executive Directors. It also reviews, monitors and approves ANZ's corporate sustainability objectives and provides advice to management on sustainability issues within ANZ. The Committee meets at least twice annually.

The above Committees are exclusively comprised of Non-Executive directors. Members, including the Chair are appointed by the Board and serve at the discretion of the Board and for such term or terms as the Board determines.

Processes and procedures relating to the operation of each of the board committees are documented in the committee charters and in the Board Committees' Standing Rules.

[4] CRO: Chief Risk Officer; GGM-IA: Group General Manager-Internal Audit

Executive Management Committees are responsible for co-ordination of risk matters for each of the areas of risk management. The Executive Management Committees most relevant to the risks described above and overall capital management at ANZ are as follows:

Group Asset and Liability Committee (GALCO)

GALCO is responsible for the oversight and strategic management of the ANZ's balance sheet activities including balance sheet structure, liquidity, funding, capital management, non-traded interest rate risk, and non-traded FX risks and exposures. The Committee meets at least 4 times a year, or more frequently as required.

Credit and Market Risk Committee (CMRC)

CMRC is responsible for the oversight and control of credit, market, insurance and material financial risks across the ANZ Group. The Committee meets monthly, with additional meetings as required.

Operational Risk Executive Committee (OREC)

OREC is responsible for oversight of and monitoring Operational and Compliance Risk and the related Control Environment, setting policies and frameworks for the implementation across ANZ. The committee meets at least four times per year, or on an 'as required' basis.

Responsible Business Committee (RBC)

The Responsible Business Committee (RBC) is a leadership and decision making body that exists to advance ANZ's Purpose. The Committee meets at least 4 times a year, or more frequently as required.

Capital Management Policy Committee (CMPC)

CMPC is responsible for the oversight and control of the Group's capital and portfolio measurement framework, addressing economic and regulatory capital requirements and is also responsible for making capital management and portfolio measurement related recommendations to the Risk Committee and ANZ Board. The Committee normally meets six times per year or on an as required basis. CMPC is a sub-committee of GALCO.

Credit Ratings System Oversight Committee (CRSOC)

CRSOC is a sub-committee of CMRC responsible for the oversight and control of the Internal Ratings System for credit risk including credit model approvals and performance monitoring. The Committee meets at least 4 times a year, or more frequently as required.

Stress Testing Oversight Committee (STOC)

STOC is responsible for the oversight and control of the Group's stress testing framework, modelling and processes. The Committee meets meet a minimum of three times per year, with additional meetings at the discretion of the Chair. STOC is a sub-committee of CMPC.

Processes and procedures relating to the operation of each of the Executive Management Committees are documented in the committee charters.

Chapter 4 – Capital reporting and measurement

Capital reporting and measurement

To ensure that an Authorised Deposit-taking Institution (ADI) is adequately capitalised on both a standalone 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 referenced under APS 001: Definitions 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.

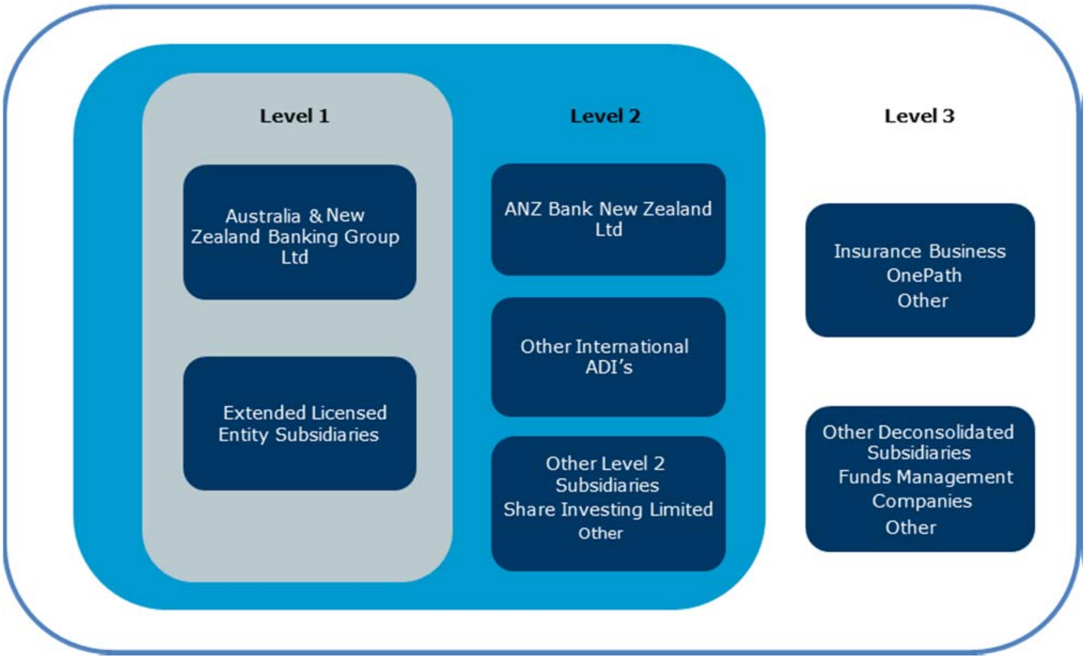
ANZ measures capital adequacy monthly and reports for prudential purposes on a Level 1 and Level 2 basis.

APRA is extending its prudential supervision framework to Conglomerate Groups via the Level 3 framework which will regulate a bancassurance group such as ANZ as a single economic entity with minimum capital requirements and additional monitoring of risk exposure levels.

In August 2016, APRA confirmed the deferral of capital requirements for Conglomerate Groups until 2019 at the earliest. The non-capital components of the Level 3 framework relating to group governance, intragroup transactions and other risk management and compliance requirements were effective from 1 July 2017 and have no material impact on the Group's capital position.

Based upon the current versions of the Level 3 standards covering capital adequacy, ANZ is not expecting any material impact on its operations.

This Pillar 3 report is based on the Level 2 prudential structure.



Refer to Note 25 Controlled Entities of ANZ's 2018 Annual Report for a list of all material subsidiaries and a brief description of their key activities.

Chapter 5 – Capital and Capital Adequacy

Table 1 Capital Disclosure template

The head of the Level 2 Group to which this prudential standard applies is Australia and New Zealand Banking Group Limited.

Table 1 of this chapter consists of a Capital Disclosure template that assists users in understanding the differences between the application of the Basel III reforms in Australia and those rules as detailed in the document Basel III: A global regulatory framework for more resilient banks and banking systems, issued by the Bank for International Settlements.

The information in the lines of the template has been mapped to ANZ's Level 2 balance sheet, which adjusts for non-consolidated subsidiaries as required under APS 001: Definitions. Where this information cannot be mapped on a one to one basis, it is provided in an explanatory table. ANZ's material non-consolidated subsidiaries are also listed in this chapter.

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 adopted the Basel II framework, effective from 1 January 2008 and Basel III reforms from 1 January 2013 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.

Table 1 Capital disclosure template

		Sep-18 $M	Reconciliation Table Reference
	Common Equity Tier 1 Capital: instruments and reserves		
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	27,321	Table A
2	Retained earnings	31,203	Table B
3	Accumulated other comprehensive income (and other reserves)	349	Table C
4	Directly issued capital subject to phase out from CET1 (only applicable to mutually-owned companies)	n/a	
5	Ordinary share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	56	Table D
6	Common Equity Tier 1 capital before regulatory adjustments	**58,929**	
	Common Equity Tier 1 capital : regulatory adjustments		
7	Prudential valuation adjustments	-	
8	Goodwill (net of related tax liability)	3,776	Table E
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	3,050	Table F
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	10	Table J
11	Cash-flow hedge reserve	127	
12	Shortfall of provisions to expected losses	609	Table G
13	Securitisation gain on sale	-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	(3)	
15	Defined benefit superannuation fund net assets	124	Table H
16	Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	-	
17	Reciprocal cross-holdings in common equity	-	
18	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	
19	Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	-	Table I
20	Mortgage service rights (amount above 10% threshold)	n/a	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	-	
22	Amount exceeding the 15% threshold	-	
23	of which: significant investments in the ordinary shares of financial entities	-	
24	of which: mortgage servicing rights	n/a	
25	of which: deferred tax assets arising from temporary differences	-	
26	National specific regulatory adjustments (sum of rows 26a - 26j)	6,545	
26a	of which: treasury shares	-	
26b	of which: offset to dividends declared under a dividend reinvestment plan (DRP), to the extent that the dividends are used to purchase new ordinary shares issued by the ADI	-	
26c	of which: deferred fee income	(132)	
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23	4,427	Table I
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	1,108	Table J
26f	of which: capitalised expenses	1,077	Table K
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	36	Table L
26h	of which: covered bonds in excess of asset cover in pools	-	
26i	of which: undercapitalisation of a non-consolidated subsidiary	-	
26j	of which: other national specific regulatory adjustments not reported in rows 26a to 26i	29	
27	Regulatory adjustments applied to CET1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	-	
28	Total regulatory adjustments to CET1	**14,238**	
29	Common Equity Tier 1 Capital (CET1)	**44,691**	

Table 1 Capital disclosure template

		Sep-18 $M	Reconciliation Table Reference
	Additional Tier 1 Capital: instruments		
30	Directly issued qualifying Additional Tier 1 instruments	7,639	Table M
31	of which: classified as equity under applicable accounting standards	-	
32	of which: classified as liabilities under applicable accounting standards	7,639	Table M
33	Directly issued capital instruments subject to phase out from Additional Tier 1	-	
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by subsidiaries and held by third parties (amount allowed in group AT1)	300	Table M
35	of which: instruments issued by subsidiaries subject to phase out	n/a	
36	Additional Tier 1 Capital before regulatory adjustments	**7,939**	Table M
	Additional Tier 1 Capital: regulatory adjustments	-	
37	Investments in own Additional Tier 1 instruments	-	
38	Reciprocal cross-holdings in Additional Tier 1 instruments	-	
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	405	Table M
41	National specific regulatory adjustments (sum of rows 41a - 41c)	7	
41a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	-	
41b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidations not reported in rows 39 and 40	6	Table M
41c	of which: other national specific regulatory adjustments not reported in rows 41a and 41b	1	Table M
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions	-	
43	Total regulatory adjustments to Additional Tier 1 capital	**412**	
44	Additional Tier 1 capital (AT1)	**7,527**	Table M
45	Tier 1 Capital (T1=CET1+AT1)	**52,218**	
	Tier 2 Capital: instruments and provisions		
46	Directly issued qualifying Tier 2 instruments	6,559	Table N
47	Directly issued capital instruments subject to phase out from Tier 2	658	Table N
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group T2)	62	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Provisions	119	Table G
51	Tier 2 Capital before regulatory adjustments	**7,398**	
	Tier 2 Capital: regulatory adjustments		
52	Investments in own Tier 2 instruments	10	Table N
53	Reciprocal cross-holdings in Tier 2 instruments	-	
54	Investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	
55	Significant investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	85	Table N
56	National specific regulatory adjustments (sums of rows 56a - 56c)	12	
56a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	-	
56b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidation not reported in rows 54 and 55	12	Table N
56c	of which: other national specific regulatory adjustments not reported in rows 56a and 56b	-	
57	Total regulatory adjustments to Tier 2 capital	**107**	
58	Tier 2 capital (T2)	**7,291**	Table N
59	Total capital (TC=T1+T2)	**59,509**	
60	Total risk-weighted assets based on APRA standards	**390,820**	

Table 1 Capital disclosure template

			Reconciliation Table Reference
	Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	11.4%	
62	Tier 1 (as a percentage of risk-weighted assets)	13.4%	
63	Total capital (as a percentage of risk-weighted assets)	15.2%	
64	Institution specific buffer requirement (minimum CET1 requirement plus capital conservation buffer plus countercyclical buffer requirements plus G-SIBs buffer requirement, expressed as a percentage of risk-weighted assets)	8.037%	
65	of which: capital conservation buffer requirement	3.5%[4]	
66	of which: ADI-specific countercyclical buffer requirements	0.037%	
67	of which: G-SIB buffer requirement (not applicable)	n/a	
68	Common Equity Tier 1 available to meet buffers (as a percentage of risk-weighted assets)	6.9%	
	National minima (if different from Basel III)	-	
69	National Common Equity Tier 1 minimum ratio (if different from Basel III minimum)	n/a	
70	National Tier 1 minimum ratio (if different from Basel III minimum)	n/a	
71	National total capital minimum ratio (if different from Basel III minimum)	n/a	
	Amount below thresholds for deductions (not risk-weighted)		
72	Non-significant investments in the capital of other financial entities	50	
73	Significant investments in the ordinary shares of financial entities	4,396	Table I
74	Mortgage servicing rights (net of related tax liability)	n/a	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	1,108	Table J
	Applicable caps on the inclusion of provisions in Tier 2	-	
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	119	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	289	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	-	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	1,887	
	Capital instruments subject to phase-out arrangements (only application between 1 January 2018 to 1 January 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	n/a	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	n/a	
82	Current cap on AT1 instruments subject to phase out arrangements	n/a	
83	Amount excluded from AT1 instruments due to cap (excess over cap after redemptions and maturities)	-	
84	Current cap on T2 instruments subject to phase out arrangements	n/a	
85	Amount excluded from T2 due to cap (excess over cap after redemptions and maturities)	-	

Counter Cyclical Capital Buffer

Geographic breakdown of Private Sector Credit Exposures	Hong Kong	Sweden	Norway	United Kingdom	Other	Total
	$M	$M	$M	$M	$M	$M
RWA for all private sector credit exposures	3,479	316	510	6,175	297,631	308,111
Jurisdictional buffer set by national authorities	1.875%	2.000%	2.000%	0.500%	-	-
Countercyclical buffer requirement	0.022%	0.002%	0.003%	0.010%	-	0.037%

[5] Includes 1.0% buffer applied by APRA to ADI's deemed as domestic systemically important.

The following table shows ANZ's consolidated balance sheet and the adjustments required to derive the Level 2 Balance Sheet. The adjustments remove the external assets and liabilities of the entities deconsolidated for prudential purposes and reinstate any intragroup assets and liabilities, treating them as external to the Level 2 Group.

Assets	Balance Sheet as in published financial statements $M	Adjustments $M	Balance sheet under scope of regulatory consolidation $M	Template and Reconciliation Table Reference
Cash and Cash Equivalents	84,636	(52)	84,584	
Settlement Balances owed to ANZ	2,319	-	2,319	
Collateral Paid	11,043	-	11,043	
Trading securities	37,722	-	37,722	
of which: Financial Institutions capital instruments			10	Table N
Derivative financial instruments	68,423	-	68,423	
Available-for-sale assets	74,284	(675)	73,609	
of which: significant investment in financial institutions equity instruments			1,025	Table I
of which: non-significant investment in financial institutions equity instruments			31	Table I
of which: Other entities equity investments			30	Table L
Net loans and advances	603,938	(1,212)	602,726	
of which: deferred fee income			(132)	Row 26c
of which: collective provision			(2,523)	Table G
of which: individual provisions			(920)	Table G
of which: capitalised brokerage			997	Table K
of which: CET1 margin lending adjustment			29	Row 26j
of which: AT1 margin lending adjustment			1	Table M
Regulatory deposits	882	-	882	
Assets held for sale	45,248	(43,635)	1,613	
of which: Goodwill			71	Table E
of which: Deferred Tax assets			8	
Due from controlled entities	-	1,469	1,469	
of which: Significant investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation			85	Table N
Shares in controlled entities	-	3,272	3,272	
of which: Investment in deconsolidated financial subsidiaries			2,867	Table I
of which: AT1 significant investment in banking, financial and insurance entities that are outside the scope of regulatory consolidation			405	Table M
Investment in associates	2,553		2,553	
of which: Financial Institutions			2,548	Table I
of which: Other Entities			5	Table L
Current tax assets	268	-	268	
Deferred tax assets	900		900	Table J
of which: Deferred tax assets that rely on future profitability			10	
Goodwill and other intangible assets	4,930	(1)	4,929	
of which: Goodwill			3,508	Table E
of which: Software			1,421	Table F
Investments backing policy liabilities	-	-	-	
Premises and equipment	1,833	-	1,833	
Other assets	3,645	5	3,650	
of which: Defined benefit superannuation fund net assets			155	
Total Assets	**942,624**	**(40,829)**	**901,795**	

Liabilities	Balance Sheet as in published financial statements $M	Adjustments $M	Balance sheet under scope of regulatory consolidation $M	Template and Reconciliation Table Reference
Settlement Balances owed by ANZ	11,810	(1)	11,809	
Collateral Received	6,542	-	6,542	
Deposits and other borrowings	618,150	4,703	622,853	
Derivative financial instruments	69,676	-	69,676	
Due to controlled entities	-	1,575	1,575	
Current tax liabilities	300	64	364	
Deferred tax liabilities	59	(202)	(143)	Table J
of which: related to capitalised expenses			5	Table K
of which: related to defined benefit super assets			31	Table H
Liabilities held for sale	47,159	(45,423)	1,736	
Policy liabilities	-	-	-	
External unit holder liabilities (life insurance funds)	-	-	-	
Provisions	1,578	(74)	1,504	
Payables and other liabilities	6,788	(193)	6,595	
Debt Issuances	121,179	(1,215)	119,964	
of which: Directly issued qualifying Additional Tier 1 instruments			7,460	Table M
of which: Additional Tier 1 Instruments			456	Table M
of which: Directly issued capital instruments subject to phase out from Tier 2			1,432	Table N
of which: Directly issued qualifying Tier 2 instruments			6,559	Table N
Total Liabilities	**883,241**	**(40,766)**	**842,475**	
Net Assets	**59,383**	**(63)**	**59,320**	

Shareholders' equity	Balance Sheet as in published financial statements $M	Adjustments $M	Balance sheet under scope of regulatory consolidation $M	Template and Reconciliation Table Reference
Ordinary Share Capital	27,205	328	27,533	Table A
of which: Share reserve			212	Tables A & C
Reserves	323	(95)	228	Table C
of which: Cash flow hedging reserves			127	Row 11
Retained earnings	31,715	(294)	31,421	Table B
Share capital and reserves attributable to shareholders of the Company	**59,243**	**(61)**	**59,182**	
Non-controlling interest	140	(2)	138	Table D
Total shareholders' equity	**59,383**	**(63)**	**59,320**	

The following reconciliation tables provide additional information on the difference between Table 1 Capital Disclosure Template and the Level 2 Balance Sheet.

