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Market Announcements Office
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APS 330 Pillar 3 Disclosure at 30 September 2022

Australia and New Zealand Banking Group Limited (ANZ) today releases its APS 330 Pillar 3 Disclosure as at 30 September 2022.

This has been approved for distribution by ANZ's Continuous Disclosure Committee.

Yours faithfully

Simon Pordage
Company Secretary
Australia and New Zealand Banking Group Limited



2022 Basel III Pillar 3 Disclosure

As at 30 September 2022

APS 330: Public Disclosure

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 full year.

Chapter 1 - 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 adequacy². In simple terms, the Basel framework consists of three mutually reinforcing 'Pillars':

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

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

Basel in ANZ

ANZ has 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 engagement 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.

Suncorp Bank Acquisition

On 18 July 2022, the Group announced an agreement to purchase 100% of the shares in SBGH Limited, the immediate non-operating holding company of Suncorp Bank. The acquisition is subject to a minimum completion period of 12 months and to certain conditions, being Federal Treasurer approval, Australian Competition and Consumer Commission authorisation or approval and certain amendments to the State Financial Institutions and Metway Merger Act 1996 (Qld). Unless the parties agree otherwise, the last date for satisfaction of these conditions is 24 months after signing (after which either party may terminate the agreement). The final purchase price is subject to completion adjustments and may be more or less than \$4.9 billion. In addition, ANZ will also acquire Suncorp Bank's Additional Tier I capital notes at face value (\$0.6 billion as at June 2022). Completion is expected in the second half of calendar year 2023.

Chapter 2 – 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 ANZ 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. Losses include those arising from diminished reputation, a reduction in investor/counter-party confidence, regulatory non-compliance (e.g., fines and banking licence restrictions) and an inability for ANZ to continue to do business. ANZ pursues an active approach to capital management, which is designed to protect the interests of depositors, creditors, and shareholders.
- **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.
- **Conduct Risk** is the risk of loss or damage arising from the failure of ANZ, its employees or agents to appropriately consider the interests of customers, the integrity of the financial markets and the expectations of the community in conducting its business activities.
- **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 of value.
- **Financial Crime Risk covers the following risks at ANZ:**
 - Money Laundering (ML) Risk – the risk that ANZ may reasonably face from its products and/or services being misused to facilitate the processing of the proceeds of crime to conceal their illegal origins and make them appear legitimate;
 - Terrorism Financing (TF) Risk – the risk that ANZ may reasonably face from its products and/or services being misused to facilitate the provision or collection of funds with the intention or knowledge that they be used to carry out acts associated in support of terrorists or terrorist organisations;
 - Sanctions Risk – the risk of failing to comply with laws and regulations relating to sanctions imposed by governments and multinational bodies because of ANZ's products and services being misused to facilitate prohibited sanctions activities; and
 - Fraud Risk – the risk that ANZ may reasonably face from its products and/or services being misused to facilitate intentional acts by one or more individuals, involving the use of deception to obtain an unjust or illegal advantage arising from internal or external sources.
- **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.
- **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 that the Group has insufficient capacity to fund increases in assets.
- **Operational risk** is the 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, but excludes strategic risk.
- **Strategic risk** is risks that affect or are created by an organisation's business strategy and strategic objectives. A possible source of loss might arise from the pursuit of an unsuccessful business plan. For example, strategic risk might arise from making poor strategic business decisions, from the substandard execution of decisions, from inadequate resource allocation, or from a failure to respond well to changes in the business environment.
- **Technology risk** covers the risk of loss and/or non-compliance with laws from inadequate or failed internal processes, people and systems or systems that deliver Technology assets and services to customers and staff. The risk includes Technology assets and services delivered or managed by third parties, and external events. An Information Technology (IT) asset is any instance of software or hardware (includes cloud computing) that is either owned by ANZ or licensed to ANZ by an external entity and used in the delivery of services to customers and staff. The risk specifically includes business continuity management, privacy obligations and Information Security and Cyber Security and how information held by ANZ needs to be protected from inappropriate modification, loss, disclosure, and unavailability. The compromise of confidentiality, integrity or availability of information assets could severely impact ANZ customers, constitute a breach of the law and regulations, lead to financial loss or additional remediation costs, and negatively impact our reputation. The scope of this risk includes IT assets that are managed and/or supported by a dedicated technology function within ANZ, IT assets managed outside of the dedicated technology function by business divisions and third party service providers used by ANZ to deliver technology services or products.

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 sets out the Board's expectations regarding the degree of risk that ANZ is prepared to accept in pursuit of its strategic objectives and plans.

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 strategic objectives and plans considering its shareholders', depositors' and customers' interests.
- For each key material risk, ANZ sets the maximum level of risk that it is willing to operate within, expressed as a risk tolerance, where appropriate. Risk tolerances translate risk appetite into operational limits for the day-to-day management of material risks, where possible;
- The approach for setting risk tolerances at an appropriate level;
- The process for monitoring compliance with each risk tolerance and for taking appropriate action if it is breached;
- The timing and process for reviewing of the risk appetite and risk tolerances; and
- The cascading and application of Group RAS to Divisions and Business Units.

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 following lists the Board Committees, in accordance with ANZ Accountability Map under Banking Executive Accountability Regime (BEAR). From time to time, other ad hoc committees of the Board may be formed.

ANZ Board - is responsible for:

- Charting and monitoring the long-term implementation of ANZ's strategies, financial objectives and organisational and risk cultural direction (including ANZ's purpose, values and expected behaviours);
- Monitoring compliance with regulatory requirements, ethical standards and external commitments, and the implementation of related policies;
- Approving the operating plan for ANZ and endorsing ANZ's strategic direction. Approving the remuneration policy; significant changes to organisational structure; the acquisition, establishment, disposal, or cessation of any significant business of ANZ;
- Appointing and reviewing the performance (including remuneration and incentives) and succession of, the ANZ CEO and certain senior executive appointees of the Board (Board Appointees);
- Approving any matters in excess of any discretions that it may have delegated from time to time to the CEO and senior management, including in relation to credit transactions, market risk limits and expenditure;
- Overseeing and assessing management's performance in achieving any strategies and budgets approved by the Board and in monitoring and managing risk;
- Approving where practicable, the substance of any announcements to the Australian Securities Exchange in relation to matters that have been the subject of a decision by the Board or any public statements which reflect significant issues of ANZ policy or strategy;
- Fulfilling its function and duties under ANZ's Fit and Proper Policy;
- Overseeing the effectiveness of workplace health and safety in the Group;
- Meeting with APRA on request;
- Reviewing reports from management on progress in relation to actions in ANZ's Self-Assessment roadmap;
- Reviewing ANZ's approach to the management of key customer matters, including customer remediation and customer complaints; and
- Approving and overseeing management's performance in establishing ANZ's organisational and risk cultural direction, including ANZ's purpose, values and expected behaviours.

Risk Committee - assists the Board of Directors in:

- Effective discharge of its responsibilities for business, market, credit, equity, and other investment (not including strategic investments), financial, operational, compliance, liquidity, and reputational risk management and for the management of the Group's compliance obligations;
- 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;
- Advising the Board on ANZ's overall current and future risk appetite and risk management strategy;
- Overseeing management's implementation of the risk management strategy and ongoing effectiveness in seeking to ensure that ANZ remains appropriately within its risk appetite;
- Reviewing reports from management concerning the Group's risk management and compliance frameworks, principles and policies, strategies, processes, and controls including the discretions conferred on executive management and executive management committees, to oversee the effectiveness of them and, if thought fit, approve or vary them;

- Reviewing reports from management concerning key material risks (including credit, market, operational risk and compliance) to oversee these risks, assess their effect on capital levels and, in all material respects, attest to the adherence to APRA Prudential Standard CPS220 Risk Management;
- Reviewing reports from management concerning credit transactions, equity and other investments beyond the approval discretion of the CRO and other executive management, in order to consider and, if thought fit, approve them;
- Overseeing risk associated with individual high risk and non-accrual accounts (and associated provisioning);
- Reviewing reports from management concerning changes anticipated for the economic, business and regulatory environment and other factors considered relevant to future strategy and capital requirements, to monitor them in the context of ANZ's projected business performance and capital adequacy;
- Reviewing reports from management concerning the risk implications of new and emerging risks, legislative or regulatory initiatives and changes, organisational change, and major initiatives, in order to monitor them;
- Constructively challenging management's proposals and decisions on all aspects of risk management arising from ANZ's activities;
- Reviewing the performance and setting the objectives of ANZ's CRO and seeking to ensure the CRO has unfettered access to the Board and the Risk Committee;
- Reviewing reports from management concerning resolution of significant risk exposures and risk events (including significant breaches), in order to monitor them and, if thought fit, approve them;
- Overseeing compliance by ANZ with applicable external obligations and significant internal policies relating to the operation of its business;
- Reviewing reports from management concerning the Group's insurance strategy, including the coverage and limits of the insurance policies managed at a Group level, in order to monitor them and, if thought fit, approve or vary them;
- Reviewing reports from management concerning Anti Money Laundering/Counter Terrorism Financing and Sanction external obligations and internal policies, in order to monitor them and, if thought fit, approve them;
- Reviewing reports from management concerning ANZ's approach to risk and governance culture in order to oversee scope and expected impact on organisational behaviour;
- Overseeing APRA risk reporting requirements (as appropriate); and
- Meeting with APRA on request.

Audit Committee - assists the Board of Directors in:

- Overseeing and reviewing ANZ's financial reporting principles and policies, controls and procedures;
- Overseeing and reviewing the effectiveness of ANZ's internal control and risk management framework;
- Overseeing and reviewing the work of Internal Audit which reports directly and solely to the Chairman of the Audit Committee. The internal management reporting line for the Group General Manager, Internal Audit is to the CEO;
- Overseeing and reviewing the integrity of ANZ's financial statements and the independent audit thereof, and ANZ's compliance with legal and regulatory requirements in relation thereto;
- Overseeing and reviewing any due diligence procedures;
- Overseeing and reviewing prudential supervision procedures and other regulatory requirements to the extent relating to financial reporting; and
- With respect to the external auditors:
 - the appointment, annual evaluation and oversight of the external auditors;
 - annual review of the independence, fitness and propriety, and qualifications of the external auditors;
 - compensation of the external auditors; and
 - where deemed appropriate, replacement of the external auditors.

Digital Business and Technology Committee - assists the Board of Directors in:

- Monitoring and providing guidance as appropriate on matters relating to ANZ's digital transformation, technology, technology-related innovation and information/cyber security strategies;
- Monitoring the delivery of the key programs that form part of ANZ's digital transformation, technology, technology-related innovation and information/cyber security strategies;
- Recommending to the Board and monitoring the delivery of material digital transformation and technology investments; and
- Reviewing health and relevance of ANZ's technology suite, to seek to ensure secure, stable and reliable services.

Human Resource Committee - assists the Board of Directors in:

- Reviewing and making recommendations to the Board, where appropriate on remuneration (including variable remuneration arrangements) for ANZ Board Appointees and individual ANZ Material Risk Takers;
- Reviewing and making recommendations to the Board, where appropriate, in respect of the design and funding of the ANZ Incentive Plan, and remuneration structures for senior executives and others specifically covered by the ANZBGL Remuneration Policy and ANZ New Zealand (NZ) Remuneration Policy;
- Reviewing and making recommendations to the Board, where appropriate, for amending the ANZBGL Remuneration Policy and the ANZ NZ Remuneration Policy;

- Considering and approving appointments and terminations for all ANZ Board Appointees, and reviewing succession plans for enterprise business critical roles, and making recommendations to the Board on such matters relating to the CEO;
- Obtaining external advice, either independently or via management, as appropriate, on remuneration, risk and any other related matter to supplement members' knowledge and expertise; and
- Obtaining all information necessary to enable the committee to perform its function.

Ethics, Environment, Social and Governance Committee - assists the Board of Directors in:

- Reviewing and approving the proposed corporate sustainability objectives for ANZ, and reviewing progress in achieving them;
- Reviewing and approving the disclosures relating to ANZ's Sustainability Framework, objectives and related performance as set out in the suite of annual reporting documents;
- Discussing, questioning, and providing advice to management on past, current, and emerging ethical, environmental, social and governance risks and opportunities relevant to the bank's ability to operate as a fair, responsible and sustainable business;
- Receiving reports on past, current, and emerging ethical, environmental, social and governance matters;
- Providing oversight of ANZ's Ethics and Responsible Business Committee, including receiving the minutes of that body and discussing material matters referred to the committee from that body;
- Referring to the Board the resolution of any significant ethical or environmental, social and governance matters where applicable;
- Reviewing the development of and approving applicable corporate governance policies and principles;
- Reviewing ANZ's Corporate Governance Statement; and
- In relation to whistleblowing:
 - Reviewing the effectiveness of management's process for informing employees of the existence of the Whistleblower Policy and ANZ Code of Conduct and Ethics;
 - Seeking to ensure procedures for the receipt, retention and treatment of information submitted confidentially by employees and third parties under such policies are established and maintained by management;
 - Receiving reports from management regarding any material incidents reported under the Whistleblower Policy; and
 - Referring any relevant matters to the Audit Committee.

Nomination and Board Operations Committee - supports the Board of Directors in:

- All matters to do with reviewing Board composition;
- Reviewing and approving the processes in place for evaluating the performance of (i) the Board, (ii) each Standing Committees and (iii) each Director including the Chairman of the Board but excluding ANZ CEO; and
- All other matters to do with the effective and efficient operation of the Board and its Standing Committees.

The above Committees are exclusively comprised of Non-Executive directors. Members, including the Chair of each committee, are appointed by the Board and serve at the discretion of the Board and for such term or terms as the Board determines. Under ANZ's BEAR arrangements, the chair and members of each committee are accountable persons with prescribed responsibility for oversight of the ANZ, as a member of the Board.

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 which are on the ANZ corporate governance website: <http://shareholder.anz.com/our-company/corporate-governance>.

Executive Management Committees are responsible for co-ordination of risk matters for each of the areas of risk management. The following lists ANZ's key management committees and states their primary purpose, in accordance with ANZ's accountability map under BEAR, and related sub-committees:

Group Executive Committee (ExCo) - headed by the CEO is ANZ's leadership team whose role is to support the CEO in delivering ANZ's purpose, to shape a world where people and communities thrive. It does this by focusing on:

- All Key stakeholders;
- ANZ's Culture and Capabilities; and
- Prioritising efforts and allocating resources in line with ANZ's strategic pillars.

Group Performance and Execution Committee (GPEC) - is charged with the oversight of the Group's overall operational performance and position and the execution of the operating plan.

Enterprise Accountability Group - reports to Board Human Resources Committee and is responsible for:

- overseeing the ongoing effectiveness of an enterprise-wide accountability and consequence management framework and being cognisant of its impact on the culture of ANZ;
- reviewing and approving the release of, or exercise of the downward adjustment or further deferral discretions in relation to, deferred remuneration; and
- reviewing and monitoring the consequences applied to staff who are considered either directly or indirectly accountable for material risk (financial or non-financial) and compliance events and/ or material internal audit issues.

Group Asset and Liability Committee (GALCO) - is responsible for the oversight and strategic management of the Group's balance sheet activities including balance sheet structure, liquidity, funding, capital management, non-traded interest rate risk and non-traded FX risk. The committee is accountable to the Board Risk Committee in the effective discharge of its responsibilities.

Credit and Market Risk Committee (CMRC) - is the senior executive management forum responsible for the oversight and control of credit, market, insurance, and other material financial risks across the ANZ Group. The Committee is accountable to the Board Risk Committee in the effective discharge of its responsibilities.

Operational Risk Executive Committee (OREC) - is the primary senior executive management forum responsible for oversight of Operational Risk and Compliance Risk, expected and unexpected risk profile and the related Control Environment. The purpose of OREC is to assist the Board Risk Committee in the effective discharge of its responsibilities for Operational Risk Management and the management of the compliance obligations of ANZ and its controlled entities.

