Basel III Pillar 3

Capital Adequacy and Risk Disclosures as at 30 June 2021



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The release of this announcement was authorised by the Board.

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Introduction



Introduction

The Commonwealth Bank of Australia (CBA) is an Authorised Deposit-taking Institution (ADI) regulated by the Australian Prudential Regulation Authority (APRA) under the authority of the Banking Act 1959.

This document is prepared for CBA and its subsidiaries (the Group) in accordance with a Board approved policy and APRA Prudential Standard (APS) 330 *Public Disclosure* (APS 330). It presents information on the Group's capital adequacy and Risk Weighted Assets (RWA) calculations for credit risk including securitisation, traded market risk, Interest Rate Risk in the Banking Book (IRRBB) and operational risk.

This document also presents information on the Group's leverage and liquidity ratios and Countercyclical Capital Buffer (CCyB) in accordance with prescribed methodologies.

The Group is required to report its assessment of capital adequacy on a Level 2 basis. Level 2 is defined as the Consolidated Banking Group excluding the insurance and funds management businesses and certain entities through which securitisation of Group assets is conducted.

The Group is predominantly accredited to use the Advanced Internal Ratings-based approach (AIRB) for credit risk and the Advanced Measurement Approach (AMA) for operational risk. The Group is also required to assess its traded market risk and IRRBB requirement under Pillar 1 of the Basel capital framework.

The Group engaged the external auditor (PwC) to perform assurance procedures over the Pillar 3 report in accordance with the Australian Standard on Assurance Engagements ASAE 3000 Assurance Engagements Other Than Audits or Reviews of Historical Financial Information. The Group has completed a number of activities in the year to enhance internal controls related to the calculation of RWA, and PwC's recommendations for further enhancement have been incorporated into the Group's ongoing improvement plans.

This Pillar 3 document is available on the Group's corporate website: Commbank.com.au/regulatorydisclosures.

The Group in Review

	30 Jun 21	31 Dec 20	30 Jun 20
Summary Group Capital Adequacy Ratios (Level 2)	%	%	%
Common Equity Tier 1	13. 1	12. 6	11.6
Additional Tier 1	2.6	2. 4	2. 3
Tier 1	15. 7	15. 0	13. 9
Tier 2	4. 1	3. 9	3. 6
Total Capital (APRA)	19. 8	18. 9	17. 5
Common Equity Tier 1 (Internationally Comparable) ¹	19. 4	18. 7	17.4

Analysis aligns with the 13 July 2015 APRA study titled "International capital comparison study".

Group Capital Ratios

As at 30 June 2021, the Group's Basel III Common Equity Tier 1 (CET1), Tier 1 and Total Capital ratios as measured on an APRA basis were 13.1%, 15.7% and 19.8% respectively. The Basel III CET1 ratio was 19.4% on an internationally comparable basis.

Leverage Ratio

The Group's leverage ratio, which is defined as Tier 1 Capital as a percentage of total exposures, was 6.0% as at 30 June 2021 on an APRA basis and 6.9% on an internationally comparable basis.

Liquidity Coverage Ratio

The Liquidity Coverage Ratio (LCR) requires Australian ADIs to hold sufficient liquid assets to meet 30 day net cash outflows projected under an APRA prescribed stress scenario. The Group maintained an average LCR of 129% in the June 2021 quarter.

On 19 March 2020, the Reserve Bank of Australia (RBA) announced the establishment of a three year Term Funding Facility (TFF) offered to eligible ADIs to support lending to Australian businesses. As at 30 June 2021, the Group had fully drawn its total available TFF allocation of \$51.1 billion, comprised of \$19.1 billion of Initial Allowance, \$13.0 billion of Supplementary Allowance and \$19.0 billion of Additional Allowance.

Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR) is the ratio of the amount of Available Stable Funding (ASF) to the amount of Required Stable Funding (RSF). Factors prescribed by APRA are used to determine the stable funding requirement of assets and the stability of alternative sources of funding. The Group's NSFR was 129% at 30 June 2021.

Policy Framework

The Group regularly benchmarks and aligns its policy framework against existing prudential and regulatory standards. Potential developments in Australian and international standards, and global best practice are also considered.

The Group continues to monitor and take actions to enhance and strengthen its risk culture. The Group has a formal Risk Management Approach (RMA) that creates clear obligations and transparency over risk management and strategy decisions. A risk accountability model (Three Lines of Accountability) requires business management to operate responsibly by taking well understood and managed risks that are appropriately and adequately priced.

The application is reflected in the Group's overall asset quality and capital position. In particular, the Group remains in a small group of banking institutions with an AA-/Aa3 credit rating. To maintain this strength, the Group continues to invest in its risk systems and management processes.

The Group's capital forecasting process and capital plans are in place to ensure a sufficient capital buffer above minimum levels is maintained at all times. The Group manages its capital by regularly and simultaneously considering regulatory capital requirements, rating agency views on the capital required to maintain the Group's credit rating, the market response to capital levels and stress testing. These views then cascade into consideration of the target capital level. The Group's management of its capital adequacy is supported by robust capital management processes applied in each Business Unit (BU). The results are integrated into the Group's risk-adjusted performance and pricing processes.

Capital Framework

Regulatory Capital Framework Overview

The Group is required to report the calculation of RWA and the assessment of capital adequacy on a Level 2 basis (see section 3, page 4 for further details). APRA has set minimum regulatory capital requirements for ADIs. These requirements define what is acceptable as capital and provide for methods of measuring the risks incurred by banks so that the "need" for capital can be compared to the amount of capital "at hand". The Basel Regulatory Capital Framework is based on "three pillars" as summarised below.

Basel Capital Framework

Pillar 2

Supervisory Review Process

Pillar 1

Minimum Capital Requirements

Firm-wide risk oversight

Pillar 3 Market Discipline

Credit Risk Interest Rate Risk in the Banking Book 1 Traded Market Risk **Operational Risk**

Internal Capital Adequacy Assessment Process considers: additional risks, capital buffers and targets and risk concentrations Regular disclosure to the market covering both qualitative and quantitative aspects of capital adequacy and risk disclosures

Applicable to Pillar 1 in Australia only (Pillar 2 elsewhere).

Pillar 1 – Minimum Capital Requirements

Basel II

In December 2007, APRA granted advanced Basel II accreditation to the Group to calculate RWA and the assessment of capital adequacy in accordance with Pillar 1.

Adoption of advanced methodologies prescribed under Basel II was effective from 1 January 2008.

As a result of receiving advanced Basel II accreditation, the Group predominantly uses the AIRB approach for credit risk and the AMA for operational risk in the calculation of RWA. Portfolios that attract the Standardised approach are discussed in section 8.3 "Portfolios Subject to Standardised and Supervisory Risk Weights" (page 37).

The Group incorporates measured IRRBB in its regulatory capital calculations with effect from 1 July 2008, as required by APRA for Australian ADIs (this is not a Pillar 1 requirement in other jurisdictions).

The Basel II enhancements announced in July 2009, relating to securitisation and market risk, were implemented on 1 January 2012. These enhancements are commonly referred to as Basel 2.5.

Basel III

APRA has implemented a set of capital, liquidity and funding reforms based on the Basel Committee on Banking Supervision (BCBS) "Basel III" framework. The objectives of the reforms are to increase the quality, consistency and transparency of capital, to enhance the risk coverage framework, and to reduce systemic and pro-cyclical risk.

The APRA prudential standards require a minimum CET1 ratio of 4.5% effective from 1 January 2013. An additional CET1 capital conservation buffer of 3.5%, inclusive of a Domestic Systemically Important Bank (D-SIB) requirement of 1% and a CCyB of 0% (effective from 1 January 2016), brings the CET1 requirement to at least 8%.

In December 2020, APRA announced that the CCyB for Australian exposures will remain at 0%. The Group has limited exposures to those offshore jurisdictions in which a CCyB in excess of 0% has been imposed. Refer to Appendix 13.4 for further details.

Pillar 2 – Supervisory Review Process

ICAAP

Under Pillar 2, APRA requires each bank to have in place and report confidentially its Internal Capital Adequacy Assessment Process (ICAAP). The Group updates the ICAAP annually. The ICAAP document provides details on:

- The Group's capital position and regulatory minima;
- A three year capital forecast;
- Stress testing and contingent capital planning;
- Key capital management policies; and
- Details on key processes and supporting frameworks.

Pillar 3 - Market Discipline

Disclosures

To enhance transparency in Australian financial markets, APRA established a set of requirements within APS 330 for the public disclosure of information on the risk management practices and capital adequacy of ADIs (pursuant to Pillar 3).

Pillar 3 qualitative and quantitative disclosures are made in detail in this document as part of the Group's 30 June 2021 financial year reporting. Detailed quantitative information is released at the Group's December half year with summarised quantitative information released for March and September quarters. These reports are published on the Group's corporate website, together with the Group's APS 330 public disclosure of capital instruments and remuneration: Commbank.com.au/regulatorydisclosures.

Scope of Application

Scope of Application

This document has been prepared in accordance with Board approved policy and reporting requirements set out in APS 330. APRA adopts a tiered approach to the measurement of an ADI's capital adequacy:

- Level 1: the Parent Bank (CBA) and offshore branches (the Bank) and APRA approved Extended Licensed Entities (ELE);
- Level 2: the Consolidated Banking Group excluding the insurance and funds management businesses and certain entities through which securitisation of Group assets is conducted; and
- Level 3: the conglomerate group including the Group's insurance and funds management businesses¹ (the Group).

The Group is required to report its assessment of capital adequacy on a Level 2 basis. The head of the Level 2 Group is the Parent Bank. Additional disclosure of capital ratios relating to material ADIs within the Group together with CBA's own Level 1 capital ratios are included under Table 6g of this report (page 8).

ASB Bank Limited (ASB) operates under Advanced Basel III status and is subject to regulation by the Reserve Bank of New Zealand (RBNZ). The RBNZ applies a similar methodology to APRA in calculating regulatory capital requirements.

In December 2020, the Group:

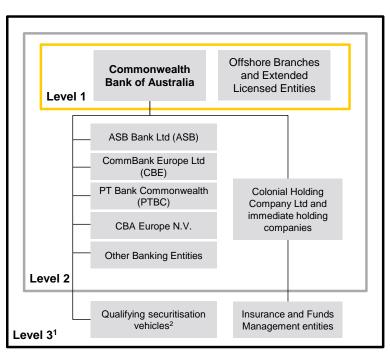
- Established a new banking entity in Amsterdam, CBA Europe N.V.; and
- Completed the divestment of its 37.5% equity interest in BoCommLife Insurance Company (BoCommLife).

CBA Europe N.V., CommBank Europe Ltd (CBE) and PT Bank Commonwealth (PTBC) apply the Standardised Basel III methodology in calculating regulatory capital requirements.

Restrictions on transfer of funds or regulatory capital within the Group

The transfer of regulatory capital and funding within the Group is subject to restrictions imposed by local regulatory requirements. In particular, APS 222 Associations with Related Entities establishes prudential limits on the level of exposure that the Bank may have to a related entity.

The Bank and all of the subsidiaries of the Group are adequately capitalised. With the exception of RBNZ imposed restrictions on the payment of dividends (refer to page 6), there are no restrictions or other major impediments on the transfer of funds within the Group. There are no capital deficiencies in non-consolidated (regulatory) subsidiaries in the Group.



APS 330 reporting structure

A detailed list of non-consolidated entities is provided in Appendix 13.5.

2 Securitisation that meets APRA's operational requirements for regulatory capital relief under APS 120 Securitisation (APS 120).

Capital



Capital

Capital Adequacy

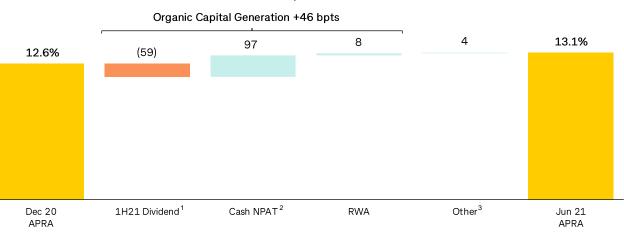
The Group actively manages its capital to balance the perspectives of various stakeholders (regulators, rating agencies and shareholders). This is achieved by optimising the mix of capital, while maintaining adequate capital ratios throughout the financial year. The Group's capital is managed within a formal framework, the ICAAP, which is an integration of risk, financial and capital management processes.

APRA advises the Group of its Prudential Capital Ratio (PCR), which represents the regulatory minimum CET1, Tier 1 and Total Capital ratios that the Group is required to maintain at all times. In order to ensure there is no breach of these minimum levels, APRA expects the Group to maintain a prudent buffer over these prescribed minimum levels. The PCR is subject to an ongoing review by APRA and is formally reassessed on an annual basis. The Group is required to inform APRA immediately of any breach or potential breach of its PCR, including details of remedial action taken or planned to be taken.

The Group has a range of instruments and methodologies available to effectively manage capital. These include share issues and buybacks, dividend and Dividend Reinvestment Plan (DRP) policies, hybrid capital raising and dated and undated subordinated debt issues. All major capital related initiatives require approval by the Board.

The Group's capital position is monitored on a continuous basis and reported monthly to the Executive Leadership Team of the Group and at regular intervals throughout the year to the Board Risk and Compliance Committee. Capital forecasts are updated on a continuous basis and a detailed capital plan is presented to the Board annually.

> Capital - CET1 (APRA) +50bpts in 2H21



The 2021 interim dividend included the on-market purchase of \$418 million of shares (CET1 impact 9 basis points) in respect of the DRP. Excludes net equity accounted profits from associates as they are capital neutral with offsetting increases in regulatory capital deductions.

Includes receipt of the final proceeds from the sale of CommInsure Life (CET1 impact of 2 basis points).

Capital Position

The Group's CET1 ratio (APRA) was 13.1% as at 30 June 2021, an increase of 50 basis points from 31 December 2020 and an increase of 150 basis points from 30 June 2020. The CET1 ratio was above APRA's 'unquestionably strong' benchmark of 10.5% and consistently well in excess of regulatory minimum capital adequacy requirements at all times throughout the financial year ended 30 June 2021.

Key drivers of the change in CET1 for the 6 months ended 30 June 2021 were capital generated from earnings (+97 basis points, excluding net equity accounted profits from associates), lower total RWA (+8 basis points) and other regulatory adjustments (+4 basis points), partly offset by the 2021 interim dividend (-59 basis points) in which the DRP was satisfied in full by the on-market purchase of shares.

Further details on movements in RWA are detailed on pages 11-12.

Internationally Comparable Capital Position

The Group's CET1 ratio as measured on an internationally comparable basis was 19.4% as at 30 June 2021, placing it amongst the top quartile of international peer banks.

Capital Initiatives

The following significant capital initiatives were undertaken during the year ended 30 June 2021:

Common Equity Tier 1 Capital

- The DRP in respect of the 2020 final dividend was satisfied by the issuance of \$264 million of ordinary shares, representing a participation rate of 15.2%.
- The DRP in respect of the 2021 interim dividend was satisfied in full by the on-market purchase of shares. The participation rate for the interim DRP was 15.7%.

Additional Tier 1 Capital

In April 2021, the Group issued \$1,180 million of CommBank PERLS XIII Capital Notes (PERLS XIII) that are Basel III compliant Additional Tier 1 capital.

Tier 2 Capital

The Group issued the following Basel III compliant subordinated notes:

- AUD205 million and AUD200 million in August 2020;
- AUD1,400 million in September 2020;
- AUD270 million in December 2020; and
 - USD1,250 million and USD1,500 million in March 2021.

Capital Initiatives (continued)

The Group redeemed the following Basel III compliant subordinated notes:

- Partial redemption of EUR660 million and USD653 million from existing EUR1,250 million and USD1,250 million subordinated notes in March 2021; and
- AUD750 million in June 2021.

Unquestionably Strong Capital Ratios

In July 2017, APRA released an information paper establishing the quantum of additional capital required for the Australian banking sector to have capital ratios that are unquestionably strong.

Under the existing capital framework, APRA's expectation is that the Australian major banks will operate for the majority of the year with a CET1 ratio of 10.5% or more. As at 30 June 2021, the Group's CET1 ratio was 13.1%, and was above the 10.5% benchmark for the entire 2021 financial year.

Subsequently, APRA issued proposed revisions to the overall design of the capital framework, scheduled to be implemented from 1 January 2023. These revisions will result in changes to the calculation of RWA and will therefore result in changes to the presentation of bank capital ratios. APRA expects that capital ratios will increase, as the amount of RWA will likely fall. APRA further reiterated that it is targeting a capital outcome in dollar terms that remains consistent with the 'unquestionably strong' capital benchmark.

Further detail on the proposed APRA reforms is provided below.

Regulator COVID-19 announcements

Capital Announcements

On 19 March 2020, APRA announced temporary changes to its expectations regarding bank capital ratios and advised that, provided banks are able to meet their minimum capital requirements, the capital buffers built up over recent years to meet the 10.5% 'unquestionably strong' benchmark CET1 capital ratio can be utilised to facilitate ongoing lending to the economy during the period of disruption caused by COVID-19.

In July 2020, APRA issued guidance requiring banks to preserve capital through retaining at least half of their earnings during the period of disruption caused by COVID-19. On 15 December 2020, APRA announced that this guidance will no longer apply from calendar year 2021. Nevertheless, in determining the appropriate level of dividends, APRA expects banks to moderate dividend payout ratios to ensure they are sustainable, taking into account the outlook for profitability, capital and the broader environment.

In April 2020, the RBNZ also issued guidance restricting the distribution of dividends by banks in New Zealand due to COVID-19. On 31 March 2021, the RBNZ announced that this guidance has been eased, allowing banks to pay up to a maximum of 50% of their earnings as dividends. This restriction will remain in place until 1 July 2022, at which point, the RBNZ has stated that it intends to normalise the dividend settings by removing the restrictions entirely, subject to no significant worsening in economic conditions. Dividends from the Bank's New Zealand subsidiary, ASB, only affect the Group's Level 1 CET1 capital ratio was 13.3%, well above APRA's 'unquestionably strong' benchmark, and as such, the Group is well placed to absorb the restriction of dividends.

COVID-19 Customer Support Measures

The Group continues to extend a number of support measures for customers impacted by COVID-19, which includes loan repayment deferral arrangements and the origination of loans under the Government's Small and Medium Enterprises (SME) Guarantee Scheme and SME Recovery Loan Scheme.

The Group received guidance from APRA and the RBNZ on the regulatory approach in relation to the implementation of the COVID-19 customer support measures.

- APRA temporary capital relief allowed ADIs to 'stop the clock' on arrears for deferred loans and provide additional relief for restructured loans, to facilitate ADIs in transitioning impacted borrowers to a regular repayment schedule.
- The RBNZ provided similar concessions for repayment deferrals granted in response to COVID-19 up to 31 March 2021.

The Group's original temporary loan deferral programs concluded in March 2021, with the vast majority of customers returning to regular repayments on their loans. The Group has extended new support measures in July 2021 to assist customers further impacted by COVID-19, including loan repayment deferral arrangements, fee waivers and refunds. In response, APRA is providing regulatory relief to assist ADIs in supporting their customers through this period. For eligible borrowers, ADIs will not need to treat the period of deferral as a period of arrears or a loan restructuring. This will apply to loans that are granted a repayment deferral of up to three months before the end of August 2021.

The SME Guarantee Scheme and SME Recovery Loan Scheme were established by the Commonwealth Government to support economic recovery and provide continued assistance to businesses and may be regarded as eligible guarantees by the government for risk weighting purposes. ASB has participated in a similar scheme in New Zealand. The Group will continue to provision for these loans under relevant accounting standards.

Regulatory Reforms

APRA

Implementation of Basel III

From 1 January 2023, APRA will implement its revisions to the ADI capital framework, commonly known as "Basel III". The objectives of the proposed revisions are to increase the risk sensitivity within the capital framework, to enhance the ability to respond flexibly to future stress events and to improve the comparability of the Australian framework with international standards. APRA's proposed revisions include:

- Higher regulatory capital buffers, with the CCyB set at 100 basis points for all ADIs and the capital conservation buffer increasing from 250 basis points to 400 basis points for Internal Ratings-based (IRB) ADIs such as CBA;
- Implementing more risk sensitive risk weights, particularly for residential mortgage lending, by targeting higher risk segments, such as interest only and investor mortgages;
- For non-retail credit portfolios, closer alignment of risk estimates relative to overseas peers and allowing internal models to be used for commercial property exposures. The expected decrease in RWAs due to this proposal will be tempered through higher scaling factors;
- RWA for New Zealand subsidiaries to be determined under RBNZ rules at the consolidated group level; and
- Implementing a 72.5% output floor to limit the capital benefit for IRB ADIs relative to standardised ADIs.

Regulatory Reforms (continued)

Further APRA Revisions

From 1 January 2022, the APRA requirements released under the final APS 222 Associations with Related Entities will be in place. The revised standard is intended to strengthen the ability of ADIs to monitor, limit and control risk arising from transactions and other associations with related entities.

From 1 January 2022, the APRA requirements released under the final APS 220 Credit Risk Management will be in place. The revised standard is broader than the existing requirements, covering credit standards through to the ongoing monitoring and management of an ADI's credit portfolios.

In January 2022, APRA will change its existing approach on equity exposures to banking and insurance subsidiaries of ADIs under the final revised APS 111 Capital Adequacy: Measurement of Capital. The revised standard requires each individual equity exposure to be risk-weighted at 250% up to 10% of the ADI's Level 1 CET1 capital, with any excess above that threshold to be deducted from Level 1 CET1 capital. Any new or additional investments (made before 1 January 2022) which exceed the 10% threshold will be required to be deducted from Level 1 CET1 capital in the interim period.

From 1 January 2024, the Australian loss-absorbing capacity regime will be established under the existing capital framework.

For D-SIBs, including CBA, APRA will require an additional Total Capital requirement of 3% of RWA based on the existing capital framework.

In 2024, changes to APS 116 Capital Adequacy: Market Risk, also known as the Fundamental Review of the Trading Book, are expected to be implemented. APRA is yet to commence consultation on these changes.

Reserve Bank of New Zealand (RBNZ)

In June 2021, the RBNZ finalised its bank capital adequacy requirements. These requirements include the RWA of IRB banks, such as ASB Bank Limited, increasing to approximately 90% of that required under a standardised approach. In addition, for those banks deemed systemically important, including ASB, the Tier 1 capital requirement will increase to 16% of RWA, of which 13.5% must be in the form of CET1 capital. Tier 2 capital will remain in the framework, and can contribute up to 2% of the 18% minimum Total Capital ratio. Existing Additional Tier 1 and Tier 2 contingent instruments issued by New Zealand banks will no longer be eligible under RBNZ's new capital criteria and will be phased out.

These reforms will be phased in from 1 October 2021 with full implementation on 1 July 2028. Revisions to Additional Tier 1 and Tier 2 eligibility will commence on 1 July 2021.

Group Regulatory Capital Position

Summary Group Capital Adequacy Ratios (Level 2)	30 Jun 21 %	31 Dec 20 %	30 Jun 20 %
Common Equity Tier 1	13. 1	12. 6	11.6
Additional Tier 1	2.6	2. 4	2. 3
Tier 1	15. 7	15. 0	13. 9
Tier 2	4. 1	3. 9	3. 6
Total Capital (APRA)	19. 8	18. 9	17.5
Common Equity Tier 1 (Internationally Comparable) ¹	19. 4	18. 7	17.4

Analysis aligns with the 13 July 2015 APRA study titled "International capital comparison study".