Table A		Sep-18 $M	Table 1 Reference
	Issued capital	27,533	
less	Reclassification to reserves	(212)	Table C
	Regulatory Directly Issued qualifying ordinary shares	**27,321**	Row 1

Table B		Sep-18 $M	Table 1 Reference
	Retained earnings	31,421	
less	Regulatory reclassification from significant investments in the ordinary shares of banking, financial and insurance entities outside the scope of regulatory consolidation	(218)	Table I
	Retained earnings	**31,203**	Row 2

Table C		Sep-18 $M	Table 1 Reference
	Reserves	228	
add	Reclassification from Issued Capital	212	Table A
less	Non qualifying reserves	(91)	
	Reserves for Regulatory capital purposes (amount allowed in group CET1)	**349**	Row 3

Table D		Sep-18 $M	Table 1 Reference
	Non-controlling interests	138	
less	Surplus capital attributable to minority shareholders	(82)	
	Ordinary share capital issued by subsidiaries and held by third parties	**56**	Row 5

Table E		Sep-18 $M	Table 1 Reference
	Goodwill	3,508	
add	Goodwill classified as Held for Sale	71	
add	Goodwill component of investments in financial associates	197	Table I
	Goodwill (net of related tax liability)	**3,776**	Row 8

Table F		Sep-18 $M	Table 1 Reference
	Software	1,421	
add	Regulatory reclassification from significant investments in the ordinary shares of banking, financial and insurance entities outside the scope of regulatory consolidation	1,629	Table I
	Other intangibles other than mortgage servicing rights (net of related tax liability)	**3,050**	Row 9

Table G		Sep-18 $M	Table 1 Reference
	Qualifying collective provision		
	Collective provision	(2,523)	
less	Non-qualifying collective provision	307	
less	Standardised collective provision	119	Row 50
less	Non-defaulted expected loss	2,664	
	Non-Defaulted: Expected Loss - Eligible Provision Shortfall	567	
	Qualifying individual provision		
	Individual provision	(920)	
add	Additional individual provisions for partial write offs	(325)	
less	Standardised individual provision	79	
add	Collective provision on advanced defaulted	(281)	
less	Defaulted expected loss	1,489	
	Defaulted: Expected Loss - Eligible Provision Shortfall	**42**	
	Gross deduction	**609**	Row 12

Table H		Sep-18 $M	Table 1 Reference
	Defined benefit superannuation fund net assets	155	
less	Associated deferred tax liabilities	(31)	
	Defined benefit superannuation fund net of deferred tax liabilities	**124**	Row 15

Table I		Sep-18 $M	Table 1 Reference
	Investment in deconsolidated financial subsidiaries	2,867	
less	Regulatory reclassification to Retained Earnings and Other Intangible Assets	(1,847)	Tables B & F
add	Investment in financial associates	2,548	
add	Investment in financial institutions Available for Sale	1,025	
less	Goodwill component of investments in financial associates	(197)	Table E
less	Amount below 10% threshold	(4,396)	
	Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	-	Row 19
add	Deduction amount below the 10% threshold of CET 1	4,396	Row 73
add	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital - Available for Sale exposures	31	
	Equity investment in financial institutions not reported in rows 18, 19 and 23	**4,427**	Row 26d
	Deduction for equity holdings in financial institutions - APRA regulations	**4,427**	

Table J		Sep-18 $M	Table 1 Reference
	Deferred tax assets	900	
add	Deferred tax liabilities	143	
add	DTL reclassed to Held for Sale	8	
	Deferred tax asset less deferred tax liabilities	1,051	
less	Deferred tax assets that rely on future profitability	(10)	Row 10
add	Deferred tax liabilities on intangible assets, capitalised expenses and defined benefit superannuation assets	36	
add	Impact of calculating the deduction on a jurisdictional basis	31	
	Deferred tax assets not reported in rows 10, 21 and 25 of the Common Disclosure Template	**1,108**	Row 26e

Table K		Sep-18 $M	Table 1 Reference
	Capitalised brokerage costs	997	
add	Capitalised debt raising expenses	85	
less	Associated deferred tax liabilities	(5)	
	Capitalised expenses	**1,077**	Row 26f

Table L		Sep-18 $M	Table 1 Reference
	Investments in non-financial Available for Sale equities	30	
add	Investments in associates moved to Held for Sale	1	
add	Investments in non financial associates	5	
	Equity exposures to non financial entities	**36**	Row 26g

Table M		Sep-18 $M	Table 1 Reference
	Directly issued qualifying Additional Tier 1 Capital Instruments classified as liabilities	7,460	
add	Issue costs	44	
add	Fair value adjustment	135	
	Directly issued qualifying Additional Tier 1 Capital Instruments classified as liabilities	7,639	Row 30
	Additional Tier 1 instruments issued by subsidiaries held by third parties	456	
add	Issue costs	2	
less	Surplus capital attributable to third party holders	(158)	
add	AT1 Instruments issued by subsidiaries and held by third parties (amounts allowed in Group AT1)	**300**	Row 34
	Additional Tier 1 capital before regulatory adjustments	**7,939**	Row 36
less	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation	(405)	Row 40
less	Investments in the capital of financial institutions that are outside the scope of regulatory consolidations not reported in rows 39 and 40	(6)	Row 41b
less	Other national specific regulatory adjustments not reported	(1)	Row 41c
	Additional Tier 1 capital	**7,527**	Row 44

Table N		Sep-18 $M	Table 1 Reference
	Directly issued capital instruments subject to phase out from Tier 2	1,432	
add	Issue costs	16	
less	Amortisation of Tier 2 Capital Instruments subject to Phase out	(967)	
add	Fair value adjustment	177	
	Directly issued capital instruments subject to phase out from Tier 2	658	Row 47
add	Surplus capital attributable to third party holders	62	
add	Directly issued qualifying Tier 2 instruments	6,559	Row 46
add	Provisions	119	Table G
	Tier 2 capital before regulatory adjustments	7,398	
less	Investments in own Tier 2 instruments (trading limit)	(10)	Row 52
less	Significant investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	(85)	Row 55
less	Investments in the capital of financial institutions that are outside the scope of regulatory consolidation not reported in rows 54 and 55	(12)	Row 56b
	Tier 2 capital	**7,291**	Row 58

The following table provides details of entities included within the accounting scope of consolidation but excluded from regulatory consolidation.

Entity	Activity	Total Assets $M	Total Liabilities $M
ACN 008 647 185 Pty Ltd	Holding Company	-	-
ANZ ILP Pty Ltd	Incorporated Legal Practice	2	0
ANZ Investment Services (New Zealand) Limited	Funds Management	26	10
ANZ Lenders Mortgage Insurance Pty Limited	Mortgage insurance	1,154	689
ANZ Pensions (UK) Limited	Trustee/Nominee	453	-
ANZ Life Assurance Company Pty Ltd	Insurance	-	-
ANZ New Zealand Investments Limited	Funds Management	116	32
ANZ New Zealand Investments Nominees Limited	Nominee	-	-
ANZ Self Managed Super Ltd	Investment	-	-
ANZ Wealth Alternative Investments Management Pty Ltd	Investment	1,035	1,031
ANZ Wealth Australia Limited	Holding Company / Corporate	1,570	-
ANZ Wealth New Zealand Limited	Holding Company	471	-
ANZcover Insurance Private Ltd	Captive-Insurance	116	89
AUT Administration Pty Ltd	Dormant	-	-
Capricorn Financial Advisers Pty Ltd	Advice	-	-
Elders Financial Planning Pty Ltd	Advice	4	1
Financial Investment Network Group Pty Ltd	Advice	34	-
Financial Lifestyle Solutions Pty Limited	Advice	4	1
Financial Planning Hotline Pty Ltd	Advice	-	-
Financial Services Partners Holdings Pty Limited	Holding Company / Advice	2	-
Financial Services Partners Incentive Co Pty Limited	Advice	-	-
Financial Services Partners Management Pty Limited	Advice	-	-
Financial Services Partners Pty Ltd	Advice	1	-
FSP Funds Management Limited	Advice	-	-
FSP Group Pty Limited	Holding Company / Advice	1	-
FSP Portfolio Administration Limited	Advice	-	-
FSP Super Pty Limited	Advice	-	-
Integrated Networks Pty Limited	Holding Company / Advice	12	-
Kingfisher Trust 2016-1	Securitisation Trust	1,239	1,239
Looking Together Pty Ltd	Property Price Information	-	-
Mercantile Mutual Financial Services Pty Ltd	Investment	-	-
Millennium 3 Financial Services Group Pty Ltd	Advice	16	-
Millennium 3 Financial Services Pty Ltd	Advice	7	1
Millennium 3 Mortgage Platform Services Pty Limited	Advice	-	-
Millennium 3 Professional Services Pty Ltd	Advice	-	-
OASIS Asset Management Limited	Investment	10	1
OASIS Fund Management Limited	Superannuation	8	3
OneAnswer Nominees Limited	Nominee	-	-
OnePath Administration Pty Ltd	Service Company	17	13
OnePath Custodians Pty Ltd	Superannuation	59	1
OnePath Financial Planning Pty Ltd	Advice	-	-
OnePath Funds Management Limited	Investment	44	13
OnePath General Insurance Pty Ltd	Insurance	105	65
OnePath Investment Holdings Pty Ltd	Investment	7	-
OnePath Life (NZ) Limited	Insurance	861	309
OnePath Life Australia Holdings Pty Ltd	Holding Company	1,501	-
OnePath Life Limited	Insurance	41,657	40,155

Entity	Activity	Total Assets $M	Total Liabilities $M
Polaris Financial Solutions Pty Limited	Advice	-	1
RI Advice Group Pty Ltd	Advice	12	-
RI Central Coast Pty Ltd	Advice	-	-
RI Dandenong Pty Ltd	Advice	-	-
RI Gold Coast Pty Ltd	Advice	-	-
RI Maroochydore Pty Ltd	Advice	-	-
RI Newcastle Pty Ltd	Advice	-	-
RI Parramatta Pty Ltd	Advice	-	-
RI Rockhampton & Gladstone Pty Ltd	Advice	-	-
RI Townsville Pty Ltd	Advice	-	-
Rieas Pty Ltd	Advice	-	-
Shout for Good Pty Ltd	Corporate	-	1
Tandem Financial Advice Pty Limited	Advice	-	-
Union Investment Company Pty Limited	Advice	-	-

Table 2 Main features of capital instruments

As the main features of ANZ's capital instruments are updated on an ongoing basis, ANZ has provided this information separately in the Regulatory Disclosures section of its website.

Table 3 Capital adequacy, Table 4 Credit risk, Table 5 Securitisation

The above tables are produced at the quarters ending 30 June and 31 December.

Table 6 Capital adequacy

Capital management

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

- Regulatory compliance such that capital levels exceed APRA's, ANZ's primary prudential supervisor, minimum Prudential Capital Ratios (PCRs) both at Level 1 (the Company and specified subsidiaries) and Level 2 (ANZ consolidated under Australian prudential standards), along with US Federal Reserve's minimum Level 2 requirements under 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; and

- An appropriate balance between maximising shareholder returns and prudent capital management principles.

ANZ's capital management strategy aims to protect the interests of depositors, creditors and shareholders. We achieve this through an Internal Capital Adequacy Assessment Process (ICAAP) whereby ANZ conducts detailed strategic and capital planning over a 3 year time horizon. The process involves

- Review 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 that 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 'stress capital buffer') needed to absorb losses that may be experienced during an economic downturn; and
- Stress testing is integral to strengthening the predictive approach to risk management and is a key component in managing risks, asset writing strategies and business strategies. It creates greater understanding of the impacts on financial performance through modelling relationships and sensitivities between geographic, industry and Divisional 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's 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 have sufficient capital to remain above both Economic Capital and regulatory requirements; and
- Identify the level of organic capital generation and hence determine current and future capital issuance requirements for Level 1 and 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.

Regulatory environment

ANZ's regulatory capital calculation is governed by APRA's Prudential Standards which adopt a risk-based capital assessment framework based on the Basel III capital measurement standards. This risk-based approach requires eligible capital to be divided by total risk weighted assets (RWA), with the resultant ratio being used as a measure of an Authorised Deposit-taking Institution's (ADIs) capital adequacy. APRA determines PCRs for Common Equity Tier 1 (CET1), Tier 1 and Total Capital, with capital as the numerator and RWAs as the denominator.

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 Common Equity Tier 1 capital less deductions and Additional Tier 1 capital instruments. Common Equity Tier 1 capital comprises shareholders' equity adjusted for items which APRA does not allow as regulatory capital or classifies as lower forms of regulatory capital. Common Equity Tier 1 capital includes the following significant adjustments:

- Additional Tier 1 capital instruments included within shareholders' equity are excluded;
- Reserves exclude the hedging reserve and reserves of insurance and funds management subsidiaries;
- Retained and current year earnings excluding those of insurance and funds management subsidiaries, but includes capitalised deferred fees forming part of loan yields that meet the criteria set out in the prudential standard;
- Inclusion of qualifying treasury shares.

Additional Tier 1 capital instruments are high quality components of capital that provide a permanent and unrestricted commitment of funds, are available to absorb losses, are subordinated to the claims of depositors and senior creditors in the event of the winding up of the issuer and provide for fully discretionary capital distributions.

Deductions from the capital base comprise mainly deductions to the Common Equity Tier 1 component. These deductions are largely intangible assets, investments in insurance and funds management entities and associates, capitalised expenses (including loan and origination fees), and the amount of regulatory expected losses (EL) in excess of eligible provisions.

Tier 2 capital mainly comprises perpetual subordinated debt instruments and dated subordinated debt instruments which have a minimum term of five years at issue date.

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

In addition to the prudential capital oversight that APRA conducts over the Company and the Group, the Company'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 Prudential Regulation Authority, the Monetary Authority of Singapore, the Hong Kong Monetary Authority and the China Banking and Insurance Regulatory Commission who may impose minimum capitalisation rates on those operations.

Throughout the financial year, the Company and the Group maintained compliance with the minimum Common Equity Tier 1, Tier 1 and Total Capital ratios set by APRA and the US Federal Reserve (as applicable) as well as applicable capitalisation rates set by regulators in countries where the Company operates branches and subsidiaries.

Regulatory development

There are a number of matters currently outstanding that may have an impact on ANZ's regulatory capital in the future. Details of these matters are available in ANZ's 2018 Full Year Results Announcement Group Results section, pages 46 and 47, available on ANZ's website: [shareholder.anz.com/pages/results-announcement-archive.]

Table 6 Capital adequacy - Capital Ratio and Risk Weighted Assets

The following table provides the composition of capital used for regulatory purposes and capital adequacy ratios.