Ethics and Responsible Business Committee (ERBC) - is a leadership and decision making body that exists to advance ANZ's purpose, namely to shape a world where people and communities thrive.

The Committee seeks to ensure ANZ operates responsibly and achieves fair and balanced customer outcomes. The committee considers the social and environmental impacts of the industries, customers, and communities that ANZ serves. It also considers ANZ's products and services and how they are provided, as well as stakeholder and community expectations. The Committee is also accountable to the Board's Ethics, Environment, Social and Governance Committee in the effective discharge of its responsibilities.

Credit Ratings System Oversight Committee (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.

Capital and Stress Testing Oversight Committee (CSTOC) - is a sub-committee of GALCO, with responsibility for the oversight and control of the Group's stress testing framework, modelling, processes and outcomes; economic profit methodology and framework; operational risk capital measurement framework, modelling, processes and outcomes; capital allocation framework and other capital management (apart from Group ICAAP) and portfolio measurement related recommendations.

Investment Committee - is responsible to carry out the responsibilities delegated by the CEO of ANZ, regarding the funding and delivery of value from ANZ's investments in change initiatives. The committee acts as the governance, oversight and advisory board for funding provided to the Divisions and enterprise priorities.

Risk Governance Oversight Committee (RGOc) - is a leadership and decision making body that exists to oversee ANZ's response to the self-assessment of governance, culture and accountability, provided to the APRA in November 2018. The Committee is accountable to the Board in the effective discharge of its responsibilities.

Group Executive People Committee (GEPC) - is a leadership and decision making body charged with advancing ANZ's people strategy and priorities in line with the ANZ's purpose, strategy and aspirational culture.

Financial Crime OREC Sub-Committee (FCOSC) - is the primary senior executive management forum responsible for oversight of the Financial Crime risk profile and the related Control Environment. The purpose of FCOSC is to assist OREC in the effective discharge of its responsibilities for financial crime obligations of ANZBGL and its controlled entities.

Processes and procedures relating to the operation of each of the Executive Management Committees are documented in the committee charters which are available on Max: Management committee registers (anz.com).

Chapter 3 – Capital reporting and measurement

Capital reporting and measurement

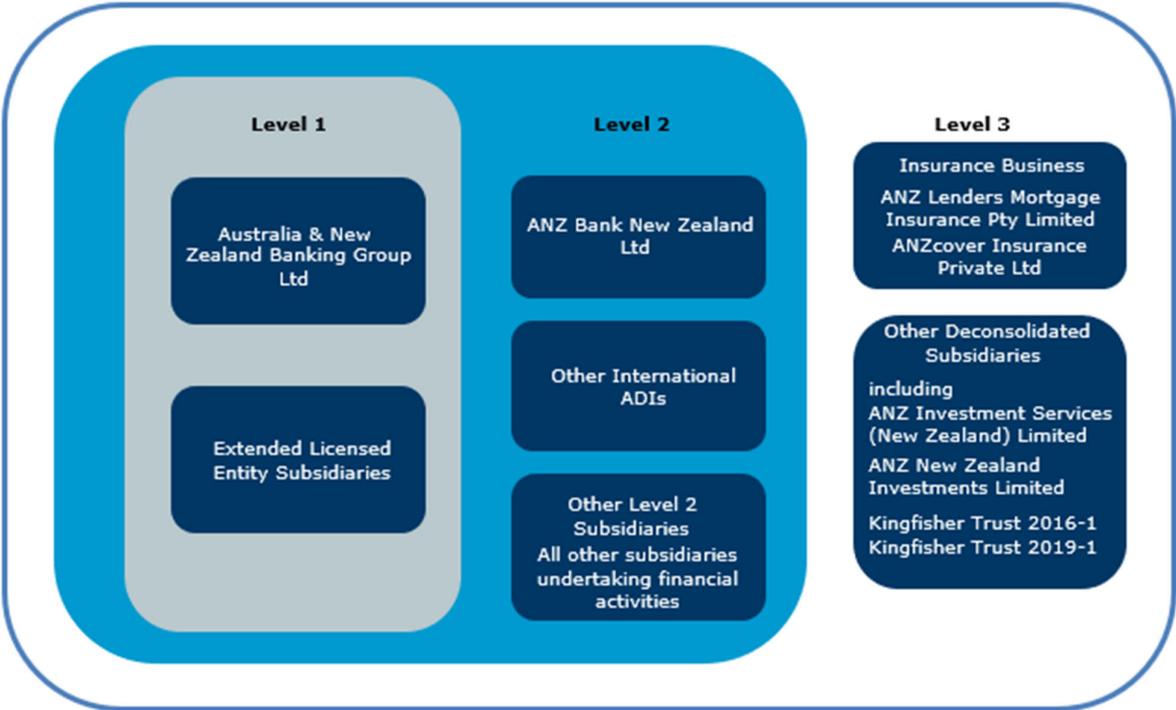
To ensure that an Authorised Deposit-taking Institution (ADI) is adequately capitalised on both a standalone and group basis, APRA adopts a tiered approach to the measurement of an ADI’s capital adequacy by assessing the ADI’s financial strength at three levels:

- 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 and is not yet required to maintain capital on a Level 3 basis.

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

Refer to Note 26 Controlled Entities of ANZ’s 2022 Annual Report for a list of all material subsidiaries and a brief description of their key activities.



Chapter 4 – 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 Common 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 capital disclosure template in this chapter is the post January 2018 version as ANZ is fully applying the Basel III regulatory adjustments, as implemented by APRA. Note that the capital conservation and countercyclical buffers referred to in rows 64 to 67 have been effective since 1 January 2016.

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 (ANZ New Zealand), which is subject to minimum capital requirements as set by the Reserve Bank of New Zealand (RBNZ). ANZ New Zealand maintains a buffer above the minimum capital base required by the RBNZ. This capital buffer has been calculated via the ICAAP undertaken for ANZ New Zealand, to ensure ANZ New Zealand is appropriately capitalised under stressed economic scenarios.

Table 1 Capital disclosure template

	Sep-22 \$M	Reconciliation Table Reference
Common Equity Tier 1 Capital: instruments and reserves		
1	28,494	Table A
2	39,752	
3	(2,463)	Table B
4	-	
5	2	Table C
6	65,785	
Common Equity Tier 1 capital: regulatory adjustments		
7	-	
8	2,906	
9	970	Table D
10	-	Table H
11	(2,036)	
12	11	Table E
13	-	
14	241	
15	154	Table F
16	-	
17	-	
18	-	
19	-	Table G
20	-	
21	-	
22	-	
23	-	
24	-	
25	-	
26	7,667	
26a	-	
26b	-	
26c	(440)	
26d	3,945	Table G
26e	2,511	Table H
26f	1,625	Table I
26g	12	Table J
26h	-	
26i	-	
26j	14	
27	-	
28	9,913	
29	55,872	

Table 1 Capital disclosure template

	Sep-22 \$M	Reconciliation Table Reference
Additional Tier 1 Capital: instruments		
30	7,874	Table K
31	-	
32	7,874	Table K
33	-	Table K
34	-	Table K
35	n/a	
36	7,874	Table K
Additional Tier 1 Capital: regulatory adjustments		
37	-	
38	-	
39	-	
40	155	Table K
41	33	
41a	-	
41b	33	Table K
41c	-	Table K
42	-	
43	188	
44	7,686	Table K
45	63,558	
Tier 2 Capital: instruments and provisions		
46	18,301	
47	-	
48	-	Table L
49	-	
50	1,233	Table L
51	19,534	Table L
Tier 2 Capital: regulatory adjustments		
52	50	Table L
53	-	
54	-	
55	85	Table L
56	122	Table L
56a	-	
56b	87	
56c	35	
57	257	
58	19,277	Table L
59	82,835	
60	454,718	

Table 1 Capital disclosure template

		Reconciliation Table Reference	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of risk-weighted assets)	12.3%	
62	Tier 1 (as a percentage of risk-weighted assets)	14.0%	
63	Total capital (as a percentage of risk-weighted assets)	18.2%	
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)	8.0169%	
65	of which: capital conservation buffer requirement ³	3.5%	
66	of which: ADI-specific countercyclical buffer requirements	0.0169%	
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)	7.8%	
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	645	
73	Significant investments in the ordinary shares of financial entities	3,420	Table G
74	Mortgage servicing rights (net of related tax liability)	n/a	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	2,511	Table H
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)	147	Table E
77	Cap on inclusion of provisions in Tier 2 under standardised approach	208	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	1,086	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	2,057	
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 redemption and maturities)	-	

Counter Cyclical Capital Buffer

Geographic breakdown of Private Sector Credit Exposures	Hong Kong \$M	Luxembourg \$M	Norway \$M	Other \$M	Total \$M
RWA for all private sector credit exposures	5,110	216	357	323,533	329,216
Jurisdictional buffer set by national authorities	1.00%	0.50%	1.00%	-	-
Countercyclical buffer requirement	0.0155%	0.0003%	0.0011%	-	0.0169%

³ Includes 1.0% buffer applied by APRA to ADIs 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	168,132	(38)	168,094	
Settlement Balances owed to ANZ	4,762	-	4,762	
Collateral Paid	12,700	-	12,700	
Trading securities	35,237	-	35,237	
of which: Financial Institutions capital instruments			85	Table L
Derivative financial instruments	90,174	-	90,174	
Investment Securities	86,153	(245)	85,908	
of which: significant investment in financial institutions equity instruments			854	Table G
of which: non-significant investment in financial institutions equity instruments			525	Table G
of which: Other entities equity investments			6	Table J
of which: collectively assessed provision			(38)	Table E
Net loans and advances	672,407	(1,094)	671,313	
of which: deferred fee income			(440)	Row 26c
of which: collectively assessed provision			(3,049)	Table E
of which: individual provisions			(533)	Table E
of which: capitalised brokerage & Loan/Lease origination fees			2,882	Table I
of which: CET1 margin lending adjustment			14	Row 26j
of which: AT1 margin lending adjustment			-	
Regulatory deposits	632	-	632	
Due from controlled entities	-	1,139	1,139	
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 L
Shares in controlled entities	-	613	613	
of which: Investment in deconsolidated financial subsidiaries			458	Table G
of which: AT1 significant investment in banking, financial and insurance entities that are outside the scope of regulatory consolidation			155	Table K
Investments in associates	2,181	-	2,181	
of which: Financial Institutions			2,175	Table G
of which: Other Entities			6	Table J
Current tax assets	46	-	46	
Deferred tax assets	3,384	(1)	3,383	Table H
Goodwill and other intangible assets	3,877	(67)	3,810	
of which: Goodwill			2,906	Row 8
of which: Software			896	Table D
Premises and equipment	2,431	-	2,431	
Other assets	3,613	(134)	3,479	
of which: Defined benefit superannuation fund net assets			199	Table F
Total Assets	1,085,729	173	1,085,902	

	Balance Sheet as in published financial statements \$M	Adjustments \$M	Balance sheet under scope of regulatory consolidation \$M	Template and Reconciliation Table Reference
Liabilities				
Settlement Balances owed by ANZ	13,766	-	13,766	
Collateral Received	16,230	-	16,230	
Deposits and other borrowings	797,281	-	797,281	
Derivative financial instruments	85,149	-	85,149	
Due to controlled entities	-	1,837	1,837	
Current tax liabilities	829	(33)	796	
Deferred tax liabilities	83	-	83	Table H
of which: related to intangible assets			1	Table D
of which: related to capitalised expenses			4	Table I
of which: related to defined benefit superannuation fund assets			45	Table F
Payables and other liabilities	9,835	(311)	9,524	
Employee Entitlements	549		549	
Provisions	1,872	(156)	1,716	
of which: collectively assessed provision			766	Table E
of which: individually assessed provision			9	Table E
Debt Issuances	93,734	(1,115)	92,619	
of which: Directly issued qualifying Additional Tier 1 instruments			7,705	Table K
of which: Additional Tier 1 Instruments			-	Table K
of which: Directly issued qualifying Tier 2 instruments			16,705	Table L
Total Liabilities	1,019,328	222	1,019,550	
Net Assets	66,401	(49)	65,352	

	Balance Sheet as in published financial statements \$M	Adjustments \$M	Balance sheet under scope of regulatory consolidation \$M	Template and Reconciliation Table Reference
Shareholders' equity				
Ordinary Share Capital	28,797	(77)	28,720	Table A
of which: Share reserve			226	Tables A & B
Reserves	(2,606)	(8)	(2,614)	Table B
of which: Cash flow hedging reserves			(2,036)	Row 11
Retained earnings	39,716	36	39,752	Row 2
Share capital and reserves attributable to shareholders of the company	65,907	(49)	65,858	
Non-controlling interests	494	-	494	Table C
Total Shareholders' Equity	66,401	(49)	66,352	

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 22	Table 1
		\$M	Reference
	Issued capital	28,720	
Less	Reclassification to Reserves	(226)	Table B
Regulatory Directly Issued qualifying ordinary shares		28,494	Row 1

Table B		Sep 22	Table 1
		\$M	Reference
	Reserves	(2,614)	
Add	Reclassification from Issued Capital	226	Table A
Less	Non qualifying reserves	(75)	
Reserves for Regulatory capital purposes (amount allowed in group CET1)		(2,463)	Row 3

Table C			Table 1
			Reference
	Non-controlling interests	494	
Less	Ineligible Non-controlling Interests	(484)	
Less	Surplus capital attributable to minority shareholders	(8)	
Ordinary share capital issued by subsidiaries and held by third parties		2	Row 5

Table D		Sep 22	Table 1
		\$M	Reference
	Software	896	
Add	Other intangible assets	8	
Less	Associated deferred tax liabilities	(1)	
Add	Regulatory reclassification from significant investments in the ordinary shares of banking, financial and insurance entities outside the scope of regulatory consolidation	67	Table G
Other intangibles other than mortgage servicing rights (net of related tax liability)		970	Row 9

Table E		Sep 22	Table 1
		\$M	Reference
Qualifying collective provision			
	Collectively assessed provision on Loans and advances	(3,049)	
	Collectively assessed provision on Investment Securities	(38)	
	Collectively assessed provision on Undrawn commitments	(766)	
Less	Non-qualifying collectively assessed provision	389	
Less	Standardised collectively assessed provision	147	Row 76
Less	Non-defaulted expected loss	2,231	
Non-Defaulted: Expected Loss - Eligible Provision Shortfall		-	
Qualifying individual provision			
	Individually assessed provision on Loans and advances	(533)	
	Individually assessed provision on Undrawn and contingent facilities	(9)	
Add	Additional individually assessed provision for partial write offs	(213)	
Less	Standardised individually assessed provision	51	
Add	Collectively assessed provision on advanced defaulted	(355)	
Less	Defaulted expected loss	1,070	
Defaulted: Expected Loss - Eligible Provision Shortfall		11	
Gross deduction		11	Row 12

Table F		Sep 22	Table 1
		\$M	Reference
	Defined benefit superannuation fund net assets	199	
Less	Associated deferred tax liabilities	(45)	
Defined benefit superannuation fund net assets		154	Row 15

Table G		Sep 22	Table 1
		\$M	Reference
	Investment in deconsolidated financial subsidiaries	458	
Less	Regulatory reclassification to Retained Earnings and Other Intangible Assets	(67)	Table D
Add	Investment in financial associates	2,175	
Add	Investment in financial institutions Investment Securities	854	
Less	Amount below 10% threshold of CET1	(3,420)	Row 73
	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	3,420	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 - Investment Securities	525	
	Equity investment in financial institutions not reported in rows 18, 19 and 23	3,945	Row 26d
Deduction for equity holdings in financial institutions - APRA regulations		3,945	