Gr	roup Regulatory Capital Position	30 Jun 21 \$M	31 Dec 20 ¹ \$M	30 Jun 20 ¹ \$M
Or	dinary share capital and treasury shares ²	38,432	38,432	38,182
Re	eserves	3,249	2,287	2,668
Re	etained earnings	36,558	33,832	30,811
Co	ommon Equity Tier 1 Capital before regulatory adjustments	78,239	74,551	71,661
Co	ommon Equity Tier 1 regulatory adjustments	(19,403)	(17,476)	(19,110)
Co	ommon Equity Tier 1 Capital	58,836	57,075	52,551
Ac	dditional Tier 1 Capital	12,008	10,825	10,841
Tie	er 1 Capital	70,844	67,900	63,392
Tie	er 2 Capital	18,472	17,822	16,429
То	tal Capital	89,316	85,722	79,821
Ri	sk Weighted Assets	450,680	453,616	454,948

Comparative information has been restated to include the effect of retrospective accounting changes. For more details refer to the 2021 Annual Report Note 1.1. Inclusive of treasury shares of \$12 million (31 Dec 20: \$15 million, 30 Jun 20: \$51 million) held by the Group's eligible employee share scheme trusts. 2

Further details on the composition of the Group's capital are detailed in Appendix 13.1.

Group Regulatory Capital Position (continued)

Table 6g - Capital Ratios - Level 1 and Major Subsidiaries

Significant Group ADIs	30 Ju	n 21 %	31 Dec 20 ^{1, 2} %	30 Jun 20 ² %
CBA Level 1 CET1 Capital ratio	1	3. 3	12. 8	11. 9
CBA Level 1 Tier 1 Capital ratio	1	6. 1	15. 2	14. 4
CBA Level 1 Total Capital ratio	2	0. 3	19. 3	18. 1
ASB CET1 Capital ratio ³	1	2. 7	11.6	10. 8
ASB Tier 1 Capital ratio ³	1	4. 4	13. 2	12. 5
ASB Total Capital ratio ³	1	5. 1	13. 9	13. 2

1 Comparative information has been restated to include the effect of retrospective accounting changes. For more details refer to the 2021 Annual Report Note 1.1. 2 ASB comparatives restated due to certain specialised lending exposures that were incorrectly classified as corporate lending exposures. There is no impact on CBA's Level 2 APRA reported ratios

3 Calculated in accordance with the RBNZ Prudential Requirements.

CBA Level 1	30 Jun 21 \$M	31 Dec 20 ¹ \$M	30 Jun 20 ¹ \$M
Common Equity Tier 1 Capital	57,048	55,288	52,259
Additional Tier 1	12,008	10,825	10,841
Tier 1 Capital	69,056	66,113	63,100
Tier 2 Capital	18,165	17,488	16,084
Total Capital	87,221	83,601	79,184
Risk Weighted Assets	429,948	433,568	438,345

Comparative information has been restated to include the effect of retrospective accounting changes. For more details refer to the 2021 Annual Report Note 1.1.

ASB Banking Group ²	30 Jun 21 NZ\$M	31 Dec 20 ¹ NZ\$M	30 Jun 20 ¹ NZ\$M
Common Equity Tier 1 Capital	7,803	7,112	6,456
Additional Tier 1	1,000	1,000	1,000
Tier 1 Capital	8,803	8,112	7,456
Tier 2 Capital	432	433	433
Total Capital	9,235	8,545	7,889
Risk Weighted Assets	61,252	61,354	59,550

1 ASB comparatives restated due to certain specialised lending exposures that were incorrectly classified as corporate lending exposures. There is no impact on CBA's Level 2 APRA reported ratios. 2

Calculated in accordance with the RBNZ Prudential Requirements.

Regulatory Capital Frameworks Comparison

The APRA Basel III capital requirements are more conservative than those of the BCBS, leading to lower reported capital ratios.

In July 2015, APRA published a study on the calculation of internationally comparable capital by Australian banks entitled "International capital comparison study" (APRA study). As at 30 June 2021, the Group's internationally comparable CET1, Tier 1 and Total Capital ratios were 19.4%, 22.8% and 28.1% respectively. The basis of this analysis aligns with the APRA study. The following table provides details on the differences, as at 30 June 2021, between the APRA Basel III capital requirements and the internationally comparable capital ratios.

	APRA Study		CET1	Tier 1	Tota Capita
Item	Reference	Description of Adjustment	%	%	%
Basel III (APRA)			13. 1	15. 7	19. 8
Equity investments	Appendix 1 Items 1, 2, 4	Balances below prescribed threshold are risk weighted, compared to a 100% CET1 deduction under APRA's requirements.	0. 8	0. 7	0. 6
Capitalised expenses	Appendix 1 Item 5	Balances are risk weighted, compared to a 100% CET1 deduction under APRA's requirements.	0. 1	0. 1	0. 1
Deferred tax assets	Appendix 1 Item 3	Balances below prescribed threshold are risk weighted, compared to a 100% CET1 deduction under APRA's requirements.	0. 3	0. 3	0. 2
IRRBB RWA	3.3.2	APRA requires capital to be held for IRRBB. The BCBS does not have any capital requirement.	0. 3	0. 4	0. 5
Residential mortgages	3.3.1	Loss Given Default (LGD) of 15%, compared to the 20% LGD floor under APRA's requirements and adjustments for higher correlation factor applied by APRA for Australian residential mortgages.	2. 7	3. 1	3. 9
Other retail standardised exposures	3.3.6	Risk weighting of 75%, rather than 100% under APRA's requirements.	_	_	0. 1
Unsecured non-retail exposures	3.3.3	LGD of 45%, compared to the 60% or higher LGD under APRA's requirements.	0.4	0. 5	0.6
Non-retail undrawn commitments	3.3.4	Credit conversion factor of 75%, compared to 100% under APRA's requirements.	0. 4	0. 5	0. 6
Specialised lending	3.3.5	Use of AIRB Probability of Default (PDs) and LGDs for income producing real estate and project finance exposures, reduced by application of a scaling factor of 1.06. APRA applies higher risk weights under a supervisory slotting approach, but does not require the application of the scaling factor.	1. 2	1.4	1.6
Currency conversion	3.3.7	Increase in the A\$ equivalent concessional threshold level for small business retail and SME corporate exposures.	0. 1	0. 1	0. 2
Subtotal ¹			19. 4	22. 8	28. 2
Basel III non-compliant instruments		Removal of Basel III non-compliant Tier 1 and Tier 2 instruments that are currently subject to transitional rules.	_	_	(0. 1)
Basel III (Internationally	Comparable	- aligns with APRA study)	19.4	22. 8	28. 1

Represents ratios prior to adjustments made for non-compliant Basel III Tier 1 and Tier 2 Capital Instruments. This value is used in determining leverage ratio (internationally comparable) as determined on page 10.

The above calculations do not include the impact of a Basel I capital floor, which was introduced as a transitional measure as part of the implementation of Basel II. The Australian banks have now fully implemented the existing Basel III requirements and, therefore, it is difficult to calculate the impact of such a floor. APRA concluded in the APRA study that it is difficult to make adjustments for the floor in internationally comparable calculations at this time but the inclusion of a floor could reduce internationally comparable ratios by a material amount.

The Group's internationally comparable CET1 ratio quoted above does not take into consideration the concessional treatment advocated by the BCBS in its 3 April 2020 report "Measures to reflect the impact of COVID-19". Applying the transitional arrangements for expected credit loss accounting under AASB 9 could result in an uplift to the Group's 30 June 2021 internationally comparable CET1 ratio of up to 30 basis points.

Leverage Ratio

5 Leverage Ratio

The Group's Leverage Ratio, defined as Tier 1 Capital as a percentage of total exposures, was 6.0% at 30 June 2021 on an APRA basis. The ratio was stable across the half with capital generated from earnings and the PERLS XIII Additional Tier 1 capital issuance offset by the payment of the 1H21 dividend and an increase in exposures. The leverage ratio was 6.9% at 30 June 2021 on an internationally comparable basis.

In November 2018, APRA released draft prudential and reporting standards, including changes to the definition of exposures related to derivatives and off Balance Sheet items and advocating a minimum leverage ratio requirement of 3.5% for IRB banks, applicable from 1 January 2023.

Summary Group Leverage Ratio ¹	30 Jun 21	31 Mar 21 ²	31 Dec 20 ²	30 Sep 20 ²	30 Jun 20 ²
Tier 1 Capital (\$M)	70,844	67,481	67,900	64,401	63,392
Total Exposures (\$M) ³	1,178,061	1,118,109	1,126,562	1,106,794	1,074,564
Leverage Ratio (APRA) (%)	6. 0	6. 0	6. 0	5.8	5.9
Leverage Ratio (Internationally Comparable) (%) 4	6. 9	6. 8	6. 8	6. 6	6. 7

Refer to Appendix 13.2 for further details on the composition of the leverage ratio.

Comparative information has been restated to include the effect of retrospective accounting changes. For more details refer to the 2021 Annual Report Note 1.1. Total Exposures is the sum of on Balance Sheet exposures, derivatives, Securities Financing Transactions (SFTs), and off Balance Sheet exposures, net of any

Tier 1 regulatory deductions, as outlined in APS 110 *Capital Adequacy* (APS 110). Refer to Appendix 13.2 for the calculation of the 30 June 2021 exposures. The Tier 1 Capital included in the calculation of the internationally comparable leverage ratio aligns with the APRA study and includes Basel III non-compliant Tier 1 instruments that are currently subject to transitional rules.

Risk Weighted Assets



Risk Weighted Assets

RWA are calculated using the AIRB approach for the majority of the Group's credit risk exposures. Internal assessment and supervisory formula approaches are used, where relevant, for non-rated securitisation exposures and for rated exposures where APS 120 prohibits the Group using the ratings-based approach. The ratings-based approach is used for securitisation exposures rated by External Credit Assessment Institutions (ECAI) where APS 120 allows or requires.

Table 6b to 6f - Basel III Capital Requirements (RWA)

	Risk	Weighted Asse	ets	Change in RWA for	
	30 Jun 21	31 Dec 20	30 Jun 20	June 2021	half
Asset Category	\$M	\$M	\$M	\$M	%
Credit Risk					
Subject to AIRB approach ¹					
Corporate	66,664	69,157	69,577	(2,493)	(3. 6)
SME corporate	29,845	30,662	30,890	(817)	(2.7)
SME retail	5,935	6,583	6,665	(648)	(9.8)
SME retail secured by residential mortgage	2,947	3,087	3,360	(140)	(4. 5)
Sovereign	2,466	2,668	1,838	(202)	(7.6)
Bank	5,379	6,424	6,667	(1,045)	(16. 3)
Residential mortgage	159,758	151,950	148,294	7,808	5. 1
Qualifying revolving retail	5,466	5,816	6,697	(350)	(6.0)
Other retail	11,177	11,511	12,126	(334)	(2.9)
Total RWA subject to AIRB approach	289,637	287,858	286,114	1,779	0.6
Specialised lending	63,705	60,136	58,611	3,569	5.9
Subject to standardised approach					
Corporate	1,234	1,194	957	40	3. 4
SME corporate	805	752	742	53	7.0
SME retail	2,500	2,660	2,929	(160)	(6. 0)
Sovereign	289	286	267	3	1.0
Bank	52	150	68	(98)	(65. 3)
Residential mortgage	6,523	6,466	6,635	57	0. 9
Other retail	938	1,017	1,132	(79)	(7.8)
Other assets	8,013	8,504	10,281	(491)	(5. 8)
Total RWA subject to standardised approach	20,354	21,029	23,011	(675)	(3. 2)
Securitisation	3,106	2,981	3,015	125	4. 2
Credit valuation adjustment	4,157	4,446	3,057	(289)	(6.5)
Central counterparties	591	450	386	141	31. 3
Total RWA for credit risk exposures	381,550	376,900	374,194	4,650	1. 2
Traded market risk	8,307	11,161	12,457	(2,854)	(25. 6)
Interest rate risk in the banking book	14,619	15,561	11,085	(942)	(6. 1)
Operational risk	46,204	49,994	57,212	(3,790)	(7.6)
Total risk weighted assets	450,680	453,616	454,948	(2,936)	(0.6)

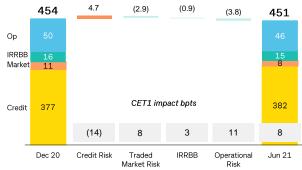
Pursuant to APRA requirements, RWA amounts derived from AIRB risk weight functions have been multiplied by a scaling factor of 1.06.

Risk Weighted Assets

Total Group RWA

Total RWA decreased by \$2.9 billion or 1% on the prior half to \$450.7 billion driven by lower operational risk RWA, traded market risk RWA and IRRBB RWA, partly offset by higher credit risk RWA.

Total Risk Weighted Assets (\$B)



Credit Risk RWA

Credit risk RWA increased by \$4.7 billion or 1% on the prior half to \$381.6 billion. Key drivers include:

- Volume growth across residential mortgages, commercial portfolios and sovereign exposures, partly offset by a reduction in unsecured retail portfolios, bank exposures, derivatives and exposures subject to standardised treatment (increase of \$9.7 billion);
- Credit quality improvement, primarily across non-retail portfolios, partly offset by an increase in residential mortgage risk weights due to a lower proportion of customers in advance and lower provision coverage on defaulted assets (decrease of \$2.2 billion);
- Foreign currency movements (increase of \$0.2 billion); and
- Data and methodology, credit risk estimates and other changes (decrease of \$3.0 billion).

Credit Risk Weighted Assets (\$B)



1 Credit quality includes portfolio mix.

2 Includes data and methodology, credit risk estimate changes and regulatory treatments.

Traded Market Risk RWA

Traded market risk RWA decreased by \$2.9 billion or 26% on the prior half to \$8.3 billion. This was mainly due to changes in risk positioning and reduced exposure to Funding Valuation Adjustments.

Interest Rate Risk in the Banking Book (IRRBB) RWA

IRRBB RWA decreased by \$0.9 billion or 6% on the prior half to \$14.6 billion. This was primarily driven by changes in interest rate risk management positions and model refinements, partly offset by a reduction in embedded gains due to higher interest rates.

Operational Risk RWA

Operational risk RWA decreased by \$3.8 billion or 8% on the prior half to \$46.2 billion. The decrease is due to improvements in the Group's operational risk profile, driven by enhanced management of conduct risk, strengthening of the control environment and operational structure simplification resulting from divestments and business model changes. As at 30 June 2021, the operational risk RWA includes a \$6.25 billion add-on required by APRA, following a 50% reduction of the add-on in the prior half.

The Group regularly reviews and updates its operational risk RWA to reflect material changes in its operational risk profile in accordance with the Operational Risk Management Framework and governance processes.

Explanation of Change in Credit Risk RWA

The composition of the movement in credit risk RWA over the prior half is shown below.

		(Credit RWA mo	ovement drivers Credit risk		
Asset Category	Change in RWA for Jun 21 half \$M	Volume changes \$M	FX changes \$M	estimates changes and regulatory treatments \$M	Data and methodology changes \$M	Change in credit quality ¹ \$M
AIRB corporate including SME and specialised lending	(529)	4,084	312	(1,961)	(683)	(2,281)
AIRB bank	(1,045)	(519)	37	(233)	75	(405)
AIRB sovereign	(202)	893	(18)	(462)	(8)	(607)
AIRB consumer retail	7,124	5,671	(141)	168	(189)	1,615
Standardised ²	(823)	(684)	36	175	58	(408)
Securitisation exposures	125	232	-	10	_	(117)
Total credit RWA movement	4,650	9,677	226	(2,303)	(747)	(2,203)

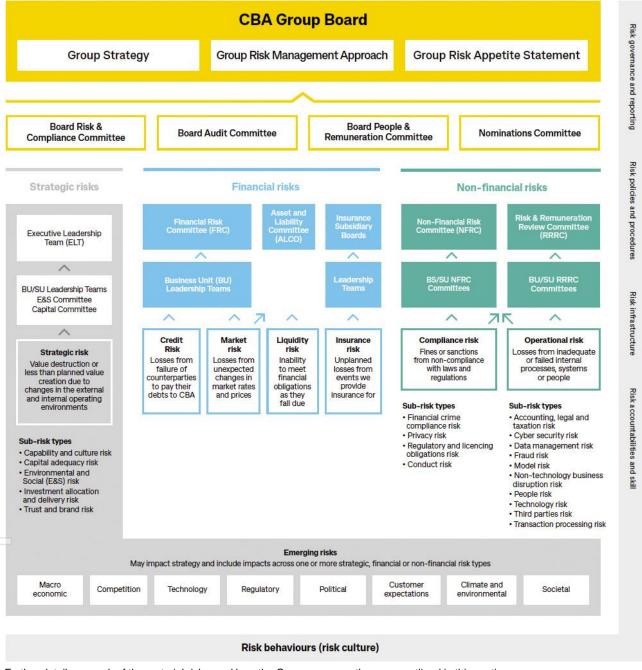
1 Credit quality includes portfolio mix.

2 Including other assets, Central Counterparty (CCP) and Credit Valuation Adjustment (CVA).

Risk Management



The Group is exposed to financial risks, non-financial risks and strategic risks arising from its operations. The Group manages these risks through its Risk Management Framework (the Framework), which evolves to accommodate changes in the business operating environment, better practice approaches, and regulatory and community expectations. The components of the Framework are illustrated below, including the governance that enables executive and Board oversight of these risks.



Further details on each of the material risks, and how the Group manages them, are outlined in this section.

Risk Management Framework

The Framework enables the appropriate development and implementation of strategies, policies and procedures to manage risk. The Framework incorporates the requirements of APRA Prudential Standard CPS 220 *Risk Management* supported by the three key documentary components:

- The Group Risk Appetite Statement (RAS) articulates the type and degree of risk the Board is prepared to accept and the maximum level of risk that the Group must operate within;
- The Group Risk Management Approach (RMA) describes the Group's approach to ensure comprehensive management of its material risks in support of achieving its strategic goals and objectives; and
- The Group Business Plan (Plan) summarises the Group's approach to the implementation of its strategic objectives. The Plan has a rolling three year duration and reflects material risks arising from its implementation.

Risk Management Framework (continued)

The Framework is underpinned by the following Risk Framework enablers that allow the Group to effectively identify, record, manage and monitor risks.

Risk Governance and Reporting

The Group is committed to ensuring that its risk management practices reflect a high standard of governance. This enables management to undertake, in an effective manner, prudent risktaking activities. The Board operates as the highest level of the Group's risk governance. The Board Risk and Compliance Committee is responsible for the oversight and governance of risks impacting the Group. It oversees the design, implementation and operation of the Framework and helps formulate the Group's risk appetite for consideration by the Board. In particular it:

- Monitors the Group's risk profile (including identification of emerging risks); and
- Reviews regular reports from management on the measurement of risk and the adequacy and effectiveness of the Group's risk management and internal control systems.

At management level, risk governance is undertaken by a structured hierarchy of personal delegations and management committees and forums across the Group and within the BUs and Support Units (SUs).

Regular management information is produced that allows financial and non-financial risk positions to be monitored against approved risk appetite and policy limits. At Board level, the majority of risk reporting is provided to the Board Risk and Compliance Committee, although select matters are reported directly to the Board as required. Controls reporting is provided to the Board Audit Committee.

The Group operates a Three Lines of Accountability model that places the accountability for risk ownership with the Line 1 BUs and SUs, while focusing the mandate of Line 2 Risk teams on risk appetite and the Framework, assurance, approval or acceptance of risk decisions of Line 1 and advice. Line 3 Internal Audit provides independent assurance to the Board, regulators and other stakeholders on the effectiveness of risk management, internal controls and governance.

Risk Policies & Procedures

Risk policies and procedures provide guidance to the business on the management of each material risk. They support the Framework by:

- Summarising the principles and practices to be used by the Group in identifying and assessing its material risks; and
- Quantifying the operating tolerances for material risks.

Risk Management Infrastructure

The Framework is supported by key infrastructure systems and processes for the management of the Group's material risks. The key risk management systems and processes in place include:

- Risk processes to identify, assess, escalate, monitor and manage risks and issues;
- Management information systems to measure and aggregate risks across the Group; and
- Risk models and tools.

Risk Accountabilities and Skills

The effective management of the Group's material risks requires appropriate resourcing of skilled employees within each of the Group's Three Lines of Accountability. It is important for all Group employees to have an awareness of their risk accountabilities in relation to their role, the Risk Management Framework, and the need to adopt the CBA Risk Behaviours to ensure a positive risk culture. This awareness is developed through:

- Communication of the Group RAS and the Group RMA: Following approval by the Board, the updated RAS and RMA are made available to all employees;
- Performance and remuneration frameworks that are designed to drive accountability for managing risks and adopting risk behaviours that lead to appropriate outcomes for all stakeholders. Each year employees are assessed on how they met the risk management expectations of their role as part of the annual performance review;
- Group mandatory learning modules;
- The Operational Risk and Compliance Training program;
- Induction and ongoing learning; and
- Talent sourcing and acquisition.

Risk Culture and Conduct Risk

Risk culture is the beliefs, values and practices within the Group that determine how risks are identified, measured, governed, and acted upon. A positive risk culture drives the right risk decisions and helps the Group make sound judgements in new and unfamiliar circumstances. The risk behaviours that demonstrate a positive risk culture and are expected of employees by the Board, senior management, customers, communities, shareholders and regulators, are underpinned by our CBA values of Care, Courage and Commitment.

The Group's RAS in relation to conduct risk requires business practices that are fair to customers, protect the fair and efficient operation of the market and engender confidence in our products and services. Annually, the Board forms a view regarding the effectiveness of the Group's risk culture in keeping risk-taking within appetite. Action plans are initiated and monitored to drive positive risk culture changes in areas of need.

Ongoing Monitoring of COVID-19 Risks

At times, changes in the Group's external and internal operating environments may have an impact on the nature of one or more of the material risk types, including strategic risk. An example is the COVID-19 pandemic. The Board and Management continue to actively monitor the situation and adapt the Group's response as required.

Material Risk Types

	Governing Policies and Key Management Committees	Key Controls and Risk Mitigation Strategies
Credit Risk (Section 8)		
	•	 Defined credit risk indicators set in the Group RAS; Transacting with counterparties that demonstrate the ability and willingness to service their obligations through performance of due diligence and appropriate credit quality assessments; Applications assessed by credit decisioning models, with more complex or higher risk applications referred to credit authority holders who exercise expert judgement; Taking collateral where appropriate; Pricing appropriately for risk; Credit concentration frameworks that set exposure limits to counterparties, groups of related counterparties industry sectors and countries; Regular monitoring of credit quality, concentrations arrears, policy exceptions and policy breaches; Working with impaired counterparties, or those in dange of becoming so, to help them rehabilitate their financia positions; and Stress testing, both at a counterparty and portfolio level.
Market Risk including Equity Risk (Section	n 9 and 10)	
 Market risk is the risk that market rates and prices will change and that this may have an adverse effect on the profitability and/or net worth of the Group. The Group is exposed to market risk primarily through: Traded Market Risk; Interest Rate Risk in the Banking Book (IRRBB); Structural Foreign Exchange Risk; Lease Residual Value Risk; and Non-traded Equity Risk. 	 The Group Market Risk Policy Key Management 	 Defined market indicators set in the Group RAS; Minimal appetite for proprietary trading; Conservative market risk limits with granula concentration limits at a position level including currency/index, tenor and product type; Pricing appropriately for risk; Back-testing of Value at Risk (VaR) models agains hypothetical profit and loss; Daily monitoring and attribution of traded market ris exposures including risk sensitivities, VaR and stress testing; Weekly monitoring of VaR and stress test measures for derivative valuation adjustments (XVAs); Monthly monitoring of residual value risk exposure: versus limits; Managing the Balance Sheet with a view to balancing Net Interest Income profit volatility and market value; Daily monitoring of IRRBB market risk exposure: including risk sensitivities, credit spread risk, VaR and stress testing; Monthly monitoring of Net Interest Earnings at Ris versus limits; and Transfer pricing for risk.