Risk weighted assets	Sep 18 $M	Mar 18 $M	Sep 17 $M
Subject to Advanced Internal Rating Based (IRB) approach			
Corporate	121,891	123,253	121,915
Sovereign	6,955	6,896	7,555
Bank	15,908	15,129	13,080
Residential Mortgage	97,764	99,560	96,267
Qualifying Revolving Retail	6,314	6,845	7,059
Other Retail	29,373	30,769	31,077
Credit risk weighted assets subject to Advanced IRB approach	**278,205**	**282,452**	**276,953**
Credit risk Specialised Lending exposures subject to slotting approach[6]	**33,110**	**32,065**	**31,845**
Subject to Standardised approach			
Corporate	13,760	15,105	13,365
Residential Mortgage	327	321	950
Other Retail	88	102	2,000
Credit risk weighted assets subject to Standardised approach	**14,175**	**15,528**	**16,315**
Credit Valuation Adjustment and Qualifying Central Counterparties	**7,344**	**7,864**	**7,269**
Credit risk weighted assets relating to securitisation exposures	1,600	1,728	1,083
Other assets	3,146	3,185	3,369
Total credit risk weighted assets	**337,580**	**342,822**	**336,834**
Market risk weighted assets	6,808	6,558	5,363
Operational risk weighted assets	37,618	37,378	37,305
Interest rate risk in the banking book (IRRBB) risk weighted assets	8,814	9,019	11,611
Total risk weighted assets	**390,820**	**395,777**	**391,113**

Capital ratios (%)[7]			
Level 2 Common Equity Tier 1 capital ratio	**11.4%**	**11.0%**	**10.6%**
Level 2 Tier 1 capital ratio	**13.4%**	**12.9%**	**12.6%**
Level 2 Total capital ratio	**15.2%**	**14.9%**	**14.8%**
Level 1: Extended licensed Common Equity Tier 1 capital ratio	**11.6%**	**10.9%**	**10.5%**
Level 1: Extended licensed entity Tier 1 capital ratio	**13.6%**	**12.9%**	**12.7%**
Level 1: Extended licensed entity Total capital ratio	**15.6%**	**15.1%**	**14.8%**
Other significant Authorised Deposit-taking Institution (ADI) or overseas bank subsidiary:			
ANZ Bank New Zealand Limited – Common Equity Tier 1 capital ratio	**11.1%**	**11.0%**	**10.7%**
ANZ Bank New Zealand Limited - Tier 1 capital ratio	**14.4%**	**14.4%**	**14.1%**
ANZ Bank New Zealand Limited - Total capital ratio	**14.4%**	**14.4%**	**14.4%**

[6] 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.

[7] 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 $0.8 billion from $336.8 billion in September 2017 to $337.6 billion in September 2018. This was driven by increases in Banks and Residential Mortgages, partially offset by reductions in Australia Other Retail and the sale of the Asia Retail and Wealth Businesses.

Market Risk, Operational Risk and IRRBB RWA

Traded Market Risk RWA increased $1.4 billion year on year due to a temporary regulatory requirement to hold additional market risk capital while upgrades to the market risk systems and methodologies are implemented.

IRRBB RWA decreased $2.8 billion year on year due to a reduction in Repricing and Yield Curve risk.

Chapter 6 – Credit risk

Table 7 Credit risk – General disclosures

Definition of credit risk

Credit Risk is the risk of financial loss resulting from a counterparty failing to fulfil its obligations, or from a decrease in credit quality of a counterparty resulting in a loss in value.

Regulatory approval to use the Advanced Internal Ratings-based approach

ANZ has been given approval by APRA to use the Advanced Internal Ratings (AIRB) based approach to credit risk, under APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk. 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 expected loss (EL) calculations.

ANZ's internal models are used to generate three key risk components that serve as inputs to the IRB approach to credit risk:

- Probability of Default (PD) is an estimate of the level of the risk of borrower default
- Exposure at Default (EAD) is defined as the expected facility exposure at the date of default
- Loss Given Default (LGD) is an estimate of the potential economic loss on a credit exposure, incurred as a consequence of obligor default.

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 Wholesale Credit Risk. The framework is top down, being defined by credit principles and policies. Credit policies, requirements 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

The Credit and Market Risk Committee (CMRC) is a senior executive level committee responsible for the oversight and control of credit, market, insurance and material financial risks across the ANZ Group. The Credit Rating System Oversight Committee (CRSOC) supports the CMRC, by providing oversight and control of the internal ratings system for credit risk in the wholesale and retail sectors, including credit model approvals and performance monitoring.

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 Chief Risk Officer (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 and requirements.

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 their 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 portfolio direction and performance tools which enable Risk to play a fundamental role in monitoring the direction and performance of the portfolio. These include:

- Group and divisional level risk appetite strategies, business writing strategies and segment transaction guidelines 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; and
- 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, expected loss, regulatory risk weighted assets (RWA) and regulatory expected loss;
- Assessing impact of emerging issues, and conducting ad-hoc investigations and analysis.
- Validating rating/scoring tools and credit estimates; and
- Ongoing review and refinement of ANZ's credit risk measurement and policy framework.

Credit Risk Reporting

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.

Exposure at default

EAD is defined as the expected facility exposure at the date of default. Unless otherwise stated, throughout this disclosure EAD represents credit exposure net of offsets for credit risk mitigation such as guarantees, credit derivatives, netting and financial collateral.

Past due facilities

Facilities where a contractual payment has not been met or the customer is outside of contractual arrangements for a material length of time 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

A facility for which there is doubt about timely payment of principal, interest and fees being achieved and / or a material credit obligation is 90 days or more past due and is not well secured. It includes all problem assets, off-balance sheet exposures and assets brought to ANZ's balance sheet through the enforcement of security.

Restructured items

A facility in which the original contractual terms have been modified to provide concessions of interest, principal, or other payments due, or for an extension in maturity for a non-commercial period for reasons related to the financial difficulties of the borrower.

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 current 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 test[8].

ANZ's collective provisioning methodology will change 1st October 2018 with the implementation of Australian Accounting Standard AASB 9 Financial Instruments.

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.

Definition of default

ANZ uses the following definition of default:

- ANZ considers that the customer is unlikely to pay its credit obligations in full, without recourse to actions such as realising security, or
- the customer is at least 90 days past due on a credit obligation, or
- the customer's overdraft or other revolving facility(ies) have been continuously outside approved limits for 90 or more consecutive days.

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.

[8] 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.

Exposure at Default in Table 7 represents credit exposure net of offsets for credit risk mitigation such as guarantees, credit derivatives, netting and financial collateral. It includes Advanced IRB, Specialised Lending and Standardised exposures, and excludes Securitisation, Equities or Other Assets exposures.

Table 7(b) part (i): Period end and average Exposure at Default [9]

			Sep 18		
Advanced IRB approach	**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**
Corporate	121,891	245,625	241,708	1	90
Sovereign	6,955	145,569	143,426	(3)	-
Bank	15,908	51,363	50,016	-	-
Residential Mortgage	97,764	376,573	376,328	56	41
Qualifying Revolving Retail	6,314	18,447	18,889	93	140
Other Retail	29,373	39,819	40,700	211	277
Total Advanced IRB approach	**278,205**	**877,396**	**871,067**	**358**	**548**
Specialised Lending	**33,110**	**39,462**	**38,661**	**2**	**4**
Standardised approach					
Corporate	13,760	15,064	15,646	(19)	15
Residential Mortgage	327	704	693	1	3
Other Retail	88	87	94	1	3
Total Standardised approach	**14,175**	**15,855**	**16,433**	**(17)**	**21**
Credit Valuation Adjustment and Qualifying Central Counterparties	**7,344**	**11,402**	**10,997**	**-**	**-**
Total	**332,834**	**944,115**	**937,158**	**343**	**573**

[9] 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.

Table 7(b) part (i): Period end and average Exposure at Default (continued)

	Mar 18				
Advanced IRB approach	**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**
Corporate	123,253	237,791	234,083	68	142
Sovereign	6,896	141,282	136,378	-	-
Bank	15,129	48,668	46,604	-	-
Residential Mortgage	99,560	376,082	371,376	42	24
Qualifying Revolving Retail	6,845	19,331	20,693	92	139
Other Retail	30,769	41,580	41,766	197	287
Total Advanced IRB approach	**282,452**	**864,734**	**850,900**	**399**	**592**
Specialised Lending	**32,065**	**37,860**	**37,533**	**(4)**	**4**
Standardised approach					
Corporate	15,105	16,228	15,342	-	16
Residential Mortgage	321	681	1,565	2	1
Other Retail	102	101	1,045	33	38
Total Standardised approach	**15,528**	**17,010**	**17,952**	**35**	**55**
Credit Valuation Adjustment and Qualifying Central Counterparties	**7,864**	**10,591**	**10,255**	**-**	**-**
Total	**337,909**	**930,195**	**916,640**	**430**	**651**

	Sep 17				
Advanced IRB approach	**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**
Corporate	121,915	230,375	229,522	75	178
Sovereign	7,555	131,473	131,139	-	-
Bank	13,080	44,540	45,128	5	8
Residential Mortgage	96,267	366,669	360,679	42	20
Qualifying Revolving Retail	7,059	22,055	22,164	118	137
Other Retail	31,077	41,951	42,039	245	275
Total Advanced IRB approach	**276,953**	**837,063**	**830,671**	**485**	**618**
Specialised Lending	**31,845**	**37,205**	**37,951**	**(4)**	**2**
Standardised approach					
Corporate	13,365	14,455	15,661	(1)	80
Residential Mortgage	950	2,448	4,462	2	1
Other Retail	2,000	1,988	2,638	72	90
Total Standardised approach	**16,315**	**18,891**	**22,761**	**73**	**171**
Credit Valuation Adjustment and Qualifying Central Counterparties	**7,269**	**9,919**	**9,838**	**-**	**-**
Total	**332,382**	**903,078**	**901,221**	**554**	**791**

Table 7(b) part (ii): Exposure at Default by portfolio type[10] [11]

Portfolio Type	Sep 18 $M	Mar 18 $M	Sep 17 $M	Average for half year Sep 18 $M
Cash	57,604	56,499	47,587	57,052
Contingents liabilities, commitments, and other off-balance sheet exposures	153,021	152,263	153,775	152,642
Derivatives	42,752	43,357	38,922	43,055
Settlement Balances	16	19	68	18
Investment Securities	73,296	69,149	66,802	71,223
Net Loans, Advances & Acceptances	592,967	582,380	568,089	587,674
Other assets	4,387	2,873	2,558	3,630
Trading Securities	20,072	23,655	25,277	21,864
Total exposures	**944,115**	**930,195**	**903,078**	**937,158**

[10] Average for half year is calculated as the simple average of the balances at the start and the end of each six month period.

[11] Prior period comparatives have been restated due to the reclassification of certain assets from Settlement Balances to Cash.

Table 7(c): Geographic distribution of Exposure at Default

	Sep 18			
Portfolio Type	Australia $M	New Zealand $M	Asia Pacific, Europe and Americas $M	Total $M
Corporate	134,113	44,608	81,968	**260,689**
Sovereign	48,311	12,402	84,856	**145,569**
Bank	22,215	4,041	25,107	**51,363**
Residential Mortgage	298,367	78,206	704	**377,277**
Qualifying Revolving Retail	18,447	-	-	**18,447**
Other Retail	27,956	11,863	87	**39,906**
Qualifying Central Counterparties	7,763	1,293	2,346	**11,402**
Specialised Lending	27,993	11,321	148	**39,462**
Total exposures	**585,165**	**163,734**	**195,216**	**944,115**

	Mar 18			
Portfolio Type	Australia $M	New Zealand $M	Asia Pacific, Europe and Americas $M	Total $M
Corporate	130,966	46,025	77,028	**254,019**
Sovereign	49,482	12,288	79,512	**141,282**
Bank	22,776	4,702	21,190	**48,668**
Residential Mortgage	297,892	78,190	681	**376,763**
Qualifying Revolving Retail	19,331	-	-	**19,331**
Other Retail	29,249	12,331	101	**41,681**
Qualifying Central Counterparties	7,561	1,321	1,709	**10,591**
Specialised Lending	26,633	11,154	73	**37,860**
Total exposures	**583,890**	**166,011**	**180,294**	**930,195**

	Sep 17			
Portfolio Type	Australia $M	New Zealand $M	Asia Pacific, Europe and Americas $M	Total $M
Corporate	126,446	45,605	72,779	**244,830**
Sovereign	47,632	11,306	72,535	**131,473**
Bank	19,697	4,620	20,223	**44,540**
Residential Mortgage	291,868	74,801	2,448	**369,117**
Qualifying Revolving Retail	22,055	-	-	**22,055**
Other Retail	30,140	11,811	1,988	**43,939**
Qualifying Central Counterparties	6,790	1,346	1,783	**9,919**
Specialised Lending	26,331	10,749	125	**37,205**
Total exposures	**570,959**	**160,238**	**171,881**	**903,078**

Table 7(d): Industry distribution of Exposure at Default[12] [13]

	Sep 18														
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	43,262	9,676	5,621	9,390	13,119	41,966	2,989	39,260	710	21,199	25,351	13,988	15,171	18,987	**260,689**
Sovereign	1,095	1	16	604	-	77,790	62,555	1,018	-	1,600	11	-	445	434	**145,569**
Bank	14	9	35	57	27	50,956	-	17	-	83	31	30	78	26	**51,363**
Residential Mortgage	-	-	-	-	-	-	-	-	377,277	-	-	-	-	-	**377,277**
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	18,447	-	-	-	-	-	**18,447**
Other Retail	3,046	2,887	4,000	104	2,239	663	16	1,634	13,567	1,212	1,213	4,013	1,353	3,959	**39,906**
Qualifying Central Counterparties	-	-	-	-	-	11,402	-	-	-	-	-	-	-	-	**11,402**
Specialised Lending	1,283	5	367	1,212	77	1	-	3	-	34,868	14	16	1,054	562	**39,462**
Total exposures	**48,700**	**12,578**	**10,039**	**11,367**	**15,462**	**182,778**	**65,560**	**41,932**	**410,001**	**58,962**	**26,620**	**18,047**	**18,101**	**23,968**	**944,115**
% of Total	*5.2%*	*1.3%*	*1.1%*	*1.2%*	*1.6%*	*19.5%*	*6.9%*	*4.4%*	*43.5%*	*6.2%*	*2.8%*	*1.9%*	*1.9%*	*2.5%*	*100.0%*

[12] 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.

[13] Other industry includes Health & Community Services, Education, Communication Services and Personal & Other Services.

Table 7(d): Industry distribution of Exposure at Default (continued)

	Mar 18														
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	43,623	9,941	5,678	9,461	13,456	37,230	2,849	37,790	730	19,685	24,776	13,405	16,109	19,286	**254,019**
Sovereign	1,095	-	28	773	-	73,584	62,706	1,048	-	1,420	13	-	344	271	**141,282**
Bank	2	4	1	27	-	48,465	-	13	-	-	27	2	127	-	**48,668**
Residential Mortgage	-	-	-	-	-	-	-	-	376,763	-	-	-	-	-	**376,763**
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	19,331	-	-	-	-	-	**19,331**
Other Retail	3,174	2,956	4,100	105	2,318	691	16	1,661	14,453	1,244	1,257	4,177	1,401	4,128	**41,681**
Qualifying Central Counterparties	-	-	-	-	-	10,591	-	-	-	-	-	-	-	-	**10,591**
Specialised Lending	815	6	375	1,599	67	1	-	1	-	33,561	17	16	955	447	**37,860**
Total exposures	**48,709**	**12,907**	**10,182**	**11,965**	**15,841**	**170,562**	**65,571**	**40,513**	**411,277**	**55,910**	**26,090**	**17,600**	**18,936**	**24,132**	**930,195**
% of Total	*5.2%*	*1.4%*	*1.1%*	*1.3%*	*1.7%*	*18.4%*	*7.0%*	*4.4%*	*44.2%*	*6.0%*	*2.8%*	*1.9%*	*2.0%*	*2.6%*	*100.0%*

	Sep 17														
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	41,333	9,746	5,468	9,461	13,109	33,600	3,027	36,912	870	18,919	24,289	13,526	15,177	19,393	**244,830**
Sovereign	1,075	-	29	524	1	65,694	61,576	856	-	1,026	16	-	370	306	**131,473**
Bank	132	49	34	25	4	44,119	-	65	-	-	39	-	43	30	**44,540**
Residential Mortgage	-	-	-	-	-	-	-	-	369,117	-	-	-	-	-	**369,117**
Qualifying Revolving Retail	-	-	-	-	-	-	-	-	22,055	-	-	-	-	-	**22,055**
Other Retail	3,257	2,951	4,135	110	2,376	713	15	1,650	16,511	1,278	1,259	4,288	1,442	3,954	**43,939**
Qualifying Central Counterparties	-	-	-	-	-	9,919	-	-	-	-	-	-	-	-	**9,919**
Specialised Lending	807	7	181	1,696	232	1	-	1	-	32,824	14	16	708	718	**37,205**
Total exposures	**46,604**	**12,753**	**9,847**	**11,816**	**15,722**	**154,046**	**64,618**	**39,484**	**408,553**	**54,047**	**25,617**	**17,830**	**17,740**	**24,401**	**903,078**
% of Total	*5.2%*	*1.4%*	*1.1%*	*1.3%*	*1.7%*	*17.1%*	*7.2%*	*4.4%*	*45.1%*	*6.0%*	*2.8%*	*2.0%*	*2.0%*	*2.7%*	*100.0%*

Table 7(e): Residual contractual maturity of Exposure at Default[14]

Sep 18					
Portfolio Type	< 12 mths $M	1 - 5 years $M	> 5 years $M	No Maturity Specified $M	Total $M
Corporate	113,477	132,355	14,711	146	**260,689**
Sovereign	82,871	44,102	18,596	-	**145,569**
Bank	35,539	15,424	400	-	**51,363**
Residential Mortgage	329	993	346,915	29,040	**377,277**
Qualifying Revolving Retail	-	-	-	18,447	**18,447**
Other Retail	13,933	7,142	18,831	-	**39,906**
Qualifying Central Counterparties	3,881	4,427	2,736	358	**11,402**
Specialised Lending	16,627	21,023	1,766	46	**39,462**
Total exposures	**266,657**	**225,466**	**403,955**	**48,037**	**944,115**

Mar 18					
Portfolio Type	< 12 mths $M	1 - 5 years $M	> 5 years $M	No Maturity Specified $M	Total $M
Corporate	112,769	125,869	15,231	150	**254,019**
Sovereign	79,422	36,023	25,837	-	**141,282**
Bank	33,167	15,078	423	-	**48,668**
Residential Mortgage	311	1,100	345,272	30,080	**376,763**
Qualifying Revolving Retail	-	-	-	19,331	**19,331**
Other Retail	14,537	7,645	19,499	-	**41,681**
Qualifying Central Counterparties	3,372	4,053	2,824	342	**10,591**
Specialised Lending	16,825	19,695	1,290	50	**37,860**
Total exposures	**260,403**	**209,463**	**410,376**	**49,953**	**930,195**

Sep 17					
Portfolio Type	< 12 mths $M	1 - 5 years $M	> 5 years $M	No Maturity Specified $M	Total $M
Corporate	109,154	120,769	14,746	161	**244,830**
Sovereign	66,591	40,319	24,563	-	**131,473**
Bank	30,068	14,159	313	-	**44,540**
Residential Mortgage	345	2,533	335,664	30,575	**369,117**
Qualifying Revolving Retail	-	-	-	22,055	**22,055**
Other Retail	15,462	8,289	19,758	430	**43,939**
Qualifying Central Counterparties	3,103	3,771	2,704	341	**9,919**
Specialised Lending	16,160	19,985	1,010	50	**37,205**
Total exposures	**240,883**	**209,825**	**398,758**	**53,612**	**903,078**

[14] No Maturity Specified predominately includes credit cards and residential mortgage equity manager accounts.