Table H		Sep 22	Table 1
		\$M	Reference
	Deferred tax assets	3,383	
Add	Deferred tax liabilities	(83)	
	Deferred tax asset less deferred tax liabilities	3,300	
Less	Deferred tax assets that rely on future profitability	-	Row 10
Less	Net Deferred tax assets associated with reserves ineligible for inclusion in regulatory capital	(877)	
Add	Deferred tax liabilities on intangible assets, capitalised expenses and defined benefit superannuation fund assets	49	
Add	Impact of calculating the deduction on a jurisdictional basis	39	
Deferred tax assets not reported in rows 10, 21 and 25 of the Common Disclosure Template		2,511	Row 26e

Table I		Sep 22	Table 1
		\$M	Reference
	Capitalised brokerage & loan/lease origination fees	2,882	
	Capitalised debt and capital disposal & issuance expenses	67	
	Other Capitalised Expenses	(1,320)	
Less	Associated deferred tax liabilities	(4)	
Capitalised expenses		1,625	Row 26f

Table J		Sep 22	Table 1
		\$M	Reference
	Investments in non-financial Investment Securities equities	6	
	Investments in non-financial associates	6	
	Non-financial equity exposures (loans)	-	
Equity exposures to non-financial entities		12	Row 26g

Table K		Sep 22	Table 1
		\$M	Reference
	Directly issued qualifying Additional Tier 1 Capital Instruments classified as liabilities	7,705	
Add	Issue costs	(10)	
Add	Fair value adjustment	179	
	Directly issued qualifying Additional Tier 1 Capital Instruments classified as liabilities	7,874	Row 30
	Additional Tier 1 instruments issued by subsidiaries held by third parties	-	
Add	Issue costs	-	
Less	Surplus capital attributable to third party holders	-	
Add	AT1 Instruments issued by subsidiaries and held by third parties (amounts allowed in Group AT1)	-	Row 34
	Additional Tier 1 capital before regulatory adjustments	7,874	Row 36
Less	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation	(155)	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	(33)	Row 41b
Less	Other national specific regulatory adjustments not reported	-	Row 41c
	Additional Tier 1 capital	7,686	Row 44

Table L		Sep 22	Table 1
		\$M	Reference
Add	Surplus capital attributable to third party holders	-	Row 48
Add	Directly issued qualifying Tier 2 instruments	16,705	
Add	Issue costs	24	
Add	Fair value adjustment	1,572	
Add	Provisions	1,233	Row 50
	Tier 2 capital before regulatory adjustments	19,534	Row 51
Less	Investments in own Tier 2 instruments (trading limit)	(50)	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	(122)	Row 56
	Tier 2 capital	19,277	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	3	-
ANZ Investment Services (New Zealand) Limited	Funds Management	15	-
ANZ Lenders Mortgage Insurance Pty. Limited	Mortgage insurance	891	447
ANZ Pensions (UK) Limited	Trustee/Nominee	-	-
ANZ New Zealand Investments Limited	Funds Management	92	29
ANZ New Zealand Investments Nominees Limited	Nominee	-	-
ANZcover Insurance Private Ltd	Captive-Insurance	220	179
Kingfisher Trust 2016-1	Securitisation Trust	476	476
Kingfisher Trust 2019-1	Securitisation Trust	645	645
Shout for Good Pty. Ltd.	Corporate	1	-
Secure Data Consent Limited	Technology	1	-

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

ANZ achieves these objectives through an Internal Capital Adequacy Assessment Process (ICAAP) whereby ANZ conducts detailed strategic and capital planning over a medium term time horizon. 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. ANZ annually conducts a detailed strategic planning process over a three-year time horizon, the outcomes of which are embodied in the Strategic Plan. This process involves forecasting key economic variables which Divisions use to determine key financial data for their existing business. New strategic initiatives to be undertaken over the planning period and their financial impact are then determined. These processes are used for the following:

- 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 that under specific stressed economic scenarios that capital levels have sufficient capital to remain above PCR requirements;
- Stress tests are performed under different economic conditions to provide 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 that models and reports to management and the Board Risk Committee on a range of scenarios and stress tests.

Results are subsequently used to:

- Recalibrate ANZ's management targets for minimum and operating ranges for its respective classes of capital such that ANZ will have sufficient capital to remain above 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:

- 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;

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 entities and associates, capitalised expenses (including loan and origination fees), and net deferred tax assets.

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 developments

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 2022 Full Year Results Announcement Group Results section, page 50, available on ANZ's website: shareholder.anz.com/pages/results-announcement.

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.

	Sep 22	Mar 22	Sep 21
	\$M	\$M	\$M
Risk weighted assets			
Subject to Advanced Internal Rating Based (IRB) approach			
Corporate	146,069	141,243	136,298
Sovereign	10,955	9,781	9,893
Bank	12,071	10,742	9,118
Residential Mortgage	113,590	111,355	110,622
Qualifying Revolving Retail	3,272	3,418	3,723
Other Retail	17,029	18,200	19,660
Credit risk weighted assets subject to Advanced IRB approach	302,986	294,739	289,314
Credit risk Specialised Lending exposures subject to slotting approach⁴	39,792	38,432	36,977
Subject to Standardised approach			
Corporate	6,235	6,149	6,632
Sovereign	29	36	27
Residential Mortgage	224	194	203
Other Retail	11	12	17
Credit risk weighted assets subject to Standardised approach	6,499	6,391	6,879
Credit Valuation Adjustment and Qualifying Central Counterparties	3,865	3,154	3,270
Credit risk weighted assets relating to securitisation exposures	2,424	2,090	2,056
Other assets	3,876	4,011	4,002
Total credit risk weighted assets	359,442	348,817	342,498
Market risk weighted assets	9,282	7,705	7,127
Operational risk weighted assets	47,931	47,986	48,425
Interest rate risk in the banking book (IRRBB) risk weighted assets	38,063	33,402	18,036
Total risk weighted assets	454,718	437,910	416,086
Capital ratios (%)⁵			
Level 2 Common Equity Tier 1 capital ratio	12.3%	11.5%	12.3%
Level 2 Tier 1 capital ratio	14.0%	13.2%	14.3%
Level 2 Total capital ratio	18.2%	16.6%	18.4%
Level 1: Extended licensed Common Equity Tier 1 capital ratio	12.0%	11.1%	12.0%
Level 1: Extended licensed entity Tier 1 capital ratio	14.0%	13.1%	14.1%
Level 1: Extended licensed entity Total capital ratio	18.9%	17.1%	18.6%
Other significant Authorised Deposit-taking Institution (ADI) or overseas bank subsidiary:			
ANZ Bank New Zealand Limited – Common Equity Tier 1 capital ratio	12.4%	12.4%	13.4%
ANZ Bank New Zealand Limited - Tier 1 capital ratio	15.0%	14.6%	16.2%
ANZ Bank New Zealand Limited - Total capital ratio	16.4%	15.1%	16.9%
Basel III APRA level 2 CET1	Sep 22	Mar 22	Sep 21
Common Equity Tier 1 Capital	55,872	50,511	51,359
Total Risk Weighted Assets	454,718	437,910	416,086
Common Equity Tier 1 capital ratio	12.3%	11.5%	12.3%
Basel III APRA level 1 Extended licensed entity CET1	Sep 22	Mar 22	Sep 21
Common Equity Tier 1 Capital	47,091	41,021	45,555
Total Risk Weighted Assets	392,018	370,715	379,387
Common Equity Tier 1 capital ratio	12.0%	11.1%	12.0%

⁴ 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.

⁵ 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 Credit RWA increased by \$10.6 billion (3.0%) from March 2022 to \$359.4 billion at September 2022. The increase is attributed to higher volume/mix (+\$8.2 billion), the impact of foreign exchange (+\$3.9 billion) and net impacts from CRWA methodology changes and CVA RWA including hedges (+\$0.5 billion). This was partially offset by risk driven factors (-\$2.0 billion). The volume/mix increase was predominantly driven by the Institutional (+\$5.7 billion) and Australia Retail (+\$1.7 billion) divisions.

Market Risk, Operational Risk and IRRBB RWA

IRRBB RWA increased due to increases in embedded losses from higher term rates and increased market volatility.

Traded Market Risk RWA increased \$1.6 billion (+20.5%) over the half due to increase in scaling factor and RFNIV.

Chapter 5 – 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 a decrease in credit quality of a counterparty resulting in a financial loss.

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 and expressed as a percentage of the facility's EAD

Where ANZ is not accredited to use the AIRB based approach to credit risk, ANZ applies the Standardised approach to credit risk, under APS 112 Capital Adequacy: Standardised Approach to Credit Risk.

Credit risk management framework and policies

ANZ has a comprehensive framework to manage Credit Risk. 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 and risk appetite setting, 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 performs key roles in portfolio management such as approving sector and customer appetite, development and validation of credit risk measurement systems, loan asset quality reporting, sensitivity analysis and stress testing in response to economic scenarios and development of the overall governance framework including credit policies and requirements, and adherence to regulations.

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 via the Credit Approval Discretion (CAD) Framework. Within ANZ's wholesale business, 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 credit discretion. Credit discretions are reviewed on an annual basis and may be varied based on the holder's performance. Credit decisions are subject to hind-sighting using a risk based approach. Material credit decisions are oversighted by divisional CRO, Group CRO and/or BRC as applicable.

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.

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 Sector and Product Transaction Guidelines which 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;
- Wholesale portfolio RAG rating and regular portfolio reviews; and
- Exposure concentration limits, covering single customers, and customer groups with economic interdependence, industries and cross border risk, to maintain 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, economic loss, regulatory risk weighted assets (RWA) and regulatory expected loss;
- Assessing impact of emerging issues, and conducting ad-hoc investigations and deep dive portfolio reviews;
- 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, 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 early alerts, watch and control lists, policy or appetite exceptions, 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 assets⁶

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 (including derivatives) and assets brought to ANZ's balance sheet through the enforcement of security. Impaired derivatives have a credit valuation adjustment, which is a market assessment of the credit risk of the relevant counterparties.

Restructured items

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

⁶ The definition of Impaired Assets for accounting purposes is a default occurs when there are indicators that a debtor is unlikely to fully satisfy contractual credit obligations to the Group, or the exposure is 90 days past due. Financial assets, including those that are well secured, are considered credit impaired for financial reporting purposes when they are in default.

Collectively Assessed Provisions for Credit Impairment

Collectively assessed provisions for credit impairment represent the Expected Credit Loss (ECL) calculated in accordance with AASB 9 Financial Instruments (AASB 9) which commenced 1 October 2018. These incorporate forward looking information and do not require an actual loss event to have occurred for an impairment provision to be recognised.

Under AASB 9, ECL is either measured over 12 months or the expected lifetime of the financial asset, depending on the credit deterioration since origination, according to the following three-stage approach:

- Stage 1: At the origination of a financial asset, and where there has not been a significant increase in credit risk since origination, a provision equivalent to 12 months ECL is recognised. For instruments with a remaining maturity of less than 12 months, a provision calculated on the remaining term of the maturity is recognised.
- Stage 2: Where there has been a significant increase in credit risk (SICR) since origination, a provision equivalent to lifetime ECL is recognised.
- Stage 3: Where there is objective evidence of default or impairment, a provision equivalent to lifetime ECL is recognised.

In determining what constitutes a SICR, ANZ considers both qualitative and quantitative information, including CCR at origination and at the reporting date.

ECL is calculated as the product of PD, LGD and EAD at a facility level, discounted for incorporating the effect of time value of money. These credit risk factors are adjusted for current and forward looking information through the use of macro-economic variables in the model.

To determine ECL under IFRS 9, a range of plausible scenarios are considered which are probability weighted. ANZ's economic scenario and probability weighting framework considers 4 economic scenarios: Base Case, Downside, Upside, and Stress to determine a probability weighted ECL outcome. Probability weightings are determined via an expert judgement process that considers:

- ANZ Research's Base Case;
- ANZ Base Case comparisons to historical trends and consensus range; and
- Risks or uncertainties to the Base Case.

Individually Assessed Provisions for Credit Impairment

Individually assessed provisions for credit impairment are calculated in accordance with AASB 9. They 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 individually assessed 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 greater than or equal to 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 individually assessed provision and collectively assessed 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.

APRA has flagged that the adoption of the forward looking ECL approach means that a GRCL will no longer be required. This is expected to occur when the capital reforms related changes to Pillar 3 disclosures take effect, likely in 2023.

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.

From 1 January 2022 ANZ adopted APRA's revised requirements under APS 220: Credit Risk Management. The revised standard no longer includes requirements in relation to impaired assets, specific provisions or the General Reserve for Credit Losses (GRCL). However, ANZ will continue to disclose these items until APS 330 requirements are changed to align to the revised APS 220 standard.

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

Advanced IRB approach	Risk Weighted Assets \$M	Exposure at Default \$M	Sep 22	Individual provision charge for half year \$M	Write-offs for half year \$M
			Average Exposure at Default for half year \$M		
Corporate	146,069	327,238	313,041	(12)	36
Sovereign	10,955	266,845	260,006	-	-
Bank	12,071	40,479	38,263	-	-
Residential Mortgage	113,590	414,125	412,877	(12)	14
Qualifying Revolving Retail	3,272	13,309	13,410	12	45
Other Retail	17,029	27,088	27,877	(2)	106
Total Advanced IRB approach	302,986	1,089,084	1,065,474	(14)	201
Specialised Lending	39,792	48,742	47,980	(1)	-
Standardised approach					
Corporate	6,235	5,976	6,039	7	4
Sovereign	29	146	162	-	-
Residential Mortgage	224	435	426	1	1
Other Retail	11	10	11	(1)	-
Total Standardised approach	6,499	6,567	6,638	7	5
Credit Valuation Adjustment and Qualifying Central Counterparties	3,865	7,916	7,354	-	-
Total	353,142	1,152,309	1,127,446	(8)	206

⁷ 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)

Advanced IRB approach	Mar 22				
	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	141,243	298,844	293,388	(35)	27
Sovereign	9,781	253,167	250,311	-	-
Bank	10,742	36,047	34,041	-	-
Residential Mortgage	111,355	411,629	410,939	6	20
Qualifying Revolving Retail	3,418	13,510	13,640	32	58
Other Retail	18,200	28,667	29,382	54	106
Total Advanced IRB approach	294,739	1,041,864	1,031,701	57	211
Specialised Lending	38,432	47,217	46,128	19	2
Standardised approach					
Corporate	6,149	6,102	6,376	11	6
Sovereign	36	179	103	-	-
Residential Mortgage	194	416	424	-	1
Other Retail	12	12	14	-	2
Total Standardised approach	6,391	6,709	6,917	11	9
Credit Valuation Adjustment and Qualifying Central Counterparties	3,154	6,793	6,607	-	-
Total	342,716	1,102,583	1,091,353	87	222
Sep 21					
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	136,298	287,932	279,341	(14)	79
Sovereign	9,893	247,455	237,640	-	-
Bank	9,118	32,035	33,718	-	-
Residential Mortgage	110,622	410,249	407,901	(3)	21
Qualifying Revolving Retail	3,723	13,769	13,947	34	60
Other Retail	19,660	30,096	30,492	52	123
Total Advanced IRB approach	289,314	1,021,536	1,003,039	69	283
Specialised Lending	36,977	45,039	44,271	(5)	-
Standardised approach					
Corporate	6,632	6,649	6,547	4	2
Sovereign	27	27	48	-	-
Residential Mortgage	203	431	427	1	1
Other Retail	17	16	19	-	-
Total Standardised approach	6,879	7,123	7,041	5	3
Credit Valuation Adjustment and Qualifying Central Counterparties	3,270	6,420	8,306	-	-
Total	336,440	1,080,118	1,062,657	69	286