Material Risk Types (continued)

Description	Governing Policies and Key Management Committees	Key Controls and Risk Mitigation Strategies
Liquidity and Funding Risk (Section 12)		
 Liquidity risk is the combined risks of not being able to meet financial obligations as they fall due (funding liquidity risk), and that liquidity in financial markets, such as the market for debt securities, may reduce significantly (market liquidity risk). The Group is exposed to liquidity risk primarily through: The funding mismatch between the Group's loans, investments and sources of funding. 	-	 Defined liquidity risk indicators in the Group RAS; The Annual Funding Strategy (the Group's wholesale funding strategy based on a three year funding plan); Maintaining a diverse, yet stable, pool of potential funding sources across different currencies, geographies, entities and products; Maintaining sufficient liquidity buffers and short term funding capacity to withstand periods of disruption in long term wholesale funding markets and unanticipated changes in the Balance Sheet funding gap; Limiting the portion of wholesale funding sourced from offshore; Conservatively managing the mismatch between asset and liability maturities; Maintaining a conservative mix of readily saleable or repo-eligible liquid assets; Daily monitoring of liquidity risk exposures, including LCR and NSFR; Market and idiosyncratic stress test scenarios; and The Contingency Funding Plan provides strategies for addressing liquidity shortfalls in a crisis situation.
Operational Risk (Section 11)		
 Operational risk is the risk of loss arising from inadequate or failed internal processes, people and systems or from external events. The Group is exposed to operational risk primarily through: Accounting, Legal and Taxation risks; Cyber security risks; Data management risks; Fraud risks (external and internal); Model risks; Non-technology business disruption risks; People risks (employment practices and workplace safety); Technology risks (disruptions from hardware or software failures); Third party risks; and Transaction processing risks. 	 Operational Risk Management Framework (ORMF) 	 Defined operational risk indicators in the Group RAS; Implementation of manual and automated controls to prevent, detect and mitigate the specific operational risks that the Group is exposed to; Regular Risk and Control Self-Assessment (RCSA) to assess key risks and controls for each BU/SU; Routine Controls Assurance Program tests to assess whether controls are designed and operating effectively to maintain risk exposures within acceptable levels; Incident management processes to identify, assess, record, report and manage actual operational or compliance events that have occurred. This data is used to guide management to strengthen processes and controls; Issue management processes to identify, assess, record, report and manage veaknesses or gaps in controls; Risk in Change process to effectively understand and manage the risks from changes to the business through projects or initiatives; Quantitative Risk Assessments are scenarios conducted to provide an understanding of potential unexpected losses; Establishment of Key Risk Indicators to monitor movements in risk exposures over time; and Assurance undertaken by Line 2 Risk teams to assess that operational risks are appropriately identified and managed across the Group.

Material Risk Types (continued)

Material Risk Types (continued)

Description	Governing Policies and Key Management Committees	Key Controls and Risk Mitigation Strategies
Insurance risk is the risk of loss due to the potential for events the Group has insured against occurring more frequently or with greater severity than anticipated. The Group is primarily exposed to insurance risk through home and motor events through a wholly-owned subsidiary in Australia.	•	 Defined insurance risk indicators set in the Group RAS; Sound product design and pricing to ensure that customers understand the extent of their cover and that premiums are sufficient to cover the risk involved; Limits, standards and underwriting authorities to ensure acceptance of appropriate risks; Regular monitoring of loss ratios, aggregations and concentrations; Catastrophe modelling and stress testing; Actuarial review of claims provisions; Controls to ensure valid claims are paid without undue delay; and Reinsurance to manage the volatility of insurance risk and limit exposure to significant, individual or aggregate risks or risk concentrations.
Strategic Risk		
 Strategic risk is the risk of material stakeholder value destruction or less than planned value creation. Strategic risk also includes the following sub-risk types that support or drive strategic decisions but are managed more routinely through their own dedicated governance, policies and procedures, infrastructure and teams: Capital Adequacy Risk: Inability to capitalise on strategic opportunities or withstand extreme events due to insufficient or inefficient use of capital. Capability and Culture Risk: Inability to execute effectively on strategy due to inadequate organisational skills and capabilities and a misaligned organisational culture. Environmental and Social Risk: from the physical impacts of climate change, not understanding or not meeting community and regulatory expectations in relation to environmental and social issues. Trust and Brand Risk: Business practices that undermine the trust of stakeholders and erode the Group's brand. Investment Allocation and Delivery Risk: Expected outcomes not achieved or missed strategic opportunities due to variations in the 	•	 Strategic Risk Management Framework The Strategic Risk Management Framework considers the impact to the Group's strategy of dynamically evolving material current and emerging risks arising from changes in areas such as: the competitive landscape, emerging technologies, macroeconomic conditions, the regulatory and political environment, and changes in social expectations. The Group assesses, monitors and responds to strategic risk throughout its processes of: Strategy development, approval and review; Identifying and monitoring changes and potential changes to the operating environment; and Monitoring execution progress of strategies. Capital Adequacy Risk Capital advice for projects and funding deals; Dividend decision and management processes; Capital monitoring, reporting and forecasting; and Ratings agency interactions. Talent acquisition processes; Leadership development initiatives; Organisational culture development initiatives; Performance and remuneration processes; Capability development and training; and Accountability frameworks.

Material Risk Types (continued)

Description	Governing Policies and Key Management Committees	Key Controls and Risk Mitigation Strategies			
Strategic Risk (continued)					
	 Key Management Committees: Executive Leadership Team (ELT) ELT Environmental & Social Committee Capital Committee Asset and Liability Committee (ALCO) Non-Financial Risk Committee ELT Risk and Remuneration Review Committee 	 Environmental and Social Risk Scenario analyses to understand the physical and transition risks of climate change; Development of new pilot products and services that support reduced emissions; Environmental, Social and Governance lending too applied to certain lending decisions; Corporate Responsibility programs; and Supplier Code of Conduct to ensure adherence to CBA's environmental and social standards. Trust and Brand Risk Media management, marketing and branding standards processes and protocols; Customer management processes (complaints handling hardships and vulnerable customers); Community investment initiatives; Government and political affairs protocols; Customer remediation programs; and Strategic decisions to address actual or perceived material conduct risks. Investment Allocation and Delivery Risk Group Delivery Framework development and maintenance; and Project/program reporting and governance. 			

Credit Risk

8 Credit Risk

Credit risk is the potential of loss arising from failure of a counterparty to meet their contractual obligations to the Group. It arises primarily from lending activities, the provision of guarantees (including letters of credit), investments in bonds and notes, financial markets transactions, credit enhancements, securitisations and other associated activities.

The Group maintains a robust system of controls and processes to optimise the Group's credit risk-taking activities.

Credit risk is managed at both a Group and BU level. The key credit risk related functions support the overall risk management responsibilities of the Board Risk and Compliance Committee and senior management as discussed in section 7 "Risk Management" of this document.

- The Group applies the following elements for effective credit risk practice in its day-to-day business activities:
- Credit Risk Management Framework with associated policies; and
- Credit Risk Rating and Measurement (pages 38-40).

Credit Risk Management Framework

The Board Risk and Compliance Committee oversees the Group's approach to credit risk management which includes key elements of the Group Credit Risk Framework. The Group Credit Risk Management Framework is designed to achieve credit portfolio outcomes that are consistent with the Group's risk and return expectations. The Board Risk and Compliance Committee meets approximately eight times each year.

The Group has clearly defined credit policies for the approval and management of credit risk. These set the minimum requirements for assessing the integrity and ability of counterparties to meet their contractual obligations for repayment, acceptable forms of collateral and security and the frequency of credit reviews.

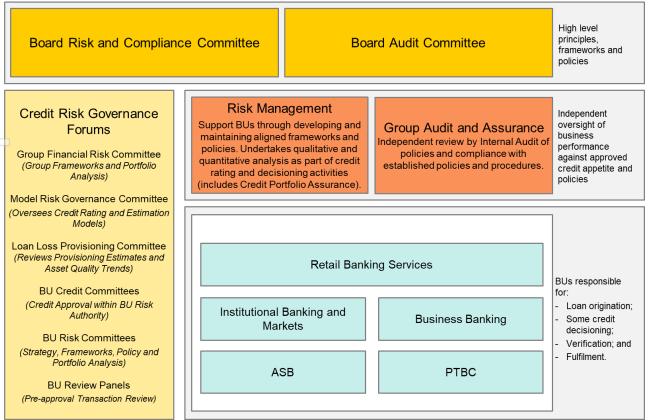
The Group's RAS requires that there is appropriate diversification of credit risk. This is achieved through established policies that include limits for the key dimensions of the credit portfolio for:

- Individual obligors, or groups of related obligors;
- Industry sectors; and
- Geography (e.g. country risk).

Experts in each BU are accountable for identifying ways to diversify credit risk exposure in their businesses, all within the policy limits.

The Credit Portfolio Assurance Unit, part of Group Financial Risk, reviews credit portfolios and BU compliance with policies, application of credit risk ratings and other key practices on a regular basis. The Credit Portfolio Assurance Unit reports its findings to the Financial Risk Committee and the Board Risk and Compliance Committee as appropriate.

The chart below illustrates the approach taken to manage credit risk in the Group.



8.1 Credit Risk Exposure – excluding Equities and Securitisation

The following tables detail credit risk exposures subject to AIRB and standardised approaches.

Table 7i - Credit risk exposures by portfolio type and modelling approach

		30 June	2021				
		Off Balanc			Average		
	On	Non-			exposure		
	Balance	market	Market		for June	Change in	exposure
	Sheet	related	related	Total	2021 half ¹	for June	2021 half ²
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	%
Subject to AIRB approach							
Corporate	64,843	46,013	10,081	120,937	122,315	(2,756)	(2. 2)
SME corporate	45,865	10,033	842	56,740	55,576	2,328	4.3
SME retail	7,215	3,977	5	11,197	11,399	(404)	(3. 5)
SME retail secured by residential mortgage	3,675	1,551	-	5,226	5,265	(78)	(1.5)
Sovereign	182,245	1,290	2,249	185,784	162,628	46,312	33. 2
Bank	15,480	398	6,565	22,443	23,580	(2,273)	(9. 2)
Residential mortgage	563,914	84,033	-	647,947	635,878	24,137	3. 9
Qualifying revolving retail	7,865	16,182	-	24,047	24,337	(579)	(2. 4)
Other retail	6,517	2,939	_	9,456	9,570	(228)	(2. 4)
Total AIRB approach	897,619	166,416	19,742	1,083,777	1,050,548	66,459	6.5
Specialised lending	62,032	10,120	1,688	73,840	71,268	5,143	7.5
Subject to standardised approach							
Corporate	961	273	-	1,234	1,214	40	3.4
SME corporate	563	242	-	805	779	53	7.0
SME retail	1,831	648	7	2,486	2,570	(168)	(6.3)
Sovereign	1,006	1	-	1,007	801	412	69.2
Bank	245	-	-	245	455	(421)	(63. 2)
Residential mortgage	13,092	1,920	-	15,012	14,892	241	1.6
Other retail	876	51	-	927	965	(77)	(7.7)
Other assets	19,056	-	-	19,056	21,232	(4,352)	(18. 6)
Central counterparties	-	-	10,281	10,281	10,461	(360)	(3. 4)
Total standardised approach	37,630	3,135	10,288	51,053	53,369	(4,632)	(8.3)
Total Credit Exposures ³	997,281	179,671	31,718	1,208,670	1,175,185	66,970	5.9

The simple average of balances as at 30 June 2021 and 31 December 2020.

The difference between exposures as at 30 June 2021 and 31 December 2020.

Total credit risk exposures (calculated as EAD) do not include equities or securitisation exposures.

Explanation of Change in Credit Risk Exposure

Details of credit risk exposure movements over the half year are as follows.

	Total exposure change	
Asset Category	\$M	Regulatory Exposure Driver
AIRB corporate (including SME corporate and SME retail) and specialised lending	4,233	Volume growth across most portfolios and foreign exchange rate (FX) movements
AIRB sovereign	46,312	Increase in liquid assets held with central banks
AIRB bank	(2,273)	Decrease in liquid assets held with banks
AIRB consumer retail	23,330	Volume growth in residential mortgages, partly offset by reductions in other consumer retail portfolios and FX movements
Total advanced and specialised lending	71,602	
Standardised (including other assets and central counterparties)	(4,632)	Lower volumes of other assets, partly offset by FX movements
Total (excluding securitisation and equity exposures)	66,970	

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7i – Credit risk exposures by portfolio type and modelling approach (continued)

		31 Decem	ber 2020				
		Off Balance	e Sheet		Average		
	On	Non-			exposure	.	
	Balance	market	Market	Tatal	for December	Change in exp	
	Sheet	related	related	Total	2020 half ¹	December	
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	%
Subject to AIRB approach							
Corporate	65,063	48,518	10,112	123,693	123,330	726	0.6
SME corporate	43,057	10,566	789	54,412	53,134	2,556	4.9
SME retail	7,082	4,508	11	11,601	11,593	16	0. 1
SME retail secured by residential mortgage	3,649	1,655	-	5,304	5,421	(233)	(4. 2)
Sovereign	135,955	1,151	2,366	139,472	123,798	31,348	29.0
Bank	17,057	404	7,255	24,716	24,445	542	2.2
Residential mortgage	543,741	80,069	_	623,810	611,662	24,297	4. 1
Qualifying revolving retail	8,124	16,502	_	24,626	24,968	(683)	(2.7)
Other retail	6,662	3,022	_	9,684	9,770	(171)	(1.7)
Total AIRB approach	830,390	166,395	20,533	1,017,318	988,121	58,398	6. 1
Specialised lending	56,649	9,844	2,204	68,697	67,565	2,264	3.4
Subject to standardised approach							
Corporate	1,026	153	15	1,194	1,076	237	24. 8
SME corporate	604	141	7	752	747	11	1.5
SME retail	1,872	774	8	2,654	2,787	(266)	(9. 1)
Sovereign	594	1	_	595	580	30	5.3
Bank	666	_	_	666	495	342	large
Residential mortgage	13,090	1,681	-	14,771	14,936	(331)	(2. 2)
Other retail	968	36	-	1,004	1,062	(116)	(10. 4)
Other assets	23,408	_	-	23,408	20,604	5,609	31.5
Central counterparties	_	_	10,641	10,641	10,562	158	1.5
Total standardised approach	42,228	2,786	10,671	55,685	52,849	5,674	11. 3
Total credit exposures ³	929,267	179,025	33,408	1,141,700	1,108,535	66,336	6. 2

The simple average of balances as at 31 December 2020 and 30 June 2020.

The difference between exposures as at 31 December 2020 and 30 June 2020.

Total credit risk exposures (calculated as EAD) do not include equities or securitisation exposures.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7i – Credit risk exposures by portfolio type and modelling approach (continued)

1 21		0	•••	,			
		30 June	e 2020				
	_	Off Balanc	e Sheet		Average		
	On	Non-	Maulast		exposure	Ohanna in	
	Balance Sheet	market related	Market related	Total	for June 2020 half ¹	Change in	exposure 2020 half ²
Portfolio Type	Sheet \$M	\$M	\$M	\$M	2020 haif * \$M	for June \$M	2020 half - %
	φIVI Φ	φIVI	AIAI	φI4I	φivi	φIVI	70
Subject to AIRB approach							
Corporate	66,476	45,826	10,665	122,967	122,262	1,410	1.2
SME corporate	42,556	8,556	744	51,856	51,840	32	0. 1
SME retail	7,477	4,108	-	11,585	11,096	978	9. 2
SME retail secured by residential mortgage	4,035	1,502	-	5,537	5,571	(67)	(1. 2)
Sovereign	104,584	1,119	2,421	108,124	99,416	17,416	19. 2
Bank	16,119	404	7,651	24,174	25,491	(2,635)	(9. 8)
Residential mortgage	526,642	72,871	_	599,513	595,266	8,495	1.4
Qualifying revolving retail	8,192	17,117	_	25,309	25,994	(1,370)	(5. 1)
Other retail	6,716	3,139	_	9,855	10,269	(827)	(7.7)
Total AIRB approach	782,797	154,642	21,481	958,920	947,205	23,432	2.5
Specialised lending	55,065	8,902	2,466	66,433	65,332	2,203	3.4
Subject to standardised approach							
Corporate	794	139	24	957	1,133	(352)	(26. 9)
SME corporate	555	175	11	741	749	(15)	(2.0)
SME retail	2,018	878	24	2,920	3,751	(1,662)	(36. 3)
Sovereign	564	1	_	565	520	90	18. 9
Bank	324	-	_	324	322	5	1.6
Residential mortgage	13,433	1,669	-	15,102	14,759	686	4.8
Other retail	1,095	25	-	1,120	1,172	(104)	(8. 5)
Other assets	17,799	-	-	17,799	17,239	1,121	6.7
Central counterparties		_	10,483	10,483	9,749	1,469	16. 3
Total standardised approach	36,582	2,887	10,542	50,011	49,394	1,238	2.5
Total credit exposures ³	874,444	166,431	34,489	1,075,364	1,061,931	26,873	2.6

The simple average of balances as at 30 June 2020 and 31 December 2019.

The difference between exposures as at 30 June 2020 and 31 December 2019.

Total credit risk exposures (calculated as EAD) do not include equities or securitisation exposures.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7b – Credit risk exposure by portfolio type

Portfolio Type	As at 30 Jun 21 \$M	Half year average ¹ \$M
Corporate	122,171	123,529
SME corporate	57,545	56,355
SME retail	13,683	13,969
SME retail secured by residential mortgage	5,226	5,265
Sovereign	186,791	163,429
Bank	22,688	24,035
Residential mortgage	662,959	650,770
Qualifying revolving retail	24,047	24,337
Other retail	10,383	10,535
Specialised lending	73,840	71,268
Other assets	19,056	21,232
Central counterparties	10,281	10,461
Total credit exposures ²	1,208,670	1,175,185

The simple average of closing balances of each half year.

Total credit risk exposures do not include equities or securitisation exposures

Portfolio Type	As at 31 Dec 20 \$M	Half year average ¹ \$M
Corporate	124,887	124,406
SME corporate	55,164	53,881
SME retail	14,255	14,380
SME retail secured by residential mortgage	5,304	5,421
Sovereign	140,067	124,378
Bank	25,382	24,940
Residential mortgage	638,581	626,598
Qualifying revolving retail	24,626	24,968
Other retail	10,688	10,832
Specialised lending	68,697	67,565
Other assets	23,408	20,604
Central counterparties	10,641	10,562
Total credit exposures ²	1,141,700	1,108,535

The simple average of closing balances of each half year.

Total credit risk exposures do not include equities or securitisation exposures

	As at 30 Jun 20	Half year average 1
Portfolio Type	\$M	\$M
Corporate	123,924	123,395
SME corporate	52,597	52,589
SME retail	14,505	14,847
SME retail secured by residential mortgage	5,537	5,571
Sovereign	108,689	99,936
Bank	24,498	25,813
Residential mortgage	614,615	610,025
Qualifying revolving retail	25,309	25,994
Other retail	10,975	11,441
Specialised lending	66,433	65,332
Other assets	17,799	17,239
Central counterparties	10,483	9,749
Total credit exposures ²	1,075,364	1,061,931

1 The simple average of closing balances of each half year.

2 Total credit risk exposures do not include equities or securitisation exposures

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7c - Credit risk exposure by portfolio type and geographic distribution

	30 June 2021 ¹				
		New			
	Australia	Zealand	Other	Total	
Portfolio Type	\$M	\$M	\$M	\$M	
Corporate	82,265	11,609	28,297	122,171	
SME corporate	41,641	15,120	784	57,545	
SME retail ²	16,967	1,822	120	18,909	
Sovereign	140,052	7,347	39,392	186,791	
Bank	10,003	1,807	10,878	22,688	
Residential mortgage	589,610	72,215	1,134	662,959	
Qualifying revolving retail	24,045	-	2	24,047	
Other retail	6,767	3,318	298	10,383	
Specialised lending	59,871	10,504	3,465	73,840	
Other assets	17,367	841	848	19,056	
Central counterparties	547	_	9,734	10,281	
Total credit exposures ³	989,135	124,583	94,952	1,208,670	

Balances are reported based on the risk domicile of the borrowers.

Including SME retail secured by residential property.

Total credit risk exposures do not include equities or securitisation exposures.

	31 December 2020 ¹						
Portfolio Type	Australia \$M	New Zealand \$M	Other \$M	Total \$M			
Corporate	81,651	12,600	30,636	124,887			
SME corporate	39,541	15,137	486	55,164			
SME retail ²	17,568	1,864	127	19,559			
Sovereign	85,914	7,421	46,732	140,067			
Bank	10,945	1,730	12,707	25,382			
Residential mortgage	568,076	69,267	1,238	638,581			
Qualifying revolving retail	24,624	_	2	24,626			
Other retail	6,903	3,454	331	10,688			
Specialised lending	56,574	8,889	3,234	68,697			
Other assets	21,616	897	895	23,408			
Central counterparties	332	-	10,309	10,641			
Total credit exposures ³	913,744	121,259	106,697	1,141,700			

Balances are reported based on the risk domicile of the borrowers.

Including SME retail secured by residential property.

Total credit risk exposures do not include equities or securitisation exposures.

	30 June 2020 ¹						
	Australia	New Zealand	Other	Total			
Portfolio Type	\$M	\$M	\$M	\$M			
Corporate	77,090	11,963	34,871	123,924			
SME corporate	37,109	14,812	676	52,597			
SME retail ²	18,022	1,859	161	20,042			
Sovereign	64,862	7,240	36,587	108,689			
Bank	10,928	1,399	12,171	24,498			
Residential mortgage	548,608	64,615	1,392	614,615			
Qualifying revolving retail	25,307	_	2	25,309			
Other retail	7,050	3,538	387	10,975			
Specialised lending	53,884	8,511	4,038	66,433			
Other assets	15,907	887	1,005	17,799			
Central counterparties	371	-	10,112	10,483			
Total credit exposures ³	859,138	114,824	101,402	1,075,364			

1 Balances are reported based on the risk domicile of the borrowers.

2 Including SME retail secured by residential property.

3 Total credit risk exposures do not include equities or securitisation exposures.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7d - Credit risk exposure by portfolio type and industry sector

					une 2021 try Sector			
Portfolio Type	Consumer \$M	Finance & Insurance \$M	Business Services \$M	Agriculture & Forestry \$M	Construction	Mining, Oil & Gas \$M	Wholesale & Retail Trade \$M	Transport & Storage \$M
Corporate	-	26,590	4,891	3,896	3,308	5,764	11,192	19,094
SME corporate	_	2,193	4,279	19,378	3,496	305	8,334	2,413
SME retail ¹	-	379	1,686	1,801	2,335	101	2,557	982
Sovereign	-	-	-	-	_	-	_	-
Bank	-	22,673	-	-	_	-	_	-
Residential mortgage	662,959	-	-	-	_	-	_	-
Qualifying revolving retail	24,047	-	-	-	_	-	_	-
Other retail	10,383	-	_	-	-	-	_	-
Specialised lending	-	8	-	-	_	1,340	222	2,708
Other assets	2,253	_	_	-	-	_	_	-
Central counterparties	_	10,281	-	-	_	-	-	-
Total credit exposures ²	699,642	62,124	10,856	25,075	9,139	7,510	22,305	25,197

				Industry Se	ctor (continued)			
Desifelia Turc	Manufacturing	Commercial Property ³	Government Admin. & Defence	Community Services			Other	Total
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	10,534	10,057	-	5,760	4,798	8,067	8,220	122,171
SME corporate	3,472	323	-	3,780	6,080	139	3,353	57,545
SME retail ¹	956	1,732	-	792	1,028	46	4,514	18,909
Sovereign	-	-	186,791	-	-	-	_	186,791
Bank	-	-	-	-	-	-	15	22,688
Residential mortgage	-	_	-	-	_	_	_	662,959
Qualifying revolving reta	il –	-	-	-	_	_	-	24,047
Other retail	-	-	-	-	_	_	-	10,383
Specialised lending	53	65,290	-	137	642	2,989	451	73,840
Other assets	-	-	-	-	-	_	16,803	19,056
Central counterparties	-	-	-	-	-	-	-	10,281
Total credit exposures	² 15,015	77,402	186,791	10,469	12,548	11,241	33,356	1,208,670

SME retail business lending secured by residential property has been allocated by industry.

Total credit risk exposures do not include equities or securitisation exposures.