Table 7(f) part (i): Impaired assets[15 16], Past due loans[17], Provisions and Write-offs by Industry sector

	Sep 18					
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	-	567	90	136	(12)	31
Business Services	-	72	39	32	3	14
Construction	-	118	62	53	6	26
Electricity, gas and water supply	-	2	1	1	-	-
Entertainment Leisure & Tourism	-	102	54	42	17	25
Financial, Investment & Insurance	-	86	19	48	2	22
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	140	23	102	(13)	23
Personal	-	637	2,359	311	271	351
Property Services	-	75	36	21	(3)	7
Retail Trade	-	136	73	74	36	31
Transport & Storage	-	72	20	22	12	10
Wholesale Trade	-	65	20	33	2	16
Other	-	77	66	45	22	17
Total	**-**	**2,149**	**2,862**	**920**	**343**	**573**

[15] Impaired derivatives are net of credit value adjustment (CVA) of $27 million, being a market value based assessment of the credit risk of the relevant counterparties (March 2018: $36 million; September 2017: $42 million).

[16] Impaired loans / facilities include restructured items of $269 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 2018: $76 million; September 2017: $167 million).

[17] For regulatory reporting, not well secured portfolio managed retail exposures have been reclassified from past due loans > 90 days to impaired loans / facilities.

Table 7(f) part (i): Impaired assets, Past due loans, Provisions and Write-offs by Industry sector (continued)

	Mar 18					
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	-	459	92	169	(5)	39
Business Services	-	81	40	32	17	18
Construction	-	157	64	73	16	69
Electricity, gas and water supply	-	1	1	1	-	1
Entertainment Leisure & Tourism	-	127	55	45	17	29
Financial, Investment & Insurance	-	103	14	68	58	5
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	193	23	130	18	22
Personal	-	641	2,351	298	263	353
Property Services	-	60	38	28	3	5
Retail Trade	-	145	72	67	35	30
Transport & Storage	-	73	20	22	(13)	10
Wholesale Trade	-	86	20	46	4	19
Other	-	81	75	37	17	51
Total	**-**	**2,207**	**2,865**	**1,016**	**430**	**651**

	Sep 17					
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	-	545	110	203	(14)	62
Business Services	-	109	31	31	(7)	15
Construction	-	225	71	125	48	16
Electricity, gas and water supply	-	2	2	1	1	1
Entertainment Leisure & Tourism	-	144	45	59	16	33
Financial, Investment & Insurance	-	29	30	14	6	10
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	219	26	137	36	93
Personal	-	745	2,177	307	369	421
Property Services	-	50	39	28	(14)	14
Retail Trade	-	129	90	62	25	19
Transport & Storage	-	144	25	33	8	10
Wholesale Trade	-	121	28	65	48	55
Other	-	119	82	71	32	42
Total	**-**	**2,581**	**2,756**	**1,136**	**554**	**791**

Table 7(f) part (ii): Impaired asset, Past due loans, Provisions and Write-offs

Sep 18	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	-	1,051	161	394	1	90
Sovereign	-	-	-	-	(3)	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	304	2,291	160	56	41
Qualifying Revolving Retail	-	76	-	-	93	140
Other Retail	-	490	353	247	211	277
Total Advanced IRB approach	**-**	**1,921**	**2,805**	**801**	**358**	**548**
Specialised Lending	**-**	**43**	**22**	**7**	**2**	**4**
Portfolios subject to Standardised approach						
Corporate	-	150	17	101	(19)	15
Residential Mortgage	-	20	12	9	1	3
Other Retail	-	15	6	2	1	3
Total Standardised approach	**-**	**185**	**35**	**112**	**(17)**	**21**
Qualifying Central Counterparties	**-**	**-**	**-**	**-**	**-**	**-**
Total	**-**	**2,149**	**2,862**	**920**	**343**	**573**

Table 7(f) part (ii): Impaired asset, Past due loans, Provisions and Write-offs (continued)

Mar 18	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	-	997	140	456	68	142
Sovereign	-	-	-	3	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	272	2,333	144	42	24
Qualifying Revolving Retail	-	88	-	5	92	139
Other Retail	-	545	336	260	197	287
Total Advanced IRB approach	**-**	**1,902**	**2,809**	**868**	**399**	**592**
Specialised Lending	**-**	**28**	**17**	**9**	**(4)**	**4**
Portfolios subject to Standardised approach						
Corporate	-	237	23	127	-	16
Residential Mortgage	-	25	12	10	2	1
Other Retail	-	15	4	2	33	38
Total Standardised approach	**-**	**277**	**39**	**139**	**35**	**55**
Qualifying Central Counterparties	**-**	**-**	**-**	**-**	**-**	**-**
Total	**-**	**2,207**	**2,865**	**1,016**	**430**	**651**

Sep 17	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	-	1,193	175	520	75	178
Sovereign	-	-	-	3	-	-
Bank	-	-	10	-	5	8
Residential Mortgage	-	259	2,166	126	42	20
Qualifying Revolving Retail	-	99	-	18	118	137
Other Retail	-	586	325	299	245	275
Total Advanced IRB approach	**-**	**2,137**	**2,676**	**966**	**485**	**618**
Specialised Lending	**-**	**25**	**21**	**17**	**(4)**	**2**
Portfolios subject to Standardised approach						
Corporate	-	273	34	140	(1)	80
Residential Mortgage	-	25	19	10	2	1
Other Retail	-	121	6	3	72	90
Total Standardised approach	**-**	**419**	**59**	**153**	**73**	**171**
Qualifying Central Counterparties	**-**	**-**	**-**	**-**	**-**	**-**
Total	**-**	**2,581**	**2,756**	**1,136**	**554**	**791**

Table 7(g): Impaired assets[18] [19], Past due loans[20] and Provisions[21] by Geography

			Sep 18		
Geographic region	Impaired derivatives $M	Impaired loans/ facilities $M	Past due loans ≥ 90 days $M	Individual provision balance $M	Collective provision balance $M
Australia	-	1,590	2,644	650	1,796
New Zealand	-	328	183	121	352
Asia Pacific, Europe and America	-	231	35	149	375
Total	**-**	**2,149**	**2,862**	**920**	**2,523**

			Mar 18		
Geographic region	Impaired derivatives $M	Impaired loans/ facilities $M	Past due loans ≥ 90 days $M	Individual provision balance $M	Collective provision balance $M
Australia	-	1,510	2,647	668	1,822
New Zealand	-	361	178	165	393
Asia Pacific, Europe and America	-	336	40	183	364
Total	**-**	**2,207**	**2,865**	**1,016**	**2,579**

			Sep 17		
Geographic region	Impaired derivatives $M	Impaired loans/ facilities $M	Past due loans ≥ 90 days $M	Individual provision balance $M	Collective provision balance $M
Australia	-	1,723	2,519	791	1,810
New Zealand	-	359	168	141	398
Asia Pacific, Europe and America	-	499	69	204	454
Total	**-**	**2,581**	**2,756**	**1,136**	**2,662**

[18] Impaired derivatives are net of credit value adjustment (CVA) of $27 million, being a market value based assessment of the credit risk of the relevant counterparties (March 2018: $36 million; September 2017: $42 million).

[19] Impaired loans / facilities include restructured items of $269 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 2018: $76 million; September 2017: $167 million).

[20] For regulatory reporting, not well secured portfolio managed retail exposures have been reclassified from past due loans > 90 days to impaired loans / facilities.

[21] 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 7(h): Provision for Credit Impairment

Collective Provision	Half year Sep 18 $M	Half year Mar 18 $M	Half year Sep 17 $M
Balance at start of period	2,579	2,662	2,785
Charge/(Release) to Income Statement	(63)	(22)	(75)
Adjustment for exchange rate fluctuations and transfers	7	18	(9)
Retail Asia divestment	-	(79)	(39)
Total Collective Provision	**2,523**	**2,579**	**2,662**
Individual Provision			
Balance at start of period	1,016	1,136	1,269
New and increased provisions	716	728	948
Write-backs	(234)	(191)	(280)
Adjustment for exchange rate fluctuations and transfers	5	5	(2)
Discount unwind	(10)	(7)	(8)
Bad debts written off	(573)	(651)	(791)
Asia Retail and Wealth divestment	-	(4)	-
Total Individual Provision	**920**	**1,016**	**1,136**
Total Provisions for Credit Impairment	**3,443**	**3,595**	**3,798**

Table 7(j): Specific Provision Balance and General Reserve for Credit Losses[22]

Sep 18	Specific Provision Balance $M	General Reserve for Credit Losses $M	Total $M
Collective Provision	307	2,216	2,523
Individual Provision	920	-	920
Total Provision for Credit Impairment	**1,227**	**2,216**	**3,443**

Mar 18	Specific Provision Balance $M	General Reserve for Credit Losses $M	Total $M
Collective Provision	312	2,267	2,579
Individual Provision	1,016	-	1,016
Total Provision for Credit Impairment	**1,328**	**2,267**	**3,595**

Sep 17	Specific Provision Balance $M	General Reserve for Credit Losses $M	Total $M
Collective Provision	352	2,310	2,662
Individual Provision	1,136	-	1,136
Total Provision for Credit Impairment	**1,488**	**2,310**	**3,798**

[22] 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 8 Credit risk – Disclosures for portfolios subject to the Standardised approach and supervisory risk weights in the IRB approach

Table 8(b): Exposure at Default by risk bucket[23]

Standardised approach exposures	Sep 18 $M	Mar 18 $M	Sep 17 $M
0%	-	-	-
20%	487	255	308
35%	359	344	2,030
50%	2,351	2,462	2,336
75%	-	-	5
100%	12,467	13,643	14,000
150%	188	303	215
>150%	3	3	4
Capital deductions	-	-	-
Total	**15,855**	**17,010**	**18,898**

Other Asset exposures	Sep 18 $M	Mar 18 $M	Sep 17 $M
0%	-	-	-
20%	865	907	947
35%	-	-	-
50%	-	-	-
75%	-	-	-
100%	2,974	3,004	3,179
150%	-	-	-
>150%	-	-	-
Capital deductions	-	-	-
Total	**3,839**	**3,911**	**4,126**

Specialised Lending exposures	Sep 18 $M	Mar 18 $M	Sep 17 $M
0%	193	99	120
70%	18,225	15,983	13,935
90%	18,402	19,164	19,659
115%	2,084	2,153	3,207
250%	558	461	284
Total	**39,462**	**37,860**	**37,205**

[23] Table 8(b) shows exposure at default after credit risk mitigation in each risk category.

Table 9 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[24] 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[25] Project finance Object finance	AIRB – Supervisory Slotting[26]
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. 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 grading of these two External Credit Assessment Institutions (ECAIs).

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.
- 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. 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.

[24] The IRB asset classification of investment banks is Corporate, rather than Bank.

[25] 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.

[26] ANZ uses an internal assessment which is mapped to the appropriate Supervisory Slot.

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 a 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 APRA approved, and 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 grading's 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 Aa3	AAA to AA-	0.0000 - 0.0346%
2+ to 3+	A1 to Baa1	A+ to BBB+	0.0347 - 0.1636%
3= to 4+	Baa2 to > Baa3	BBB to > BB+	0.1637 - 0.4004%
4= to 6=	Ba1 to B1	BB+ to B+	0.4005 – 2.7550%
6- to 7=	B2 to B3	B to B-	2.7551 – 9.7980%
7- to 8+	Caa	CCC	9.7981 – 27.1109%
8=	Ca, C	CC, C	27.1110 – 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 PDs, and used to allocate exposures to homogenous pools, along with LGD and EAD.

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), and
- 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. Credit rating models are owned by central Risk teams. 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.

Within ANZ's wholesale businesses, Group Credit Assurance provides independent credit related assurance activities, including providing an independent assessment of both the asset quality in the portfolio and the quality of credit decision making. It also assesses management controls from a "top down" portfolio oversight perspective as well as credit risk processes from a "bottom up" perspective based on individual customer file reviews.

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 Australian state governments	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	Expert models/Supervisory Slotting[27]

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. As noted above, the scores are calibrated to PD, and used to allocate exposures to homogenous pools, along with LGD and EAD.

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.

[27] 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 9(d): Non Retail Exposure at Default subject to Advanced Internal Ratings Based (IRB) approach[28] [29] [30]

Sep 18	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	24,269	68,253	79,833	54,934	14,790	1,636	1,910	**245,625**
Sovereign	120,919	19,532	1,822	903	2,375	17	1	**145,569**
Bank	17,177	27,971	4,183	1,917	109	6	-	**51,363**
Total	**162,365**	**115,756**	**85,838**	**57,754**	**17,274**	**1,659**	**1,911**	**442,557**
% of Total	36.7%	26.2%	19.4%	13.1%	3.9%	0.4%	0.4%	100.0%
Undrawn commitments (included in above)								
Corporate	8,015	24,703	22,462	7,943	1,631	245	33	**65,032**
Sovereign	952	68	-	11	2	-	-	**1,033**
Bank	6	450	28	131	3	-	-	**618**
Total	**8,973**	**25,221**	**22,490**	**8,085**	**1,636**	**245**	**33**	**66,683**
Average Exposure at Default								
Corporate	11.109	8.117	1.603	0.651	0.130	0.172	0.714	**0.911**
Sovereign	161.225	542.567	31.972	9.219	30.444	5.712	0.653	**142.296**
Bank	12.013	7.359	11.951	6.223	0.998	0.209	-	**8.514**
Exposure-weighted average Loss Given Default (%)								
Corporate	55.7%	55.8%	46.5%	37.0%	33.8%	38.7%	43.6%	**47.0%**
Sovereign	5.3%	11.5%	39.9%	46.7%	53.9%	60.0%	5.0%	**7.6%**
Bank	63.5%	62.5%	65.0%	65.0%	34.8%	42.7%	-	**63.0%**
Exposure-weighted average risk weight (%)								
Corporate	18.5%	32.3%	52.2%	63.2%	88.0%	180.6%	109.6%	**49.2%**
Sovereign	1.0%	3.0%	43.0%	94.7%	146.5%	267.3%	-	**4.8%**
Bank	20.3%	26.4%	65.1%	113.1%	114.2%	251.7%	-	**31.0%**

[28] In accordance with APS 330, EAD in Table 9(d) includes Advanced IRB exposures and excludes Specialised Lending, Standardised, Securitisation, Equities or Other Assets exposures. Specialised Lending is excluded from Table 9(d) as it follows the Supervisory Slotting treatment, and a breakdown of risk weightings is provided in Table 8(b).

[29] Average EAD is calculated as total EAD post risk mitigants divided by the total number of credit risk generating exposures.

[30] Exposure-weighted average risk weight (%) is calculated as CRWA divided by EAD.