Table 7(b) part (ii): Exposure at Default by portfolio type⁸

Portfolio Type	Sep 22	Mar 22	Sep 21	Average for half year Sep 22
	\$M	\$M	\$M	\$M
Cash	152,042	147,409	133,269	149,726
Contingents liabilities, commitments, and other off-balance sheet exposures	183,411	175,572	175,410	179,491
Derivatives	53,875	41,399	40,937	47,637
Settlement Balances	34	72	138	53
Investment Securities	81,198	74,706	79,346	77,952
Net Loans, Advances & Acceptances	653,303	635,682	617,951	644,492
Other assets	9,163	8,307	8,390	8,735
Trading Securities	19,283	19,436	24,677	19,360
Total exposures	1,152,309	1,102,583	1,080,118	1,127,446

⁸ Average 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(c): Geographic distribution of Exposure at Default

Portfolio Type	Sep 22			Total \$M
	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	
Corporate	165,339	40,234	127,641	333,214
Sovereign	126,677	25,114	115,200	266,991
Bank	17,359	3,082	20,038	40,479
Residential Mortgage	316,163	97,962	435	414,560
Qualifying Revolving Retail	13,309	-	-	13,309
Other Retail	19,409	7,679	10	27,098
Qualifying Central Counterparties	924	399	6,593	7,916
Specialised Lending	36,118	12,352	272	48,742
Total exposures	695,298	186,822	270,189	1,152,309

Portfolio Type	Mar 22			Total \$M
	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	
Corporate	155,994	40,316	108,636	304,946
Sovereign	126,282	24,923	102,141	253,346
Bank	16,831	1,712	17,504	36,047
Residential Mortgage	309,206	102,422	417	412,045
Qualifying Revolving Retail	13,510	-	-	13,510
Other Retail	20,346	8,321	12	28,679
Qualifying Central Counterparties	953	365	5,475	6,793
Specialised Lending	33,900	13,176	141	47,217
Total exposures	677,022	191,235	234,326	1,102,583

Portfolio Type	Sep 21			Total \$M
	Australia \$M	New Zealand \$M	Asia Pacific, Europe and Americas \$M	
Corporate	153,827	41,731	99,023	294,581
Sovereign	124,794	25,985	96,703	247,482
Bank	13,252	2,588	16,195	32,035
Residential Mortgage	309,444	100,805	431	410,680
Qualifying Revolving Retail	13,769	-	-	13,769
Other Retail	21,227	8,869	16	30,112
Qualifying Central Counterparties	1,055	685	4,680	6,420
Specialised Lending	32,227	12,687	125	45,039
Total exposures	669,595	193,350	217,173	1,080,118

Table 7(d): Industry distribution of Exposure at Default^{9 10}

Portfolio Type	Sep 22														Total \$M
	Agriculture, Forestry, Fishing & Mining \$M	Business Services \$M	Construction \$M	Electricity, Gas & Water Supply \$M	Entertainment, Leisure & Tourism \$M	Financial, Investment & Insurance \$M	Government and Official Institutions \$M	Manufacturing \$M	Personal \$M	Property Services \$M	Wholesale Trade \$M	Retail Trade \$M	Transport & Storage \$M	Other \$M	
Corporate	43,976	11,441	5,715	15,257	14,548	86,832	19	46,254	189	26,991	27,442	13,963	17,732	22,855	333,214
Sovereign	422	-	16	519	1	197,670	65,070	1,908	-	825	15	-	421	124	266,991
Bank	-	-	-	-	-	40,234	-	237	-	-	1	4	1	2	40,479
Residential Mortgage Qualifying	-	-	-	-	-	-	-	-	414,560	-	-	-	-	-	414,560
Revolving Retail	-	-	-	-	-	-	-	-	13,309	-	-	-	-	-	13,309
Other Retail	1,766	2,166	2,800	58	1,538	493	8	1,326	7,246	820	970	2,794	972	4,141	27,098
Qualifying Central Counterparties	-	-	-	-	-	7,916	-	-	-	-	-	-	-	-	7,916
Specialised Lending	1,407	5	311	1,486	262	1	-	-	-	44,513	-	-	540	217	48,742
Total exposures	47,571	13,612	8,842	17,320	16,349	333,146	65,097	49,725	435,304	73,149	28,428	16,761	19,666	27,339	1,152,309
% of Total	4.1%	1.2%	0.8%	1.5%	1.4%	28.9%	5.6%	4.3%	37.8%	6.3%	2.5%	1.5%	1.7%	2.4%	100.0%

⁹ 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.

¹⁰ Other industry includes Health & Community Services, Education, Communication Services and Personal & Other Services.

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

Portfolio Type	Mar 22														
	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	43,097	10,459	5,222	13,751	14,892	71,210	27	40,623	236	25,511	26,960	13,069	17,411	22,478	304,946
Sovereign	408	-	4	497	2	188,125	61,449	1,142	-	832	16	-	200	661	253,346
Bank	-	-	-	-	-	36,035	-	-	1	1	1	4	1	4	36,047
Residential Mortgage	-	-	-	-	-	-	-	-	412,045	-	-	-	-	-	412,045
Qualifying Revolving	-	-	-	-	-	-	-	-	13,510	-	-	-	-	-	13,510
Retail	1,952	2,213	2,973	67	1,639	525	9	1,384	7,801	898	1,015	2,939	1,092	4,172	28,679
Other Retail	-	-	-	-	-	6,793	-	-	-	-	-	-	-	-	6,793
Qualifying Central Counterparties	1,803	6	332	1,482	296	1	-	127	-	42,101	11	2	738	318	47,217
Specialised Lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total exposures	47,260	12,678	8,541	15,797	16,829	302,689	61,485	43,276	433,593	69,343	28,003	16,014	19,442	27,633	1,102,583
% of Total	4.3%	1.1%	0.8%	1.4%	1.5%	27.5%	5.6%	3.9%	39.3%	6.3%	2.5%	1.5%	1.8%	2.5%	100.0%

Portfolio Type	Sep 21														
	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	42,791	11,131	5,083	12,002	14,601	70,555	30	39,995	297	24,735	21,691	12,991	16,701	21,978	294,581
Sovereign	470	-	15	576	-	164,252	78,885	1,219	-	1,632	20	-	234	179	247,482
Bank	1	1	-	-	-	32,020	-	2	-	-	-	6	-	5	32,035
Residential Mortgage	-	-	-	-	-	-	-	-	410,680	-	-	-	-	-	410,680
Qualifying Revolving	-	-	-	-	-	-	-	-	13,769	-	-	-	-	-	13,769
Retail	2,076	2,280	3,103	73	1,728	538	12	1,424	8,338	933	1,036	3,073	1,170	4,328	30,112
Other Retail	-	-	-	-	-	6,419	-	-	-	-	-	-	-	1	6,420
Qualifying Central Counterparties	1,492	7	352	1,825	318	1	-	116	-	39,565	24	2	896	441	45,039
Specialised Lending	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total exposures	46,830	13,419	8,553	14,476	16,647	273,785	78,927	42,756	433,084	66,865	22,771	16,072	19,001	26,932	1,080,118
% of Total	4.3%	1.2%	0.8%	1.3%	1.5%	25.4%	7.3%	4.0%	40.1%	6.2%	2.1%	1.5%	1.8%	2.5%	100.0%

Table 7(e): Residual contractual maturity of Exposure at Default¹¹

Sep 22					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	148,707	167,246	17,215	46	333,214
Sovereign	195,060	41,464	30,467	-	266,991
Bank	30,456	9,641	382	-	40,479
Residential Mortgage	222	852	391,648	21,838	414,560
Qualifying Revolving Retail	-	-	-	13,309	13,309
Other Retail	10,181	2,957	13,960	-	27,098
Qualifying Central Counterparties	5,689	1,077	722	428	7,916
Specialised Lending	18,624	28,259	1,847	12	48,742
Total exposures	408,939	251,496	456,241	35,633	1,152,309

Mar 22					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	134,573	154,557	15,763	53	304,946
Sovereign	181,272	47,475	24,599	-	253,346
Bank	25,817	9,879	351	-	36,047
Residential Mortgage	225	1,175	387,534	23,111	412,045
Qualifying Revolving Retail	-	-	-	13,510	13,510
Other Retail	10,797	3,436	14,443	3	28,679
Qualifying Central Counterparties	4,938	992	431	432	6,793
Specialised Lending	18,672	26,382	2,150	13	47,217
Total exposures	376,294	243,896	445,271	37,122	1,102,583

Sep 21					
Portfolio Type	< 12 mths \$M	1 - 5 years \$M	> 5 years \$M	No Maturity Specified \$M	Total \$M
Corporate	135,428	145,349	13,739	65	294,581
Sovereign	164,238	55,444	27,800	-	247,482
Bank	21,608	10,007	420	-	32,035
Residential Mortgage	230	1,040	385,276	24,134	410,680
Qualifying Revolving Retail	-	-	-	13,769	13,769
Other Retail	11,278	4,039	14,792	3	30,112
Qualifying Central Counterparties	4,408	881	663	468	6,420
Specialised Lending	17,994	25,471	1,557	17	45,039
Total exposures	355,184	242,231	444,247	38,456	1,080,118

¹¹ No Maturity Specified predominately includes credit cards and residential mortgage equity manager accounts.

Table 7(f) part (i): Impaired assets^{12 13}, Past due loans¹⁴, Provisions and Write-offs by Industry sector

Industry Sector	Sep 22					
	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	-	129	137	32	(28)	23
Business Services	-	41	28	25	(1)	6
Construction	-	63	48	40	11	7
Electricity, Gas & Water Supply	-	2	-	2	(6)	1
Entertainment Leisure & Tourism	7	180	56	44	11	14
Financial, Investment & Insurance	-	33	38	25	6	11
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	44	22	29	7	6
Personal	-	498	1,726	113	(3)	105
Property Services	-	69	89	33	(5)	3
Retail Trade	-	49	58	32	1	8
Transport & Storage	-	72	14	18	(2)	7
Wholesale Trade	-	270	48	120	(1)	7
Other	-	33	93	29	2	8
Total	7	1,483	2,357	542	(8)	206

¹² Impaired derivatives are net of credit value adjustment (CVA) of nil, being a market value based assessment of the credit risk of the relevant counterparties (March 2022: nil; September 2021: nil).

¹³ Impaired loans / facilities include restructured items of \$376 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 2022: \$375 million; September 2021: \$355 million).

¹⁴ 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)

Industry Sector	Mar 22					
	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	-	172	65	64	(6)	6
Business Services	-	50	46	30	4	10
Construction	-	58	52	32	3	13
Electricity, Gas & Water Supply	-	9	-	8	-	-
Entertainment Leisure & Tourism	11	142	105	47	4	11
Financial, Investment & Insurance	-	50	63	30	(4)	2
Government & Official Institutions	-	-	-	-	-	-
Manufacturing	-	43	21	27	10	3
Personal	-	435	2,121	145	55	133
Property Services	-	128	49	40	21	4
Retail Trade	-	65	77	39	2	17
Transport & Storage	-	300	26	26	(12)	5
Wholesale Trade	-	261	23	115	6	6
Other	-	42	118	33	4	12
Total	11	1,755	2,766	636	87	222

Industry Sector	Sep 21					
	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	-	215	95	58	(9)	10
Business Services	-	59	55	33	(10)	12
Construction	-	77	68	41	8	15
Electricity, Gas & Water Supply	-	9	1	9	-	-
Entertainment Leisure & Tourism	11	130	89	51	11	14
Financial, Investment & Insurance	-	55	68	31	4	3
Government & Official Institutions	-	-	1	-	-	-
Manufacturing	-	45	36	23	(6)	15
Personal	-	508	2,258	160	55	157
Property Services	-	97	63	24	(3)	5
Retail Trade	-	109	88	53	(23)	16
Transport & Storage	1	359	33	43	-	12
Wholesale Trade	-	293	31	123	38	8
Other	-	57	119	38	4	19
Total	12	2,013	3,005	687	69	286

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

	Sep 22					
	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	7	568	272	251	(12)	36
Sovereign	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	371	1,759	63	(12)	14
Qualifying Revolving Retail	-	29	-	-	12	45
Other Retail	-	225	247	133	(2)	106
Total Advanced IRB approach	7	1,193	2,278	447	(14)	201
Specialised Lending						
	-	51	15	29	(1)	-
Portfolios subject to Standardised approach						
Corporate	-	200	55	57	7	4
Residential Mortgage	-	31	9	6	1	1
Other Retail	-	8	-	3	(1)	-
Total Standardised approach	-	239	64	66	7	5
Qualifying Central Counterparties						
	-	-	-	-	-	-
Total	7	1,483	2,357	542	(8)	206

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

	Mar 22					
	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	11	917	178	293	(35)	27
Sovereign	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	306	2,107	85	6	20
Qualifying Revolving Retail	-	33	-	-	32	58
Other Retail	-	275	326	177	54	106
Total Advanced IRB approach	11	1,531	2,611	555	57	211
Specialised Lending	-	103	14	29	19	2
Portfolios subject to Standardised approach						
Corporate	-	104	103	45	11	6
Residential Mortgage	-	9	38	5	-	1
Other Retail	-	8	-	2	-	2
Total Standardised approach	-	121	141	52	11	9
Qualifying Central Counterparties	-	-	-	-	-	-
Total	11	1,755	2,766	636	87	222
	Sep 21					
	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	11	1,083	217	338	(14)	79
Sovereign	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Residential Mortgage	-	363	2,214	93	(3)	21
Qualifying Revolving Retail	-	33	-	-	34	60
Other Retail	-	328	401	187	52	123
Total Advanced IRB approach	11	1,807	2,832	618	69	283
Specialised Lending	-	66	35	13	(5)	-
Portfolios subject to Standardised approach						
Corporate	1	119	94	46	4	2
Residential Mortgage	-	10	44	6	1	1
Other Retail	-	11	-	4	-	-
Total Standardised approach	1	140	138	56	5	3
Qualifying Central Counterparties	-	-	-	-	-	-
Total	12	2,013	3,005	687	69	286

Table 7(g): Impaired assets¹⁵ ¹⁶, Past due loans¹⁷ and Provisions¹⁸ by Geography

Sep 22					
Geographic region	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	7	1,075	1,901	379	2,617
New Zealand	-	143	391	72	590
Asia Pacific, Europe and America	-	265	65	91	646
Total	7	1,483	2,357	542	3,853

Mar 22					
Geographic region	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	11	1,385	2,269	481	2,599
New Zealand	-	172	358	71	573
Asia Pacific, Europe and America	-	198	139	84	585
Total	11	1,755	2,766	636	3,757

Sep 21					
Geographic region	Impaired derivatives \$M	Impaired loans/ facilities \$M	Past due loans ≥ 90 days \$M	Individual provision balance \$M	Collective provision balance \$M
Australia	11	1,589	2,522	530	2,987
New Zealand	-	182	345	71	603
Asia Pacific, Europe and America	1	242	138	86	605
Total	12	2,013	3,005	687	4,195

¹⁵ Impaired derivatives are net of credit value adjustment (CVA) of nil, being a market value based assessment of the credit risk of the relevant counterparties (March 2022: nil; September 2021: nil).

¹⁶ Impaired loans / facilities include restructured items of \$376 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 2022: \$375 million; September 2021: \$355 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.