Commercial Property includes Real Estate Investment Trusts (REIT) and excludes Business Services.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

 Table 7d – Credit risk exposure by portfolio type and industry sector (continued)

				31 Dece	mber 2020 ¹			
				Indus	try Sector			
	Consumer	Finance & Insurance	Business Services	Agriculture & Forestry	Construction	Mining, Oil & Gas	Wholesale & Retail Trade	Transport & Storage
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	-	24,118	5,819	3,830	3,244	6,361	10,575	20,024
SME corporate	_	1,920	4,150	18,731	3,261	286	8,134	2,317
SME retail ²	-	395	1,710	1,836	2,287	99	2,634	992
Sovereign	-	-	-	-	_	-	_	-
Bank	-	24,953	_	-	-	-	_	_
Residential mortgage	638,581	-	-	-	_	-	_	-
Qualifying revolving retail	24,626	-	-	-	_	-	_	-
Other retail	10,688	-	_	-	-	-	_	_
Specialised lending	-	275	_	-	-	1,132	275	2,383
Other assets	2,156	-	-	-	_	-	_	-
Central counterparties	-	10,641	_	-	_	-	_	-
Total credit exposures ³	676,051	62,302	11,679	24,397	8,792	7,878	21,618	25,716

				Industry Se	ctor (continued)			
		Commercial	Government Admin. &	Community	Entertainment Leisure	Electricity		
Portfolio Type	Manufacturing \$M	Property ⁴ \$M	Defence \$M	Services \$M	& Tourism \$M	Gas & Water \$M	Other \$M	Total \$M
Corporate	10,723	11,358	_	6,262	5,127	8,709	8,737	124,887
SME corporate	3,294	180	_	3,533	5,808	135	3,415	55,164
SME retail ²	971	1,792	-	796	1,109	45	4,893	19,559
Sovereign	-	-	140,067	-	-	-	_	140,067
Bank	-	-	-	-	-	-	429	25,382
Residential mortgage	-	-	-	-	-	-	-	638,581
Qualifying revolving retain	ail –	-	-	-	-	-	-	24,626
Other retail	-	-	-	-	-	-	_	10,688
Specialised lending	53	61,343	-	139	642	2,383	72	68,697
Other assets	-	-	-	-	-	-	21,252	23,408
Central counterparties	_	-	-	-	-	-	-	10,641
Total credit exposures	s ³ 15,041	74,673	140,067	10,730	12,686	11,272	38,798	1,141,700

Comparative information has been restated to conform to presentation in the current period.

SME retail business lending secured by residential property has been allocated by industry.

Total credit risk exposures do not include equities or securitisation exposures.

Commercial Property includes Real Estate Investment Trusts (REIT) and excludes Business Services.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

 Table 7d – Credit risk exposure by portfolio type and industry sector (continued)

					ne 2020 ¹ try Sector			
Portfolio Type	Consumer \$M	Finance & Insurance \$M	Business Services \$M	Agriculture & Forestry \$M	Construction	Mining, Oil & Gas \$M	Wholesale & Retail Trade \$M	Transport & Storage \$M
Corporate	_	25,193	5,106	3,147	3,651	8,169	9,791	20,071
SME corporate	_	1,985	3,893	17,889	3,146	237	7,443	2,136
SME retail ²	-	414	1,672	1,877	2,185	100	2,577	978
Sovereign	_	-	_	-	-	-	_	-
Bank	-	24,205	_	-	_	-	_	-
Residential mortgage	614,615	-	_	-	_	-	_	-
Qualifying revolving retail	25,309	-	_	-	_	-	_	-
Other retail	10,975	-	_	-	_	-	_	-
Specialised lending	-	-	_	-	_	1,474	218	3,636
Other assets	2,150	-	_	-	_	-	_	-
Central counterparties	_	10,483	-	-	_	-	_	-
Total credit exposures ³	653,049	62,280	10,671	22,913	8,982	9,980	20,029	26,821

				Industry Se	ctor (continued))		
Portfolio Type	Manufacturing \$M	Commercial Property ⁴ \$M	Government Admin. & Defence \$M	Health & Community Services \$M	Entertainment Leisure & Tourism \$M	Electricity Gas & Water \$M	Other \$M	Total \$M
Corporate	10,430	12,022	_	5,060	4,980	8,160	8,144	123,924
SME corporate	3,215	190	_	3,230	5,597	178	3,458	52,597
SME retail ²	936	1,853	_	763	1,114	43	5,530	20,042
Sovereign	-	-	108,689	-	-	-	_	108,689
Bank	-	-	-	-	_	-	293	24,498
Residential mortgage	_	-	-	-	-	_	-	614,615
Qualifying revolving reta	ail —	_	-	-	_	_	_	25,309
Other retail	_	_	-	-	_	_	_	10,975
Specialised lending	62	57,443	-	141	699	2,456	304	66,433
Other assets	_	-	-	-	-	_	15,649	17,799
Central counterparties	-	-	-	-	_	-	_	10,483
Total credit exposures	s ³ 14,643	71,508	108,689	9,194	12,390	10,837	33,378	1,075,364

Comparative information has been restated to conform to presentation in the current period.

SME retail business lending secured by residential property has been allocated by industry.

Total credit risk exposures do not include equities or securitisation exposures.

Commercial Property includes Real Estate Investment Trusts (REIT) and excludes Business Services.

8.1 Credit Risk Exposure – excluding Equities and Securitisation (continued)

Table 7e - Credit risk exposure by portfolio type and residual contractual maturity

		:	30 June 2021		
				No specified	
	≤ 12mths	1 ≤ 5yrs	> 5 years	maturity	Total
Portfolio Type	\$M	\$M	\$M	\$M	\$M
Corporate	44,107	71,441	6,623	-	122,171
SME corporate	20,758	33,514	3,273	-	57,545
SME retail ¹	6,762	7,615	4,532	_	18,909
Sovereign	114,530	37,231	35,030	-	186,791
Bank	10,271	11,690	727	-	22,688
Residential mortgage	30,241	85,675	514,996	32,047	662,959
Qualifying revolving retail	-	_	_	24,047	24,047
Other retail	279	4,359	1,832	3,913	10,383
Specialised lending	23,647	44,676	5,517	-	73,840
Other assets	2,411	198	339	16,108	19,056
Central counterparties	3,732	5,512	1,037	-	10,281
Total credit exposures ²	256,738	301,911	573,906	76,115	1,208,670

Including SME retail secured by residential property.

Total credit risk exposures do not include equities or securitisation exposures.

	31 December 2020 ¹					
	-		I	No specified		
	≤ 12mths	1 ≤ 5yrs	> 5 years	maturity	Total	
Portfolio Type	\$M	\$M	\$M	\$M	\$M	
Corporate	45,912	71,929	7,046	_	124,887	
SME corporate	20,605	31,171	3,388	_	55,164	
SME retail ²	6,991	7,829	4,739	_	19,559	
Sovereign	57,635	39,780	42,652	_	140,067	
Bank	10,868	14,169	345	_	25,382	
Residential mortgage	25,721	95,197	484,719	32,944	638,581	
Qualifying revolving retail	-	_	_	24,626	24,626	
Other retail	271	4,568	1,851	3,998	10,688	
Specialised lending	21,884	41,799	5,014	_	68,697	
Other assets	2,342	187	273	20,606	23,408	
Central counterparties	5,055	4,146	1,440	-	10,641	
Total credit exposures ³	197,284	310,775	551,467	82,174	1,141,700	

Comparative information has been restated to conform to presentation in the current period.

Including SME retail secured by residential property.

Total credit risk exposures do not include equities or securitisation exposures.

		3	0 June 2020 ¹		
			I	No specified	
	≤ 12mths	1 ≤ 5yrs	> 5 years	maturity	Total
Portfolio Type	\$M	\$M	\$M	\$M	\$M
Corporate	41,685	72,492	9,747	_	123,924
SME corporate	20,217	28,909	3,471	-	52,597
SME retail ²	7,228	8,009	4,805	-	20,042
Sovereign	39,371	34,964	34,354	_	108,689
Bank	8,839	13,822	1,837	-	24,498
Residential mortgage	24,776	91,175	464,593	34,071	614,615
Qualifying revolving retail	-	-	_	25,309	25,309
Other retail	185	4,577	2,174	4,039	10,975
Specialised lending	19,948	40,390	6,095	-	66,433
Other assets	2,313	325	470	14,691	17,799
Central counterparties	4,231	3,479	2,773	_	10,483
Total credit exposures ³	168,793	298,142	530,319	78,110	1,075,364

Comparative information has been restated to conform to presentation in the current period. 1

2 3 Including SME retail secured by residential property.

Total credit risk exposures do not include equities or securitisation exposures.

Provisioning for Impairment

The Group assesses and measures credit losses in accordance with statutory financial accounting requirements under the *Corporations Act 2001* (Cth), Australian Accounting Standards as issued by the Australian Accounting Standards Board (AASB) and APRA regulatory requirements.

The Group assesses its provisioning for impairment in accordance with AASB 9 and recognises both individually assessed provisions and collectively assessed provisions.

A monthly assessment is undertaken to assess the quality of the credit portfolio to determine the loan impairment expense and provisions.

APRA Prudential Standard APS 220 *Credit Quality* (APS 220) requires the Group to report Specific Provisions and a General Reserve for Credit Losses (GRCL) and requires that impairment be recognised for both on and off Balance Sheet items, including financial guarantee contracts and loan commitments, for the expected life. Any shortfall of the Group's provisions eligible for inclusion in the GRCL are deducted from CET1.

APS 111 Capital Adequacy: Measurement of Capital (APS 111) requires the Group to reduce CET1 when the amount of regulatory expected losses is in excess of APRA defined eligible provisions.

Collective Provisions

The expected credit loss (ECL) impairment model is used by the Group to calculate collective provisions. ECL is a probability weighted expected credit loss estimated by evaluating a range of possible outcomes and taking into account the time value of money, past events, current conditions and forecasts of future economic conditions.

The Group uses the following AASB 9 collective provisioning models in calculating ECL for significant portfolios:

- Retail lending: Home Loans model, Credit Cards model, Personal Loans model; and
- Non-retail lending: Corporate Risk Rated model, Asset Finance model, Retail SME model.

For each significant portfolio ECL is calculated as a product of the following credit risk factors at a facility level:

Exposure at default (EAD): Expected Balance Sheet exposure at default. The Group generally calculates EAD as the higher of the drawn balance and total credit limit except for the credit cards portfolio, for which the EAD

calculation also takes into account the probability of unused limits being drawn down;

- Probability of default (PD): The likelihood that a debtor will be unable to pay its obligations in full without having to take actions such as realising on security, or that the debtor will become 90 days overdue on an obligation or contractual commitment; and
- LGD: The amount that is not expected to be recovered following default.

Credit risk factors of PD and LGD used in the ECL calculation are point-in-time estimates based on current conditions and adjusted to include the impact of multiple probability weighted future forecast economic scenarios. This is distinct from the long-run and downturn estimates used for regulatory purposes described in section 8.4.

Individually Assessed Provisions

Individually Assessed Provisions (IAP) are made against financial assets that are individually significant, or which have been individually assessed as impaired.

Defaulted exposures with an expected loss in excess of \$20,000 are assessed for impairment through an IAP process. Impairment provisions on these exposures are calculated directly as the difference between the defaulted asset's carrying value and the present value of expected future cash flows including cash flows, from realisation of collateral, where applicable.

General Reserve for Credit Losses

All provisions for impairment assessed on an individual basis, in accordance with Australian Accounting Standards, are classified as specific provisions in accordance with APS 220. Most of the collective provisions raised under Australian Accounting Standards are included in the GRCL, however, certain collective provisions not eligible for inclusion in the GRCL are classified as specific provisions. This includes, for example, collective provisions on retail products that are in default.

The Group's GRCL methodology is aligned to the methodology for collective provisions under AASB 9 which prescribes lifetime expected credit losses on stage 2 loans that have experienced a Significant Increase in Credit Risk (SICR) since origination.

The Group's GRCL methodology results in an amount lower than the provision recognised for accounting purposes, resulting in no additional GRCL requirement.

Reconciliation of Australian Accounting Standards and APS 220 based credit provisions and Table 7j – General reserve for credit losses

	30 June 2021			
	General			
	reserve for	Specific	Total	
	credit losses 1	provision ¹	provisions	
	\$M	\$M	\$M	
Collective provision ²	4,683	628	5,311	
Individual provisions ²	-	900	900	
Total regulatory provisions	4,683	1,528	6,211	

Provisions classified according to APS 220.

Provisions according to Australian Accounting Standards.

	31 December 2020			
	General			
	reserve for	Specific provision ¹	Total	
	credit losses 1		provisions	
	\$M	\$M	\$M	
Collective provision ²	5,274	669	5,943	
Individual provisions ²	_	872	872	
Total regulatory provisions	5,274	1,541	6,815	

Provisions classified according to APS 220.

Provisions according to Australian Accounting Standards.

	30 June 2020			
	General			
	reserve for	Specific provision ¹	Total	
	credit losses 1		provisions	
	\$M	\$M	\$M	
Collective provision ²	4,902	494	5,396	
Individual provisions ²	_	967	967	
Total regulatory provisions	4,902	1,461	6,363	

Provisions classified according to APS 220.

Provisions according to Australian Accounting Standards.

The following tables provide a summary of the Group's financial losses by portfolio type, industry and geography.

		30 June 2021					
Industry Sector	Impaired assets \$M	Past due Ioans ≥ 90 days ¹ \$M	Specific provision balance ² \$M	Net full year charges for individual provisions \$M	Full year actual losses ³ \$M		
Consumer	1,927	3,045	777	20	450		
Government Administration & Defence	-	_	_	-	-		
Finance & Insurance	6	5	3	(1)	4		
Business Services	132	37	69	28	20		
Agriculture & Forestry	237	95	73	12	16		
Mining, Oil & Gas	57	2	31	(12)	-		
Manufacturing	289	24	186	84	99		
Electricity, Gas & Water	-	5	-	_	-		
Construction	94	30	39	(2)	10		
Wholesale & Retail Trade	189	86	122	83	37		
Transport & Storage	182	36	54	29	36		
Commercial Property	84	197	66	6	5		
Entertainment, Leisure & Tourism	123	87	58	7	9		
Health & Community Services	3	11	1	1	-		
Other	86	100	49	11	42		
Total	3,409	3,760	1,528	266	728		

Represents loans ≥ 90 days past due but not impaired.

Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

3 Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the year ended 30 June 2021.

		31 December 2020 ¹					
	Impaired assets	Past due Ioans ≥ 90 days ²	Specific provision balance ³	Net half year charges for individual provisions	Half year actual losses ⁴		
Industry Sector	\$M	\$M	\$M	\$M	\$M		
Consumer	1,663	2,522	837	8	261		
Government Administration & Defence	_	_	_	_	-		
Finance & Insurance	6	_	5	_	3		
Business Services	120	31	37	(2)	18		
Agriculture & Forestry	242	77	64	(4)	7		
Mining, Oil & Gas	122	3	40	(5)	-		
Manufacturing	297	37	183	52	70		
Electricity, Gas & Water	-	1	_	_	-		
Construction	85	30	38	(8)	7		
Wholesale & Retail Trade	144	82	98	49	23		
Transport & Storage	123	24	72	17	13		
Commercial Property	75	127	64	3	4		
Entertainment, Leisure & Tourism	123	75	53	2	7		
Health & Community Services	11	11	_	_	-		
Other	89	102	50	2	20		
Total	3,100	3,122	1,541	114	433		

1 Comparative information has been restated to conform to presentation in the current period.

2 Represents loans ≥ 90 days past due but not impaired.

3 Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

4 Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the half year ended 31 December 2020.

Table 7f (i) - Impaired, past due, specific provisions and write-offs charged by industry sector (continued)

Industry Sector	Impaired assets \$M	Past due Ioans ≥ 90 days ² \$M	Specific provision balance ³ \$M	charges for individual provisions \$M	Full year actual losses ⁴ \$M
Consumer	1,952	2,755	693	88	670
Government Administration & Defence	2	-	-	_	_
Finance & Insurance	6	8	5	(6)	5
Business Services	156	44	62	41	14
Agriculture & Forestry	259	78	76	6	34
Mining, Oil & Gas	164	3	43	12	14
Manufacturing	285	53	220	146	15
Electricity, Gas & Water	1	-	-	_	_
Construction	75	45	44	1	37
Wholesale and Retail Trade	151	98	79	82	79
Transport & Storage	214	31	66	46	24
Commercial Property	79	142	63	5	11
Entertainment, Leisure & Tourism	129	1	56	28	60
Health & Community Services	13	2	-	1	3
Other	62	101	54	25	56
Total	3,548	3,361	1,461	475	1,022

30 June 2020¹

Net full year

Comparative information has been restated to conform to presentation in the current period.

2 Represents loans \geq 90 days past due but not impaired.

Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the year ended 30 June 2020.

Factors impacting the loss experience

The overall quality of the portfolio has improved during the financial year ended 30 June 2021. Gross impaired assets as a proportion of gross loans and advances (GLAAs) decreased by 3 basis points during the financial year ended 30 June 2021. Total provisions as a proportion of GLAAs decreased by 6 basis points to 0.76%. The decrease reflected lower collective and individual provisions, driven by improvement in the economic outlook, lower consumer finance balances and lower impairments in the Australian home lending portfolio. This was partly offset by increased forward looking adjustments and overlays mainly due to the ongoing impact of COVID-19. Group actual losses decreased by \$294 million on the prior year led by continued reduction in losses for the retail portfolios.

Table 7f (ii) - Impaired, past due, specific provisions and write-offs charged by portfolio

		30 June 2021						
	-	Net full year						
$\sum_{i=1}^{n}$	Portfolio	Impaired assets \$M	Past due Ioans ≥ 90 days ¹ \$M	Specific provision balance ² \$M	charges for individual provisions \$M	Full year actual losses ³ \$M		
	Corporate including SME, specialised lending and central counterparties	1,482	715	751	246	278		
	Sovereign	_	_	_	-	-		
	Bank	_	-	_	-	-		
	Residential mortgage	1,746	3,045	598	14	63		
	Qualifying revolving retail	82	-	80	(3)	172		
_	Other retail	99	-	99	9	215		
1	Total	3,409	3,760	1,528	266	728		

Represents loans ≥ 90 days past due but not impaired.

Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

3 Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the year ended 30 June 2021.

	31 December 2020 ¹						
_	Net half year						
Portfolio	Impaired assets \$M	Past due Ioans ≥ 90 days ² \$M	Specific provision balance ³ \$M	charges for individual provisions \$M	Half year actual losses ⁴ \$M		
Corporate including SME, specialised lending and central counterparties	1,437	600	704	106	172		
Sovereign	_	_	_	_	_		
Bank	_	_	_	_	_		
Residential mortgage	1,451	2,504	627	9	36		
Qualifying revolving retail	87	_	86	(3)	111		
Other retail	125	18	124	2	114		
Total	3,100	3,122	1,541	114	433		

Comparative information has been restated to conform to presentation in the current period.

Represents loans ≥ 90 days past due but not impaired.

Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

4 Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the half year ended 31 December 2020.

_		3	30 June 2020 ¹					
Portfolio	Impaired assets \$M	Past due Ioans ≥ 90 days ² \$M	Specific provision balance ³ \$M	Net full year charges for individual provisions \$M	Full year actual losses ⁴ \$M			
Corporate including SME, specialised lending and central counterparties	1,596	606	768	394	354			
Sovereign	_	-	_	_	-			
Bank	_	_	-	(7)	-			
Residential mortgage	1,673	2,710	444	82	116			
Qualifying revolving retail	143	_	114	_	225			
Other retail	136	45	135	6	327			
Total	3,548	3,361	1,461	475	1,022			

1 Comparative information has been restated to conform to presentation in the current period.

2 Represents loans ≥ 90 days past due but not impaired.

3 Specific provision balance includes certain Australian Accounting Standards collective provisions on some defaulted loans.

4 Actual losses equal write-offs from individual provisions, write-offs direct from collective provisions less recoveries of amounts previously written off, for the year ended 30 June 2020.

8.2 Past Due and Impaired Exposures, Provisions and Reserves (continued)

Table 7g (i) - Impaired, past due and specific provisions by geographic region

		30 June 2021			
- · · - · · 1	Impaired assets	Past due Ioans ≥ 90 days ²	Specific provision balance		
Geographic Region ¹	\$M	\$M	\$M		
Australia	2,178	3,585	1,227		
New Zealand	849	131	152		
Other	382	44	149		
Total	3,409	3,760	1,528		

Balances are reported based on the risk domicile of the borrower. The Group's financial statements disclose balances based on the domicile of the lending entity. Represents loans ≥ 90 days past due but not impaired.

	31	December 2020	1
Geographic Region ¹	Impaired assets \$M	Past due Ioans ≥ 90 days ² \$M	Specific provision balance \$M
Australia	2,199	2,927	1,244
New Zealand	524	190	145
Other	377	5	152
Total	3,100	3,122	1,541

Balances are reported based on the risk domicile of the borrower. The Group's financial statements disclose balances based on the domicile of the lending entity. Represents loans ≥ 90 days past due but not impaired.

		30 June 2020Past dueImpairedIoansassets≥ 90 days 2\$M\$M	
Coorrentie Borien ¹	assets	loans ≥ 90 days ²	Specific provision balance \$M
Geographic Region ¹	ΦIVI	ΦIVI	ΦΙΛΙ
Australia	2,416	3,061	1,078
New Zealand	681	223	196
Other	451	77	187
Total	3,548	3,361	1,461

Balances are reported based on the risk domicile of the borrower. The Group's financial statements disclose balances based on the domicile of the lending entity.
 Represents loans ≥ 90 days past due but not impaired.

The Group's GRCL (before tax) by geographic region is distributed as follows:

Table 7g (ii) – GRCL by geographic region

	30 Jun 21	31 Dec 20	30 Jun 20
Geographic Region	\$M	\$M	\$M
Australia	3,992	4,524	4,160
New Zealand	368	464	417
Other	323	286	325
Total GRCL	4,683	5,274	4,902

8.2 Past Due and Impaired Exposures, Provisions and Reserves (continued)

Table 7h (i) – Movement in collective provisions and general reserve for credit losses

	н	alf Year Ended	
	30 Jun 21	31 Dec 20	30 Jun 20
Movement in Collective Provisions	\$M	\$M	\$M
Opening balance	5,943	5,396	4,067
Net charge against profit and loss	(481)	768	1,598
Recoveries	62	69	84
Other	23	10	4
Write-offs	(236)	(300)	(357)
Total collective provisions	5,311	5,943	5,396
Less collective provisions transferred to specific provisions	(628)	(669)	(494)
General reserve for credit losses	4,683	5,274	4,902

Table 7h (ii) – Movement in individual provisions and specific provisions

	Half Year Ended			
	30 Jun 21	31 Dec 20	30 Jun 20	
Movement in Individual Provisions	\$M	\$M	\$M	
Opening balance for the period	872	967	959	
Net new and increased provisioning	260	236	371	
Net write back of provisions no longer required	(107)	(122)	(99)	
Discount unwind to interest income	(9)	(7)	(5)	
Other	5	_	22	
Write-offs	(121)	(202)	(281)	
Total individual provisions	900	872	967	
Add collective provisions transferred to specific provisions	628	669	494	
Specific provisions	1,528	1,541	1,461	

8.3 Portfolios Subject to Standardised and Supervisory Risk Weights

The standardised approach is also used by the Group where portfolios or segments are considered as immaterial by the size of exposure or where APRA requires a standardised approach to be used.

Portfolios that use the standardised approach include:

CBA:

- Some retail SMEs (overdrawn accounts);
- Non-rated corporate exposures;
- Some residential mortgages (including purchased portfolios and reverse mortgages);
- Margin lending;
- Non-recourse purchased receivables; and
- Central counterparties.

ASB:

Personal loans and Retail SME.

Bankwest:

- Some residential mortgages (equity lines of credit); and
- Some unsecured consumer retail (personal cheque accounts).

All exposures in the following entities:

- CBE;
- PTBC; and
- CBA Europe N.V.

The Group continues to review portfolios that use the standardised approach. Approval to apply the advanced approach will be sought from APRA when the size of exposures and number of customers within these portfolios are sufficient to qualify for advanced approaches.