Table 9(d): Non Retail Exposure at Default subject to Advanced Internal Ratings Based (IRB) approach (continued)

Mar 18	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	19,419	62,744	78,496	58,649	14,245	2,409	1,829	**237,791**
Sovereign	120,077	16,108	1,760	1,001	2,323	13	-	**141,282**
Bank	17,342	25,651	3,928	1,668	71	8	-	**48,668**
Total	**156,838**	**104,503**	**84,184**	**61,318**	**16,639**	**2,430**	**1,829**	**427,741**
% of Total	36.7%	24.4%	19.7%	14.3%	3.9%	0.6%	0.4%	100.0%
Undrawn commitments (included in above)								
Corporate	5,731	24,602	23,306	9,165	1,506	275	44	**64,629**
Sovereign	862	70	8	51	3	-	-	**994**
Bank	139	506	1	-	2	-	-	**648**
Total	**6,732**	**25,178**	**23,315**	**9,216**	**1,511**	**275**	**44**	**66,271**
Average Exposure at Default								
Corporate	6.812	7.567	1.628	0.666	0.124	0.237	0.671	**0.865**
Sovereign	158.412	413.028	34.493	8.558	27.334	6.747	-	**134.298**
Bank	7.791	5.489	8.908	6.391	1.019	0.185	-	**6.311**
Exposure-weighted average Loss Given Default (%)								
Corporate	54.7%	55.8%	46.6%	37.6%	34.3%	41.0%	47.5%	**46.7%**
Sovereign	5.4%	12.6%	38.9%	49.3%	51.1%	60.0%	-	**7.7%**
Bank	63.4%	62.4%	66.3%	67.6%	72.3%	55.6%	-	**63.3%**
Exposure-weighted average risk weight (%)								
Corporate	18.2%	32.2%	52.0%	64.2%	88.2%	196.9%	118.1%	**51.2%**
Sovereign	1.1%	3.4%	44.4%	105.2%	138.3%	267.3%	-	**4.9%**
Bank	20.7%	26.5%	68.5%	113.4%	197.3%	309.6%	-	**31.1%**

Sep 17	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	20,273	59,504	72,916	59,268	14,525	1,856	2,033	**230,375**
Sovereign	107,161	18,177	2,138	1,403	2,573	21	-	**131,473**
Bank	16,773	23,248	3,055	1,371	80	2	11	**44,540**
Total	**144,207**	**100,929**	**78,109**	**62,042**	**17,178**	**1,879**	**2,044**	**406,388**
% of Total	35.5%	24.8%	19.2%	15.3%	4.2%	0.5%	0.5%	100.0%
Undrawn commitments (included in above)								
Corporate	6,621	23,372	22,802	10,088	1,448	144	52	**64,527**
Sovereign	553	85	6	56	-	-	-	**700**
Bank	15	144	23	-	1	-	-	**183**
Total	**7,189**	**23,601**	**22,831**	**10,144**	**1,449**	**144**	**52**	**65,410**
Average Exposure at Default								
Corporate	8.590	8.114	1.578	0.649	0.126	0.185	0.660	**0.836**
Sovereign	143.456	757.354	37.513	8.451	29.924	3.468	-	**121.062**
Bank	15.416	5.846	6.990	9.523	1.102	0.073	5.195	**7.747**
Exposure-weighted average Loss Given Default (%)								
Corporate	55.8%	56.6%	45.7%	39.1%	34.2%	38.0%	46.5%	**46.9%**
Sovereign	5.6%	12.2%	38.9%	50.1%	50.8%	56.3%	-	**8.4%**
Bank	63.2%	63.1%	68.8%	68.8%	73.1%	69.5%	29.6%	**63.7%**
Exposure-weighted average risk weight (%)								
Corporate	18.1%	32.7%	50.9%	67.5%	85.7%	181.4%	118.1%	**51.4%**
Sovereign	1.2%	3.2%	43.3%	107.3%	124.5%	301.2%	-	**5.8%**
Bank	20.1%	26.1%	64.8%	109.3%	190.4%	390.2%	136.2%	**29.4%**

Table 9(d): Retail Exposure at Default subject to Advanced Internal Ratings Based (IRB) approach by risk grade

Sep 18	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% <100.00% $M	Default $M	Total $M
Exposure at Default								
Residential Mortgage	72,571	100,911	61,451	127,212	7,944	3,830	2,654	**376,573**
Qualifying Revolving Retail	5,776	3,911	1,521	4,695	1,767	703	74	**18,447**
Other Retail	1,056	5,353	2,384	22,156	5,780	2,125	965	**39,819**
Total	**79,403**	**110,175**	**65,356**	**154,063**	**15,491**	**6,658**	**3,693**	**434,839**
% of Total	18.3%	25.3%	15.0%	35.4%	3.6%	1.5%	0.8%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	15,368	7,284	2,689	7,431	37	27	1	**32,837**
Qualifying Revolving Retail	4,225	2,957	982	1,948	507	79	1	**10,699**
Other Retail	811	3,418	1,544	2,945	546	81	8	**9,353**
Total	**20,404**	**13,659**	**5,215**	**12,324**	**1,090**	**187**	**10**	**52,889**
Average Exposure at Default								
Residential Mortgage	0.251	0.231	0.252	0.248	0.332	0.324	0.272	**0.246**
Qualifying Revolving Retail	0.009	0.008	0.009	0.011	0.010	0.006	0.009	**0.009**
Other Retail	0.008	0.015	0.012	0.025	0.010	0.011	0.027	**0.017**
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.7%	18.5%	19.2%	20.7%	20.3%	20.0%	19.9%	**19.9%**
Qualifying Revolving Retail	75.5%	80.2%	77.5%	81.3%	84.7%	82.8%	83.5%	**79.3%**
Other Retail	56.6%	54.5%	73.6%	45.2%	65.1%	57.7%	46.8%	**52.0%**
Exposure-weighted average risk weight (%)								
Residential Mortgage	5.9%	11.6%	19.3%	40.0%	94.1%	127.7%	190.5%	**25.6%**
Qualifying Revolving Retail	3.5%	8.1%	16.3%	44.8%	105.1%	201.4%	232.6%	**34.2%**
Other Retail	30.5%	36.9%	55.8%	59.1%	112.7%	172.4%	255.0%	**73.8%**

Table 9(d): Retail Exposure at Default subject to Advanced Internal Ratings Based (IRB) approach by risk grade

Mar 18	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% <100.00% $M	Default $M	Total $M
Exposure at Default								
Residential Mortgage	70,037	99,897	61,545	129,372	8,360	4,213	2,658	**376,082**
Qualifying Revolving Retail	5,799	4,005	1,590	5,184	1,902	768	83	**19,331**
Other Retail	1,107	5,603	2,440	23,055	6,253	2,149	973	**41,580**
Total	**76,943**	**109,505**	**65,575**	**157,611**	**16,515**	**7,130**	**3,714**	**436,993**
% of Total	17.6%	25.1%	15.0%	36.1%	3.8%	1.6%	0.8%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	15,252	7,274	2,678	8,363	37	22	-	**33,626**
Qualifying Revolving Retail	4,250	3,026	1,019	2,304	576	88	1	**11,264**
Other Retail	829	3,569	1,587	3,209	563	81	6	**9,844**
Total	**20,331**	**13,869**	**5,284**	**13,876**	**1,176**	**191**	**7**	**54,734**
Average Exposure at Default								
Residential Mortgage	0.246	0.231	0.251	0.247	0.326	0.325	0.272	**0.245**
Qualifying Revolving Retail	0.009	0.008	0.009	0.011	0.010	0.006	0.009	**0.009**
Other Retail	0.008	0.016	0.013	0.025	0.011	0.011	0.025	**0.017**
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.7%	18.5%	19.1%	20.8%	20.3%	20.0%	20.0%	**19.7%**
Qualifying Revolving Retail	75.5%	80.3%	77.4%	81.1%	84.5%	82.8%	83.5%	**79.3%**
Other Retail	55.6%	54.4%	73.7%	45.5%	64.9%	57.7%	48.2%	**52.2%**
Exposure-weighted average risk weight (%)								
Residential Mortgage	5.9%	11.7%	19.3%	40.1%	94.3%	128.1%	193.7%	**26.1%**
Qualifying Revolving Retail	3.5%	8.1%	16.3%	44.9%	104.8%	201.2%	232.3%	**35.4%**
Other Retail	29.8%	36.7%	55.8%	59.8%	113.1%	174.4%	257.2%	**74.0%**

Sep 17	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% <100.00% $M	Default $M	Total $M
Exposure at Default								
Residential Mortgage	68,361	96,848	59,982	126,225	8,394	4,381	2,478	**366,669**
Qualifying Revolving Retail	-	11,785	2,833	4,825	1,723	724	165	**22,055**
Other Retail	1,066	5,443	2,339	23,182	6,773	2,155	993	**41,951**
Total	**69,427**	**114,076**	**65,154**	**154,232**	**16,890**	**7,260**	**3,636**	**430,675**
% of Total	16.1%	26.5%	15.1%	35.9%	3.9%	1.7%	0.8%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	15,073	7,153	2,655	9,102	37	23	1	**34,044**
Qualifying Revolving Retail	-	9,239	2,097	2,194	671	82	36	**14,319**
Other Retail	814	3,466	1,543	3,134	566	86	6	**9,615**
Total	**15,887**	**19,858**	**6,295**	**14,430**	**1,274**	**191**	**43**	**57,978**
Average Exposure at Default								
Residential Mortgage	0.243	0.227	0.245	0.242	0.319	0.315	0.268	**0.241**
Qualifying Revolving Retail	-	0.011	0.009	0.010	0.009	0.008	0.009	**0.010**
Other Retail	0.008	0.015	0.011	0.025	0.011	0.010	0.026	**0.017**
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.8%	18.6%	19.2%	20.9%	20.4%	20.0%	20.1%	**19.8%**
Qualifying Revolving Retail	0.0%	73.2%	73.2%	73.2%	73.2%	73.2%	73.2%	**73.2%**
Other Retail	57.2%	54.7%	74.4%	45.2%	64.0%	58.1%	50.1%	**52.2%**
Exposure-weighted average risk weight (%)								
Residential Mortgage	5.9%	11.8%	19.5%	40.2%	94.5%	128.3%	195.5%	**26.3%**
Qualifying Revolving Retail	0.0%	5.2%	14.5%	39.8%	116.1%	210.4%	355.4%	**32.0%**
Other Retail	31.3%	36.8%	55.9%	59.5%	111.9%	175.4%	239.5%	**74.1%**

Table 9(e): Actual Losses by portfolio type

	Half year Sep 18	
Basel Asset Class	Individual provision charge $M	Write-offs $M
Corporate	1	90
Sovereign	(3)	-
Bank	-	-
Residential Mortgage	56	41
Qualifying Revolving Retail	93	140
Other Retail	211	277
Total Advanced IRB	**358**	**548**
Specialised Lending	2	4
Standardised approach	(17)	21
Total	**343**	**573**

	Half year Mar 18	
Basel Asset Class	Individual provision charge $M	Write-offs $M
Corporate	68	142
Sovereign	-	-
Bank	-	-
Residential Mortgage	42	24
Qualifying Revolving Retail	92	139
Other Retail	197	287
Total Advanced IRB	**399**	**592**
Specialised Lending	(4)	4
Standardised approach	35	55
Total	**430**	**651**

	Half year Sep 17	
Basel Asset Class	Individual provision charge $M	Write-offs $M
Corporate	75	178
Sovereign	-	-
Bank	5	8
Residential Mortgage	42	20
Qualifying Revolving Retail	118	137
Other Retail	245	275
Total Advanced IRB	**485**	**618**
Specialised Lending	(4)	2
Standardised approach	73	171
Total	**554**	**791**

Factors impacting the loss experience

The individual credit impairment charge decreased $87 million over the half driven primarily by AIRB Corporate and Standardised asset class due to lower new individual provisions combined with higher write-backs and recoveries.

Write-offs decreased $78 million over the half driven by AIRB Corporate and Standardised asset class reflecting the decrease in the number of large single names exposures being written-off.

Table 9(f): Average estimated vs. actual PD, EAD and LGD – Advanced IRB

	Sep 18				
Portfolio Type	**Average Estimated PD %**	**Average Actual PD %**	**Average estimated to actual EAD ratio**	**Average Estimated LGD %**	**Average Actual LGD %**
Corporate	1.83	1.78	1.15	42.04	35.00
Sovereign	0.37	nil	n/a	n/a	n/a
Bank	0.67	0.08	1.31	46.00	58.30
Specialised Lending	n/a	2.12	1.06	n/a	24.63
Residential Mortgage	0.71	0.77	1.01	20.78	2.21
Qualifying Revolving Retail	2.45	1.85	1.07	74.48	71.68
Other Retail	4.02	3.35	1.05	52.87	42.29

APS 330 Table 9(f) compares internal credit risk estimates used in calculating regulatory capital with realised outcomes by portfolio types. 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 were no Sovereign defaults observed in ANZ Sovereign exposures for the observation period.

Wholesale Portfolios

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 period of observation being 2009 to 2017. The actual PD is based on the number of defaulted obligors up to August 2018 compared to the total number of obligors measured.

The EAD ratio compares internally estimated EAD prior to default to realised EAD for defaulted obligors over the 8 years of observation being 2009 to August 2018. 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 downturn LGD for accounts that defaulted at the beginning of each year during the observation period being 2009 to September 2016. The actual LGD is based on the average realised losses over the period for the accounts observed at the beginning and defaulted during the observation period. For non-retail portfolios, the estimated and actual LGDs are based on accounts that defaulted up to September 2016. Defaults occurring after September 2016 have been excluded from the analysis to allow sufficient time for workout period. Actual LGD for defaults where workouts were not finalised have been estimated to approximate the final actual loss.

Retail Portfolios

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 period of observation being 2013 to 2017. The actual PD is based on the number of defaulted obligors up to September 2018 compared to the total number of obligors measured.

The EAD ratio compares internally estimated EAD prior to default to realised EAD for defaulted obligors over the period of observation being 2013 to 2017. 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 downturn LGD for accounts that defaulted at the beginning of each year during the observation period being 2012 to 2016. The actual LGD is based on the average realised losses over the period for the accounts observed at the beginning and defaulted during the observation period. Defaults occurring after September 2016 have been excluded from the analysis to allow sufficient time for workout period.

[31] A revised capital model was introduced in June 2017, which will impact Average Estimated PD rates for the Australian Residential Mortgages portfolio. The current Average Estimated PD rates are based on previous capital models, with the impacts of the revised model to gradually roll through in future periods.

Table 10 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.[32] Types of collateral typically taken by ANZ include:

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

In some cases, such as where the customer risk profile is considered very sound or by the nature of the product, a transaction may not be supported by collateral.

Our credit policy, requirements 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 the SI.

Policies and processes for collateral valuation and management

ANZ has well established policies, requirements and processes around collateral valuation and management, that are reviewed regularly. 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 is an integral component in transaction structuring for ANZ. The guarantee of a financially stronger 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 requirements provide 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. 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.

[32] 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.

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 10(b): Credit risk mitigation on Standardised approach portfolios – collateral [33]

Sep 18	Exposure $M	Eligible Financial Collateral $M	Other Eligible Collateral $M	% Coverage
Standardised approach				
Corporate	15,064	5,486	2,585	53.6%
Residential Mortgage	704	-	-	0.0%
Other Retail	87	-	-	0.0%
Total	**15,855**	**5,486**	**2,585**	**50.9%**

Mar 18	Exposure $M	Eligible Financial Collateral $M	Other Eligible Collateral $M	% Coverage
Standardised approach				
Corporate	16,228	5,159	3,078	50.8%
Residential Mortgage	681	-	-	0.0%
Other Retail	101	-	-	0.0%
Total	**17,010**	**5,159**	**3,078**	**48.4%**

Sep 17	Exposure $M	Eligible Financial Collateral $M	Other Eligible Collateral $M	% Coverage
Standardised approach				
Corporate	14,455	5,023	2,499	52.0%
Residential Mortgage	2,448	-	-	0.0%
Other Retail	1,988	131	-	6.6%
Total	**18,891**	**5,154**	**2,499**	**40.5%**

[33] Eligible Collateral could include cash collateral (cash, certificates deposits and bank bills issued by the lending ADI), gold bullion and highly rated debt securities.