¹⁸ 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

	Half year Sep 22 \$M	Half year Mar 22 \$M	Half year Sep 21 \$M
Collectively Assessed Provision			
Balance at start of period	3,757	4,195	4,285
Charge/(Release) to Income Statement	60	(371)	(145)
Adjustment for exchange rate fluctuations and transfers	36	(67)	55
Total Collectively Assessed Provision	3,853	3,757	4,195
Individually Assessed Provision			
Balance at start of period	636	687	809
New and increased provisions	219	301	369
Write-backs	(118)	(115)	(206)
Adjustment for exchange rate fluctuations and transfers	18	(8)	11
Discount unwind	(7)	(7)	(10)
Bad debts written off	(206)	(222)	(286)
Total Individually Assessed Provision	542	636	687
Total Provisions for Credit Impairment	4,395	4,393	4,882

Table 7(j): Specific Provision Balance and General Reserve for Credit Losses¹⁹

	Sep 22		Total \$M
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	
Collectively Assessed Provision	389	3,464	3,853
Individually Assessed Provision	542	-	542
Total Provision for Credit Impairment	931	3,464	4,395
	Mar 22		Total \$M
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	
Collectively Assessed Provision	440	3,317	3,757
Individually Assessed Provision	636	-	636
Total Provision for Credit Impairment	1,076	3,317	4,393
	Sep 21		Total \$M
	Specific Provision Balance \$M	General Reserve for Credit Losses \$M	
Collectively Assessed Provision	436	3,759	4,195
Individually Assessed Provision	687	-	687
Total Provision for Credit Impairment	1,123	3,759	4,882

¹⁹ 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 bucket²⁰**

	Sep 22	Mar 22	Sep 21
	\$M	\$M	\$M
Standardised approach exposures			
0%	1	3	-
20%	145	386	22
35%	178	194	200
50%	319	336	515
75%	-	-	-
100%	5,562	5,394	6,088
150%	348	385	296
>150%	14	11	2
Capital deductions	-	-	-
Total	6,567	6,709	7,123
Other Asset exposures			
0%	-	-	-
20%	641	696	748
35%	-	-	-
50%	-	-	-
75%	-	-	-
100%	3,650	3,794	3,785
150%	-	-	-
>150%	39	31	27
Capital deductions	-	-	-
Total	4,330	4,521	4,560
Specialised Lending exposures			
0%	122	150	109
70%	27,159	26,370	24,488
90%	18,038	17,696	17,830
115%	2,971	2,560	2,031
250%	452	441	581
Total	48,742	47,217	45,039

²⁰ 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 ²¹ In Australia only, other authorised deposit taking institutions (ADI) incorporated in Australia	AIRB
Residential Mortgages	Exposures secured by residential property	AIRB
Qualifying Revolving Retail	Australian consumer credit cards <\$100,000 limit	AIRB
Other Retail	Small business lending Other lending to consumers	AIRB
Specialised Lending	Income Producing Real Estate ²² Project finance Object finance	AIRB – Supervisory Slotting ²³
Other Assets	All other assets not falling into the above classes e.g. margin lending, fixed assets	AIRB – fixed risk weights

In addition, where ANZ is not accredited to use the AIRB based approach to credit risk, ANZ applies the Standardised approach to credit risk 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.

²¹ The IRB asset classification of investment banks is Corporate, rather than Bank.

²² 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.

²³ 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 BBB-	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+	Caa1 to Caa3	CCC+ to CCC-	9.7981 - 27.1109%
8=	Ca to C	CC to 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,
- Collectively assessed 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 capital and in the collectively assessed 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 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.

Internal Audit provides third line 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 capital ensure 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	Australian 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 ²⁴

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.

²⁴ 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^{25 26}

	Sep 22							
	AAA To AA- \$M	A+ to BBB+ \$M	BBB to BBB- \$M	BB+ to B+ \$M	B to B- \$M	CCC+ to C \$M	Default \$M	Total \$M
Exposure at Default								
Corporate	40,661	122,256	97,488	57,079	7,082	1,258	1,414	327,238
Sovereign	236,858	21,519	3,997	1,635	2,745	91	-	266,845
Bank	12,738	22,289	4,127	1,287	34	4	-	40,479
Total	290,257	166,064	105,612	60,001	9,861	1,353	1,414	634,562
% of Total	45.7%	26.2%	16.6%	9.5%	1.6%	0.2%	0.2%	100.0%
Undrawn commitments (included in above)								
Corporate	10,602	37,838	25,836	8,466	789	124	61	83,716
Sovereign	1,062	960	467	37	14	8	-	2,548
Bank	52	635	13	-	-	-	-	700
Total	11,716	39,433	26,316	8,503	803	132	61	86,964
Average Exposure at Default								
Corporate	19.446	13.276	2.885	0.852	0.479	0.249	0.979	2.449
Sovereign	171.387	182.365	22.329	19.013	68.633	5.374	-	146.217
Bank	4.718	4.398	6.732	9.974	1.378	0.186	-	4.730
Exposure-weighted average Loss Given Default (%)								
Corporate	58.9%	58.1%	45.1%	32.0%	28.5%	38.5%	43.8%	49.0%
Sovereign	5.8%	16.0%	37.4%	41.4%	56.3%	45.1%	-	7.9%
Bank	58.9%	59.5%	67.0%	67.7%	71.1%	64.0%	-	60.4%
Exposure-weighted average risk weight (%)								
Corporate	18.1%	33.7%	53.3%	62.0%	82.3%	205.0%	125.6%	44.6%
Sovereign	1.0%	4.6%	34.2%	82.2%	174.1%	230.3%	-	4.1%
Bank	15.5%	24.8%	71.5%	119.2%	178.3%	390.0%	-	29.8%

²⁵ 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).

²⁶ Average EAD is calculated as total EAD post risk mitigants divided by the total number of credit risk generating exposures.

²⁷ 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 22							
	AAA To AA- \$M	A+ to BBB+ \$M	BBB to BBB- \$M	BB+ to B+ \$M	B to B- \$M	CCC+ to C \$M	Default \$M	Total \$M
Exposure at Default								
Corporate	32,553	102,808	97,825	52,157	10,748	1,158	1,595	298,844
Sovereign	216,912	28,820	3,524	1,551	2,261	99	-	253,167
Bank	11,111	20,191	3,575	1,106	49	15	-	36,047
Total	260,576	151,819	104,924	54,814	13,058	1,272	1,595	588,058
% of Total	44.3%	25.8%	17.8%	9.3%	2.2%	0.2%	0.3%	100.0%
Undrawn commitments (included in above)								
Corporate	9,580	33,422	28,738	8,824	1,723	127	42	82,456
Sovereign	1,030	371	361	49	17	18	-	1,846
Bank	47	409	10	134	-	-	-	600
Total	10,657	34,202	29,109	9,007	1,740	145	42	84,902
Average Exposure at Default								
Corporate	17.995	12.512	2.586	0.920	0.482	0.305	0.877	2.252
Sovereign	267.133	255.041	27.747	15.668	23.932	4.507	-	199.511
Bank	4.785	4.514	4.747	7.325	1.635	0.031	-	4.382
Exposure-weighted average Loss Given Default (%)								
Corporate	59.7%	57.7%	45.3%	33.3%	29.6%	39.3%	41.0%	48.4%
Sovereign	5.9%	18.2%	36.1%	40.5%	52.2%	46.0%	-	8.3%
Bank	59.5%	59.0%	67.7%	69.2%	72.0%	66.1%	-	60.4%
Exposure-weighted average risk weight (%)								
Corporate	18.6%	34.3%	54.2%	64.2%	84.3%	211.9%	121.7%	47.3%
Sovereign	1.0%	5.0%	32.8%	80.5%	160.4%	225.3%	-	3.9%
Bank	16.0%	23.8%	73.1%	125.3%	184.4%	404.9%	-	29.8%
	Sep 21							
	AAA To AA- \$M	A+ to BBB+ \$M	BBB to BBB- \$M	BB+ to B+ \$M	B to B- \$M	CCC+ to C \$M	Default \$M	Total \$M
Exposure at Default								
Corporate	32,022	94,109	94,734	51,223	12,191	1,681	1,972	287,932
Sovereign	216,732	23,550	3,242	1,436	2,349	146	-	247,455
Bank	7,782	19,924	3,617	657	53	2	-	32,035
Total	256,536	137,583	101,593	53,316	14,593	1,829	1,972	567,422
% of Total	45.3%	24.2%	17.9%	9.4%	2.6%	0.3%	0.3%	100.0%
Undrawn commitments (included in above)								
Corporate	9,341	32,520	29,271	8,573	1,510	172	61	81,448
Sovereign	1,307	392	436	28	62	19	-	2,244
Bank	1	409	25	-	-	-	-	435
Total	10,649	33,321	29,732	8,601	1,572	191	61	84,127
Average Exposure at Default								
Corporate	18.091	6.980	2.159	0.835	0.312	0.372	0.914	1.726
Sovereign	256.184	158.057	27.709	14.960	19.907	7.693	-	183.572
Bank	3.421	3.983	2.799	4.641	1.911	0.110	-	3.636
Exposure-weighted average Loss Given Default (%)								
Corporate	59.8%	57.1%	45.8%	33.3%	32.2%	38.7%	37.7%	48.1%
Sovereign	6.0%	18.3%	33.1%	40.7%	53.2%	39.7%	-	8.2%
Bank	57.3%	58.5%	67.5%	69.2%	72.1%	72.4%	-	59.5%
Exposure-weighted average risk weight (%)								
Corporate	18.7%	32.8%	53.6%	62.3%	90.0%	202.8%	121.6%	47.3%
Sovereign	1.1%	5.2%	32.4%	81.6%	162.8%	199.7%	-	4.0%
Bank	14.7%	22.9%	69.6%	118.4%	210.2%	356.1%	-	28.5%

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

	Sep 22						Default \$M	Total \$M
	0.00% <0.11% \$M	0.11% <0.30% \$M	0.30% <0.51% \$M	0.51% <3.49% \$M	3.49% <10.09% \$M	10.09% <100.00% \$M		
Exposure at Default								
Residential Mortgage	88,300	93,052	65,417	156,131	7,338	1,568	2,319	414,125
Qualifying Revolving Retail	3,615	4,245	1,480	2,965	714	260	30	13,309
Other Retail	762	3,654	1,639	13,269	5,715	1,428	621	27,088
Total	92,677	100,951	68,536	172,365	13,767	3,256	2,970	454,522
% of Total	20.4%	22.2%	15.1%	37.9%	3.0%	0.7%	0.7%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	22,694	5,865	1,486	9,840	27	11	4	39,927
Qualifying Revolving Retail	2,574	3,145	999	1,280	149	39	2	8,188
Other Retail	687	2,837	844	2,674	634	100	19	7,795
Total	25,955	11,847	3,329	13,794	810	150	25	55,910
Average Exposure at Default								
Residential Mortgage	0.264	0.222	0.301	0.356	0.338	0.334	0.298	0.287
Qualifying Revolving Retail	0.008	0.009	0.008	0.010	0.008	0.007	0.008	0.009
Other Retail	0.008	0.010	0.010	0.019	0.024	0.010	0.026	0.016
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.7%	17.2%	19.4%	20.6%	20.1%	20.0%	19.0%	19.4%
Qualifying Revolving Retail	72.1%	75.8%	75.2%	78.5%	82.1%	80.8%	75.7%	75.7%
Other Retail	57.4%	61.7%	45.3%	39.0%	39.4%	53.1%	43.3%	43.9%
Exposure-weighted average risk weight (%)								
Residential Mortgage	4.5%	11.7%	22.9%	45.2%	97.7%	145.1%	165.3%	27.4%
Qualifying Revolving Retail	3.7%	7.6%	15.4%	42.9%	104.0%	204.7%	130.4%	24.6%
Other Retail	34.4%	43.4%	35.7%	52.0%	75.5%	138.2%	226.4%	62.9%

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

	Mar 22							
	0.00% <0.11%	0.11% <0.30%	0.30% <0.51%	0.51% <3.49%	3.49% <10.09%	10.09% <100.00%	Default	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Exposure at Default								
Residential Mortgage	89,384	94,830	68,468	147,306	7,393	1,687	2,561	411,629
Qualifying Revolving Retail	3,636	4,279	1,491	3,018	772	279	35	13,510
Other Retail	806	3,974	1,717	14,095	5,757	1,494	824	28,667
Total	93,826	103,083	71,676	164,419	13,922	3,460	3,420	453,806
% of Total	20.7%	22.7%	15.8%	36.2%	3.1%	0.8%	0.8%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	22,781	5,628	1,382	8,522	27	9	2	38,351
Qualifying Revolving Retail	2,613	3,202	1,011	1,282	159	35	2	8,304
Other Retail	736	3,119	888	2,863	672	101	23	8,402
Total	26,130	11,949	3,281	12,667	858	145	27	55,057
Average Exposure at Default								
Residential Mortgage	0.261	0.223	0.303	0.340	0.325	0.335	0.305	0.282
Qualifying Revolving Retail	0.008	0.009	0.008	0.010	0.009	0.007	0.008	0.009
Other Retail	0.008	0.011	0.011	0.020	0.024	0.010	0.031	0.016
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.7%	17.2%	19.6%	20.6%	20.1%	20.0%	19.0%	19.4%
Qualifying Revolving Retail	71.8%	75.7%	75.1%	78.4%	82.2%	80.6%	75.7%	75.7%
Other Retail	58.0%	61.8%	44.5%	39.9%	39.2%	53.4%	42.3%	44.3%
Exposure-weighted average risk weight (%)								
Residential Mortgage	4.5%	11.6%	23.1%	44.9%	98.1%	145.2%	184.0%	27.1%
Qualifying Revolving Retail	3.7%	7.6%	15.4%	42.9%	104.0%	205.6%	156.5%	25.3%
Other Retail	35.0%	43.2%	34.6%	53.1%	75.7%	139.2%	204.7%	63.5%
Sep 21								
	0.00% <0.11%	0.11% <0.30%	0.30% <0.51%	0.51% <3.49%	3.49% <10.09%	10.09% <100.00%	Default	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Exposure at Default								
Residential Mortgage	90,803	94,203	68,171	144,757	7,686	2,052	2,577	410,249
Qualifying Revolving Retail	5,276	3,256	1,082	2,938	784	397	36	13,769
Other Retail	834	4,117	1,797	14,754	6,036	1,644	914	30,096
Total	96,913	101,576	71,050	162,449	14,506	4,093	3,527	454,114
% of Total	21.3%	22.4%	15.6%	35.8%	3.2%	0.9%	0.8%	100.0%
Undrawn commitments (included in above)								
Residential Mortgage	22,974	5,800	1,493	8,781	27	15	-	39,090
Qualifying Revolving Retail	3,967	2,471	715	1,284	225	52	2	8,716
Other Retail	760	3,277	923	2,996	725	119	24	8,824
Total	27,701	11,548	3,131	13,061	977	186	26	56,630
Average Exposure at Default								
Residential Mortgage	0.262	0.223	0.297	0.332	0.322	0.330	0.308	0.279
Qualifying Revolving Retail	0.009	0.008	0.008	0.010	0.010	0.006	0.009	0.009
Other Retail	0.008	0.011	0.011	0.020	0.021	0.010	0.031	0.016
Exposure-weighted average Loss Given Default (%)								
Residential Mortgage	19.7%	17.3%	19.7%	20.7%	20.1%	20.0%	19.2%	19.5%
Qualifying Revolving Retail	72.7%	76.0%	74.6%	78.4%	82.0%	80.4%	75.7%	75.6%
Other Retail	58.7%	62.7%	43.5%	40.6%	41.5%	54.1%	43.1%	45.3%
Exposure-weighted average risk weight (%)								
Residential Mortgage	4.5%	11.6%	23.0%	44.6%	98.3%	144.9%	187.9%	27.0%
Qualifying Revolving Retail	3.4%	8.0%	16.2%	44.5%	112.2%	218.0%	153.3%	27.0%
Other Retail	35.4%	43.8%	33.5%	54.1%	79.0%	141.3%	206.7%	65.3%

Table 9(e): Actual Losses by portfolio type

Basel Asset Class	Half year Sep 22	
	Individual provision charge \$M	Net Write-offs \$M
Corporate	(12)	36
Sovereign	-	-
Bank	-	-
Residential Mortgage	(12)	14
Qualifying Revolving Retail	12	45
Other Retail	(2)	106
Total Advanced IRB	(14)	201
Specialised Lending	(1)	-
Standardised approach	7	5
Total	(8)	206

Basel Asset Class	Half year Mar 22	
	Individual provision charge \$M	Write-offs \$M
Corporate	(35)	27
Sovereign	-	-
Bank	-	-
Residential Mortgage	6	20
Qualifying Revolving Retail	32	58
Other Retail	54	106
Total Advanced IRB	57	211
Specialised Lending	19	2
Standardised approach	11	9
Total	87	222

Basel Asset Class	Half year Sep 21	
	Individual provision charge \$M	Write-offs \$M
Corporate	(14)	79
Sovereign	-	-
Bank	-	-
Residential Mortgage	(3)	21
Qualifying Revolving Retail	34	60
Other Retail	52	123
Total Advanced IRB	69	283
Specialised Lending	(5)	-
Standardised approach	5	3
Total	69	286

Factors impacting the loss experience

The individually assessed credit impairment charged decreased \$95 million driven by decreases in the Australia Retail division (-\$50 million) reflecting higher recoveries in the unsecured portfolios and underlying delinquency and impairment flows remaining subdued with the benefit from previous government and bank COVID-19 support packages, the Australia Commercial division (-\$49 million) due to low underlying delinquency rates in the SME Banking portfolio, and the Institutional division (-\$15 million) reflecting lower transition to impaired loans.