Risk weights pertaining to retail and SME corporate standardised portfolios have been applied in accordance with APRA Prudential Standard APS 112 *Capital Adequacy: Standardised Approach to Credit Risk* (APS 112) and with consideration to the type of collateral held and past due status. In respect of loans secured by residential mortgages, consideration is given with respect to the Loan to Value Ratio (LVR) and whether mortgage insurance is held.

The Group's definition of internal risk ratings used for corporate, bank and sovereign exposures has been aligned to equivalent rating grades provided by external credit assessment institutions including S&P Global Ratings and Moody's Investors Services.

APRA requires certain specialised lending exposures including Income Producing Real Estate, Object and Project Finance to be assigned specific risk weights according to "slotting" criteria defined by the regulator.

The Group recognises assets for lease under operating leases on the Balance Sheet. The residual value of the asset is risk weighted at 100% under the standardised approach (APS 112) and the net present value of the lease payment stream is risk weighted based on the internal risk rating of the lessee (APS 113). Severe disruption to the aviation sector caused by international travel bans was deemed an indicator of impairment. Further disclosure is included in the 2021 Annual Report Note 1.1.

Table 8b - Exposures subject to standardised and supervisory risk weights

	Exposure af	ter credit risk mi	tigation ¹
	30 Jun 21	31 Dec 20	30 Jun 20
Standardised Approach Exposures	\$M	\$M	\$M
Risk Weight			
0%	8,865	12,544	5,115
20%	3,509	3,610	3,385
35%	10,354	9,887	10,156
50%	3,725	3,971	3,808
75%	729	790	846
100%	13,539	14,202	16,176
150%	51	39	42
> 150%	-	1	-
Capital deductions	-	_	-
Total	40,772	45,044	39,528

Exposure after credit risk mitigation does not include central counterparties, equity or securitisation exposures.

Specialised Lending Exposures Subject to Supervisory Slotting ¹	30 Jun 21 \$M	31 Dec 20 \$M	30 Jun 20 \$M
Risk Weight			
0%	455	473	313
70%	23,669	20,266	18,873
90%	43,255	41,293	39,804
115%	5,885	5,835	6,690
250%	576	830	753
Total exposures	73,840	68,697	66,433

1 APRA requires specialised lending exposures including Income Producing Real Estate, Object and Project Finance to be assigned specific risk weights according to "slotting" criteria defined by the Regulator.

8.4 Portfolios Subject to Internal Ratings-based Approaches

The Group, with the exception of some relatively small portfolios, is accredited to use AIRB approaches to calculate its capital requirements under APS 113 *Capital Adequacy: Internal Ratings-based Approach to Credit Risk* (APS 113).

Credit Risk Measurement

The measurement of credit risk is based on an internal credit risk rating system which uses expert judgement and analytical tools to calculate AIRB credit risk estimates, including obligor PD, facility LGD, and facility EAD. These are inputs into the estimation of Expected Loss (EL) and Unexpected Loss (UL) for the credit portfolio.

The Model Risk Governance Committee oversees Group credit rating models and processes to ensure appropriate credit risk estimates are developed and used, model performance is reviewed on a regular basis and that there is consistency across BU credit models as appropriate.

Probability of Default

The PD, expressed as a percentage, is the estimate of the probability that an obligor will default within a one year period. It reflects an obligor's ability to generate sufficient cash flows in the future to meet the terms of all of its credit obligations to the Group. The PD rating methodology applied to the various segments of the credit portfolio is shown in Table 9c (page 40).

PD estimates are based on a long-run average default rate based on the Group's historical data, supplemented with external data where applicable. Customer risk characteristics and account performance criteria are used to define retail risk pools. Pools may be combined to ensure the number of exposures within a given pool is sufficient to allow quantification of reliable estimates and to facilitate validation of loss characteristics at the pool level.

Models are independently validated and in addition, confidence intervals are calculated to statistically demonstrate that retail pools meaningfully differentiate risk. PD model results are calibrated to obtain long-run PDs that reflect the central tendency over a full economic cycle.

The credit risk portfolio has two major PD rating segments:

(i) Risk-Rated; and

(ii) Retail Managed.

(i) Risk-Rated Segment

This segment comprises non-retail exposures including bank and sovereign exposures. Non-retail exposures to clients with turnover less than \$50 million that are required to be risk-rated and individually managed under the Group's internal credit policy are classified under the SME corporate asset class.

The credit risk rating system for corporate customer exposures currently in use includes 24 PD grades (16 performing, 6 weak/doubtful, 1 restructured, 1 defaulted).

Obligors that are risk-rated have their PD rating assigned via expert judgement and the appropriate PD Rating Tool. Obligors whose PD ratings are assigned via expert judgement include banks, sovereigns and/or large corporate customers with turnover \$50 million and greater. Under expert judgement, PD ratings are assigned based on the expert knowledge of the credit officer conducting the review. The credit officer may use multiple rating inputs to assist with the rating decision, including the use of internal PD Rating Tools, the ratings assigned by an external rating agency, benchmark rating criteria, management capability and integrity, market or other relevant information.

PD Rating Tools are used to form a benchmark in the rating process and are based on customer financials and a number of management related questions.

For the Business Banking BUs across the Group (including within CBA and ASB), PD Rating Tools are the primary method of assigning a PD rating. PD Rating Tools are statistical models designed to predict the rating outcome. Ratings are assigned based on the responses to a series of questions relating to the financial condition of the customer's business, as well as questions relating to management capability and integrity. The responses are weighted by their importance in predicting credit quality and are used to calculate an overall score upon which the PD rating is determined.

The PD rating reflects the estimated probability of default for that grade over a one year horizon. The Group uses a throughthe-cycle (TTC) approach whereby PD ratings are based on longer term considerations to capture a company's ability to perform through a credit cycle. External rating agencies also use a TTC PD rating approach.

The Group's PD rating criteria reflect both long-run and current considerations of the financial health of an obligor.

PD ratings fall within the following major categories:

- Exceptional (A0 through to A3) a strong profit history with principal and interest repayments covered by large stable surpluses;
- Strong (B1 through to C3) a strongly performing business with principal and interest payments well protected by stable cash operating surpluses;
- Pass (D1 through to E3) a soundly performing business with sufficient operating cash surpluses to meet all principal and interest repayments;
- Weak/Doubtful (F1 through to G3) profitability has been weak and the capacity to meet principal and interest payments is weak or doubtful;
- Restructured (R) concessions of interest and/or principal obligations have been provided due to the customer's financial difficulties, rendering the facility noncommercial to the Group. Restructured facilities are treated as impaired assets; and
- Default (H) the obligation is in default (see below).

A PD rating of "Pass" grade or above qualifies the obligor for approval of new facilities or increased exposure on normal commercial terms. An obligor whose PD rating is "Weak" (excluding F grade – well secured) or "Default" is not eligible for new facilities or increased exposure unless it will facilitate rehabilitation or protect or improve the Group's position by maximising recovery prospects.

Assignments of obligor PD ratings are reviewed at least annually with higher risk exposures being reviewed more frequently. Rating reviews are also initiated when material new information on an obligor comes to light.

For the purpose of determining the PD rating, default is defined as any one of the following:

- The customer is 90 days or more overdue on a scheduled credit obligation repayment; or
- The customer is unlikely to repay their credit obligation to the Group in full, without the Group taking action such as realising available security.

Material deviations from the reference default definition are not permitted.

The Group's mapping of internal rating scales for risk-rated exposures to external rating agencies is detailed in Table 9b (page 40).

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

(ii) Retail Managed Segment

This segment has sub-segments covering housing loan, credit card, personal loan facilities, and personal overdrafts. It also includes most non-retail lending where the aggregated credit exposure to a group of related obligors is less than \$1 million.

The Group has been using scorecards to "auto-decision" loan applications for over 20 years in its consumer retail divisions and more recently for SME retail applications. These are autodecisioned for the approval of credit using a scorecard approach whereby the performance of historical applications is supplemented by information from a credit reference bureau and/or from the Group's existing knowledge of a customer's behaviour. Loan applications that do not meet scorecard autodecisioning requirements may be referred to a Personal Credit Approval Authority for manual decisioning.

Customers with similar characteristics, products and subject to the same origination process are allocated the same PD.

Portfolios in the Retail Managed Segment are managed using behavioural scoring systems and a delinquency band approach (e.g. actions taken when loan payments are greater than 30 days past due differ from actions when payments are greater than 60 days past due) and are reviewed by the relevant Risk Management SU. Loans past due are reviewed by the relevant Arrears Management or Financial Assistance Team.

Financial assets in the retail segment are classified as secured or unsecured. Unsecured facilities (e.g. credit cards) are considered impaired at 90 days past due and are generally written off once they reach 180 days past due (unless arrangements have been made between the borrower and the Group).

Secured facilities (e.g. home loans) are classified as impaired when a facility is 90 days past due and it is not well secured, the facility has been formally restructured or judgement is made that there is reasonable evidence that the customer is unable to meet contractual obligations and it is not well secured.

Common PD, EAD and LGD methodologies are followed in constructing the internal ratings process for residential mortgages, qualifying revolving retail exposures and other retail advances with the default definition applied when payment on a facility is 90 days or more past due, or indications of unlikeliness to pay (e.g. a write-off amount exists against the facility).

Loss Given Default

LGDs are derived using data from accounts that were in default during any given month within the modelling observation period. LGD is estimated as the net present value of the post default loss, including an allowance for internal and external costs, expressed as a percentage of the EAD.

Amounts recovered and the associated costs of recovery after the point of default are discounted using an appropriate discount rate inclusive of a risk premium.

LGD is impacted by:

- The level of security cover and the type of collateral held;
- Liquidity and volatility of collateral value;
- Carrying costs (effectively the costs of providing a facility that is not generating an interest return); and
- Realisation costs.

For calculating regulatory capital an estimated downturn LGD is used that reflects likely recovery rates under stressed economic conditions except for residential mortgages, where a 20% floor has been determined by APRA.

It is recognised that some accounts will cure after entering default. Cure rates are an important aspect of estimating a downturn LGD that is consistent with economic recession conditions.

For corporate and SME corporate customers, an LGD rating is applied based on the security cover ratio, after taking into consideration the security lending margins applied to various security asset types. The LGD rating provides an estimate of the likely loss in the event of default, based on past experience. Secured commercial exposures receive an LGD rating of A-F. By way of examples:

- A rating of A is applied only to very well secured exposures where the security cover ratio exceeds 140%;
- An LGD rating of C reflects a security cover ratio of 100%; and
- An LGD rating of F applies where the security cover is less than 40%.

Unsecured large corporate customers, banks and sovereigns receive an LGD rating of J to N, depending on their PD rating and the existence of covenants.

For retail exposures, accounts are segmented into homogeneous LGD pools based on product/loan type and other relevant attributes.

The Group has policies and procedures in place setting out the circumstances where acceptable and appropriate collateral is to be taken, including valuation parameters, review frequency and independence of valuation.

Collateral types are discussed in further detail in section 8.5 "Credit Risk Mitigation" (page 50).

Exposure at Default

EAD is the estimate of the amount of a facility that will be outstanding in the event of default.

For defaulted facilities, it is the actual amount outstanding at the time of default.

For non-defaulted committed facilities, it is based on the actual amount outstanding, plus the undrawn amount multiplied by a credit conversion factor, which represents the potential rate of conversion from the undrawn amount 12 months prior to default, to the drawn amount at default. For most committed facilities, the Group applies a credit conversion factor of 100% to the undrawn amount. For uncommitted facilities the EAD will generally be the drawn balance only.

For retail exposures, a modelling approach can be used based on factors including limit usage, arrears and loan type to segment accounts into homogeneous pools for the calculation.

Expected Loss

Regulatory EL is calculated as the product of PD, EAD and LGD.

Regulatory EL is reported for both defaulted and non-defaulted exposures. For non-defaulted exposures, regulatory EL is based on the quality of exposures at a point in time using longrun PDs and downturn LGDs as required by APRA. For defaulted exposures, regulatory EL is based on the best estimate of loss.

Regulatory EL for Specialised Lending exposures is prescribed by APRA's Supervisory Slotting approach. Regulatory EL is not required to be calculated on standardised portfolios.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Unexpected Loss

The UL for each portfolio segment is calculated based on a given level of confidence that the magnitude of the UL will not be exceeded with a known probability. UL represents the difference between EL and the point on the loss distribution associated with the required level of probability that the loss is not to exceed. The Group holds capital to cover the UL. UL is calculated based on the Basel III Framework using a 99.9% probability that UL will not be exceeded.

Uses of Internal Estimates of Credit Risk Components other than for Regulatory Capital Purposes

The Group uses its internal estimates of PD, LGD and EAD for a number of activities other than for AIRB regulatory capital purposes. They include:

- Management of credit risk concentrations through the Large Credit Exposure, Industry Sector Concentration and Country Risk Exposure policies;
- Loan origination and credit quality control through the generation and monitoring of credit risk ratings;
 - Calculation of some accounting collective provisions;

- Capital budgeting through modelling of business plans under expected and stressed scenarios; and
- Aligning risk culture to the Group's risk appetite through its internal risk-based-pricing performance framework ensuring the Group generates appropriate economic returns through its risk-pricing framework at both:

(i) a transactional level where long-run EL is factored into interest margins and fees; and

(ii) a portfolio level via Profit After Capital Charge and Return on Target Equity frameworks.

Credit Risk Ratings System

The Credit Risk Rating (CRR) is assigned by reference to a matrix that maps the PD and long-run LGD to a number commensurate with EL.

The Group uses its credit risk estimates to price transactions, measure performance and help determine the amount of capital required to support business activities.

The Group's credit risk estimates are subject to annual review in accordance with a Board Risk and Compliance Committee approved Model Policy to ensure independent validation and testing of assigned risk estimates.

Table 9b – Internal ratings structure for credit risk exposures and mapping to external ratings

Description	Internal Rating	Probability of Default	S&P Rating	Moody's Rating
Exceptional	A0 to A3	0% - 0.035%	AAA to AA-	Aaa to Aa3
Strong	B1 to C3	>0.035% - 0.446%	A+ to BBB-	A1 to Baa3
Pass	D1 to E3	>0.446% - 6.656%	BB+ to B-	Ba1 to B3
Weak/Doubtful	F1 to G3	>6.656%	CCC to C	Caa to Ca
Restructured	R	30.998%	-	-
Defaulted	н	100%	D	С

Table 9c – PD rating methodology by portfolio segment

	Portfolio Segment	PD Rating Methodology
	Bank and sovereign exposures	Expert judgement assigned risk rating, informed but not driven by rating agency views.
	Large corporate exposures	Combination of expert judgement and PD Rating Tool assigned risk ratings depending on the industry sector.
	SME corporate exposures	PD Rating Tool and expert judgement assigned risk rating.
	SME retail exposures < \$1m	SME behaviour score assigned PD pools.
) -	Consumer retail exposures (including residential mortgages, qualifying revolving credit and other retail)	Depending on the product, PD pools are assigned using product specific application scorecards, behavioural scorecards, payment status or a combination thereof.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Credit Risk Exposure Subject to the AIRB Approach

Table 9d (i) - Non-retail exposures by portfolio type and PD band

_	30 June 2021							
	0 0 000/	0.000/ 0.450/	0.45% 0.5%	PD Ban		100/ 1000/		
Non-retail ¹	0 < 0.03% \$M	0.03% < 0.15% \$M	0.15% < 0.5% \$M	0.5% < 3% \$M	3% < 10% \$M	10% < 100% \$M	Default \$M	Tota \$M
	~	*	.	*	.	*	.	*
Total credit risk exposures		20 700	40 500	20.020	707	000	005	400.007
Corporate	-	39,769	42,568	36,230	707	828	835	120,937
SME corporate	-	1,279	4,533	45,554	2,651	1,608	1,115	56,740
SME retail ²	-	-	1,476	10,924	3,234	506	283	16,423
Sovereign	164,448	20,872	456	8	-	-	-	185,784
Bank	-	21,588	842	13		-		22,443
Total	164,448	83,508	49,875	92,729	6,592	2,942	2,233	402,327
Undrawn commitments ³								
Corporate	-	15,845	17,829	11,748	315	129	147	46,013
SME corporate	-	290	1,051	8,065	418	128	81	10,033
SME retail ²	-	-	1,330	3,370	726	86	16	5,528
Sovereign	913	328	43	6	-	-	-	1,290
Bank	_	364	32	2	_	-	_	398
Total	913	16,827	20,285	23,191	1,459	343	244	63,262
Exposure - average EAD (\$M)								
Corporate	-	2.937	1.586	0.852	0.402	0.856	1.562	1.404
SME corporate	-	0.848	0.459	0.468	0.385	0.359	0.367	0.461
SME retail ²	-	-	0.080	0.055	0.048	0.079	0.075	0.056
Sovereign	11.017	21.255	1.059	0.184	-	-	-	11.334
Bank	-	2.070	0.463	0.073	_	-	-	1.804
Exposure - weighted average LGD (%)								
Corporate	_	55.3	46.2	40.0	42.7	39.5	51.9	47.3
SME corporate	_	55.1	28.6	26.7	28.8	30.0	33.2	27.8
SME retail ²	-	-	37.3	31.8	42.3	32.4	31.2	34.3
Sovereign	5.4	10.7	47.9	56.8	_	-	-	6.1
Bank	-	59.0	59.9	59.7	_	-	-	59.1
Exposure - weighted average risk weight (%) ⁴								
Corporate	-	27.9	52.6	81.8	155.9	207.3	88.4	55.1
SME corporate	_	23.2	28.4	48.9	79.0	137.8	148.5	52.6
SME retail ²	_	_	22.7	42.6	83.7	110.4	222.4	54.1
Sovereign	1.0	2.7	52.2	123.5	_	_		1.3
Bank	-	22.4	61.5	121.3	_	_	_	24.0

Total credit risk exposures do not include specialised lending, equity or securitisation exposures.

Including SME retail secured by residential property.

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

4 Includes 1.06 scaling factor.

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8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9d (i) - Non-retail exposures by portfolio type and PD band (continued)

-				31 Decembe				
	0.000	0.00%	0.45%	PD Ban		400/ 4000/		
Non-retail ¹	0 < 0.03% \$M	0.03% < 0.15% \$M	0.15% < 0.5% \$M	0.5% < 3% \$M	3% < 10% \$M	10% < 100% \$M	Default \$M	Total \$M
Total credit risk exposures								
Corporate	_	40,615	43,430	36,754	809	1,211	874	123,693
SME corporate	_	762	3,994	43,963	2,668	1,965	1,060	54,412
SME retail ²	_	-	1,576	11,089	3,436	518	286	16,905
Sovereign	111,366	27,562	543	1	-	_		139,472
Bank	-	23,449	1,233	34	_	_	_	24,716
Total	111,366	92,388	50,776	91,841	6,913	3,694	2,220	359,198
Undrawn commitments ³	111,000	32,000	00,110	01,041	0,010	0,004	2,220	000,100
Corporate	_	17,075	18,156	12,576	329	213	169	48,518
SME corporate	_	207	1,057	8,656	413	172	61	10,566
SME retail ²	_		1,420	3,850	787	85	21	6,163
Sovereign	893	214	43	1	-	_	_	1,151
Bank	-	307	96	1	_	_	_	404
Total	893	17,803	20,772	25,084	1,529	470	251	66,802
Exposure - average EAD (\$M)		,			.,			,
Corporate	_	2.905	1. 795	0. 944	0. 506	1.025	1.608	1. 538
SME corporate	_	0. 471	0. 492	0. 497	0. 448	0. 438	0. 491	0. 491
SME retail ²	_	_	0. 100	0.065	0. 053	0.099	0. 128	0.066
Sovereign	7. 941	36. 750	1. 394	0. 043	_	_	_	9. 172
Bank	_	1. 985	0. 588	0. 178	_	_	_	1. 750
Exposure - weighted average LGD (%)								
Corporate	_	55.4	45. 7	41. 1	43. 7	43. 1	53. 4	47.5
SME corporate	_	52.9	30. 8	28.0	30. 3	31.8	33. 8	28. 9
SME retail ²	_	_	41. 3	32. 5	42. 1	32.8	32. 7	35. 3
Sovereign	5. 6	9.9	42. 8	25. 4	_	_	_	6.6
Bank	_	59. 2	60. 0	60.0	_	_	_	59.3
Exposure - weighted average risk weight (%) 4								
Corporate	_	27. 2	52. 1	82. 3	161. 7	223. 0	141. 3	55.9
SME corporate	_	20. 4	30. 3	50. 8	84. 3	147. 0	173. 1	56.4
SME retail ²	_	_	28. 1	44. 7	88. 2	113. 1	227. 3	57.2
Sovereign	1. 6	2.7	34. 7	46. 2	_	-	_	1.9
Bank	_	24. 2	58. 4	114. 8	_	_	_	26.0

Total credit risk exposures do not include specialised lending, equity or securitisation exposures.

Including SME retail secured by residential property.

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

Includes 1.06 scaling factor.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9d (i) - Non-retail exposures by portfolio type and PD band (continued)

_				30 June 2				
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	PD Ban 0.5% < 3%	d 3% < 10%	10% < 100%	Default	Tota
Non-retail ¹	0 < 0.03% \$M	0.03% < 0.15% \$M	0.15% < 0.5% \$M	0.5% < 3% \$M	3% < 10% \$M	\$M	\$M	10ta \$N
Total credit risk exposures								
Corporate	_	42,063	45,158	32,828	671	1,297	950	122,967
SME corporate	_	753	4,078	41,581	2,234	1,996	1,214	51,856
SME retail ²	_	_	1,205	11,846	3,187	569	315	17,122
Sovereign	95,304	12,597	218	5	_	_	_	108,124
Bank	_	22,506	1,648	20	_	_	_	24,174
Total	95,304	77,919	52,307	86,280	6,092	3,862	2,479	324,243
Undrawn commitments ³								
Corporate	_	18,558	16,964	9,664	244	261	135	45,826
SME corporate	_	135	937	6,995	264	157	68	8,556
SME retail ²	_	_	1,038	3,805	677	73	17	5,610
Sovereign	856	225	36	2	_	-	_	1,119
Bank	_	308	95	1	_	-	_	404
Total	856	19,226	19,070	20,467	1,185	491	220	61,515
Exposure - average EAD (\$M)								
Corporate	_	3. 038	1. 936	0.866	0. 425	0. 887	1. 923	1. 564
SME corporate	_	0. 563	0. 498	0. 480	0. 395	0. 413	0. 490	0. 475
SME retail ²	_	_	0. 077	0. 056	0.067	0.079	0. 088	0.060
Sovereign	7. 108	18. 283	0. 697	0. 123	_	_	-	7.475
Bank	_	1.909	0. 724	0. 077	_	_	-	1. 687
Exposure - weighted average LGD (%)								
Corporate	_	55. 5	47. 2	42. 1	40. 9	48.8	51.2	48.7
SME corporate	_	56.9	31. 3	28.7	30. 4	31. 3	32. 9	29.6
SME retail ²	_	_	40. 5	32. 7	40.0	29. 5	33. 3	34. 5
Sovereign	5. 7	12. 6	44. 4	48.4	_	-	-	6.6
Bank	_	59. 5	60. 0	60.0	_	_	-	59.5
Exposure - weighted average risk weight (%) ^{4, 5}								
Corporate	-	27.6	53. 3	86. 8	152. 7	263. 0	103. 2	56.6
SME corporate	-	24. 5	31. 1	53. 3	88. 4	146. 2	197. 5	59.6
SME retail ²	-	-	27. 8	45.8	87. 1	110. 7	272. 9	58.6
Sovereign	1. 5	2.5	33. 3	131.2	_	-	_	1.7
Bank	_	25. 2	58. 5	125. 6	_	_	_	27.6

Total credit risk exposures do not include specialised lending, equity or securitisation exposures.

Including SME retail secured by residential property.