Table 10(c): Credit risk mitigation – guarantees and credit derivatives

Sep 18	Exposure $M	Exposures covered by Guarantees $M	Exposures covered by Credit Derivatives $M	% Coverage
Advanced IRB				
Corporate (incl. Specialised Lending)	285,087	7,460	856	2.9%
Sovereign	145,569	5,386	-	3.7%
Bank	51,363	11	-	0.0%
Residential Mortgage	376,573	-	-	0.0%
Qualifying Revolving Retail	18,447	-	-	0.0%
Other Retail	39,819	-	-	0.0%
Total	**916,858**	**12,857**	**856**	**1.5%**
Standardised approach				
Corporate	15,064	58	-	0.4%
Residential Mortgage	704	-	-	0.0%
Other Retail	87	-	-	0.0%
Total	**15,855**	**58**	**-**	**0.4%**
Qualifying Central Counterparties	**11,402**	**-**	**-**	**0.0%**

Mar 18	Exposure $M	Exposures covered by Guarantees $M	Exposures covered by Credit Derivatives $M	% Coverage
Advanced IRB				
Corporate (incl. Specialised Lending)	275,651	6,790	824	2.8%
Sovereign	141,282	5,212	-	3.7%
Bank	48,668	10	-	0.0%
Residential Mortgage	376,082	-	-	0.0%
Qualifying Revolving Retail	19,331	-	-	0.0%
Other Retail	41,580	-	-	0.0%
Total	**902,594**	**12,012**	**824**	**1.4%**
Standardised approach				
Corporate	16,228	182	-	1.1%
Residential Mortgage	681	-	-	0.0%
Other Retail	101	-	-	0.0%
Total	**17,010**	**182**	**-**	**1.1%**
Qualifying Central Counterparties	**10,591**	-	-	**0.0%**

Table 10(c): Credit risk mitigation – guarantees and credit derivatives (continued)

	Sep 17			
	Exposure $M	Exposures covered by Guarantees $M	Exposures covered by Credit Derivatives $M	% Coverage
Advanced IRB				
Corporate (incl. Specialised Lending)	267,580	6,824	887	2.9%
Sovereign	131,473	4,479	-	3.4%
Bank	44,540	15	-	0.0%
Residential Mortgage	366,669	-	-	0.0%
Qualifying Revolving Retail	22,055	-	-	0.0%
Other Retail	41,951	-	-	0.0%
Total	**874,268**	**11,318**	**887**	**1.4%**
Standardised approach				
Corporate	14,455	168	-	1.2%
Residential Mortgage	2,448	-	-	0.0%
Other Retail	1,988	-	-	0.0%
Total	**18,891**	**168**	**-**	**0.9%**
Qualifying Central Counterparties	**9,919**	**-**	**-**	**0.0%**

Table 11 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 derivative contracts and the counterparty is unable to fulfil present and future contractual payment 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 (OTC) 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 over the life of derivative contracts. The markets covered by this treatment include the derivative activities associated with interest rate, foreign exchange, CDS, equity, commodity 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 Markets 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 derivative 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 approach to measure counterparty credit risk exposure is based on internal models. These measures are referred to as potential credit risk exposure (PCRE) and potential future exposure (PFE) and measure the maximum credit exposure of derivative transactions at future time points to ANZ. PFE is measured at the 97.5th percentile at future pre-described time points, and PCRE is a 97.5th percentile averaged over time points.

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.

PFE simulates relevant risk factors in a portfolio by taking into account the relevant volatilities and correlations calibrated to historical market data.

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 PD, LGD, and expected credit risk exposure.

APRA requires banks, including ANZ, to hold additional risk based capital to cover the risk of mark to market losses associated with deterioration in counterparty credit worthiness when entering into derivatives transactions.

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 counterparty credit risk exposures.

Counterparty credit risk mitigation and credit enhancements

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

- A bilateral netting master agreement (e.g. by 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 or CSA) that governs the amount of collateral required to be posted or received by ANZ throughout the life of the contract. Reasons for requiring collateral include:
    - Initial Margin – covers the future potential exposure that could arise from future changes in market value;
    - Variation Margin – reflects the current mark-to-market exposure.
- Since March 2017, APRA's CPS 226 "Margining and risk mitigation for non-centrally cleared derivatives" has mandated CSA arrangements between financial institutions, subject to trading volume thresholds. The operation of collateral agreements falls under a policy which establishes the control framework designed to ensure a robust and globally consistent approach to the management of collateralised exposures, as well as compliance with CPS 226 obligations.
- 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 included in documentation.
- Linking covenants and events of default in existing loan facility agreements to master agreements.
- 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 clearing counterparties clearing houses. Ensuring that when dealing in derivative risk mitigation tools, such as portfolio compression and reconciliation occur are used where applicable, and that there is a framework to resolve any derivative valuation disputes.
- Exchange of variation and initial margin for derivative transactions not cleared through CCP's mandated by regulators subject to certain criteria.

In the event of a downgrading of ANZ's rating by one notch from AA- to A+, as at 30 September 2018, ANZ would not be required to lodge additional collateral with its counterparties.

Table 11(b): Counterparty credit risk – net derivative credit exposure

	Sep 18 $M	Mar 18 $M	Sep 17 $M
Gross positive fair value of contracts	68,426	70,915	62,518
Netting benefits	(54,251)	(55,268)	(49,227)
Netted current credit exposure	14,175	15,647	13,291
Collateral held	(5,507)	(7,530)	(5,093)
Net derivatives credit exposure	**8,668**	**8,117**	**8,198**

Counterparty credit risk exposure - by portfolio type

Portfolio Type	Sep 18 $M	Mar 18 $M	Sep 17 $M
Corporate	14,286	15,106	13,573
Sovereign	1,478	1,383	1,359
Bank	15,199	15,817	13,569
Qualifying Central Counterparties	11,402	10,591	9,916
Specialised Lending	387	461	505
Total exposures	**42,752**	**43,358**	**38,922**

Notional Value of Credit Derivative Hedges

Product Type	Sep 18 $M	Mar 18 $M	Sep 17 $M
Credit Default Swaps	342	343	731
Interest Rate Swaps	-	-	-
Currency Swaps	-	-	-
Other	-	-	-
Total exposures	**342**	**343**	**731**

Table 11(c): Counterparty credit risk exposure – credit derivative transactions

	Sep 18		
	Protection Bought $M	Protection Sold $M	Total $M
Credit derivative products used for own credit portfolio			
Credit default swaps	2,347	1,794	4,141
Total notional value	**2,347**	**1,794**	**4,141**
Credit derivative products used for intermediation			
Credit default swaps	342	342	684
Total return swaps	-	-	-
Total notional value	**342**	**342**	**684**
Total credit derivative notional value	**2,689**	**2,136**	**4,825**

	Mar 18		
	Protection Bought $M	Protection Sold $M	Total $M
Credit derivative products used for own credit portfolio			
Credit default swaps	2,896	2,502	5,398
Total notional value	**2,896**	**2,502**	**5,398**
Credit derivative products used for intermediation			
Credit default swaps	343	343	686
Total return swaps	-	-	-
Total notional value	**343**	**343**	**686**
Total credit derivative notional value	**3,239**	**2,845**	**6,084**

	Sep 17		
	Protection Bought $M	Protection Sold $M	Total $M
Credit derivative products used for own credit portfolio			
Credit default swaps	6,138	5,672	11,810
Total notional value	**6,138**	**5,672**	**11,810**
Credit derivative products used for intermediation			
Credit default swaps	731	731	1,462
Total return swaps	-	-	-
Total notional value	**731**	**731**	**1,462**
Total credit derivative notional value	**6,869**	**6,403**	**13,272**

Chapter 7 – Securitisation

Table 12 Securitisation disclosures

Definition of securitisation

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, 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.

Securitisation of ANZ originated assets

Securitisations may be categorised as:

- Traditional securitisations, where legal ownership of the underlying asset pool is transferred to investors, with principal and interest paid from realisation of or regular cash flows from the assets. The Special Purpose Vehicle (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.

Covered bond transactions, whereby bonds issued by ANZ are secured by assets held in a special purpose vehicle, are not securitisation exposures.

Third Party Securitisation Activities

ANZ's involvement with securitisation of third-party originated assets, including residential mortgages, auto and equipment loans and trade receivables, comprises of:

- Provision of facilities – this may include providing facilities to securitisation vehicles in the form of funding facility provider and interest rate swap provider. Funding may be provided via an ANZ-sponsored securitisation vehicle which is consolidated onto the Bank's financial statements, to certain clients wishing to access securitisation.

- Services to securitisation programs may include structuring and arranging services and acting as bond manager.

- Investment in securities – ANZ may purchase notes issued by securitisation programs.

For any assets ANZ has securitised or for SPVs that ANZ sponsors, any role provided by ANZ or its subsidiaries is subject to market based terms and conditions, and ANZ's normal approval and review processes. Further, any securitisation exposures retained by ANZ or its affiliated entities are subject to ANZ's normal approval and review processes as well as satisfying the requirements under APS 120: Securitisation.

Governance of securitisation activities

Governance of securitisation activities is managed in accordance with the credit risk and market risk frameworks described in Chapters 6 and 8.

Risk Management

Similar to other exposures, securitisation exposures are subject to credit, market, operational liquidity 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.

Funding for third party originated exposures and investment in securities are via balance sheet funded arrangements where such arrangements satisfy ANZ's credit, due diligence and other business requirements.

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

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

Risk reporting of securitisation exposures

In addition to the formal credit review process for ANZ's securitisation exposures, the type and frequency of internal reporting to the appropriate Risk and management functions 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[34].

Regulatory capital approaches

For securitisation exposures held in ANZ's banking book[35], ANZ applies a Standardised approach (as outlined in APS 120: Securitisation) to determine the regulatory capital charge.

Chapter 8 outlines regulatory capital treatment for securitisation exposures held in ANZ's trading book. The operational requirements for the recognition of external credit assessments outlined in APS 120 apply to these exposures.

In accordance with APS 120: Securitisation, ANZ has a hierarchy of approaches available to quantify the credit risk of banking book securitisation exposures. As at 1 January 2018, APRA revised APS 120 and included changing the permitted rating approaches.

The primary rating approach is the External Ratings Based Approach (ERBA) (specifically utilising the external ratings of External Credit Assessment Institutions (ECAIs)). Where the use of ECAIs 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.

[34] 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.

[35] 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.

Other factors such as the tenor of the securitisation exposure are factored into the credit risk regulatory capital calculation.

In absence of ERBA being applicable, securitisation exposures must adopt the Supervisory Formula Approach (SFA).

Previous rating approaches including Internal Assessment Approach (IAA) and Eligible Facility Approach are no longer applicable under the revised APS 120.

Accounting policies

The principal accounting policies governing ANZ's securitisation activities are outlined in ANZ's 2018 Annual Report, Notes to the Financial Statements. These include the valuation, derecognition, consolidation and income recognition principles outlined in the accounting policies and key judgements and estimates disclosures in each relevant note. ANZ applies these group accounting policies to its securitisation activities, as appropriate and these policies have not changed since the prior year. Note 27 – Structured Entities and Note 28 – Transfers of Financial Assets also provides details about the nature of ANZ's securitisation activities and certain accounting policies and key judgements and estimates as they specifically apply to these activities.

Financial instruments held or issued by structured entities are recognised and valued using the principles of AASB 139 Financial Instruments: Recognition and Measurement. 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 2018 Annual Report.

Banking Book

Table 12(g): Banking Book: Traditional and synthetic securitisation exposures

	Sep 18		
Traditional securitisations			
Underlying asset	**ANZ Originated $M**	**ANZ Self Securitised $M**	**ANZ Sponsored $M**
Residential mortgage	1,211	70,615	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,211**	**70,615**	**-**
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	1,211	70,615	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,211**	**70,615**	**-**

Table 12(g): Banking Book: Traditional and synthetic securitisation exposures (continued)

Mar 18

Traditional securitisations Underlying asset	ANZ Originated $M	ANZ Self Securitised $M	ANZ Sponsored $M
Residential mortgage	1,349	70,709	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,349**	**70,709**	**-**

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	1,349	70,709	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,349**	**70,709**	**-**

Sep 17

Traditional securitisations Underlying asset	ANZ Originated $M	ANZ Self Securitised $M	ANZ Sponsored $M
Residential mortgage	1,528	71,011	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,528**	**71,011**	**-**

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	1,528	71,011	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	**1,528**	**71,011**	**-**

Table 12(h): Banking Book: Impaired and Past due loans relating to ANZ originated securitisations

	Sep 18				
Underlying asset	ANZ originated $M	ANZ Self Securitised $M	Impaired $M	Past due $M	Losses recognised for the six month ended $M
Residential mortgage	1,211	70,615	-	52	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	**1,211**	**70,615**	**-**	**52**	**-**

	Mar 18				
Underlying asset	ANZ originated $M	ANZ Self Securitised $M	Impaired $M	Past due $M	Losses recognised for the six month ended $M
Residential mortgage	1,349	70,709	-	57	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	**1,349**	**70,709**	**-**	**57**	**-**

	Sep 17				
Underlying asset	ANZ originated $M	ANZ Self Securitised $M	Impaired $M	Past due $M	Losses recognised for the six month ended $M
Residential mortgage	1,528	71,011	-	67	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	**1,528**	**71,011**	**-**	**67**	**-**

Table 12(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 12(j): Banking Book: Securitisation - Summary of current period's activity by underlying asset type and facility [36]

	Sep 18			
	Original value securitised			
Securitisation activity by underlying asset type	ANZ Originated $M	ANZ Self Securitised $M	ANZ Sponsored $M	Recognised gain or loss on sale $M
Residential mortgage	(138)	(94)	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	**(138)**	**(94)**	**-**	**-**

Securitisation activity by facility provided	Notional amount $M
Liquidity facilities	(3)
Funding facilities	600
Underwriting facilities	-
Lending facilities	-
Credit enhancements	-
Holdings of securities (excluding trading book)	(444)
Other	5
Total	**158**

	Mar 18			
	Original value securitised			
Securitisation activity by underlying asset type	ANZ Originated $M	ANZ Self Securitised $M	ANZ Sponsored $M	Recognised gain or loss on sale $M
Residential mortgage	(179)	(302)	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	**(179)**	**(302)**	**-**	**-**

Securitisation activity by facility provided	Notional amount $M
Liquidity facilities	(51)
Funding facilities	(162)
Underwriting facilities	-
Lending facilities	-
Credit enhancements	-
Holdings of securities (excluding trading book)	(404)
Other	6
Total	**(611)**

[36] Activity represents net movement in outstandings.

Table 12(j): Banking Book: Securitisation - Summary of current period's activity by underlying asset type and facility (continued)

	Sep 17			
	Original value securitised			
Securitisation activity by underlying asset type	ANZ Originated $M	ANZ Self Securitised $M	ANZ Sponsored $M	Recognised gain or loss on sale $M
Residential mortgage	(222)	(10,213)	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	**(222)**	**(10,213)**	**-**	**-**

Securitisation activity by facility provided	Notional amount $M
Liquidity facilities	-
Funding facilities	815
Underwriting facilities	-
Lending facilities	-
Credit enhancements	-
Holdings of securities (excluding trading book)	(635)
Other	4
Total	**184**

Table 12(k): Banking Book: Securitisation - Regulatory credit exposures by exposure type

Securitisation exposure type - On balance sheet	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	-	-	21
Funding facilities	6,924	7,126	7,004
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	1,721	2,165	2,569
Protection provided	-	-	-
Other	104	128	151
Total	**8,749**	**9,418**	**9,745**

Securitisation exposure type - Off Balance Sheet	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	13	17	51
Funding facilities	1,362	1,411	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	-	-	-
Protection provided	-	-	-
Other	-	-	-
Total	**1,375**	**1,428**	**51**

Total Securitisation exposure type	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	13	17	72
Funding facilities	8,286	8,537	7,004
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	1,721	2,165	2,569
Protection provided	-	-	-
Other	104	128	151
Total	**10,124**	**10,846**	**9,796**

Table 12(l) part (i): Banking Book: Securitisation - Regulatory credit exposures by risk weight band

	Sep 18		Mar 18		Sep 17	
Securitisation risk weights	**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%	10,124	1,600	10,846	1,728	9,709	1,012
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	36	20
>75 ≤ 100%	-	-	-	-	51	51
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	**10,124**	**1,600**	**10,846**	**1,728**	**9,796**	**1,083**

	Sep 18		Mar 18		Sep 17	
Resecuritisation risk weights	**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%	-	-	-	-	-	-
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	-	-
>75 ≤ 100%	-	-	-	-	-	-
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	**-**	**-**	**-**	**-**	**-**	**-**

	Sep 18		Mar 18		Sep 17	
Total Securitisation risk weights	**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%	10,124	1,600	10,846	1,728	9,709	1,012
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	36	20
>75 ≤ 100%	-	-	-	-	51	51
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	**10,124**	**1,600**	**10,846**	**1,728**	**9,796**	**1,083**

Table 12(l) part (ii): Banking Book: Securitisation - Aggregate securitisation exposures deducted from Capital

No longer required under Basel III; defaulted exposures are given a risk weight of 1250% and no longer deducted from Capital.

Table 12(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 12(n): Banking Book: Resecuritisation - Aggregate amount of resecuritisation exposures retained or purchased

ANZ does not have any retained or purchased Resecuritisation exposures.

Trading Book

Table 12(o): Trading Book: Traditional and synthetic securitisation exposures

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

Table 12(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 12(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 12(r): Trading Book: Traditional and synthetic securitisation exposures

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

Table 12(s): Trading Book: Securitisation – Regulatory credit exposures by exposure type

Securitisation exposure type - On balance sheet	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	-	-	23
Protection provided	-	-	-
Other	-	-	-
Total	**-**	**-**	**23**

Securitisation exposure type - Off Balance Sheet	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	-	-	-
Protection provided	-	-	-
Other	-	-	-
Total	**-**	**-**	**-**

Total Securitisation exposure type	Sep 18 $M	Mar 18 $M	Sep 17 $M
Liquidity facilities	-	-	-
Funding facilities	-	-	-
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities	-	-	23
Protection provided	-	-	-
Other	-	-	-
Total	**-**	**-**	**23**

Table 12(t)(i) & Table 12(u)(i): Trading Book: Aggregate securitisation exposures subject to Internal Models Approach (IMA) and the associated Capital requirements

ANZ does not have any Securitisation exposures subject to Internal Models Approach.