Write-offs decreased \$16 million over the half predominantly driven by lower write offs in Qualifying Revolving Retail and Residential Mortgage asset class.

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

Portfolio Type	Sep 22				
	Average Estimated PD %	Average Actual PD %	Average estimated to actual EAD ratio	Average Estimated LGD %	Average Actual LGD %
Corporate	2.03	1.77	1.14	41.41	37.56
Sovereign	0.45	-	n/a	n/a	n/a
Bank	0.61	0.07	1.34	46.00	58.30
Specialised Lending	n/a	1.80	1.06	n/a	31.74
Residential Mortgage	0.79	0.71	1.01	20.19	1.46
Qualifying Revolving Retail	1.76	1.39	1.13	80.26	62.89
Other Retail	3.81	2.45	1.05	50.18	34.57

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 PDs for obligors that are not in default at the beginning of each financial year over the period of observation being 2009 to 2021. The actual PD is based on the number of defaulted obligors up to August 2022 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 13 years of observation being 2009 to August 2022. 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 2020. The actual LGD is based on the average realised losses captured 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 2020. Defaults occurring after September 2020 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. Defaults where no loss data has been captured are excluded from the LGD calculation.

A review of historical LGD data is currently being undertaken and may result in changes to Average Actual LGD numbers detailed above.

Retail Portfolios

The estimated PD is based on the average of the internally estimated long-run PDs for obligors that are not in default at September of each year over the period of observation being 2017 to 2021. The actual PD is based on the number of defaulted obligors up to September 2022 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 2017 to 2021. 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 September of each year during the observation period being 2016 to 2020. 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 2021 have been excluded from the analysis to allow sufficient time for workout period.

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.²⁸ 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.
- Cash and securities under Credit Support Annex (CSA) and Global Master Repurchase Agreement (GMRA) for Counterparty credit risk in derivative and repo transactions

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.

For derivative transactions, APRA's CPS 226 "Margining and risk mitigation for non-centrally cleared derivatives" has mandated Variation Margin and Initial Margin arrangements between covered entities, 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.

For non-derivative and repo transactions, 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 of collateral would be expected to incur in a forced sale. The discounted value is used in the determination of the SI and LGD. For derivative and repo transactions, ANZ haircuts the value of cash and securities collateral under CSA or GMRA to calculate the regulatory EAD, as per APRA's APS 112 and APS 180.

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), 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

Within wholesale lending, guarantee support for lending proposals is a common 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.

²⁸ 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.

Use of credit derivatives for risk mitigation

ANZ may use 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.

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.

Additionally, ANZ uses market instruments, mainly interest rate and foreign exchange derivatives, as well as CDS Indices to hedge the Credit value adjustment (CVA) mark to market volatility of the markets derivative portfolio.

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.

Additional credit risk mitigation for markets derivatives

Right to break clauses are used in master agreement or in trade confirmation to reduce the term of long dated derivative trades. Additional termination triggers (close out of exposure) such as credit rating downgrade clauses and change in ownership clauses included in documentation are used to reduce credit exposure under specific credit events. ANZ uses central clearing houses to clear certain derivative transactions and reduce bilateral exposure. Settlement through Continuous Linked Settlement (CLS) is used to eliminate settlement risk for foreign exchange transactions with CLS members. In addition to the exchange of Variation margin and Initial Margin, APRA's CPS 226 also requires the following risk mitigation practices to be established for un-cleared derivatives between covered counterparties: trading relationship documentation; trade confirmation; portfolio reconciliation; portfolio compression; valuation processes; and dispute resolution processes.

Table 10(b): Credit risk mitigation on Standardised approach portfolios – collateral ^{29 30}

Sep 22				
	Exposure at Default \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	% Coverage
Standardised approach				
Corporate	5,976	713	-	10.5%
Sovereign	146	1,635	-	91.8%
Residential Mortgage	435	-	-	-
Other Retail	10	-	-	-
Total	6,567	2,348	-	26.1%
Mar 22				
	Exposure at Default \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	% Coverage
Standardised approach				
Corporate	6,102	298	-	4.6%
Sovereign	179	1,721	-	90.6%
Residential Mortgage	416	-	-	-
Other Retail	12	-	-	-
Total	6,709	2,019	-	23.1%
Sep 21				
	Exposure at Default \$M	Eligible Financial Collateral \$M	Other Eligible Collateral \$M	% Coverage
Standardised approach				
Corporate	6,649	563	-	7.7%
Sovereign	27	520	-	95.1%
Residential Mortgage	431	-	-	-
Other Retail	16	-	-	-
Total	7,123	1,083	-	13.1%

²⁹ Eligible Collateral could include cash collateral (cash, certificates deposits and bank bills issued by the lending ADI), gold bullion and highly rated debt securities.

³⁰ Exposure at Default represents credit exposure net of offsets for credit risk mitigation such as guarantees, credit derivatives, netting and financial collateral.

Table 10(c): Credit risk mitigation – guarantees and credit derivatives³¹

	Sep 22			% Coverage
	Exposure at Default \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	
Advanced IRB				
Corporate (incl. Specialised Lending)	375,980	1,342	868	0.6%
Sovereign	266,845	4,972	-	1.9%
Bank	40,479	-	38	0.1%
Residential Mortgage	414,125	-	-	-
Qualifying Revolving Retail	13,309	-	-	-
Other Retail	27,088	-	-	-
Total	1,137,826	6,314	906	0.6%
Standardised approach				
Corporate	5,976	9	-	0.2%
Sovereign	146	-	-	-
Residential Mortgage	435	-	-	-
Other Retail	10	-	-	-
Total	6,567	9	-	0.1%
Qualifying Central Counterparties	7,916	-	-	-
	Mar 22			% Coverage
	Exposure at Default \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	
Advanced IRB				
Corporate (incl. Specialised Lending)	346,061	992	744	0.5%
Sovereign	253,167	3,652	-	1.4%
Bank	36,047	-	25	0.1%
Residential Mortgage	411,629	-	-	-
Qualifying Revolving Retail	13,510	-	-	-
Other Retail	28,667	-	-	-
Total	1,089,081	4,644	769	0.5%
Standardised approach				
Corporate	6,102	-	-	-
Sovereign	179	-	-	-
Residential Mortgage	416	-	-	-
Other Retail	12	-	-	-
Total	6,709	-	-	-
Qualifying Central Counterparties	6,793	-	-	-

³¹ Exposure at Default represents credit exposure net of offsets for credit risk mitigation such as guarantees, credit derivatives, netting and financial collateral.

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

	Sep 21			% Coverage
	Exposure at Default \$M	Exposures covered by Guarantees \$M	Exposures covered by Credit Derivatives \$M	
Advanced IRB				
Corporate (incl. Specialised Lending)	332,971	1,276	786	0.6%
Sovereign	247,455	4,688	-	1.9%
Bank	32,035	1	37	0.1%
Residential Mortgage	410,249	-	-	-
Qualifying Revolving Retail	13,769	-	-	-
Other Retail	30,096	-	-	-
Total	1,066,575	5,965	823	0.6%
Standardised approach				
Corporate	6,649	-	4	0.1%
Sovereign	27	-	-	-
Residential Mortgage	431	-	-	-
Other Retail	16	-	-	-
Total	7,123	-	4	0.1%
Qualifying Central Counterparties	6,420	-	-	-

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 favor 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 worse case 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.

Exposure at default for regulatory capital

For regulatory capital the Exposure at Default captures the expected positive mark-to-market of a portfolio in the event of a counterparty default across a one-year time horizon at a 99% confidence level, taking into account any legal documents in force. It is calculated following Standardised Approach for Counterparty Credit Risk (SA-CCR) under APRA's APS180: Capital Adequacy: Counterparty Credit Risk.

Credit valuation adjustment (CVA)

ANZ uses a model to adjust the fair value of the CVA held which takes into account the impact of counterparty credit quality. The methodology calculates the present value of the expected losses over the life of a derivative as a function of PD, LGD, and expected credit risk exposure.

As the CVA changes over the life of a derivative due to changes in credit spreads, ANZ uses CDS Indices to hedge the mark to market impacts. Other market risks are also hedged with interest rate and foreign exchange derivatives.

APRA requires banks, including ANZ, to hold additional risk based capital to cover the risk of CVA mark to market losses associated with deterioration in counterparty credit worthiness when entering into derivative 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 for derivatives and Global Master Repurchase Agreement or GMRA for repo) 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:
 - Variation Margin – reflects the current mark-to-market exposure.
 - Initial Margin – covers the future potential exposure that could arise from future changes in market value
 - Since March 2017, APRA's CPS 226 "Margining and risk mitigation for non-centrally cleared derivatives" has mandated Variation Margin and Initial Margin arrangements between covered entities, 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.
 - APRA's CPS 226 also requires ADIs to apply risk mitigation practices for un-cleared derivatives between covered counterparties in the areas of trading relationship documentation, trade confirmation, portfolio reconciliation, portfolio compression, valuation processes and dispute resolution processes.
- Use of right to break clauses in master agreements or in trade confirmation to reduce the 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 to reduce credit exposure under specific credit events.
- 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 counterparties clearing houses.
- A specific risk appetite for Credit Valuation Adjustment (CVA) exposures, approved by the Board.
- Design and implementation of limit framework and monitoring of CVA exposures, to ensure CVA exposure is within Risk appetite.

In the event of a downgrading of ANZ's rating by one notch from AA- to A+, as at 30 September 2022, ANZ would not be required to lodge additional collateral with its counterparties.

In August 2021, the Group amended the terms of its legal agreements with one of its central clearing counterparties giving effect to this form of legal settlement. As a result of this change, collateral paid and received by the Group under these agreements is no longer separately recognised, instead settling the Group's outstanding derivative exposures and reducing the associated carrying values of the derivative asset and liability balances.

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

	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Gross positive fair value of contracts	90,174	45,238	38,736
Netting benefits	(57,277)	(27,920)	(23,810)
Netted current credit exposure	32,897	17,318	14,926
Collateral held	(16,342)	(8,710)	(5,663)
Net derivatives credit exposure	16,555	8,608	9,263

Counterparty credit risk exposure - by portfolio type

Portfolio Type	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Corporate	24,956	17,326	18,375
Sovereign	4,354	3,379	3,280
Bank	16,506	13,565	12,083
Qualifying Central Counterparties	7,916	6,793	6,239
Specialised Lending	143	336	960
Total exposures	53,875	41,399	40,937

Notional Value of Credit Derivative Hedges

Product Type	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Credit Default Swaps	-	-	-
Interest Rate Swaps	-	-	-
Currency Swaps	-	-	-
Other	-	-	-
Total exposures	-	-	-

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

	Sep 22		
	Protection Bought \$M	Protection Sold \$M	Total \$M
Credit derivative products used for own credit portfolio			
Credit default swaps	13,599	10,823	24,422
Total notional value	13,599	10,823	24,422
Credit derivative products used for intermediation			
Credit default swaps	-	-	-
Total return swaps	-	-	-
Total notional value	-	-	-
Total credit derivative notional value	13,599	10,823	24,422
	Mar 22		
	Protection Bought \$M	Protection Sold \$M	Total \$M
Credit derivative products used for own credit portfolio			
Credit default swaps	6,934	3,470	10,404
Total notional value	6,934	3,470	10,404
Credit derivative products used for intermediation			
Credit default swaps	-	-	-
Total return swaps	-	-	-
Total notional value	-	-	-
Total credit derivative notional value	6,934	3,470	10,404
	Sep 21		
	Protection Bought \$M	Protection Sold \$M	Total \$M
Credit derivative products used for own credit portfolio			
Credit default swaps	6,755	2,764	9,519
Total notional value	6,755	2,764	9,519
Credit derivative products used for intermediation			
Credit default swaps	-	-	-
Total return swaps	-	-	-
Total notional value	-	-	-
Total credit derivative notional value	6,755	2,764	9,519

Chapter 6 – 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.

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.

Securitisation of ANZ originated assets

ANZ adopts securitisation as a funding, capital and liquidity management tool using assets it has originated. This may involve the transfer of credit risk and thereby provide regulatory capital relief. ANZ also operates a self-securitisation program, backed by a pool of residential mortgages, which forms part of the Bank's liquidity arrangements by providing access to government sponsored facilities including the Committed Liquidity Facility and the Term Funding Facility.

For these securitisation programs, ANZ will undertake roles including as the originator, sponsor, servicer and trust manager. ANZ may retain an exposure to these securitisation programs (including as facility provider and swap provider), consistent with the roles described below in 'Third Party Securitisation Activities' and facilities provided as described below in 'Risk Management'.

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 in the Bank's financial statements, to certain clients wishing to access securitisation.
- Services to securitisation programs may include structuring and arranging services and distributing securities.
- 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 and Risk Management

Similar to other exposures, securitisation exposures are subject to credit, market, operational liquidity and compliance risks. Governance of securitisation activities is managed in accordance with ANZ's established risk management framework, including the credit risk and market risk frameworks described in Chapters 5 and 7. Roles and responsibilities are clearly outlined in the Bank's 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 securitisations with ANZ originated assets.

Funding 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 approval by Risk business unit and respective independent credit risk officer. 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, oversight of these exposures by securitisation specialists continue until the securitisation exposures are repaid in full or sold.

All facilities provided to our investments in securitisation programs (across both the banking and trading books) undergo initial and ongoing due diligence in line with requirements outlined by APRA. This includes analysing the risk characteristics of the securitisation exposure, 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 with credit discretions being exercised.

Risk reporting of securitisation exposures

Credit risk management information systems, reporting and analysis are managed centrally for all securitisation exposures. In addition to the formal credit review process for ANZ's securitisation exposures, internal reporting to the appropriate Risk and management functions provides oversight at the portfolio level. These reports include securitisation program performance, EAD, portfolio mix, and RWA.

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 methodology³².

Regulatory capital approaches

For securitisation exposures held in ANZ's banking book³³, ANZ adopts a Standardised approach (as outlined in APS 120: Securitisation) to determine the credit risk regulatory capital charge via a hierarchy of approaches.

The primary rating approach is the External Ratings Based Approach (ERBA). For externally rated securitisation exposures that satisfy the operational requirements for external credit assessments, ANZ calculates credit risk regulatory capital based upon the ratings assigned by Standard & Poor's, Moody's Investor Services and/or Fitch Ratings as appropriate, seniority of the securitisation exposure and the tenor of the securitisation exposure.