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

Includes 1.06 scaling factor

In June 2020, AASB 9 collective provisions were included in the calculation of credit RWA for defaulted non-retail exposures. This change in methodology was approved by APRA.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9d (ii) – Retail exposures by portfolio type and PD band

				30 June 2	-			
				PD Ban				
	0 < 0.1%	0.1% < 0.3%	0.3% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Retail	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Total credit risk exposures								
Residential mortgage	191,827	129,335	79,325	224,671	11,217	6,259	5,313	647,947
Qualifying revolving retail	204	14,686	3,311	4,103	1,470	212	61	24,047
Other retail	55	71	56	5,453	3,240	483	98	9,456
Total	192,086	144,092	82,692	234,227	15,927	6,954	5,472	681,450
Undrawn commitments ¹								
Residential mortgage	43,945	15,585	10,037	14,128	256	61	21	84,033
Qualifying revolving retail	169	11,707	2,454	1,596	225	30	1	16,182
Other retail	44	11	36	2,491	265	87	5	2,939
Total	44,158	27,303	12,527	18,215	746	178	27	103,154
Exposure - average EAD (\$M)								
Residential mortgage	0. 273	0. 298	0. 280	0. 288	0. 268	0. 220	0. 272	0. 283
Qualifying revolving retail	0.004	0.009	0. 007	0.008	0.007	0.007	0.006	0. 008
Other retail	0. 005	0. 438	0.006	0.006	0. 010	0. 001	0.005	0. 006
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19. 7	19. 4	20. 3	21.0	19. 7	20. 3	20. 0
Qualifying revolving retail	81. 0	84. 9	84. 2	84. 5	84. 3	84.0	84. 7	84. 6
Other retail	106. 9	99. 8	105. 2	88.6	83. 5	91.2	87. 8	87. 2
Exposure - weighted average risk weight (%) ²								
Residential mortgage	4.4	12. 7	20. 7	40. 5	98.6	131.7	155. 2	24. 7
Qualifying revolving retail	4.8	5. 5	13. 7	44. 2	128. 7	212. 2	60. 3	22. 7
Other retail	25. 2	44. 1	70. 5	105.7	129. 5	193. 3	199. 6	118. 2

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

2 Includes 1.06 scaling factor.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9d (ii) - Retail exposures by portfolio type and PD band (continued)

_				31 Decembe	r 2020			
				PD Ban				
	0 < 0.1%	0.1% < 0.3%	0.3% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Tota
Retail	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Total credit risk exposures								
Residential mortgage	198,208	122,221	71,882	208,809	11,290	6,924	4,476	623,810
Qualifying revolving retail	_	15,132	3,436	4,218	1,558	222	60	24,626
Other retail	50	56	48	5,773	3,111	522	124	9,684
Total	198,258	137,409	75,366	218,800	15,959	7,668	4,660	658,120
Undrawn commitments ¹								
Residential mortgage	44,717	14,620	8,504	11,977	176	60	15	80,069
Qualifying revolving retail	_	11,905	2,567	1,755	242	32	1	16,502
Other retail	45	10	34	2,580	260	89	4	3,022
Total	44,762	26,535	11,105	16,312	678	181	20	99,593
Exposure - average EAD (\$M)								
Residential mortgage	0. 278	0. 295	0. 273	0. 279	0. 274	0. 228	0. 278	0. 280
Qualifying revolving retail	_	0.009	0. 007	0.008	0.008	0.007	0.007	0. 008
Other retail	0.004	0. 373	0. 005	0.007	0. 010	0.002	0. 005	0.006
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19. 7	19. 4	20. 4	21. 2	19. 8	20. 3	20. 0
Qualifying revolving retail	_	84.8	84. 2	84. 5	84. 2	83. 9	84. 6	84. 6
Other retail	107. 8	99.6	106. 2	88.3	83. 3	90. 5	86.6	87. 0
Exposure - weighted average risk weight (%) 2								
Residential mortgage	4.4	12. 8	20. 6	41.2	101. 7	134.6	135. 2	24. 4
Qualifying revolving retail	-	5.6	13. 9	44. 2	128. 5	211.6	267.9	23.6
Other retail	26. 7	43. 3	70. 5	105. 9	129. 3	194. 1	235. 5	118. 9

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

2 Includes 1.06 scaling factor.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9d (ii) - Retail exposures by portfolio type and PD band (continued)

				30 June 2	020			
				PD Ban	d			
	0 < 0.1%	0.1% < 0.3%	0.3% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Retail	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Total credit risk exposures								
Residential mortgage	189,231	118,352	68,379	199,934	11,866	6,972	4,779	599,513
Qualifying revolving retail	_	14,548	3,652	4,758	1,904	335	112	25,309
Other retail	52	42	47	5,499	3,459	624	132	9,855
Total	189,283	132,942	72,078	210,191	17,229	7,931	5,023	634,677
Undrawn commitments ¹								
Residential mortgage	41,773	13,894	6,864	10,102	162	59	17	72,871
Qualifying revolving retail	-	12,022	2,801	1,954	302	37	1	17,117
Other retail	47	3	35	2,692	273	85	4	3,139
Total	41,820	25,919	9,700	14,748	737	181	22	93,127
Exposure - average EAD (\$M)								
Residential mortgage	0. 280	0. 293	0. 269	0. 271	0. 272	0. 226	0. 266	0. 277
Qualifying revolving retail	-	0.009	0. 007	0.008	0.008	0.008	0.009	0. 008
Other retail	0.004	0. 349	0.005	0.006	0. 010	0.002	0. 004	0. 006
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19.7	19. 4	20. 3	21. 1	19. 8	20. 3	20. 0
Qualifying revolving retail	-	84.8	84. 3	84. 5	84. 2	84. 1	84. 5	84. 6
Other retail	107. 8	99. 5	106. 5	92.0	85. 3	89. 3	88. 0	89.6
Exposure - weighted average risk weight (%) ^{2, 3}								
Residential mortgage	4. 4	12.6	20. 4	41.4	101. 0	133. 9	149. 8	24. 7
Qualifying revolving retail	-	5.5	13. 9	44.9	128. 1	207.6	102. 3	26.6
Other retail	26.6	45.0	70. 4	110. 5	132. 8	192.6	145. 1	123. 0

The credit exposure value of undrawn commitments included in Total credit risk exposures above.

Includes 1.06 scaling factor.

In June 2020, AASB 9 collective provisions were included in the calculation of Credit RWA for defaulted retail exposures. This change in methodology was approved by APRA.

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Analysis of Losses

The following tables provide a summary of financial losses by AIRB portfolio (Table 9e) and a comparison of financial losses to regulatory EL estimates (Table 9f (i)). Actual losses may differ from modelled regulatory EL for a number of reasons.

Actual losses (whether from standardised or AIRB portfolios) are historical and are based on the quality of impaired assets in prior periods, full or partial write-offs, and more recent economic conditions. Actual losses are expected to be below the regulatory EL estimate in most years. Regulatory EL measures economic loss at a point in time and includes costs (such as internal costs) not included in actual losses. Regulatory EL is calculated on non-defaulted and defaulted AIRB exposures using long-run PDs and downturn LGDs for non-defaulted exposures, and the Best Estimate of Expected Loss (BEEL) for defaulted exposures.

Table 9e - Actual losses by portfolio type

	:	30 June 2021	
	Full year lo	sses in reporting	period
	Gross		Actual
	write-offs	Recoveries	losses
Portfolio Type	\$M	\$M	\$M
Corporate	105	-	105
SME corporate	87	(2)	85
SME retail (including SME retail secured by residential mortgages)	39	(1)	38
Specialised lending	3	-	3
Total corporate including SME and specialised lending	234	(3)	231
Sovereign	-	-	-
Bank	-	-	_
Residential mortgage (excluding SME retail secured by residential mortgages)	68	(5)	63
Qualifying revolving retail	238	(66)	172
Other retail	236	(48)	188
Total AIRB and specialised lending portfolios	776	(122)	654

	31	December 2020	
	Half year lo	sses in reporting	period
	Gross		Actual
	write-offs	Recoveries	losses
Portfolio Type	\$M	\$M	\$M
Corporate	82	_	82
SME corporate	41	(1)	40
SME retail (including SME retail secured by residential mortgages)	21	(1)	20
Specialised lending	2	_	2
Total corporate including SME and specialised lending	146	(2)	144
Sovereign	-	-	-
Bank	-	_	-
Residential mortgage (excluding SME retail secured by residential mortgages)	39	(3)	36
Qualifying revolving retail	141	(30)	111
Other retail	130	(29)	101
Total AIRB and specialised lending portfolios	456	(64)	392

	:	30 June 2020	
	Full year lo	sses in reporting	period
	Gross		Actual
	write-offs	Recoveries	losses
Portfolio Type	\$M	\$M	\$M
Corporate	134	_	134
SME corporate	121	(9)	112
SME retail (including SME retail secured by residential mortgages)	64	(6)	58
Specialised lending	9	-	9
Total corporate including SME and specialised lending	328	(15)	313
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	121	(5)	116
Qualifying revolving retail	305	(80)	225
Other retail	367	(76)	291
Total AIRB and specialised lending portfolios	1,121	(176)	945

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Table 9f (i) – Historical loss analysis by portfolio type

	30 Jur	ne 2021
	-	Regulatory
		one year
	Full year	•
	actual loss	estimate
Portfolio Type	\$M	\$M
Corporate	105	872
SME corporate	85	652
SME retail (including SME retail secured by residential mortgages)	38	209
Specialised lending	3	879
Total corporate including SME and specialised lending	231	2,612
Sovereign	-	3
Bank	-	6
Residential mortgage (excluding SME retail secured by residential mortgages)	63	1,578
Qualifying revolving retail	172	292
Other retail	188	396
Total AIRB and specialised lending portfolios	654	4,887

	31 Decer	nber 2020
Portfolio Type	Half year actual loss \$M	Regulatory one year expected loss estimate \$M
Corporate	82	931
SME corporate	40	661
SME retail (including SME retail secured by residential mortgages)	20	215
Specialised lending	2	878
Total corporate including SME and specialised lending	144	2,685
Sovereign	-	3
Bank	-	7
Residential mortgage (excluding SME retail secured by residential mortgages)	36	1,574
Qualifying revolving retail	111	269
Other retail	101	415
Total AIRB and specialised lending portfolios	392	4,953

	30 Ju	ne 2020
Portfolio Type	Full year actual loss \$M	Regulatory one year expected loss estimate \$M
Corporate	134	972
SME corporate	112	672
SME retail (including SME retail secured by residential mortgages)	58	208
Specialised lending	9	798
Total corporate including SME and specialised lending	313	2,650
Sovereign	-	2
Bank	-	7
Residential mortgage (excluding SME retail secured by residential mortgages)	116	1,395
Qualifying revolving retail	225	376
Other retail	291	480
Total AIRB and specialised lending portfolios	945	4,910

8.4 Portfolios Subject to Internal Ratings-based Approaches (continued)

Accuracy of Risk Estimates

The following tables compare credit risk estimates used in calculating regulatory capital to realised outcomes.

Probability of Default

Table 9f (ii) compares estimates of long-run PD to actual default rates averaged over the period from the time of AIRB accreditation (2009 for most portfolios).

Average estimated PD is based on the average of long-run PD's for obligors that are not in default at the beginning of each financial year in the observation period. Actual PD is based on the number of defaulted obligors during the year compared to the non-defaulted obligors measured at the beginning of each financial year.

Table 9f (ii) - Accuracy of risk estimates - PD

	30 June 2	2021
	Average estimated PD	Average actual PD
Portfolio Type	%	%
Corporate	1. 30	0. 88
SME corporate	2. 28	1. 98
SME retail (including SME retail secured by residential mortgages) ¹	1. 89	1. 58
Specialised lending ²	n/a	1. 51
Sovereign ³	0. 56	0. 03
Bank ³	0. 35	0. 23
Residential mortgage (excluding SME retail secured by residential mortgages)	0. 86	0. 74
Qualifying revolving retail	1. 87	1. 91
Other retail	5. 09	4. 77

The average annual PD represents a 6 year observation period for part of the portfolio.

Average estimated PD not relevant for specialised lending under the Supervisory Slotting approach.

Actual PDs based on low volume of defaults observed.

Loss Given Default and Exposure at Default

LGDs for non-retail portfolios are based on accounts that defaulted in 2009 to 2019 financial years. LGDs for retail portfolios are based on accounts that defaulted in 2009 to 2020 financial years. Defaults occurring in the most recent years have been excluded from the analysis, to allow sufficient time for workout of impaired assets, booking of losses and more meaningful disclosures.

The EAD ratio compares estimates of EAD prior to default to realised EAD for obligors that defaulted.

Table 9f (iii) - Accuracy of risk estimates - LGD and EAD

	30 June 2021		
	Average		Ratio of
	estimated	Average	estimated EAD
	downturn LGD	actual LGD	to actual EAD
Portfolio Type	%	%	
Corporate	55.0	38. 9	1. 2
SME corporate	32. 8	20. 0	1. 1
SME retail (including SME retail secured by residential mortgages)	31. 9	21.4	1. 1
Specialised lending ¹	n/a	29. 2	1. 1
Sovereign ²	61.0	1. 2	2.0
Bank ²	65.4	109. 9	1. 8
Residential mortgage (excluding SME retail secured by residential mortgages) ³	20. 5	5. 2	1.0
Qualifying revolving retail	87. 0	69.8	1. 1
Other retail	96. 5	76. 2	1. 0

Average estimated PD not relevant for specialised lending under the Supervisory Slotting approach.

2 Actual PDs based on low volume of defaults observed.

3 Estimated downturn LGD based on minimum regulatory floor requirements imposed by APRA and RBNZ.

8.5 Credit Risk Mitigation

Collateral

The Group has policies and procedures in place, setting out the acceptable collateral for mitigating credit risk. These include valuation parameters, review frequency and independence of valuation. The Chief Credit Officer (or delegate) is responsible for approving acceptable collateral types.

The collateral type, value, liquidity, realisation costs, security lending margin and loss experience are key determinants of the LGD percentage that is assigned to a credit risk exposure. Collateral held for any credit facility is valued, recorded and controlled in the manner explained below.

Real Estate Collateral

Real estate collateral values can only be used for reducing LGD estimates where the following criteria are met:

- Objective market value of collateral the collateral must be valued by an independent valuer (or via a valuation approach approved by the BU Chief Risk Officer or delegate), at no more than the current fair value under which the property could be sold via a private contract, between a willing seller and an arm's length buyer, on the date of valuation;
- Revaluation the Group monitors the value of collateral and updates the value, when appropriate, so that the value is current;
- Insurance steps are taken to ensure that property taken as collateral is adequately insured against damage or destruction at origination, with documentation requiring the customer to maintain adequate insurance over the life of the credit exposure;
- Prior claim other parties may have senior claims to the Group on an asset offered for collateral. For example, council rates and land tax usually benefit from specific legal protection. The impact of such claims needs to be considered when assessing collateral values; and
- Environment the risk of environmental liability arising in respect of the collateral must be appropriately assessed, monitored and where appropriate, reflected in the valuation of collateral.

Home loans are generally secured by mortgages over borrowers' residential properties. In limited circumstances, collateral in the form of cash or commercial property may be provided in addition to residential property. With the exception of some relatively small portfolios, for loans with a LVR of higher than 80% either a Low Deposit Premium or margin is levied, or Lender's Mortgage Insurance (LMI) is taken out to protect the Group by covering the difference between the principal amount plus interest owing and the net amount received from selling the collateral upon default.

Non-Real Estate Collateral

Non-real estate collateral values are only used for reducing LGD estimates where there is a sound process for determining the value of the collateral. Monitoring processes appropriate for the exposure and the collateral type are required to be in place. The main non-real estate collateral types include:

- Cash (usually in the form of a charge over a term deposit) and other liquid assets (e.g. bonds, shares, investment funds);
- Fixed or floating charges over a company's assets, including stock, debtors and work in progress; and
- A charge over assets being financed (e.g. vehicles, equipment).

Where financial collateral is highly correlated with the counterparty exposure that it is used to secure (wrong-way risk), policy specifies that no risk reduction can be taken for the collateral held.

Other Credit Risk Mitigation (including Credit Default Swaps and Guarantees)

The Group mitigates its credit exposure by entering into master netting arrangements with counterparties with which it undertakes a significant volume of transactions. Counterparty credit risk is reduced by a master netting arrangement to the extent that if an event of default occurs, all amounts with the counterparty are terminated and settled on a net basis.

The Group mitigates its counterparty credit risk exposure from dealing in Global Markets type products through the use of Credit Support Annexes (CSAs) and clearing of eligible trades with Central Counterparties (CCPs). CSAs require the counterparty (or the Group) to post collateral when mark-to-market positions exceed agreed threshold and minimum transfer amounts.

Other forms of credit risk mitigation used to either reduce or transfer credit risk include purchasing credit derivatives (e.g. credit default swaps) and/or guarantees from highly rated banks or corporates. To be an eligible mitigant, the credit derivative or guarantee must be contractually binding, have legal certainty and be non-cancellable. Table 10b and 10c (page 51) discloses the Group's coverage of exposure by credit default swaps and guarantees.

Portfolio Management

The Group applies a Board approved Large Credit Exposure Policy (LCEP). This policy governs the authority of management with regard to the amount of credit provided to any single counterparty, or group of related counterparties (as determined by applying Aggregation Policy) within the risk-rated segment.

The objective of the LCEP is to limit the risk of catastrophic loss to the Group through over-exposure to the failure of a single obligor, or group of related counterparties. The LCEP is reviewed annually.

Usage of LCEP limits is determined at both individual counterparty and group of related counterparty levels. Limits are tiered by counterparty type, PD rating, security cover and facility maturity.

Management reports to the Group Financial Risk Committee and the Board Risk and Compliance Committee each quarter, on a total credit risk exposure basis:

- All exposures at, or greater than, the LCEP limits, including those resulting from term extension, PD or security cover deterioration; and
- All exposures ceasing to exceed LCEP limits since the last report.

All relevant borrower specific credit submissions prominently display relative compliance with the LCEP.

Credit risk concentration limits are in place to ensure portfolio diversification and prevent over concentration to industries or countries. Geographic dispersion monitoring within Australia and New Zealand is also conducted for some larger subportfolios. Periodic stress tests of major credit risk concentrations are conducted to identify potential changes in market conditions (such as changes in interest rates, droughts, etc.) that could adversely impact the credit portfolio's performance. Action is taken where necessary to reduce the volatility of losses.

8.5 Credit Risk Mitigation (continued)

Table 10b and 10c – Credit risk mitigation

	30 June 2021 Exposures				
		Eligible	Exposures	•	
	Total	financial	Exposures covered by	covered by credit	
	exposure ¹	collateral	guarantees	derivatives	Coverage
	sM	\$M	\$M	\$M	%
Advanced approach ²					
Corporate	120,937	_	440	_	0.4
SME corporate	56,740	_	_	_	_
SME retail ³	16,423	_	_	_	_
Sovereign	185,784	_	_	_	_
Bank	22,443	_	-	_	_
Residential mortgage	647,947	_	_	-	_
Qualifying revolving retail	24,047	_	-	_	-
Other retail	9,456	_	-	_	_
Total advanced approach	1,083,777	_	440	-	0.0
Specialised lending	73,840	_	44	_	0. 1
Standardised approach					
Corporate	1,234	_	_	_	-
SME corporate	805	-	-	_	-
SME retail	2,486	_	_	_	-
Sovereign	1,007	-	-	_	-
Bank	245	-	-	_	-
Residential mortgage	15,012	_	-	_	-
Other retail	927	-	-	-	-
Other assets	19,056	_	-	_	-
Central clearing counterparties	10,281	-	-	_	
Total standardised approach	51,053	-	-	-	-
Total exposures	1,208,670	_	484	_	0.0

Credit derivatives that are treated as part of synthetic securitisation structures are excluded from credit risk mitigation disclosures and included within those relating to securitisation.

Advanced approach: Exposure for derivatives and guarantees is after netting and financial collateral

Including SME retail secured by residential property.

8.5 Credit Risk Mitigation (continued)

Table 10b and 10c - Credit risk mitigation (continued)

	31 December 2020 ¹					
	Total exposure ² \$M	Eligible financial collateral \$M	Exposures covered by guarantees \$M	Exposures covered by credit derivatives \$M	Coverage %	
Advanced approach ³						
Corporate	123,693	_	510	_	0.4	
SME corporate	54,412	_	_	_	-	
SME retail ⁴	16,905	_	_	-	_	
Sovereign	139,472	_	_	-	_	
Bank	24,716	-	_	-	-	
Residential mortgage	623,810	_	_	-	-	
Qualifying revolving retail	24,626	-	_	-	-	
Other retail	9,684	_	_	-	-	
Total advanced approach	1,017,318	_	510	-	0. 1	
Specialised lending	68,697	-	_	_	-	
Standardised approach						
Corporate	1,194	-	_	-	-	
SME corporate	752	-	-	-	-	
SME retail	2,654	-	_	-	-	
Sovereign	595	-	_	_	-	
Bank	666	-	-	-	-	
Residential mortgage	14,771	-	_	-	-	
Other retail	1,004	-	-	-	-	
Other assets	23,408	-	_	-	-	
Central clearing counterparties	10,641			_	_	
Total standardised approach	55,685	_	-	-	-	
Total exposures	1,141,700	_	510	-	0.0	

Comparative information has been restated to conform to presentation in the current period.

2 Credit derivatives that are treated as part of synthetic securitisation structures are excluded from credit risk mitigation disclosures and included within those relating to securitisation.

Advanced approach: Exposure for derivatives and guarantees is after netting and financial collateral.

Including SME retail secured by residential property.

8.5 Credit Risk Mitigation (continued)

Table 10b and 10c - Credit risk mitigation (continued)

	30 June 2020 ¹				
	Total exposure ² \$M	Eligible financial collateral \$M	Exposures covered by guarantees \$M	Exposures covered by credit derivatives \$M	Coverage %
Advanced approach ³					
Corporate	122,967	_	510	_	0.4
SME corporate	51,856	-	_	_	-
SME retail ⁴	17,122	_	_	_	_
Sovereign	108,124	_	_	_	_
Bank	24,174	-	_	_	-
Residential mortgage	599,513	-	_	_	-
Qualifying revolving retail	25,309	_	-	_	_
Other retail	9,855	-	_	_	-
Total advanced approach	958,920	_	510	_	0. 1
Specialised lending	66,433	_	-	_	-
Standardised approach					
Corporate	957	_	-	_	_
SME corporate	741	-	-	_	-
SME retail	2,920	-	-	_	-
Sovereign	565	_	-	_	-
Bank	324	_	-	_	-
Residential mortgage	15,102	-	-	_	-
Other retail	1,120	_	-	_	-
Other assets	17,799	_	-	-	-
Central clearing counterparties	10,483	_		_	
Total standardised approach	50,011	_	_	_	_
Total exposures	1,075,364	_	510	_	0.0

Comparative information has been restated to conform to presentation in the current period.

2 Credit derivatives that are treated as part of synthetic securitisation structures are excluded from credit risk mitigation disclosures and included within those relating to securitisation.

Advanced approach: Exposure for derivatives and guarantees is after netting and financial collateral.

Including SME retail secured by residential property.

8.6 Counterparty Credit Risk

Counterparty Credit Risk (CCR) is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or a portfolio of transactions with the counterparty has a positive economic value for the Group at the time of default. Unlike an exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss whereby the market value for many different types of transactions can be positive or negative to either counterparty. The market value is uncertain and can vary over time with the movement of underlying market factors.

Capital is allocated to CCR exposures after taking into account the risk-rating and expected exposure to the counterparty, and correlations and diversification impacts across risk types.

CCR is controlled through a variety of credit policies and procedures including, but not limited, to the following:

- Large Credit Exposure Policy;
- Country Risk Exposure Policy;
- Aggregation Policy;
- Netting Policy;
- Collateralisation of Derivative Transactions Policy;
- Wrong-way Risk Policy; and
- Specific product policies.

Wrong-way risk is a risk associated with CCR. There are two types of wrong-way risk, general and specific. General wrongway risk arises when the PD of counterparties is positively correlated with general market risk factors. Specific wrong-way risk arises when the exposure to a particular counterparty and the PD of the counterparty providing credit risk mitigation for the exposure are highly correlated.