Table 12(t)(ii) & Table 12(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 APS120 and the associated Capital requirements.

Table 12(u)(iii): Trading Book: Securitisation - Aggregate securitisation exposures deducted from Capital

ANZ does not have any Securitisation exposures deducted from Capital.

Table 12(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 12(w): Trading Book: Resecuritisation - Aggregate amount of resecuritisation exposures retained or purchased

ANZ does not have any retained or purchased Resecuritisation exposures.

Chapter 8 – Market risk

Table 13 Market risk – Standard approach

ANZ uses the standard model approach to measure market risk capital for specific risk[37] (APRA does not currently permit Australian banks to use an internal model approach for this).

Table 13(b): Market risk – Standard approach 38

	Sep 18 $M	Mar 18 $M	Sep 17 $M
Interest rate risk	76	100	90
Equity position risk	-	-	-
Foreign exchange risk	-	-	-
Commodity risk	-	-	-
Total	**76**	**100**	**90**
Risk Weighted Assets equivalent	**950**	**1,250**	**1,125**

[37] 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.

[38] RWA equivalent is the capital requirement multiplied by 12.5 in accordance with APS 110.

Table 14 Market risk – Internal models approach

Definition and scope of market risk

Market Risk stems 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, credit spreads, volatility, correlations or from fluctuations in bond, commodity or equity prices.

Market risk management of IRRBB is described in Chapter 11 and is 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 Capital Adequacy: Market Risk for general market risk and under APS 117 Capital Adequacy: Interest Rate Risk in the Banking Book (Advanced ADIs) for interest rate risk in the banking book (IRRBB).

Governance of market risk

The Board Risk Committee supervision of market risk is supported by the Credit and Market Risk Committee (CMRC). CMRC is responsible for the oversight and control of credit, market, insurance and material financial risks across the ANZ Group and meets at least monthly.

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

Traded Market Risk is the risk of loss from changes in the value of financial instruments due to movements in price factors for both physical and derivative trading positions. Trading positions arise from transactions where ANZ acts as principal with customers, financial exchanges or inter-bank counterparties.

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 Market Risk function with specific responsibilities.
- Regular and effective reporting of market risk to executive management and the Board.

Non-Traded Market Risk

Non Traded Market Risk is the market risk associated with the management of non-traded interest rate risk, liquidity risk and foreign exchange exposures from the Group's foreign currency capital and earnings.

Included in Non-Traded Market risk is Interest Rate Risk in the Banking Book (IRRBB). This is the risk of loss arising from adverse changes in the overall and relative level of interest rates for different tenors, differences in the actual versus expected net interest margin, and the potential valuation risk associated with embedded options in financial instruments and bank products.

In quantifying risk, all material market risk factors need to be identified and reflected within the risk measurement approach. Non-traded market risk (or balance sheet risk) comprises the management of non-traded interest rate risk, liquidity risk, and foreign exchange exposures from the Group's foreign currency capital and earnings.

ANZ has a detailed market risk management and control framework, to support its trading and balance sheet activities, which incorporates an independent risk measurement approach to quantify the magnitude of market risk within the trading and balance sheet portfolios. This approach, along with related analysis, identifies the range of possible outcomes that can be expected over a given period of time, and establishes the likelihood of those outcomes and allocates an appropriate amount of capital to support these activities.

Measurement of Traded 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, sensitivity 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 both standard VaR and Stressed VaR. Standard VaR is calculated over both a one-day and a ten-day holding period, while Stressed VaR is calculated over a ten-day holding period. All material market risk factors and all trading portfolios are captured within the VaR model, with the exception of specific risk where capital is calculated using the Standardised approach.

ANZ also undertakes a wide range of stress tests on the Group trading portfolio and to individual trading portfolios. Standard stress tests are applied daily measuring the potential loss that could arise from the largest market movements observed since 2008 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 also calculated daily.

VaR and stress tests are supplemented by loss limits and detailed control limits. 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 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 comparing VaR calculations with corresponding profit and loss to identify how often trading losses exceed the calculated VaR. For APRA back testing 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 determine whether they are the result of trading decisions, systemic changes in market conditions or issues related to the VaR model (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.

Table 14(f): Value at Risk (VaR) and stressed VaR over the reporting period [39]

	Six months ended Sep 18			
99% 1 Day Value at Risk (VaR)	**Mean $M**	**Maximum $M**	**Minimum $M**	**Period end $M**
Foreign Exchange	3.3	6.4	1.7	3.7
Interest Rate	13.6	18.7	6.0	8.3
Credit	2.9	3.5	2.3	2.5
Commodity	3.8	4.5	3.3	3.7
Equity	-	-	-	-

	Six months ended Mar 18			
99% 1 Day Value at Risk (VaR)	**Mean $M**	**Maximum $M**	**Period end $M**	**Period end $M**
Foreign Exchange	5.0	10.3	2.1	3.3
Interest Rate	10.8	15.5	6.8	12.7
Credit	5.1	6.5	3.4	3.6
Commodity	2.4	3.5	1.4	3.5
Equity	-	-	-	-

	Six months ended Sep 17			
99% 1 Day Value at Risk (VaR)	**Mean $M**	**Maximum $M**	**Minimum $M**	**Period end $M**
Foreign Exchange	5.3	10.5	2.5	4.2
Interest Rate	11.7	17.0	8.4	12.8
Credit	3.8	5.4	2.6	4.4
Commodity	1.9	3.0	1.4	2.2
Equity	0.1	0.2	-	-

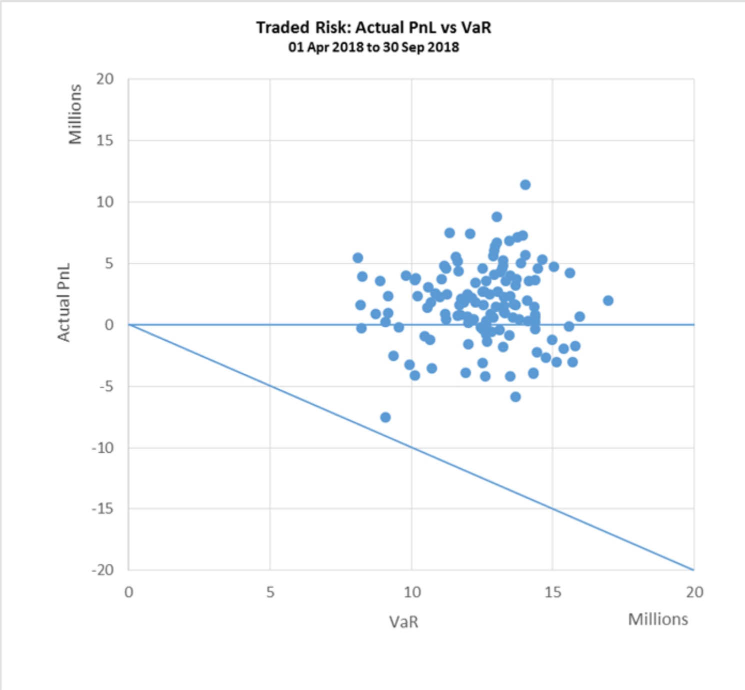
	Six months ended Sep 18			
99% 10 Day Stressed VaR	**Mean $M**	**Maximum $M**	**Minimum $M**	**Period end $M**
Foreign Exchange	42.1	80.7	15.4	71.0
Interest Rate	81.3	198.5	49.3	49.3
Credit	30.9	36.1	21.8	32.1
Commodity	17.0	26.0	7.5	10.4
Equity	-	0.1	-	-

	Six months ended Mar 18			
99% 10 Day Stressed VaR	**Mean $M**	**Maximum $M**	**Minimum $M**	**Period end $M**
Foreign Exchange	40.8	74.0	20.0	46.3
Interest Rate	68.6	166.5	35.3	64.5
Credit	37.3	49.3	29.0	29.0
Commodity	13.3	24.0	4.3	21.3
Equity	0.1	0.3	-	-

	Six months ended Sep 17			
99% 10 Day Stressed VaR	**Mean $M**	**Maximum $M**	**Minimum $M**	**Period end $M**
Foreign Exchange	40.9	81.1	18.4	37.2
Interest Rate	82.1	184.0	41.2	63.1
Credit	31.8	38.0	26.2	34.8
Commodity	7.0	14.9	4.2	8.5
Equity	1.8	2.1	-	0.3

[39] The Foreign exchange VaR excludes foreign exchange translation exposures outside of the trading book.

Comparison of VaR estimates with actual gains/losses experienced



Reporting of Traded Market Risk

Market Risk reports daily VaR and stress testing results to senior management in Market Risk and the Markets business. Market Risk expediently escalates details of any limit breach to the appropriate discretion holder within Market Risk and to Group Risk, and reports to the CMRC each month.

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

Total traded market risks back testing exceptions were within the APS 116 green zone for the period.

Mitigation of market risk

The Market Risk team's responsibilities, including the reporting and escalation processes described above, are fundamental to how market risk is managed. Market Risk has a 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 or the implied volatilities of various commodities. All direct commodity price exposures are managed in the trading book by the 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 values or the implied volatilities of exchange rates.

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 2018, ANZ's investment in ANZ Bank New Zealand Limited is the main source of the structural foreign exchange exposure.

Chapter 9 – Operational risk

Table 15 Operational risk

Definition of operational risk

Operational Risk is defined as the risk of loss and/or non-compliance with laws resulting from inadequate or failed internal processes, people and systems, and/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.

ANZ's Operational Risk Measurement and Management Framework (ORMMF), taking into consideration the internal and external environment in which ANZ operates at any point in time, allows for more targeted focus on particular areas of operational risk. Currently, ANZ has identified the following types of operational risk as separate Key Material Risks:

- **Compliance Risk:** ANZ uses the same policies, governance, management and systems for Operational Risk and Compliance Risk. These are described below.
- **Reputation Risk:** ANZ uses some additional policies, governance, management and systems for managing Reputation Risk. These are described below.
- **Technology Risk:** (effective from 1 October 2018): ANZ uses some additional policies, governance, management and systems for managing Technology Risk.

ANZ has been authorised by APRA to use the advanced measurement approach (AMA) for calculation of operational risk capital requirements under APS 115 Capital Adequacy: Advanced Measurement Approaches to Operational Risk. This methodology applies across all of ANZ.

Operational risk governance and structure

The primary responsibilities for operational risk are vested by the Operational Risk Approach in the Board Risk Committee and Operational Risk Executive Committee.

The Board Risk Committee:

- approve the Operational Risk Approach
- identify, act on and monitor Operational Risk, at a group level
- promote a culture that supports the organisation to identify, act on and monitor Operational Risk

Operational Risk Executive Committee:

- endorse the Operational Risk Approach
- monitor the implementation of the Operational Risk Approach, at a group level
- assist the Board Risk Committee to identify, act on and monitor Operational Risk, at a group level
- promote a culture that supports the organisation to identify, act on and monitor Operational Risk

Risk management framework

ANZ operates three lines of defence model for the management of Operational Risk. Each line of defence has 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 Operational Risk Measurement and Management Framework (ORMMF) and Compliance Framework continue to meet organisational needs and regulatory requirements.

First line

The Business has first line of defence responsibility for managing operational risk including obligations to:

- take primary accountability for the identification, measurement and management of key risks and the related control environment;

Second line

Operational Risk functions (Division and Enterprise) form the second line of defence.

Division Risk is accountable for:

- undertaking review and challenge of business activities and ensuring that the strategy is maintained across the division.

Group Operational Risk is accountable for:

- developing and maintaining relevant policies and procedures to ensure continuing appropriateness of the Operational Risk Measurement and Management Framework (ORMMF) and to support its consistent execution, and
- setting and monitoring compliance with the Group Operational Risk, Risk Appetite Statements (RAS).

Third line

Internal Audit forms the third line of defence and is accountable for:

- providing independent and objective assurance to management and the ANZ Board regarding compliance with policy and regulatory requirements;
- performing objective assessments across all geographies, divisions, lines of business and processes, and
- undertaking independent review of the adequacy of the ORMMF.

Collectively Internal Audit, Operational Risk functions, Divisions and Business Units are responsible for monitoring and reporting to Executive Management, the Board, Regulators and others on all matters related to the measurement and management of operational risk.

Operational Risk Framework

ANZ's operational risk framework is delivered through:

- Level 1 ANZ Board Operational Risk Approach (the policy) – approved by the Board Risk Committee, outlines the core standards, roles and responsibilities and minimum requirements of the way in which operational risks and obligations are identified, acted on and monitored across ANZ sets the operational risk principles for governing the overall measurement and management of operational risk across ANZ.

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

Operational risk management

The objective of ANZ's approach to operational risk is to ensure that risks are identified, assessed, measured, evaluated, treated, monitored and reported in a structured environment with appropriate governance oversight.

ANZ's foundational operational risk policy is the Operational Risk Approach. The Operational Risk Approach and its supporting requirements (together comprising the ORMMF) includes management and measurement of operational risks and compliance with laws, regulations, industry standards, codes and principles of good governance, and internal policies and procedures. It is founded on ANZ's values and culture, which focus on doing what's right and being ethical, accountable, trustworthy and transparent in our decisions.

ANZ takes a risk based approach to the management of operational risks and obligations. This enables ANZ to be consistent in proactively identifying, assessing, managing, reporting and escalating operational risk-related risk exposures, while respecting the specific obligations of each jurisdiction in which we operate.

Day-to-day management of operational risk is the responsibility of business unit line management and staff. 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 needs visibility of Key Risks. These are the risks that if they materialised, would adversely affect the achievement of business objectives, ANZ's reputation, legal and regulatory compliance or impact key processes.

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 mitigants for operational risk.

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 framework includes a global, web-based Risk, Compliance and IT Governance tool that provides ANZ the source of truth and provides greater transparency and integrity of Risk, Controls, Obligations and Events information across ANZ.

OREC's role is to monitor and oversight at an enterprise level the state of operational risk and compliance management and to instigate any necessary corrective actions.

ANZ has been authorised by APRA to use the advanced measurement approach (AMA) for calculation of operational risk capital requirements under APS 115 Capital Adequacy: Advanced Measurement Approaches to Operational Risk. This methodology applies across all of ANZ.

ANZ's advanced measurement approach

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

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 model uses the following data as inputs:

- historical internal losses captured and reported in the bank wide Compliance and Operational Risk platform;
- relevant external losses, sourced from the Operational Risk Data Exchange (ORX), an industry data base comprising the anonymised loss data from over 60 member banks;
- scenario analysis - unexpected potential loss estimates for severe but plausible risk events which are calculated using exposure models developed using business data and inputs from subject matter experts.

Once calculated, the capital is allocated to divisions based on the historic loss experience and exposure to scenarios. Understanding the divisional exposure to scenarios (and their underlying risk 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.

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

Definition of compliance risk

Compliance Risk is a subset of Operational Risk. It covers the risk of failure to act in accordance with laws, regulations, industry standards and codes, internal policies and procedures and principles of good governance as applicable to ANZ’s businesses.

Compliance

The consequences of Compliance failure may include significant legal or regulatory sanctions, material financial loss (fines, civil penalties, damages) diminished reputation or restrictions on the ability of ANZ to do business.
In order for the Business to be able to identify and manage Compliance Risk, they must identify their Regulatory Obligations and their impacted business activities, and maintain and monitor key controls.

Compliance specific approaches include:

- Centralised management of key obligations via a Global Obligations Library, enabling ANZ's change management capability in relation to new and revised obligations.
- An emphasis on the identification of changing regulations and the business environment, to enable proactive assessment of emerging compliance risks.
- Recognition of incident management as a separate element to enhance ANZ's ability to identify, manage and report on incidents/breaches in a timely manner.

Management of the Whistle-blower Protection Policy

ANZ will ensure there is an effective and fit for purpose channel, allowing employees and contractors to make confidential, anonymous submissions regarding concerns relating to accounting, internal control, compliance, audit and other matters.

Chapter 10 – Equities

Table 16 Equities – Disclosures for banking book positions

Definition and categorisation of equity investments held in the banking book

Equity risk is the risk of financial loss arising from the unexpected reduction in value of equity investments not held in the trading book including those of the Group's associates. 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 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 six monthly for impairment.

- 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 exists, 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 bi-annually for impairment, using either market value, or a discounted cash flow methodology to assess value in-use. As at 30 September 2018 the carrying value of these investments were supported by value in use calculations.