If ERBA is not applicable, ANZ adopts the Supervisory Formula Approach (SFA) for securitisation exposures. In this case, the credit risk regulatory capital calculation takes into account the type and performance of the underlying assets of the securitisation and the credit support provided to the securitisation exposure.

In relation to securitisation of ANZ originated assets, where:

- the significant credit risk transfer requirements have been satisfied under APS 120, ANZ is not required to hold credit risk regulatory capital for the underlying assets of the securitisation, however credit risk regulatory capital is calculated for the facilities provided to the securitisation;
- in absence of significant credit risk transfer being satisfied under APS 120, ANZ holds credit risk regulatory capital for the underlying assets of the securitisation however the credit risk regulatory capital for facilities provided to the securitisation is not required to be calculated.

Chapter 7 outlines regulatory capital treatment for securitisation exposures held in ANZ's trading book. In addition, the operational requirements for the recognition of external credit assessments outlined in APS 120 also apply to these exposures.

³² 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.

³³ 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.

Accounting policies

A key consideration in determining the treatment of transactions involving ANZ assets is whether the securitisation special purpose vehicles (SPVs) should be consolidated under AASB 10: Consolidated Financial Statements. If these SPVs meet the criteria for consolidation, the assets remain on the balance sheet of ANZ's consolidated financial statements and are classified and valued in accordance with AASB 9: Financial Instruments. Currently, transfers to securitisation SPVs are treated as financing transactions in the separate financial statements of ANZBGL given the parent entity retains substantially all of the risks and rewards of assets transferred to the SPVs.

Securitisation services based on customer's generated assets include warehouse and term fund facilities which are treated as loans.

For synthetic securitisations of ANZ originated assets, any transferred credit exposure is recognised through the fair value measurement of the credit derivative established within the structure.

Full details of the principal accounting policies governing ANZ's securitisation activities are outlined in ANZ's 2022 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. Note 28 – Structured Entities and Note 29 – Transfers of Financial Assets also provides details about the nature of ANZ's securitisation activities and certain accounting policies as they specifically apply to these activities. There have been no changes to the application of accounting policies in relation to securitisation activities since the prior year.

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 2022 Annual Report.

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

Sep 22			
Traditional securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	1,094	85,858	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,094	85,858	-
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	1,094	85,858	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,094	85,858	-

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

Mar 22			
Traditional securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	1,243	83,552	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,243	83,552	-
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	1,243	83,552	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,243	83,552	-
Sep 21			
Traditional securitisations			
Underlying asset	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M
Residential mortgage	1,396	76,895	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,396	76,895	-
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	1,396	76,895	-
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	1,396	76,895	-

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

Underlying asset	Sep 22				
	ANZ originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	Losses recognised for the six month ended \$M
Residential mortgage	1,094	85,858	-	48	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	1,094	85,858	-	48	-

Underlying asset	Mar 22				
	ANZ originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	Losses recognised for the six month ended \$M
Residential mortgage	1,243	83,552	-	59	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	1,243	83,552	-	59	-

Underlying asset	Sep 21				
	ANZ originated \$M	ANZ Self Securitised \$M	Impaired \$M	Past due \$M	Losses recognised for the six month ended \$M
Residential mortgage	1,396	76,895	-	53	-
Credit cards and other personal loans	-	-	-	-	-
Auto and equipment finance	-	-	-	-	-
Commercial loans	-	-	-	-	-
Other	-	-	-	-	-
Total	1,396	76,895	-	53	-

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 ³⁴

Securitisation activity by underlying asset type	Sep 22			Recognised gain or loss on sale \$M
	Original value securitised			
	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M	
Residential mortgage	(149)	2,306	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	(149)	2,306	-	-
Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities				-
Funding facilities				1,486
Underwriting facilities				-
Lending facilities				-
Credit enhancements				-
Holdings of securities (excluding trading book)				112
Other				1
Total				1,599
Securitisation activity by underlying asset type	Mar 22			Recognised gain or loss on sale \$M
	Original value securitised			
	ANZ Originated \$M	ANZ Self Securitised \$M	ANZ Sponsored \$M	
Residential mortgage	(152)	6,657	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	(152)	6,657	-	-
Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities				-
Funding facilities				(478)
Underwriting facilities				-
Lending facilities				-
Credit enhancements				-
Holdings of securities (excluding trading book)				616
Other				1
Total				139

³⁴ 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)

Securitisation activity by underlying asset type	Sep 21			Recognised gain or loss on sale \$M
	ANZ Originated \$M	Original value securitised		
		ANZ Self Securitised \$M	ANZ Sponsored \$M	
Residential mortgage	(191)	4,742	-	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	(191)	4,742	-	-
Securitisation activity by facility provided				Notional amount \$M
Liquidity facilities				-
Funding facilities				(600)
Underwriting facilities				-
Lending facilities				-
Credit enhancements				-
Holdings of securities (excluding trading book)				204
Other				9
Total				(387)

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

Securitisation exposure type - On balance sheet	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Liquidity facilities	-	-	-
Funding facilities	9,433	7,768	7,696
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	3,352	3,240	2,624
Protection provided	-	-	-
Other	55	85	177
Total	12,840	11,093	10,497

Securitisation exposure type - Off Balance Sheet	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Liquidity facilities	12	13	15
Funding facilities	2,128	1,744	2,084
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	-	-	-
Protection provided	-	-	-
Other	-	-	-
Total	2,140	1,757	2,099

Total Securitisation exposure type	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Liquidity facilities	12	13	15
Funding facilities	11,561	9,512	9,780
Underwriting facilities	-	-	-
Lending facilities	-	-	-
Credit enhancements	-	-	-
Holdings of securities (excluding trading book)	3,352	3,240	2,624
Protection provided	-	-	-
Other	55	85	177
Total	14,980	12,850	12,596

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

Securitisation risk weights	Sep 22		Mar 22		Sep 21	
	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%	14,980	2,424	12,850	2,090	12,596	2,056
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	-	-
>75 ≤ 100%	-	-	-	-	-	-
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	14,980	2,424	12,850	2,090	12,596	2,056

Resecuritisation risk weights	Sep 22		Mar 22		Sep 21	
	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	-	-	-	-	-	-

Total Securitisation risk weights	Sep 22		Mar 22		Sep 21	
	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%	14,980	2,424	12,850	2,090	12,596	2,056
>25 ≤ 35%	-	-	-	-	-	-
>35 ≤ 50%	-	-	-	-	-	-
>50 ≤ 75%	-	-	-	-	-	-
>75 ≤ 100%	-	-	-	-	-	-
>100 ≤ 650%	-	-	-	-	-	-
1250% (Deduction)	-	-	-	-	-	-
Total	14,980	2,424	12,850	2,090	12,596	2,056

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

ANZ does not have any Regulatory credit exposures by exposure type.

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 7 – Market risk

Table 13 Market risk – Standard approach

ANZ uses the standard model approach to measure market risk capital for specific risk³⁵ (APRA does not currently permit Australian banks to use an internal model approach for this).

Table 13(b): Market risk – Standard approach ³⁶

	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
Interest rate risk	113	131	134
Equity position risk	-	-	-
Foreign exchange risk	-	-	-
Commodity risk	-	-	-
Total	113	131	134
Risk Weighted Assets equivalent	1,413	1,638	1,675

³⁵ 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.

³⁶ 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 or economic value 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 10 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 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.

Markets Risk is a specialist risk management unit independent of the business that is responsible for measuring and monitoring market risk. Markets Risk has implemented policies and procedures to keep ANZ's market risk exposures managed within the appetite and limit framework set by the Board.

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 identify 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 one and ten-day holding periods for Standard VaR, and a ten-day holding period for stressed VaR. All material market risk factors and all trading portfolios are captured within the VaR model, with the exception of specific risk for interest rates, equity trading, for which 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 are designed to 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 ³⁷

Six months ended Sep 22				
99% 1 Day Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	2.0	4.0	1.1	1.8
Interest Rate	7.1	10.1	5.0	7.6
Credit	2.3	3.0	1.6	2.6
Commodity	2.3	4.9	1.4	4.3
Equity	-	-	-	-

Six months ended Mar 22				
99% 1 Day Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	2.9	4.8	1.7	2.5
Interest Rate	11.8	23.4	5.5	6.3
Credit	7.5	11.8	2.3	2.3
Commodity	3.5	7.0	2.3	3.0
Equity	-	-	-	-

Six months ended Sep 21				
99% 1 Day Value at Risk (VaR)	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	3.1	5.5	1.3	3.8
Interest Rate	7.5	12.9	4.6	9.6
Credit	13.1	21.8	5.3	6.3
Commodity	3.1	5.0	2.0	3.1
Equity	-	-	-	-

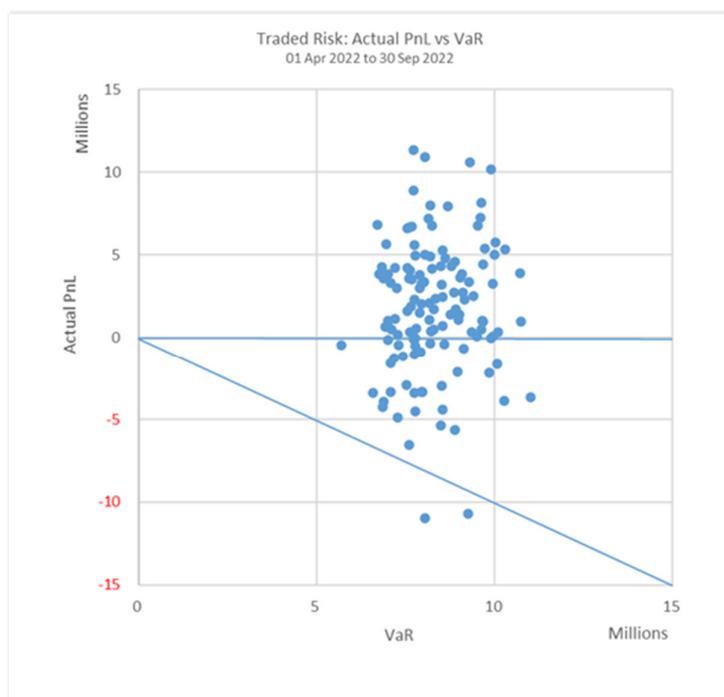
Six months ended Sep 22				
99% 10 Day Stressed VaR	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	25.1	62.0	11.7	34.2
Interest Rate	67.2	127.5	35.5	86.8
Credit	18.7	26.1	11.4	13.8
Commodity	22.3	35.9	15.5	27.3
Equity	-	-	-	-

Six months ended Mar 22				
99% 10 Day Stressed VaR	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	28.5	65.5	10.8	26.2
Interest Rate	63.9	158.6	32.6	42.1
Credit	33.7	45.5	16.7	17.6
Commodity	35.0	85.0	19.6	27.5
Equity	-	-	-	-

Six months ended Sep 21				
99% 10 Day Stressed VaR	Mean \$M	Maximum \$M	Minimum \$M	Period end \$M
Foreign Exchange	29.5	55.8	14.3	31.0
Interest Rate	48.8	88.2	27.1	74.1
Credit	47.1	65.9	26.6	30.0
Commodity	31.5	38.8	24.5	25.2
Equity	-	-	-	-

³⁷ 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 the result of daily VaR and stress testing results to senior management in Market Risk and the Markets business. Market Risk will escalate 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.

As highlighted in the chart above, when using actual profit and loss data, back-testing exceptions for the Trading Book have been as expected over the past year. Given the extreme market volatility, there have been a larger number of exceptions when using hypothetical profit and loss data and this has required the addition of a plus factor for market risk capital purposes.

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 exposures are transferred to the trading book centrally managed 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 2022, ANZ's investment in ANZ Bank New Zealand Limited is the main source of the structural foreign exchange exposure.

Chapter 8 – Operational risk

Table 15 Operational risk

Definition of operational risk

Operational Risk is the 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, but excludes strategic risk. At ANZ, Operational Risk is managed in close partnership with compliance risk, which 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.

ANZ's I.AM (Identify, Act, Monitor) - Compliance and Operational Risk Framework (I.AM Framework), taking into consideration the internal and external environment in which ANZ operates at any point in time, allows for targeted focus on particular areas of operational risk. Currently, ANZ has identified Compliance Risk, Conduct Risk, Financial Crime Risk and Technology Risk as separate Key Material Risks, which are managed in accordance with the I.AM Framework

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. For the purposes of RBNZ capital adequacy, ANZ Bank New Zealand Ltd uses Reserve Bank of New Zealand standardised approach to Operational Risk capital calculation.

Operational risk governance and structure

The primary responsibilities for operational risk are vested by the Compliance and Operational Risk Principles, in the Board Risk Committee and Operational Risk Executive Committee. Each of the duties of these committees stated in *Chapter 2 – Risk appetite and governance*, applies to their responsibilities for Compliance and Operational Risk.

Risk management framework

ANZ operates the three lines of defence model for the management of Operational Risk. Each line of defence has clearly 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 I.AM Framework continues to meet organisational needs and regulatory requirements.

First line

The Business has first line of defence responsibility for managing Operational Risk including obligations to:

- identification, measurement and management of key risks and the related control environment across the business.

Second line

Compliance and Operational Risk functions (Divisional/Functional and Group) form the second line of defence.

Divisional/Functional Compliance and Operational Risk is accountable for:

- undertaking appropriate oversight and independent review & challenge and assurance over business activities including consistent implementation of the I.AM Framework, across the division/function.

Group Compliance and Operational Risk is accountable for:

- developing and maintaining the I.AM Framework and relevant policies and procedures;
- providing subject matter expertise on the I.AM Framework and relevant policies and procedures to enable consistent implementation; 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 the adequacy and 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 I.AM Framework.

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

Operational Risk Framework

ANZ's I.AM Framework is delivered through:

- Level 1 Compliance and Operational Risk Principles (the Principles) – approved by the Board Risk Committee, outlines the core standards, outlining 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 Principles for governing the overall measurement and management of Compliance and Operational Risk across ANZ.
- Level 2A Operational Risk Procedures (the Requirements, and Lifecycle, Roles and Responsibilities) – owned by Group Compliance and Operational Risk, provide the procedures to support the consistent application of Level 1 Principles across ANZ. The procedures are further augmented by tools, templates, systems and on-going training.

Operational risk mitigation

In line with industry practice, ANZ obtains insurance to cover those Operational Risks where cost-effective premiums can be obtained. In conducting their business, Business Units are advised to act as if uninsured and not to use insurance as a guaranteed mitigant for operational risk.

ANZ 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 I.AM Framework includes a global governance risk and compliance ('GRC') platform within ANZ that operates as the source of truth and provides greater transparency of Risk, Controls, Obligations and Events information across ANZ. This information is used for internal and external reporting including operational risk capital calculation and regulatory reporting.

The Operational Risk Executive Committee ('OREC') monitors and oversees at an enterprise level the state of Compliance and Operational Risk management and instigate any necessary corrective actions. Divisional and Business Unit level Risk Management committees also operate to ensure matters of relevance are escalated to OREC accordingly.

Operational risk management

The objective of ANZ's approach to Operational and Compliance Risk is to ensure that risks are identified, assessed, measured, evaluated, treated, monitored and reported in a structured environment with appropriate governance oversight. Further, that a control environment is in place to not only manage those risks, but ensure traceability through to our obligation. ANZ managed Compliance and Operational Risk in the best interests of its customers and the community and to meet the expectations of the regulators.

The Compliance and Operational Risk Principles (Level 1) establish the fundamental requirements at ANZ which inform policies, processes, and procedure development of ANZ's management of Compliance and Operational Risk, through timely and appropriate identification, action and monitoring. It is part of ANZ's Risk Management Framework and ANZ's I.AM (Identify, Act, Monitor) Framework (Level 2). 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 those risks that if materialised, would adversely affect ANZ.