Specific wrong-way risk is controlled through not recognising any risk reduction from credit risk mitigation provided by highly correlated counterparties. General wrong-way risk is monitored through the Group's stress testing activities and is controlled via the Group's policies that manage industry, country and individual counterparty concentrations. CSAs are used with some large corporates and most bank and non-bank financial institution counterparties to collateralise CCR for Global Markets products. The use of CSAs is governed by the Collateralisation of Derivative Transactions Policy and Netting Policy. CSAs lower the wrong-way risk that arises from market movements by requiring the counterparty (or the Group) to post collateral to cover mark-to-market values that might be owed upon a counterparty default.

Aggregate threshold and minimum transfer amounts are the amounts by which the counterparty (or the Bank) can be out of the money before they may be obliged to post collateral. In approximately 7% of ISDA Master Agreements and CSAs these amounts vary depending on the counterparty's long term debt rating. In the remaining agreements the amounts are fixed. Generally, a counterparty's rating is considered in determining its threshold and minimum transfer amount. A trend to lower thresholds has been observed since the Global Financial Crisis. This trend will continue in line with regulatory change.

Risk Managers provide sign-off on terms of the CSA prior to the documentation being executed. Upon execution of a CSA with a counterparty, all relevant threshold levels are input into the collateral management system.

Collateral stress testing is used to determine the effect that a rating downgrade would have on the Group's collateral obligation to its counterparties.

As at 30 June 2021, the maximum additional collateral that could be posted to other counterparties based on the Group's current rating is \$294 million. As at 30 June 2021, a unilateral one-notch and two-notch downgrade in the Group's rating would have resulted in a further \$74 million and \$218 million of collateral being posted to other counterparties respectively. Collateral stress tests are also conducted on the Group's counterparties so that it can monitor for likely collateral stresses in the event of a counterparty downgrade.

Table 11b (i) Counterparty credit risk derivative exposure under the SA-CCR method ¹

	30 Jun 21 \$M	31 Dec 20 ² \$M	30 Jun 20 ² \$M
Gross positive fair value	21,034	33,594	29,759
Netting and collateral benefits	(14,740)	(25,809)	(21,503)
Including collateral held of which:			
Cash	(4,218)	(4,106)	(4,592)
Replacement cost	6,294	7,785	8,256
Potential future exposure	9,074	8,551	9,008
Impact of scaling factor of 1.4 and incurred CVA	6,069	6,431	6,742
Exposure at Default	21,437	22,767	24,006

1 Excluding exposures to CCP's.

2 Comparative information has been restated to conform to presentation in the current period.

8.6 Counterparty Credit Risk (continued)

Table 11b (ii) Counterparty credit risk derivative exposure¹

	Current Credit Exposure			
	30 Jun 21	31 Dec 20	30 Jun 20	
Exposure type	\$M	\$M	\$M	
Interest rate contracts	5,775	9,131	9,714	
Foreign currency contracts	14,774	24,120	19,288	
Equity contracts	-	-	_	
Credit derivatives	8	9	7	
Commodities and other	477	334	750	
Total	21,034	33,594	29,759	

Excluding exposures to CCP's.

Table 11c Counterparty credit risk derivative transactions

	Own Credit Portfolio		Intermediation Activity	
Notional value by product type as at 30 June 2021 ^{1, 2}	Protection buyer \$M	Protection seller \$M	Protection buyer \$M	Protection seller \$M
Credit default swaps	2,154	_	_	421
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	_	-
Total	2,154	-	-	421

Excluding exposures to CCP's.

Notional values are presented for credit derivatives with positive fair values and include credit derivative hedges.

	Own Credit P	Own Credit Portfolio Intermediation		
Notional value by product type as at 31 December 2020 ^{1, 2}	Protection buyer \$M	Protection seller \$M	Protection buyer \$M	Protection seller \$M
Credit default swaps	2,233	_	_	450
Total return swaps	_	_	-	_
Credit options	_	_	-	_
Other	-	_	-	-
Total	2,233	_	_	450

Excluding exposures to CCP's.

Notional values are presented for credit derivatives with positive fair values and include credit derivative hedges.

	Own Credit P	Own Credit Portfolio		
Notional value by product type as at 30 June 2020 ^{1, 2}	Protection buyer \$M	Protection seller \$M	Protection buyer \$M	Protection seller \$M
Credit default swaps	2,723	_	17	967
Total return swaps	-	_	_	-
Credit options	_	_	_	_
Other	_	_	_	_
Total	2,723	_	17	967

Excluding exposures to CCP's.

Notional values are presented for credit derivatives with positive fair values and include credit derivative hedges.

8.7 Securitisation

Securitisation is a financing 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 (i.e. one class of creditor is entitled to receive payments from the pool before another class of creditors).

Securitisations may be categorised as either:

- Traditional securitisation a securitisation where the pool is transferred (or assigned) to, and held by, or otherwise held directly in its name by, a Special Purpose Vehicle (SPV); or
 - Synthetic securitisation a securitisation whereby the credit risk, or part of the credit risk, of a pool is transferred to a third party which need not be an SPV. The transfer of credit risk can be undertaken through the use of funded (e.g. credit linked notes) or unfunded (e.g. credit default swaps) credit derivatives or guarantees.

Securitisation Activities

The Group is involved in the following types of business activities that give rise to securitisation exposures:

Group originated securitisations – where the Group equitably assigns home loans it has originated to a SPV, which in turn raises wholesale funding by the issuance of notes to external investors. The Medallion Programme is the Group's securitisation programme of CBA and ASB originated residential mortgage loans. CBA has also established an internal securitisation where CBA retains all the notes issued to use as collateral to raise contingent liquidity from the RBA;

Third party securitisations – where assets are originated by parties other than the Group. Such transactions usually have added layers of credit protection, whether it is lender's mortgage insurance, over-collateralisation, cash reserves and/or other subordinated credit support. The nature of the underlying assets is similar to those that the Group would normally support in a non-securitised form including residential and commercial mortgages, personal loans, revolving credit exposures, and vehicle loans and equipment financing. The Group acts as a funder/note holder;

- The purchase of asset/mortgage backed securities for trading or portfolio investment; and
- The provision of interest rate swaps, cross-currency swaps and/or liquidity support facilities to an external SPV where the Group may be the arranger, lead manager and/or originator of the respective securities or underlying assets.

For contingent liquidity, the Group manages a Residential Mortgage Backed Security (RMBS) portfolio which is not intended to be issued publicly. These notes will be held by the Group and the senior notes, if required, can be used for repurchase agreements with the RBA and RBNZ to generate additional liquidity for the Group through access to the CLF and TFF, for which these RMBS are eligible collateral.

Strategic Issues

For the Group, securitisation has provided and will continue to provide a source of liquidity through RBA repurchase transactions and an opportunistic rather than core external funding source. The Group, when undertaking an intermediary role for third party securitisations, receives fee based income and collateral business in other banking products.

Regulatory Compliance

APRA's requirements in managing the capital and risks associated with securitisation activities and exposures are set out in APS 120 and Prudential Practice Guide APG 120 *Securitisation.* To be compliant with the standard the Group has policies and procedures that include:

- Appropriate risk management systems to identify, measure, monitor and manage the risks arising from the Group's involvement in securitisation;
- Monitoring the effects of securitisation on its risk profile, including credit quality, and how it has aligned with its risk management practices; and
- Measures to ensure that it is not providing implicit support for a securitisation.

The Group's securitisation activities also need to comply with other prudential standards applicable to any traded or Balance Sheet exposure.

The Group uses a hierarchy detailed in APS 120 to determine the credit rating grade for regulatory capital purposes. The two approaches the Group uses are the External Ratings-based Approach (ERBA Approach) or the Supervisory Formula Approach (SFA Approach).

Risk Assessment

Securitisation activities expose the Group to risks including liquidity risk, market risk, operational risk and credit risk, which are managed in accordance with the Group's respective risk management frameworks. Where the Group arranges either a Group originated or third party securitisation transaction, the capital markets issuance will be rated by at least one ECAI based on their respective rating models. The Group uses recognised ECAI including S&P Global Ratings, Moody's Investors Service and/or Fitch Ratings for both Group originated and third party securitisation transactions.

The Group undertakes credit assessments on all securitisation transactions. In addition to compliance with the securitisation and other prudential standards, credit risk assessment of securitisation exposures is performed in accordance with the Group's policies and procedures.

The risk assessment takes into account a wide range of credit, reputation, origination, concentration and servicing factors related to the underlying portfolio of assets being securitised in addition to the capital structure of the proposed securitisation SPV.

Where a securitisation exposure is held through a warehouse structure prior to terming out via the debt capital markets, the credit ratings of the warehouse facility are also assessed by the Group using the rating methodologies of the ECAI and/or other models accepted by APRA.

Credit Approval

Credit approval authorities relating to securitisation are restricted to officers with appropriately badged delegations. Risk Management's Institutional Banking and Markets team is responsible for approval and limit management and monitoring for all securitisations. Proposed exposures that exceed individual approval authorities are referred to various credit committees of the Group for decisioning.

Each Group originated or third party transaction is led by a deal team leader who is responsible for the deal origination and its compliance with Group policies and prudential standards.

8.7 Securitisation (continued)

Securitisation Risk Management Framework

Exposure Reporting and Monitoring

All securitisation exposures and limits are recorded on appropriate risk systems and monitored for limit and capital compliance.

Where exposures are fair valued for accounting purposes, the transactions are monitored under the Group's Market Risk Management Framework (refer section 10, page 69). This includes a limit framework and monitoring around the size and turnover of such exposures, and a robust independent price validation process conducted on the prices used to value those exposures. All securitisation limits and exposures are reviewed in accordance with the Group's approved Risk Management Framework which in turn is subject to periodic internal (internal audits and reviews) and external reviews (conducted by external audit and APRA).

The Bank receives underlying pool data for all its securitisation exposures and undertakes ongoing analysis and modelling as required under its policies and procedures and to meet APS 120 due diligence requirements. Where exposures are externally rated, the ratings are also monitored. The Group has no exposure to resecuritisation transactions.

Exposure Aggregation

Securitisation SPVs are bankruptcy remote entities. Generally, there is no legally enforceable obligation on the asset originator or issuer to provide ongoing credit support to such transactions and they are mostly not aggregated for either Group Large Credit Exposure Policy or APRA prudential standard compliance. Aggregation is assessed on a case by case basis having regard to the proposed structure. The Group will aggregate, where appropriate, the broader banking exposures to the proposed originator and/or issuing entities in making its determinations.

Group Originated Securitisations

General Principles

Where the Group intends to securitise assets it has originated, it ensures the terms and conditions applicable to the proposed securitisation and any support facilities or dealings are arm's length and market based and compliant with APRA's prudential regulations. These transactions are managed by Group Treasury.

Where the Group has sold assets to an SPV but retains a servicer role in managing those assets on behalf of the SPV the Group ensures those securitised assets are effectively ring-fenced from the Group's own assets. Where the Group or its subsidiary provides support services such as servicing to the SPV, these need to be subject to arm's length, market based terms and be of an equivalent standard available in the market.

Purchase of Securities issued under Group Originated Securitisation

Any purchases of either securities issued by an SPV or assets of an SPV must be arm's length in nature and approved under the Group's credit approval process. No pre existing obligation to purchase public securities or the underlying assets of the SPV exists. The Group's SPVs under the Medallion programme are consolidated for accounting purposes.

The Group holds less than 20% (except permitted underwritings as per APS 120) of the public securities outstanding issued by an SPV for Group originated securitisations.

The aggregated value of all securities held by the Group under its various public Medallion programme does not exceed 10% of the Group's Level 2 capital (except permitted security underwritings as per APS 120).

Summary of Accounting Policies

Securitisations may, depending on the individual arrangement, result in:

- continued recognition of the securitised assets on the Balance Sheet of the Group;
- continued recognition of the assets to the extent of the Group's continuing involvement in those assets (as defined within AASB 9); or
- derecognition of the assets and the separate recognition, as assets or liabilities, of any rights and obligations created or retained in the transfer of assets to the securitisation vehicle.

A securitisation transaction is first assessed for any potential requirement to consolidate the vehicles used.

The assessment is made considering the requirements of AASB 10 *Consolidated Financial Statements* (AASB 10). AASB 10 introduces control as the single basis for consolidation for all entities, regardless of the nature of the investee. The Group exercises judgement at inception and periodically, to assess whether a SPV should be consolidated based on the Bank's power over the relevant activities of the entity and the significance of its exposure to variable returns of the structured entity.

For the Group's accounting policy on the derecognition of financial assets and financial liabilities and the measurement of any retained interests, refer to the 2021 Annual Report.

The valuation process of any retained interests in securitisation exposures primarily focuses on quotations from third parties and calibrated valuations from market standard models with key inputs such as spreads to discount rates, default and recovery rates that may be observable or unobservable.

Assets are valued according to the normal methods appropriate to the asset class. As at 30 June 2021 and 31 December 2020, the Group had no assets awaiting securitisation.

The Group discloses all contractual commitments, such as liquidity lines, and applies the accounting policies as set out in the 2021 Annual Report. The Group provides support for securitisation transactions to the extent of those contractual obligations.

8.7 Securitisation (continued)

Banking Book

The following table provides banking book exposures securitised by the Group and third party securitised assets where the Group is classified as a sponsor. The Group originated exposures can be broken down as follows:

- Group originated assets capital relief comprise CBA Medallion Trust subject to capital treatment under APS 120.
- Group originated assets non-capital relief comprise CBA Medallion Trust subject to capital treatment under APS 113.
- Group originated assets internal RMBS comprise CBA Medallion and ASB Medallion Trusts, held for contingent liquidity purposes.
- Third party originated assets comprise assets managed and sponsored by the Group.

Table 12g - Banking book exposures securitised

Traditional Securitisation

	30 June 2021					
	Group originated assets - capital relief	Group originated assets - non capital relief	Group originated assets - internal RMBS	Third party originated assets		
Underlying Asset	sm	\$M	\$M	\$M		
Residential mortgage	5,097	5,007	125,957	_		
Credit cards and other personal loans	-	-	-	-		
Auto and equipment finance	-	-	-	-		
Commercial loans	-	-	-	-		
Other	-	-	-	-		
Total	5,097	5,007	125,957	_		

	31 Decemb	er 2020		
Underlying Asset	Group originated assets - capital relief \$M	Group originated assets - non capital relief \$M	Group originated assets - internal RMBS \$M	Third party originated assets \$M
Residential mortgage	5,152	6,234	107,554	-
Credit cards and other personal loans	-	-	_	_
Auto and equipment finance	-	_	_	_
Commercial loans	_	_	_	_
Other	-	-	-	_
Total	5,152	6,234	107,554	-

	30 June 2020					
Underlying Asset	Group originated assets - capital relief \$M	Group originated assets - non capital relief \$M	Group originated assets - internal RMBS \$M	Third party originated assets \$M		
Underlying Asset	φ ιν ι	φivi	φIVI	φινι		
Residential mortgage	5,605	6,909	136,482	-		
Credit cards and other personal loans	-	-	-	-		
Auto and equipment finance	-	-	-	_		
Commercial loans	-	-	-	_		
Other	-	-	-	-		
Total	5,605	6,909	136,482	-		

APS 120 provides specific regulatory treatment for synthetic securitisations where credit risk is transferred to a third party, however, legal ownership of the underlying assets remains with the originator. The Group has not undertaken any synthetic securitisation in the banking book.

8.7 Securitisation (continued)

Table 12h - Past due and impaired banking book exposures by asset type

	30 June 2021				
	Grou	p originated as	sets securitise	ed	
	Outstanding exposure	Impaired assets	Past due ¹	Losses recognised	
Underlying Asset	\$M	\$M	\$M	\$M	
Residential mortgage	136,061	52	397	-	
Credit cards and other personal loans	-	_	_	-	
Auto and equipment finance	-	-	-	-	
Commercial loans	-	_	_	-	
Other	-	-	-	-	
Total	136,061	52	397	-	

Represents loans ≥ 90 days past due but not impaired.

	31 December 2020					
	Group originated assets securitised					
	Outstanding exposure	Impaired assets	Past due ¹	Losses recognised		
Underlying Asset	\$M	\$M	\$M	\$M		
Residential mortgage	118,940	22	278	_		
Credit cards and other personal loans	-	-	-	_		
Auto and equipment finance	-	-	-	_		
Commercial loans	-	-	-	_		
Other	-	-	-	_		
Total	118,940	22	278	-		

Represents loans ≥ 90 days past due but not impaired.

	30 June 2020					
	Group originated assets securitised					
	Outstanding exposure	Impaired assets	Past due ¹	Losses recognised		
Underlying Asset	\$M	\$M	\$M	\$M		
Residential mortgage	148,996	19	298	_		
Credit cards and other personal loans	_	_	_	_		
Auto and equipment finance	_	-	-	-		
Commercial loans	-	-	-	-		
Other	-	-	-	-		
Total	148,996	19	298	-		

Represents loans ≥ 90 days past due but not impaired.

Table 12i - Banking book exposures intended to be securitised

As at 30 June 2021, the Group does not have any outstanding banking book exposures that are intended to be securitised.

8.7 Securitisation (continued)

Table 12j (i) - Banking book activity for the reporting period

The Group's new securitisation activity in the banking book during the full year ended 30 June 2021, was \$3,252 million.

	Full year ended 3	30 June 2021
	Total	Recognised
	exposures	gain or loss
	securitised	on sale
Underlying Asset	\$M	\$M
Residential mortgages	2,650	-
Credit cards and other personal loans	252	-
Auto and equipment finance	350	-
Commercial loans	-	-
Other	-	-
Total	3,252	-

	Half year ended 31 D	ecember 2020
	Total	Recognised
	exposures	gain or loss
	securitised	on sale
Underlying Asset	\$M	\$M
Residential mortgages	414	_
Credit cards and other personal loans	2	-
Auto and equipment finance	-	_
Commercial loans	-	-
Other	_	
Total	416	_

	Full year ended 30	June 2020
	Total	
	exposures	gain or loss
	securitised	on sale
Underlying Asset	\$M	\$M
Residential mortgages	4,681	-
Credit cards and other personal loans	-	-
Auto and equipment finance	657	-
Commercial loans	49	-
Other	-	_
Total	5,387	-

8.7 Securitisation (continued)

Table 12k – Banking book securitisation exposures retained or purchased

Securitisation Facility Type	On Balance Sheet \$M	Off Balance Sheet \$M	Total exposures \$M
Liquidity support facilities	_	265	265
Warehouse facilities	6,725	4,758	11,483
Derivative facilities	-	412	412
Holdings of securities	5,039	-	5,039
Other	-	15	15
Total securitisation exposures in the banking book	11,764	5,450	17,214

		31 December 2020 ¹			
Securitisation Facility Type	On Balance Sheet \$M	Off Balance Sheet \$M	Total exposures \$M		
Liquidity support facilities	-	293	293		
Warehouse facilities	5,009	4,814	9,823		
Derivative facilities	-	475	475		
Holdings of securities	5,300	_	5,300		
Other	_	10	10		
Total securitisation exposures in the banking book	10,309	5,592	15,901		

Comparative information has been restated to conform to presentation in the current period.

Securitisation Facility Type	On Balance Sheet \$M	Off Balance Sheet \$M	Total exposures \$M
Liquidity support facilities	_	258	258
Warehouse facilities	6,840	2,846	9,686
Derivative facilities	-	539	539
Holdings of securities	6,039	-	6,039
Other	-	10	10
Total securitisation exposures in the banking book	12,879	3,653	16,532

Comparative information has been restated to conform to presentation in the current period.

8.7 Securitisation (continued)

Table 12I (i) - Banking book exposure by risk weighting

Total securitisation exposures in the banking book increased by \$682 million or 4% during the full year ended 30 June 2021. The corresponding RWA increased by \$97 million or 3%, mainly due to the downward revision of warehouse risk weights.

			30 June 20	021		
	Expos	ures	Total	Risk Weight	ed Assets	Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	17,100	_	17,100	3,042	_	3,042
> 25% ≤ 35%	-	-	-	-	-	-
> 35% ≤ 50%	73	-	73	32	-	32
> 50% ≤ 75%	38	-	38	20	-	20
> 75% ≤ 100%	-	-	_	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	-	-	-
Total	17,211	_	17,211	3,094	_	3,094

			31 December	2020		
	Expos	ures	Total	Risk Weight	ed Assets	Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	15,355	_	15,355	2,794	_	2,794
> 25% ≤ 35%	435	_	435	118	_	118
> 35% ≤ 50%	67	_	67	28	_	28
> 50% ≤ 75%	41	_	41	23	-	23
> 75% ≤ 100%	_	_	_	_	_	-
> 100% ≤ 650%	_	_	_	-	-	-
> 650% ≤ 1250%	-	-	_	_	-	-
Total	15,898	_	15,898	2,963	_	2,963

			30 June 20)20		
	Exposures		Total	Risk Weight	ed Assets	Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	15,963	_	15,963	2,828	_	2,828
> 25% ≤ 35%	470	-	470	126	_	126
$> 35\% \le 50\%$	68	-	68	28	-	28
> 50% ≤ 75%	28	-	28	15	-	15
> 75% ≤ 100%	-	-	_	-	-	-
> 100% ≤ 650%	-	-	_	-	-	-
> 650% ≤ 1250%	_	_	_	_	_	_
Total	16,529	_	16,529	2,997	_	2,997

8.7 Securitisation (continued)

Table 12I (ii) - Banking book exposure deducted entirely from capital

Total movement of securitisation exposures deducted from Tier 1 capital was nil during the half year ended 31 December 2020 and there is nil movement during the half year ended 30 June 2021.

	Commo	Common Equity Tier 1 Capital		
	30 Jun 21	31 Dec 20	30 Jun 20	
Underlying Asset	\$M	\$M	\$M	
Residential mortgage	3	3	3	
Credit cards and other personal loans	-	_	-	
Auto and equipment finance	-	-	-	
Commercial loans	-	_	-	
Other	-	-		
Total	3	3	3	

Table 12m – Banking book exposures subject to early amortisation

The Group has not undertaken any securitisation subject to early amortisation treatment.

 Table 12n – Banking book resecuritisation exposures

 The Group does not have any retained or repurchased banking book resecuritisation exposure.

Trading Book

 Table 12o – Trading book exposures securitised

 The Group has no traditional or synthetic securitisation exposures in the trading book.

 Table 12p – Trading book exposures intended to be securitised

 As at 30 June 2021, the Group does not have any outstanding trading book exposures that are intended to be securitised.

Table 12q - Trading book activity for the reporting period

The Group participated in third party securitisation in the trading book during the full year ended 30 June 2021, relating to \$35 million residential mortgages (31 December 2020: \$35 million, 30 June 2020: \$28 million), \$38 million auto and equipment finance (31 December 2020: nil, 30 June 2020: \$7 million), and \$7 million personal finance (31 December 2020: \$4 million, 30 June 2020: \$22 million) exposures.

Table 12r - Trading book exposures subject to APS 116 Capital Adequacy, Market Risk (APS 116)

The aggregate amount of exposures securitised by the Group and subject to APS 116 was \$74 million as at 30 June 2021 (31 December 2020: \$93 million, 30 June 2020: \$93 million), all of which are traditional securitisations. This consists of:

- Securities held in the trading book subject to the Standard Method were nil (31 December 2020: \$36 million, 30 June 2020: \$11 million); and
- Derivatives held in the trading book subject to the Internal Models Approach (IMA) of \$74 million (31 December 2020: \$57 million,
 30 June 2020: \$82 million).

8.7 Securitisation (continued)

Table 12s - Trading book exposures retained or purchased subject to APS 120

	:	30 June 2021			
	On Balance	Off Balance	Total		
	Sheet	Sheet	exposures		
Securitisation Facility Type	\$M	\$M	\$M		
Liquidity support facilities	-	-	-		
Warehouse facilities	-	_	-		
Derivative facilities	_	74	74		
Holdings of securities	_	_	-		
Other	-	_	-		
Total securitisation exposures in the trading book	_	74	74		

	31	31 December 2020 ¹			
	On Balance	Off Balance	Total		
	Sheet	Sheet	exposures		
Securitisation Facility Type	\$M	\$M	\$M		
Liquidity support facilities	_	-	_		
Warehouse facilities	_	-	_		
Derivative facilities	_	57	57		
Holdings of securities	36	-	36		
Other	-	-	_		
Total securitisation exposures in the trading book	36	57	93		

Comparative information has been restated to conform to presentation in the current period.