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 16(b) and 16(c): Equities – Types and nature of Banking Book investments

Equity investments	Sep 18 $M Balance sheet value	Sep 18 $M Fair value
Value of listed (publicly traded) equities	3,554	2,869
Value of unlisted (privately held) equities	86	86
Total	**3,640**	**2,955**

Equity investments	Mar 18 $M Balance sheet value	Mar 18 $M Fair value
Value of listed (publicly traded) equities	3,444	2,831
Value of unlisted (privately held) equities	151	151
Total	**3,595**	**2,982**

Equity investments	Sep 17 $M Balance sheet value	Sep 17 $M Fair value
Value of listed (publicly traded) equities	2,900	2,633
Value of unlisted (privately held) equities	1,953	1,953
Total	**4,853**	**4,586**

Table 16(d) and 16(e): Equities – gains (losses)

Realised gains (losses) on equity investments	Half Year Sep 18 $M	Half Year Mar 18 $M	Half Year Sep 17 $M
Cumulative realised gains (losses) from disposals and liquidations in the reporting period	124	353	(2)
Cumulative realised losses from impairment and writedowns in the reporting period	-	-	-
	124	**353**	**(2)**

Unrealised gains (losses) on equity investments	Half Year Sep 18 $M	Half Year Mar 18 $M	Half Year Sep 17 $M
Total unrealised gains (losses)	36	170	21
Reversal of prior period unrealised gains (losses) from disposals and liquidations in the reporting period	-		-
Total unrealised gains (losses) included in Common Equity Tier 1, Tier 1 and/or Tier 2 capital	**36**	**170**	**21**

Table 16(f): Equities Risk Weighted Assets

From 1 January 2013 all banking book equity exposures are deducted from Common Equity Tier 1 capital.

Chapter 11 – Interest Rate Risk in the Banking Book

Table 17 Interest Rate Risk in the Banking Book

Definition of Interest Rate Risk in the Banking Book (IRRBB)

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 Capital Adequacy: Interest Rate Risk in the Banking Book (Advanced ADIs).

Governance

The Board Risk Committee has established a risk appetite for IRRBB and delegated authority to the Group Asset and Liability Committee (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 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.

Risk 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 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.
- 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 no less than at a 99% level of statistical confidence) less the average outcome.

Reporting of interest rate risk in the banking book

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

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 contribute to 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 17(b) that follows shows the results of this test by currency of the exposures outside the trading book.

Table 17(b): Interest Rate Risk in the Banking Book

	Change in Economic Value		
Standard Shock Scenario Stress Testing:	**Sep 18**	**Mar 18**	**Sep 17**
Interest rate shock applied	**$M**	**$M**	**$M**
AUD			
200 basis point parallel increase	(485)	(339)	(427)
200 basis point parallel decrease	497	344	415
NZD			
200 basis point parallel increase	(133)	(112)	(82)
200 basis point parallel decrease	129	106	75
USD			
200 basis point parallel increase	(76)	(46)	(32)
200 basis point parallel decrease	76	52	34
GBP			
200 basis point parallel increase	21	12	9
200 basis point parallel decrease	(21)	(12)	(9)
Other			
200 basis point parallel increase	(48)	(96)	(98)
200 basis point parallel decrease	52	103	103

IRRBB regulatory capital	**705**	**722**	**929**
IRRBB regulatory RWA	**8,814**	**9,019**	**11,611**

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 significantly different to the base modelling assumptions.

Chapter 12 – Leverage and Liquidity Coverage Ratio

Leverage Ratio

The Leverage Ratio requirements are part of the Basel Committee on Banking Supervision (BCBS) Basel III capital framework. It is a simple, non-risk based supplement or backstop to the current risk based capital requirements and is intended to restrict the build-up of excessive leverage in the banking system.

Consistent with the BCBS definition, APRA's Leverage Ratio compares Tier 1 Capital to the Exposure Measure (expressed as a percentage) as defined by APS 110. APRA has not finalised a minimum Leverage Ratio requirement for Australian ADIs, although the current BCBS requirement is for a minimum of 3%.

At 30 September 2018, the Group's Leverage Ratio of 5.5% was above the 3% minimum currently required by the BCBS. Table 18 below shows the Group's Leverage Ratio calculation as at 30 September 2018 and Table 19 summarises the reconciliation of accounting assets and leverage ratio exposure measure at 30 September 2018.

Table 18 Leverage Ratio

		Sep 18 $M	Mar 18 $M	Sep 17 $M
	On-balance sheet exposures			
1	On-balance sheet items (excluding derivatives and SFTs, but including collateral)	799,199	795,034	768,930
2	(Asset amounts deducted in determining Basel III Tier 1 capital)	(13,794)	(14,762)	(16,583)
3	**Total on-balance sheet exposures (excluding derivatives and SFTs)**	**785,405**	**780,272**	**752,347**
	Derivative exposures			
4	Replacement cost associated with all derivatives transactions (ie net of eligible cash variation margin)	8,702	8,267	8,354
5	Add-on amounts for PFE associated with all derivatives transactions	29,471	31,107	28,193
6	Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	-	-	-
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(8,106)	(7,199)	(6,102)
8	(Exempted CCP leg of client-cleared trade exposures)	-	-	-
9	Adjusted effective notional amount of written credit derivatives	2,137	2,851	6,429
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(1,528)	(2,279)	(5,405)
11	**Total derivative exposures**	**30,676**	**32,747**	**31,469**
	Securities financing transaction exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	34,173	29,543	28,034
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(253)	(1,240)	(490)
14	CCR exposure for SFT assets	2,146	1,048	1,054
15	Agent transaction exposures	-	-	-
16	**Total securities financing transaction exposures**	**36,066**	**29,351**	**28,598**
	Other off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	245,108	233,527	232,162
18	(Adjustments for conversion to credit equivalent amounts)	(142,298)	(133,606)	(135,397)
19	Off-balance sheet items	**102,810**	**99,921**	**96,765**
	Capital and Total Exposures			
20	**Tier 1 capital**	**52,218**	**51,125**	**49,324**
21	**Total exposures**	**954,957**	**942,291**	**909,179**
	Leverage ratio			
22	**Basel III leverage ratio**	**5.5%**	**5.4%**	**5.4%**

Table 19 Summary comparison of accounting assets vs. leverage ratio exposure measure

		Sep 18 $M	Mar 18 $M	Sep 17 $M
1	Total consolidated assets as per published financial statements	942,624	935,116	897,326
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation.	(40,829)	(39,623)	(37,846)
3	Adjustment for assets held on the balance sheet in a fiduciary capacity pursuant to the Australian Accounting Standards but excluded from the leverage ratio exposure measure	-	-	-
4	Adjustments for derivative financial instruments.	(37,747)	(38,168)	(31,047)
5	Adjustment for SFTs (i.e. repos and similar secured lending)	1,893	(193)	564
6	Adjustment for off-balance sheet exposures (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	102,810	99,921	96,765
7	Other adjustments	(13,794)	(14,762)	(16,583)
	Leverage ratio exposure	**954,957**	**942,291**	**909,179**

Table 20 Liquidity Coverage Ratio disclosure template

		Sep 18 Total Unweighted Value $M	Sep 18 Total Weighted Value $M	Jun 18 Total Unweighted Value $M	Jun 18 Total Weighted Value $M	Mar 18 Total Unweighted Value $M	Mar 18 Total Weighted Value $M
	Liquid assets, of which:						
1	High-quality liquid assets (HQLA)	-	143,308	-	140,961	-	142,032
2	Alternative liquid assets (ALA)	-	40,897	-	40,896	-	40,898
3	Reserve Bank of New Zealand (RBNZ) securities	-	10,672	-	11,554	-	12,306
	Cash outflows						
4	Retail deposits and deposits from small business customers	200,900	21,704	202,281	21,797	201,613	21,800
5	of which: stable deposits	76,278	3,814	76,751	3,838	76,074	3,804
6	of which: less stable deposits	124,622	17,890	125,530	17,959	125,539	17,996
7	Unsecured wholesale funding	191,856	106,859	191,333	108,219	199,523	112,597
8	of which: operational deposits (all counterparties) and deposits in networks for cooperative banks	57,716	13,760	57,657	13,787	59,713	14,303
9	of which: non-operational deposits (all counterparties)	121,176	80,135	121,593	82,349	128,114	86,598
10	of which: unsecured debt	12,964	12,964	12,083	12,083	11,696	11,696
11	Secured wholesale funding		1,679		272		604
12	Additional requirements	142,461	42,596	143,057	43,349	142,331	44,342
13	of which: outflows related to derivatives exposures and other collateral requirements	29,301	29,301	30,726	30,726	31,878	31,878
14	of which: outflows related to loss of funding on debt products	-	-	-	-	-	-
15	of which: credit and liquidity facilities	113,160	13,295	112,331	12,623	110,453	12,464
16	Other contractual funding obligations	10,200	-	10,244	-	10,189	-
17	Other contingent funding obligations	66,375	3,872	73,918	4,571	81,064	4,733
18	Total cash outflows		176,710		178,208		184,076
	Cash inflows						
19	Secured lending (e.g. reverse repos)	27,371	1,271	24,262	1,025	21,956	1,122
20	Inflows from fully performing exposures	29,633	19,433	30,890	20,646	29,390	19,201
21	Other cash inflows	19,211	19,211	20,789	20,789	21,712	21,712
22	Total cash inflows	76,215	39,915	75,941	42,460	73,058	42,035
23	Total liquid assets		194,877		193,411		195,236
24	Total net cash outflows		136,795		135,748		142,041
25	Liquidity Coverage Ratio (%)		142.5%		142.5%		137.5%
	Number of data points used (simple average)		65		65		64

Liquidity Coverage Ratio (LCR)

ANZ's average LCR for the 6 months to 30 September 2018 was 142.5% with total liquid assets exceeding net outflows by an average of $57.9b.

The main contributors to net cash outflows were modelled outflows associated with the bank's corporate and retail deposit portfolios, offset by inflows from maturing loans. While cash outflows associated with derivatives are material, these are effectively offset by derivative cash inflows.

The composition of the liquid asset portfolio has remained relatively stable through the half, with HQLA securities and cash making up on average 73% of total liquid assets.

Through the period the Liquidity Coverage Ratio has remained within a range of 134% to 153%. ANZ has a well-diversified deposit and funding base avoiding undue concentrations by investor type, maturity, market source and currency.

ANZ monitors and manages its liquidity risk on a daily basis including LCR by geography and currency, ensuring ongoing compliance across the network.

Table 21 NSFR disclosure template

		Sep 18				
		Unweighted value by residual maturity				
	Available Stable Funding (ASF) Item	**No maturity $M**	**< 6 months $M**	**6 months to < 1yr $M**	**≥ 1yr $M**	**Weighted value $M**
1	Capital	59,061	-	-	14,251	73,312
2	of which: regulatory capital	59,061	-	-	14,251	73,312
3	of which: other capital instruments	-	-	-	-	-
4	Retail deposits and deposits from small business customers	168,417	70,308	9,673	3,594	231,659
5	of which: stable deposits	71,183	18,970	-	-	85,645
6	of which: less stable deposits	97,234	51,338	9,673	3,594	146,014
7	Wholesale funding	113,775	250,123	30,405	90,686	194,477
8	of which: operational deposits	58,455	-	-	-	29,228
9	of which: other wholesale funding	55,320	250,123	30,405	90,686	165,249
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities	13,462	6,982	-	294	294
12	of which: NSFR derivative liabilities		6,982	-	-	
13	of which: All other liabilities and equity not included in the above categories	13,462	-	-	294	294
14	**Total ASF**					**499,742**
	Required Stable Funding (RSF) Item					
15(a)	Total NSFR (HQLA)					5,194
15(b)	ALA					4,690
15(c)	RBNZ securities					570
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	11,969	111,572	38,409	432,568	388,308
18	of which: Performing loans to financial institutions secured by Level 1 HQLA	-	31,951	3	-	3,197
19	of which: Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	488	23,607	8,277	10,525	18,693
20	of which: Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs)	9,823	50,067	25,756	123,867	151,307
21	of which: With a risk weight of less than or equal to 35% under APS 112	21	967	479	4,951	3,955
22	of which: Performing residential mortgages,	-	4,412	4,214	296,285	211,247
23	of which: With a risk weight equal to 35% under APS 112	-	3,927	3,755	255,403	176,026
24	of which: Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,658	1,535	159	1,891	3,864
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	-	19,115	597	3,577	30,536
27	of which: Physical traded commodities, including gold	1,249				1,062
28	of which: Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)		1,416	-	-	1,204
29	of which: NSFR derivative assets		1,719	-	-	1,719
30	of which: NSFR derivative liabilities before deduction of variation margin posted		15,115	-	-	3,023
31	of which: All other assets not included in the above categories	77,976	865	597	3,577	23,528
32	Off-balance sheet items		-	-	171,702	6,755
33	**Total RSF**					**436,053**
34	**Net Stable Funding Ratio (%)**					**114.61%**

ANZ's NSFR as at 30 September 2018 was 114.6%, unchanged since June 2018.

The main sources of Available Stable Funding (ASF) at September 2018 were deposits from Retail and SME customers, at 46%, with other wholesale funding at 33% and capital at 15% of the total ASF.

The majority of ANZ's Required Stable Funding (RSF) at September 2018 was driven by mortgages at 48% and other lending to non-FI customers at 35% of the total RSF.

Table 21 NSFR disclosure template (continued)

		Jun 18				
		Unweighted value by residual maturity				
	Available Stable Funding (ASF) Item	**No maturity $M**	**< 6 months $M**	**6 months to < 1yr $M**	**≥ 1yr $M**	**Weighted value $M**
1	Capital	57,957	-	-	14,679	72,636
2	of which: regulatory capital	57,957	-	-	14,679	72,636
3	of which: other capital instruments	-	-	-	-	-
4	Retail deposits and deposits from small business customers	165,616	73,702	8,351	3,735	231,071
5	of which: stable deposits	70,714	17,964	-	-	84,244
6	of which: less stable deposits	94,902	55,738	8,351	3,735	146,827
7	Wholesale funding	114,259	250,616	29,201	94,640	191,398
8	of which: operational deposits	57,453	-	-	-	28,727
9	of which: other wholesale funding	56,806	250,616	29,201	94,640	162,671
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities	13,199	6,930	-	985	985
12	of which: NSFR derivative liabilities		6,930	-	-	
13	of which: All other liabilities and equity not included in the above categories	13,199	-	-	985	985
14	**Total ASF**					**496,090**
	Required Stable Funding (RSF) Item					
15(a)	Total NSFR (HQLA)					5,302
15(b)	ALA					4,690
15(c)	RBNZ securities					601
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	10,808	114,131	34,810	429,507	383,227
18	of which: Performing loans to financial institutions secured by Level 1 HQLA	-	31,974	37	-	3,216
19	of which: Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	622	27,235	4,524	8,391	15,361
20	of which: Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs)	8,470	49,908	25,242	123,140	149,202
21	of which: With a risk weight of less than or equal to 35% under APS 112	-	958	394	4,935	3,883
22	of which: Performing residential mortgages,	-	4,278	4,255	295,822	211,415
23	of which: With a risk weight equal to 35% under APS 112	-	3,807	3,793	255,279	176,487
24	of which: Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,716	736	752	2,154	4,033
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	-	18,888	892	3,697	32,181
27	of which: Physical traded commodities, including gold	704				599
28	of which: Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)		1,342	-	-	1,141
29	of which: NSFR derivative assets		2,397	-	-	2,397
30	of which: NSFR derivative liabilities before deduction of variation margin posted		14,747	-	-	2,949
31	of which: All other assets not included in the above categories	85,398	402	892	3,697	25,095
32	Off-balance sheet items		-	-	166,069	6,625
33	**Total RSF**					**432,626**
34	**Net Stable Funding Ratio (%)**					**114.67%**

Glossary

ADI	Authorised Deposit-taking Institution.
Basel III Credit Valuation adjustment (CVA) capital charge	CVA charge is an additional capital requirement under Basel III for bilateral derivative exposures. Derivatives not cleared through a central exchange/counterparty are subject to this additional capital charge and also receive normal CRWA treatment under Basel II principles.
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 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 a counterparty failing to fulfil its obligations, or from a decrease in credit quality of a counterparty resulting in a loss in value.
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.
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)	Individual 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.
Internationally Comparable Basel III Capital Ratio	The Internationally Comparable Basel III CET1 ratios are ANZ's interpretation of the regulations documented in the Basel Committee publications; "Basel 3: A global regulatory framework for more resilient banks and banking systems" (June 2011) and "International Convergence of Capital Measurement and Capital Standards" (June 2006). They also include differences identified in APRA's information paper entitled International Capital Comparison Study (13 July 2015).

Market risk	The risk to ANZ's earnings arising from changes in interest rates, foreign exchange rates, credit spreads, volatility, correlations 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 both physical and derivative trading positions. Trading positions arise from transactions where ANZ acts as principal with customers, financial exchanges or inter-bank counterparties. 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 processes, people and systems, 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.
Qualifying Central Counterparties (QCCP)	QCCP is a central counterparty which is an entity that interposes itself between counterparties to derivative contracts. Trades with QCCP attract a more favorable risk weight calculation.
Recoveries	Payments received and taken to profit for the current period for the amounts written off in prior financial periods.
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 (both on and off-balance sheet) are risk weighted according to each asset's inherent potential for default and what the likely losses would be in the case of default. In the case of non-asset backed risks (i.e. market and operational risk), RWA is determined by multiplying the capital requirements for those risks by 12.5.
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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