ANZ's approach to Operational Risk Capital Adequacy

Group Compliance and Operational Risk is responsible for the measurement and allocation of Operational Risk Regulatory Capital.

Operational Risk Capital is held to protect depositors and shareholders from rare and severe unexpected losses. ANZ maintains and calculates Operational Risk 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 90 member banks;
- Operational risk scenario - potential loss from large, unexpected but plausible risk events 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.

ANZ is currently in the process of transitioning to the Standard Methodology Approach ('SMA') for calculating Operational Risk Capital with implementation targeted for December 2022 quarter reporting.

Chapter 9 – 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 joint ventures 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 and those investments managed by a dedicated investment manager (1835i). 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 where appropriate, either Group Strategy or a dedicated investment oversight group to ensure that it is within expectations.
- 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 or not.

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 profit or loss of associates is included in the consolidated income statement. The associate investments are recognised at cost plus ANZ's share of post-acquisition increase or decrease in net assets less accumulated impairment. Interests in associates are reviewed semi-annually for impairment. If an indicator of impairment is identified, their recoverable amount is determined being the higher of their fair value less costs of disposal (market value for listed entities) or a discounted cash flow methodology to assess value in-use (VIU). If the recoverable amount is less than the carrying value of the investment, an impairment is recorded. As at 30 September 2022 the carrying value of the Group's investment in AMMB Holdings Berhad (Ambank) and PT Bank Pan Indonesia (PT Panin) were supported by their market value.

Equity instruments held at Fair Value

Where ANZ does not have significant influence over the investee, the instrument is categorised as an investment security and classified as fair value through profit and loss, with changes in fair value recognised in the income statement, unless designated irrevocably on acquisition as fair value through other comprehensive income (FVOCI). If this election is made, gains or losses are recorded in other comprehensive income and are not reclassified from other comprehensive income to profit or loss on disposal of the investment. However, gains or losses may be reclassified within equity.

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

Equity investments	Sep 22 \$M	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	2,970	3,807
Value of unlisted (privately held) equities	619	619
Total	3,589	4,426

Equity investments	Mar 22 \$M	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	2,898	2,481
Value of unlisted (privately held) equities	565	565
Total	3,463	3,046

Equity investments	Sep 21 \$M	
	Balance sheet value	Fair value
Value of listed (publicly traded) equities	2,941	2,443
Value of unlisted (privately held) equities	399	399
Total	3,340	2,842

Table 16(d) and 16(e): Equities – gains (losses)³⁸

	Half Year Sep-22 \$M	Half Year Mar 22 \$M	Half Year Sep 21 \$M
Realised gains (losses) on equity investments			
Cumulative realised gains (losses) from disposals and liquidations in the reporting period	-	-	8
Cumulative realised losses from impairment and writedowns in the reporting period	-	-	(2)
	-	-	6

	Half Year Sep-22	Half Year Mar-22	Half Year Sep-21
Unrealised gains (losses) on equity investments			
Total unrealised gains (losses)	(95)	(18)	(26)
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	(95)	(18)	(26)

Table 16(f): Equities Risk Weighted Assets

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

³⁸ Table 16(d) and Table 16 (e) are reported on an after-tax basis

Chapter 10 – 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 earnings or economic value. The risk generally arises from:

- **Repricing and yield curve risk** - the risk to earnings or economic 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 market 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% 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 extraordinary forward looking and repricing term assumptions 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.

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 make up the capital requirement and are calculated as the difference between the book value and the current economic value of banking book items accounted for on an actual basis.

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 shock by currency of ANZ's banking book exposures.

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

Standard Shock Scenario Stress Testing: Interest rate shock applied	Change in Economic Value		
	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
AUD			
200 basis point parallel increase	(729)	(717)	(1,317)
200 basis point parallel decrease	751	751	1,419
NZD			
200 basis point parallel increase	(140)	(172)	(306)
200 basis point parallel decrease	124	154	294
USD			
200 basis point parallel increase	109	(53)	(10)
200 basis point parallel decrease	(116)	54	18
Other			
200 basis point parallel increase	(70)	(54)	(118)
200 basis point parallel decrease	85	74	130
IRRBB regulatory capital	3,045	2,672	1,443
IRRBB regulatory RWA	38,063	33,402	18,036

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 and potential future scenarios, including behavioural characteristics as well as stresses to assumptions made about the repricing term of exposures. The rate move scenarios include changes over the stressed periods and the worst theoretical losses over the selected period are reported. Stresses of the repricing term assumptions investigate scenarios where actual repricing terms are significantly different to those modelled.

Chapter 11 – 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: Capital Adequacy. APRA requires ADIs authorised to use the internal ratings based approach to credit risk to maintain a minimum leverage ratio of 3.5% from January 2023.

At 30 September 2022, the Group's Leverage Ratio of 5.4% was above the 3.5% minimum requirement. Table 18 below shows the Group's Leverage Ratio calculation as at 30 September 2022 and Table 19 summarises the reconciliation of accounting assets and leverage ratio exposure measure at 30 September 2022.

Table 18 Leverage Ratio

	Sep 22 \$M	Mar 22 \$M	Sep 21 \$M
On-balance sheet exposures			
1 On-balance sheet items (excluding derivatives and SFTs, but including collateral)	966,226	941,228	914,059
2 (Asset amounts deducted in determining Basel III Tier 1 capital)	(12,138)	(12,542)	(12,090)
3 Total on-balance sheet exposures (excluding derivatives and SFTs)	954,088	928,686	901,969
Derivative exposures			
4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	19,606	9,614	9,675
5 Add-on amounts for PFE associated with all derivatives transactions	38,739	33,845	31,879
6 Gross-up for derivatives collateral provided where deducted from the balance sheet assets pursuant to the operative accounting framework	3,058	686	2,076
7 (Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(9,714)	(7,671)	(5,875)
8 (Exempted CCP leg of client-cleared trade exposures)	-	-	-
9 Adjusted effective notional amount of written credit derivatives	10,823	3,470	143
10 (Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(10,712)	(3,470)	(129)
11 Total derivative exposures	51,800	36,474	37,769
Securities financing transaction exposures			
12 Gross SFT assets (with no recognition of netting), after adjusting for sale accounting transactions	29,502	30,768	25,943
13 (Netted amounts of cash payables and cash receivables of gross SFT assets)	(899)	(2,761)	(1,253)
14 CCR exposure for SFT assets	6,967	6,216	5,794
15 Agent transaction exposures	-	-	-
16 Total securities financing transaction exposures	35,570	34,223	30,484
Other off-balance sheet exposures			
17 Off-balance sheet exposure at gross notional amount	285,816	264,942	260,594
18 (Adjustments for conversion to credit equivalent amounts)	(158,963)	(147,038)	(142,746)
19 Off-balance sheet items	126,853	117,904	117,848
Capital and Total Exposures			
20 Tier 1 capital	63,558	58,001	59,473
21 Total exposures	1,168,311	1,117,287	1,088,070
Leverage ratio			
22 Basel III leverage ratio	5.4%	5.2%	5.5%

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

		Sep 22	Mar 22	Sep 21
		\$M	\$M	\$M
1	Total consolidated assets as per published financial statements	1,085,729	1,017,361	978,857
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation.	173	(127)	(120)
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.	(38,375)	(8,764)	(967)
5	Adjustment for SFTs (i.e. repos and similar secured lending)	6,069	3,455	4,542
6	Adjustment for off-balance sheet exposures (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	126,853	117,904	117,848
7	Other adjustments	(12,138)	(12,542)	(12,090)
	Leverage ratio exposure	1,168,311	1,117,287	1,088,070

Table 20 Liquidity Coverage Ratio disclosure template

		Sep 22		Jun 22
	Total Unweighted Value \$M	Total Weighted Value \$M	Total Unweighted Value \$M	Total Weighted Value \$M
Liquid assets, of which:				
1	High-quality liquid assets (HQLA)		241,616	231,524
2	Alternative liquid assets (ALA)		4,458	6,214
3	Reserve Bank of New Zealand (RBNZ) securities		543	15
Cash outflows				
4	Retail deposits and deposits from small business customers	270,102	25,078	285,499
5	of which: stable deposits	121,616	6,081	117,447
6	of which: less stable deposits	148,486	18,997	168,052
7	Unsecured wholesale funding	297,867	157,736	286,673
8	of which: operational deposits (all counterparties) and deposits in networks for cooperative banks	102,110	24,633	100,568
9	of which: non-operational deposits (all counterparties)	180,773	118,119	170,836
10	of which: unsecured debt	14,984	14,984	15,269
11	Secured wholesale funding		1,147	1,057
12	Additional requirements	178,842	57,835	179,655
13	of which: outflows related to derivatives exposures and other collateral requirements	38,093	38,093	38,433
14	of which: outflows related to loss of funding on debt products	-	-	-
15	of which: credit and liquidity facilities	140,749	19,742	141,222
16	Other contractual funding obligations	9,083	-	10,221
17	Other contingent funding obligations	109,163	6,388	97,798
18	Total cash outflows		248,184	243,678
Cash inflows				
19	Secured lending (e.g. reverse repos)	16,421	1,671	17,456
20	Inflows from fully performing exposures	28,406	19,323	31,304
21	Other cash inflows	35,617	35,617	37,643
22	Total cash inflows	80,444	56,611	86,403
23	Total liquid assets		246,617	237,753
24	Total net cash outflows		191,573	183,201
25	Liquidity Coverage Ratio (%)		128.7%	129.8%
	Number of data points used (simple average)		66	65

Liquidity Coverage Ratio (LCR)

ANZ's average LCR for the 3 months to 30 September 2022 was 128.7% with total liquid assets exceeding net outflows by an average of \$55.0 billion.

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.

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

Available Stable Funding (ASF) Item	Sep 22 Unweighted value by residual maturity				Weighted value \$M
	No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
	\$M	\$M	\$M	\$M	
1 Capital	66,227	-	-	27,313	93,540
2 of which: regulatory capital	66,227	-	-	27,313	93,540
3 of which: other capital instruments	-	-	-	-	-
4 Retail deposits and deposits from small business customers	250,691	56,009	-	-	282,552
5 of which: stable deposits	118,888	11,554	-	-	123,920
6 of which: less stable deposits	131,803	44,455	-	-	158,632
7 Wholesale funding	180,523	280,666	55,045	55,497	206,948
8 of which: operational deposits	101,140	-	-	-	50,570
9 of which: other wholesale funding	79,383	280,666	55,045	55,497	156,378
10 Liabilities with matching interdependent assets	-	-	-	-	-
11 Other liabilities	11,081	18,170	-	1,414	1,414
12 of which: NSFR derivative liabilities	-	18,170	-	-	-
13 of which: All other liabilities and equity not included in the above categories	11,081	-	-	1,414	1,414
14 Total ASF					584,454
Required Stable Funding (RSF) Item					
15a Total NSFR (HQLA)					7,644
15b ALA					2,276
15c RBNZ securities					943
16 Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17 Performing loans and securities	13,257	107,793	47,328	497,426	440,807
18 of which: Performing loans to financial institutions secured by Level 1 HQLA	-	21,573	87	-	2,201
19 of which: Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	861	28,481	11,170	22,327	33,044
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)	11,288	50,509	29,746	128,284	158,671
21 of which with a risk weight of less than or equal to 35% under APS 112	-	4	194	451	393
22 of which: Performing residential mortgages, of which:	-	6,343	6,040	343,727	242,738
23 of which with a risk weight equal to 35% under APS 112	-	5,631	5,362	297,547	202,790
24 of which: Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,108	887	285	3,088	4,153
25 Assets with matching interdependent liabilities	-	-	-	-	-
26 Other assets:	21,647	51,420	1,422	2,842	30,895
27 of which: Physical traded commodities, including gold	1,808	-	-	-	1,537
28 of which: Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	-	3,282	-	-	2,790
29 of which: NSFR derivative assets	-	19,606	-	-	1,436
30 of which: NSFR derivative liabilities before deduction of variation margin posted	-	28,426	-	-	5,685
31 of which: All other assets not included in the above categories	19,839	107	1,422	2,842	19,447
32 Off-balance sheet items	-	-	-	203,075	8,300
33 Total RSF					490,865
34 Net Stable Funding Ratio (%)					119.07%

ANZ's NSFR as at 30 September 2022 was 119.1%, up 0.2% in the quarter since June 2022.

The main sources of Available Stable Funding (ASF) at September 2022 were deposits from Retail and SME customers, at 48%, with other wholesale funding (including Term Funding Facilities) at 27% and capital at 16% of the total ASF.

The majority of ANZ's Required Stable Funding (RSF) at September 2022 was driven by mortgages at 49% and other lending to non-FI customers at 32% of the total RSF.

Table 21 NSFR disclosure template (continued)

	Available Stable Funding (ASF) Item	Jun 22 Unweighted value by residual maturity				Weighted value \$M
		No maturity	< 6 months	6 months to < 1yr	≥ 1yr	
		\$M	\$M	\$M	\$M	
1	Capital	61,224	-	-	23,004	84,227
2	of which: regulatory capital	61,224	-	-	23,004	84,227
3	of which: other capital instruments	-	-	-	-	-
4	Retail deposits and deposits from small business customers	254,500	52,150	-	-	282,433
5	of which: stable deposits	118,795	10,181	-	-	122,527
6	of which: less stable deposits	135,705	41,969	-	-	159,906
7	Wholesale funding	184,825	279,107	37,925	68,840	210,807
8	of which: operational deposits	103,506	-	-	-	51,753
9	of which: other wholesale funding	81,319	279,107	37,925	68,840	159,054
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities	21,825	13,356	-	480	480
12	of which: NSFR derivative liabilities	-	13,356	-	-	-
13	of which: All other liabilities and equity not included in the above categories	21,825	-	-	480	480
14	Total ASF					577,947
	Required Stable Funding (RSF) Item					
15(a)	Total NSFR (HQLA)					7,356
15(b)	ALA					2,544
15(c)	RBNZ securities					986
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	13,293	114,738	43,814	490,282	436,161
18	of which: Performing loans to financial institutions secured by Level 1 HQLA	-	28,095	101	-	2,860
19	of which: Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	602	26,461	8,181	22,823	31,485
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)	11,292	51,416	28,278	123,761	154,532
21	of which with a risk weight of less than or equal to 35% under APS 112	-	34	169	464	403
22	of which: Performing residential mortgages	-	6,827	6,597	339,362	241,110
23	of which with a risk weight equal to 35% under APS 112	-	6,050	5,841	293,579	201,428
24	of which: Securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,399	1,939	657	4,336	6,174
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets:	29,253	37,286	1,510	2,894	30,631
27	of which: Physical traded commodities, including gold	3,620	-	-	-	3,077
28	of which: Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	-	2,341	-	-	1,990
29	of which: NSFR derivative assets	-	13,418	-	-	62
30	of which: NSFR derivative liabilities before deduction of variation margin posted	-	21,193	-	-	4,239
31	of which: All other assets not included in the above categories	25,633	333	1,510	2,894	21,263
32	Off-balance sheet items	-	-	-	199,694	8,395
33	Total RSF					486,073
34	Net Stable Funding Ratio (%)					118.9%

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.
Collectively Assessed Provision for Credit Impairment	Collectively assessed provisions for credit impairment represent the Expected Credit Loss (ECL) calculated in accordance with AASB 9 Financial Instruments (AASB 9). These incorporate forward looking information and do not require an actual loss event to have occurred for an impairment provision to be 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.
Individually Assessed Provisions for Credit Impairment	Individually assessed provisions for credit impairment are calculated in accordance with AASB 9 Financial Instruments (AASB 9). They 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	<p>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:</p> <p>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.</p> <p>Non-traded market risk (or balance sheet risk) - comprises interest rate risk in the banking book and the risk to the AUD denominated value of ANZ's capital and earnings due to foreign exchange rate movements.</p>
Operational risk	The risk of loss resulting from inadequate or failed internal 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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