	30 June 2020 ¹				
	On Balance	Off Balance	Total		
	Sheet	Sheet	exposures		
Securitisation Facility Type	\$M	\$M	\$M		
Liquidity support facilities	_	_	_		
Warehouse facilities	-	-	_		
Derivative facilities	-	82	82		
Holdings of securities	11	-	11		
Other	-	-	_		
Total securitisation exposures in the trading book	11	82	93		

Comparative information has been restated to conform to presentation in the current period.

Table 12t (i) - Trading book exposures retained/purchased subject to IMA

The Group has \$74 million of derivatives exposures held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2021 (31 December 2020: \$57 million, 30 June 2020: \$82 million).

8.7 Securitisation (continued)

Table 12t (ii) - Trading book exposures subject to APS 120 by risk weighting

	30 June 2021				
Risk Weight Band	ERBA Approach \$M	SFA Approach \$M	Total exposures \$M		
≤ 25%	58	16	74		
> 25% ≤ 35%	-	-	-		
> 35% ≤ 50%	-	-	-		
> 50% ≤ 75%	-	-	-		
> 75% ≤ 100%	-	-	-		
> 100% ≤ 650%	-	-	-		
> 650% ≤ 1250%	-	-	_		
Total	58	16	74		

		31	31 December 2020				
	Risk Weight Band	ERBA Approach \$M	SFA Approach \$M	Total exposures \$M			
	≤ 25%	71	14	85			
	> 25% ≤ 35%	_	8	8			
	> 35% ≤ 50%	_	_	_			
	> 50% ≤ 75%	_	-	_			
	> 75% ≤ 100%	_	-	_			
1	> 100% ≤ 650%	_	-	_			
	> 650% ≤ 1250%	_	-	_			
	Total	71	22	93			

	30 June 2020		
Risk Weight Band	ERBA Approach \$M	SFA Approach \$M	Total exposures \$M
≤ 25%	63	21	84
> 25% ≤ 35%	_	9	9
> 35% ≤ 50%	-	-	_
> 50% ≤ 75%	-	-	_
> 75% ≤ 100%	-	-	_
> 100% ≤ 650%	-	-	_
> 650% ≤ 1250%	-	_	
Total	63	30	93

Table 12u (i) - RWA of trading book exposures retained/purchased subject to IMA

The Group has \$796 million of RWA held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2021 (31 December 2020: \$142 million, 30 June 2020: \$166 million).

8.7 Securitisation (continued)

Table 12u (ii) – Capital requirements (RWA) of trading book exposures subject to APS 120 by risk weighting

		30 June 2021						
	ERBA Ap	proach	SFA App	roach	Standardised	Approach	Total Capital R	equirements
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	9	-	3	_	_	_	12	-
> 25% ≤ 35%	-	-	_	-	-	-	-	-
> 35% ≤ 50%	-	-	_	_	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	_	-	-	-	-
Total	9	-	3	_	-	-	12	-
		31 December 2020						

					. 2020			
	ERBA App	oroach	SFA App	roach	Standardised	Approach	Total Capital Re	equirements
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	14	_	2	_	_	_	16	_
> 25% ≤ 35%	-	_	2	_	_	-	2	_
> 35% ≤ 50%	-	_	-	-	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	_
> 75% ≤ 100%	-	_	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	_	-	_	_
> 650% ≤ 1250%	-	_	_	_	_	-	_	
Total	14	_	4	_	-	_	18	_

30 June 2020

	ERBA App	broach	SFA App	roach	Standardised	Approach	Total Capital Re	equirements
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	13	_	3	_	-	_	16	_
> 25% ≤ 35%	-	_	2	_	_	-	2	_
> 35% ≤ 50%	-	_	_	_	_	-	_	_
> 50% ≤ 75%	-	_	_	_	_	-	_	_
> 75% ≤ 100%	-	_	_	_	_	-	_	_
> 100% ≤ 650%	_	_	_	_	_	_	_	_
> 650% ≤ 1250%	-	_	_	_	_	-	_	_
Total	13	_	5	_	_	_	18	_

8.7 Securitisation (continued)

Table 12u (iii) - Trading book exposures entirely deducted from capital

The Group has no trading book exposures that are entirely deducted entirely from CET1 capital.

The Group did not have any trading book exposures that are credit enhancements deducted from Total Capital or any other exposures deducted from Total Capital.

 Table 12v – Trading book exposures subject to early amortisation

 The Group has not undertaken any securitisation subject to early amortisation treatment.

Table 12w – Trading book resecuritisation exposures

The Group did not have any retained or repurchased trading book resecuritisation exposures.

Table 5a - Total securitisation activity for the reporting period

The Group disclosed the summary of the current period's securitisation activity including the total amount of exposures securitised and gain or loss recognised on sale by exposure type in Table 12j (banking book) and Table 12q (trading book).

The total exposures securitised in the full year to 30 June 2021 was \$3,332 million (30 June 2020: \$5,444 million). The total exposures securitised in the half year to 31 December 2020 was \$455 million.

Table 5b – Summary of total securitisation exposures retained or purchased

	As at 30 June 2021			
	On Balance	Off Balance	Total	
	Sheet	Sheet	exposures	
Securitisation Facility Type	\$M	\$M	\$M	
Liquidity support facilities	-	265	265	
Warehouse facilities	6,725	4,758	11,483	
Derivative facilities	-	486	486	
Holdings of securities	5,039	-	5,039	
Other	-	15	15	
Total securitisation exposures	11,764	5,524	17,288	

	As at	As at 31 December 2020 ¹			
	On Balance	Off Balance	Total		
	Sheet	Sheet	exposures		
Securitisation Facility Type	\$M	\$M	\$M		
Liquidity support facilities	_	293	293		
Warehouse facilities	5,009	4,814	9,823		
Derivative facilities	_	532	532		
Holdings of securities	5,336	_	5,336		
Other	_	10	10		
Total securitisation exposures	10,345	5,649	15,994		

Comparative information has been restated to conform to presentation in the current period.

	As		
	On Balance	Off Balance	Total
	Sheet	Sheet	exposures
Securitisation Facility Type	\$M	\$M	\$M
Liquidity support facilities	-	258	258
Warehouse facilities	6,840	2,846	9,686
Derivative facilities	-	621	621
Holdings of securities	6,050	_	6,050
Other	-	10	10
Total securitisation exposures	12,890	3,735	16,625

1 Comparative information has been restated to conform to presentation in the current period.

Equity Risk

9 Equity Risk

Equity risk is the potential loss arising from price volatility in equity investments.

The Group holds equity investments in the banking book for both capital gain and strategic reasons. Equity investments acquired for strategic reasons require approval from the relevant Finance and Risk Management functions, including governance by the Board Risk and Compliance Committee, and monitoring by an independent Market Risk Management function. The measurement of banking book securities is determined in accordance with the Group's accounting policies. The accounting treatment for equity investment depends on whether the Group has significant influence or joint control over the investee. Where significant influence or joint control exists, the investment is classified as an associate or joint venture and measured using the equity method. Under the equity method, investments are initially recorded at cost and adjusted for the Group's share of the post-acquisition profits or losses, and other comprehensive income, less any dividends received. Other investments which are not joint ventures or associates, are recognised at fair value through other comprehensive income or through profit or loss.

When an active market exists, fair value is determined using quoted market prices. When a quoted price in an active market is not available, fair value is determined using acceptable market valuation techniques. Key assumptions applied include trading multiples for businesses displaying similar characteristics to the equity investments being valued.

Under the application of Basel III, APRA requires that all these equity investments be fully deducted from CET1.

Table 16b to 16f – Equity investment exposures¹

	30 June 20	30 June 2021	
	Balance	Fair	
	Sheet value	value	
Equity Investments	\$M	\$M	
Value of listed (publicly traded) equities	3,393	4,931	
Value of unlisted (privately held) equities	3,364	3,775	
Total	6,757	8,706	

	31 December	31 December 2020	
	Balance Sheet value	Fair value	
Equity Investments	\$M	\$M	
Value of listed (publicly traded) equities	1,853	2,814	
Value of unlisted (privately held) equities	1,930	2,149	
Total	3,783	4,963	

	30 June 2020	
	Balance	Fair
	Sheet value	value
Equity Investments	\$M	\$M
Value of listed (publicly traded) equities	1,855	1,749
Value of unlisted (privately held) equities	1,763	1,657
Total	3,618	3,406

		Half year ended		
	30 Jun 2	1 31 Dec 20	30 Jun 20	
Gains on Equity Investments	\$	M \$M	\$M	
Cumulative realised gains in reporting period	1	9 8	-	
Total unrealised gains ²	2,34	9 269	53	

1 Equity investment exposures include non-traded equity investments as well as investments in associates that are treated as capital deductions and are not risk weighted at Level 2.

2 At 30 June 2021, this includes the revaluation of an unlisted equity instrument measured at fair value on the Group's Balance Sheet. For more details refer to the 2021 Annual Report Note 9.5.

Market Risk

10 Market Risk

Market risk is the potential adverse impact on the profitability and/or net worth of the Group from changes in interest rates, foreign exchange rates, equity and commodity prices, credit spreads, and the resale value of assets under residual value guarantees.

The Group makes a distinction between traded and non-traded market risk for the purposes of risk management, measurement and reporting. Traded market risk principally arises from the Group's trading book activities within the Institutional Banking and Markets business and its subsidiary financial institutions.

Non-traded market risk includes interest rate risk that arises from banking book activities, non-traded equity risk, structural foreign exchange risk and lease residual value risk.

Market Risk Management Governance Overview

The Group's appetite for market risk is determined by the Board and is expressed via the Group's Risk Appetite Statement and its framework of limits and policies. The limits are designed to manage the volatility in earnings and value due to market risk. The policies establish a sound operating environment for market risk, which is consistent with the governance and control standards of the Group and conform to prudential regulatory requirements.

The market risk profile of the Group is overseen by the Board Risk and Compliance Committee and senior executive management. The Market Risk Oversight area provides support to the Board Risk and Compliance Committee and ALCO in the performance of their market risk management accountabilities.

Market risk may only be generated by authorised business areas across the Group. The key functional areas that must be established to support market risk activity comprise:

- An approved Trading, Treasury or Origination function;
- An independent Market Risk Oversight area; and
- A Senior Management Oversight Committee.
- The chart below summarises governance arrangements for market risk.

The Market Risk Oversight area supports the implementation of the Board approved policies through the establishment of Market Risk Standards and other documents that define the operational requirements for managing market risk, including details of sub-limits, stress testing, key controls, delegations, reporting and escalation requirements. The Market Risk Oversight area is responsible for the daily monitoring and analysis of risk positions. Senior management has oversight of market risk performance against risk and return expectations on a monthly basis. The Board Risk and Compliance Committee meets approximately eight times each year and considers the operation of the Market Risk Management Framework together with any issues that may arise.

Market Risk Governance

Financial Risk Committee Asset and Liability Committee Market Risk Oversight Risk Management Teams	Governance Committees
Risk Management Teams	
	BU Oversight
Market Risk Types	
Traded Market Risk	
Interest Rate Risk in the Banking Book (IRRBB)	
Non-Traded Equity Risk	
Defined Benefit Pension Plans – Market Risk	
Lease Residual Value Risk	

Market Risk (continued)

Market Risk Measurement

The Group uses Value-at-Risk (VaR) as one of the measures of traded and non-traded market risk. VaR measures potential loss using historically observed market movements and correlation between different markets.

VaR is modelled at a 99.0% confidence level. This means that there is a 99.0% probability that the loss will not exceed the VaR estimate on any given day.

The VaR measured for traded market risk uses two years of daily movement in market rates. The VaR measure for non-traded banking book market risk uses six years of daily movement in market rates.

A 10-day holding period is used for trading book positions. A 20-day holding period is used for interest rate risk in the banking book.

VaR is driven by historical observations and is not an estimate of the maximum loss that the Group could experience from an extreme market event. As a result of this limitation, management also uses stress testing to measure the potential for economic loss at confidence levels significantly higher than 99.0%. Management then uses these results in decisions to manage the economic impact of market risk positions.

Stressed VaR (SVaR) is calculated for traded market risk using the same methodology as the regular traded market risk VaR except that the historical data is taken from a 1 year observation period of significant market volatility as seen during the Global Financial Crisis (GFC).

The stress events considered for market risk are extreme but plausible market movements, and have been back-tested against moves seen during 2008 and 2009 at the height of the GFC. The results are reported to the Board Risk and Compliance Committee and the Group's ALCO on a regular basis. Stress tests also include a range of forward looking macroeconomic scenario stresses.

10.1 Traded Market Risk

The Group trades and distributes financial market products and provides risk management solutions to customers on a global basis.

The objectives of the Group's financial markets activities are to:

 Provide risk management and capital market products and services to customers;

- Efficiently assist in managing the Group's own market risks; and
- Conduct profitable market making within a controlled framework to assist in the provision of products and services to customers.

The Group maintains access to markets by quoting bid and offer prices with other market makers and carries an inventory of treasury, capital market and risk management instruments, including a broad range of securities and derivatives.

The Group participates in all major markets across interest rate, foreign exchange, debt, equity and commodity products as required to provide treasury, capital markets and risk management services to customers of the Group.

Income is earned from spreads achieved through market making and from warehousing market risk. Trading positions are valued at fair value and taken to profit and loss on a mark-to-market basis. Market liquidity risk is controlled by concentrating trading activity in highly liquid markets.

The Group measures and manages traded market risk through a combination of VaR and stress test limits, together with other key controls including permitted instruments, sensitivity limits and term restrictions. Thus traded market risk is managed under a clearly defined risk appetite within the Group Market Risk Policy and limit structure approved by the Board Risk and Compliance Committee. Risk is monitored by the independent Market Risk Oversight function.

Capital Calculation Methods

The Group is accredited by APRA as an Internal Model user for regulatory capital calculation for Group trading book activity.

Consequently, general market risk regulatory capital is calculated for interest rates (including credit spread), foreign exchange, equity and commodity risk using this model.

There are also a small number of products in the trading book for which regulatory capital is determined using the standard method. In accordance with the standard method, the Group applies the maturity method against these products for capital calculations, and a specific risk charge is calculated for debt specific and equity position risk. Inflation linked products and a small number of path dependent rates related products are managed in this manner.

The breakdown of RWA for traded market risk by modelling method is summarised in the table below.

	30 Jun 21	31 Dec 20	30 Jun 20
Traded Market Risk RWA by Modelling Approach ¹	\$M	\$M	\$M
Internal Model Approach	7,528	10,376	11,455
Standard Method	779	785	1,002
Total Traded Market Risk RWA	8,307	11,161	12,457

Refer to page 12 for commentary.

Table 13b - Traded Market Risk under the Standard Method

Exposure Type	30 Jun 21 \$M	31 Dec 20 \$M	30 Jun 20 \$M
Interest rate risk	62. 1	62. 8	80. 2
Equity risk	-	_	_
Foreign exchange risk	0. 2	_	_
Commodity risk	-	-	-
Total	62. 3	62. 8	80. 2
Risk Weighted Asset equivalent ¹	779	785	1,002

1 Risk Weighted Assets equivalent is the capital requirements multiplied by 12.5 in accordance with APS 110.

Market Risk (continued)

10.1 Traded Market Risk (continued)

Traded Market Risk Internal Model

The VaR and SVaR results calculated under the internal model approach are summarised in Table 14f (i).

Table 14f (i) - Value-at-Risk and Stressed Value-at-Risk for Trading Portfolios under the Internal Model Approach

	Aggregate VaR Over the Reporting Period			
				As at
	Mean	Maximum	Minimum	balance
	value	value	value	date
Average VaR ¹	\$M	\$M	\$M	\$M
Over the 6 months to 30 June 2021	118	184	83	135
Over the 6 months to 31 December 2020	156	219	69	153
Over the 6 months to 30 June 2020	109	272	20	124

10 day, 99% confidence interval over the reporting period.

	Aggrega	d		
				As at
	Mean	Maximum	Minimum	balance
	value	value	value	date
Stressed VaR ¹	\$M	\$M	\$M	\$M
Over the 6 months to 30 June 2021	77	173	37	173
Over the 6 months to 31 December 2020	92	196	37	68
Over the 6 months to 30 June 2020	128	325	34	41

10 day, 99% confidence interval over the reporting period.

Internal Model Approach – Back-test results

The internal model is subject to back-testing against hypothetical profit and loss. In the 6 months to 30 June 2021 there were no back-test outliers. The back-test results are summarised in Table 14f (ii) and details of these are provided in Table 14f (iii). A comparison of VaR with actual gains or losses during the 6 months to 30 June 2021 is illustrated in Table 14f (iv).

APS 330 Table 14f (ii) - Summary Table of the Number of Back-Testing Outliers¹

Over the 6 months to 30 June 2021
Over the 6 months to 31 December 2020
Over the 6 months to 30 June 2020

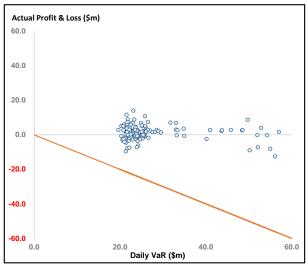
10 day, 99% confidence interval over the reporting period.

Table 14f (iii): Details of Back-Testing Outliers

	Over the Reporting Peric 1 January 2020 to 30 June 2	
	Hypothetical	VaR
	loss	99%
	\$M	\$M
28 February 2020	27	12

Table 14f (iv): Comparison of VaR estimates outliers with actual gains/losses experiences for the 6 months ended 30 June 2021

1



10.2 Non-Traded Market Risk

Non-traded market risk activities are governed by the Group Market Risk Framework approved by the Board Risk and Compliance Committee. This framework governs all the activities performed in relation to non-traded market risk.

Interest Rate Risk in the Banking Book

Interest rate risk is the current and prospective impact to the Group's financial condition due to adverse changes in interest rates to which the Group's Balance Sheet is exposed. The maturity transformation activities of the Group create mismatches in the repricing terms of asset and liability positions. These mismatches may have undesired earnings and value outcomes depending on the interest rate movements.

The Group's New Zealand banking subsidiary, ASB, manages its own domestic IRRBB in accordance with its own risk management policies and the policies of the Group. The Group also has a relatively small banking subsidiary in Indonesia, PTBC that manages its own IRRBB on a similar basis.

The Group's objective is to manage interest rate risk to achieve stable and sustainable net interest income in the long term.

The Group measures and manages the impact of interest rate risk in two ways:

(i) Next 12 Months' Earnings

Interest rate risk from an earnings perspective is the impact based on changes to the net interest income over the next 12 months.

The risk to net interest income over the next 12 months from changes in interest rates is measured on a monthly basis.

Earnings risk is measured through a sensitivity analysis which applies an instantaneous 100 basis point parallel shock in interest rates across the yield curve.

The prospective change to net interest income is measured by using an Asset and Liability Management simulation model which incorporates both existing and anticipated new business in its assessment. The change to the Balance Sheet product mix, growth, funding and pricing strategies is incorporated.

Assets and liabilities that reprice directly from observable market rates are measured based on the full extent of the rate shock that is applied.

Products that are priced based on Group administered or discretionary interest rates and that are impacted by customer behaviour are measured by taking into consideration the historic repricing strategy of the Group and repricing behaviours of customers. In addition to considering how the products have repriced in the past, the expected change in price based on both the current and anticipated competitive market forces are also considered in the sensitivity analyses.

(ii) Economic Value

Interest rate risk from an economic value perspective is based on a 20-day, 99% VaR measure.

Measuring the change in the economic value of equity is an assessment of the long term impact to the earnings potential of the Group, present valued to the current date. The Group assesses the potential change in the economic value of equity through the application of the VaR methodology.

A 20-day 99% VaR measure is used to capture the net economic value for all Balance Sheet assets and liabilities due to adverse changes in interest rates.

The impact of customer prepayments on the contractual cash flows for fixed rate products is included in the calculation. Cash flows for discretionary priced products are behaviourally adjusted and repriced at the resultant profile.

Determining Interest Rate Risk in the Banking Book

APRA requires Australian banks accredited for the Advanced Approach under the Basel III framework to incorporate regulatory capital for IRRBB in their assessment of Total Capital. The capital requirement associated with IRRBB is measured by the Group's internal measurement model which incorporates the following risk calculations:

- Repricing and yield curve risks, which arise from repricing mismatches between assets and liabilities, are jointly determined from the distribution of changes in the economic value of the banking book as a consequence of interest rate changes (overall level of the yield curve and the shape of the yield curve). A historical simulation VaR approach is used, with IRRBB regulatory capital determined with respect to a one year holding period and a 99% level of confidence. Interest rate scenarios are constructed over a historical observation period of six years.
- Basis risk is measured as the risk of loss in earnings of the banking book arising from differences between the actual and expected interest margins on banking book items. The IRRBB regulatory capital requirement for basis risk is measured under a dynamic simulation approach, as the change in net interest income over a 12 month forecast period, in response to an adverse change to implied forward cash rates.
- Optionality risk is measured as the risk of loss in economic value owing to the existence of stand-alone or embedded options in the banking book, to the extent that such potential losses are not included in the measurement of repricing, yield curve or basis risks. Optionality risk arising from a departure from assumed prepayment behaviour is calculated from a stressed prepayment rate scenario by the VaR model. Optionality risk arising from the use of replicating portfolios for indeterminate maturity or discretionary rate items is measured by the VaR model under an applied mismatch between the underlying product balances and the unhedged term asset positions.
- The embedded loss or gain in banking book items not accounted for on a mark-to-market basis is measured and included in the regulatory capital for IRRBB. The embedded loss or gain measures the difference between the book value and economic value of banking book activities, based on transfer-priced assets and liabilities.

These interest rate risk calculations are summed (subject to the capital requirement not being less than zero in total) and multiplied by 12.5 to derive regulatory RWA for IRRBB in accordance with APS 110.

Stress Testing of Interest Rate Risk in the Banking Book

Stress testing of IRRBB measures the impact of extreme but plausible market movements on both an earnings and an economic value basis. The results are reported to the Board Risk and Compliance Committee and the Group ALCO on a regular basis.

The Stress Testing figures in Table 17b (below) represent expected net change in the economic value of assets and liabilities, held for purposes other than trading, based on a 200 basis point parallel rate shock. In addition Table 17b includes the regulatory RWA for IRRBB.

Market Risk (continued)

10.2 Non-Traded Market Risk (continued)

Table 17b – Interest Rate Risk in the Banking Book

	Change	Change in Economic Value		
	30 Jun 21	31 Dec 20	30 Jun 20	
Stress Testing: Interest Rate Shock Applied	\$M	\$M	\$M	
AUD				
200 basis point parallel increase	(724)	(1,388)	(808)	
200 basis point parallel decrease	764	1,472	870	
NZD				
200 basis point parallel increase	(413)	(394)	(348)	
200 basis point parallel decrease	437	418	370	
USD				
200 basis point parallel increase	(171)	(167)	(131)	
200 basis point parallel decrease	76	(31)	144	
Other				
200 basis point parallel increase	38	48	36	
200 basis point parallel decrease	(38)	(48)	(37)	
	30 Jun 21	31 Dec 20	30 Jun 20	
Regulatory RWA ¹	\$M	\$M	\$M	
Interest rate risk in the banking book	14,619	15,561	11,085	

Refer to page 12 for commentary.

Structural Foreign Exchange Risk

Structural foreign exchange risk is the risk that movements in foreign exchange rates may have an adverse effect on the Group's Australian dollar earnings and economic value when the Group's foreign currency denominated earnings and capital are translated into Australian dollars. The Group's only material exposure to this risk arises from its operations in New Zealand, Asia, USA and Europe. The management of structural foreign exchange risk is regularly reported to the Group's ALCO.

Lease Residual Value Risk

The Group takes lease residual value risk on assets such as industrial, mining, rail, aircraft and other equipment. A lease residual value guarantee exposes the Group to a potential fall in prices of these assets below the guarantee level at lease expiry. The lease residual value risk within the Group is controlled through the Risk Management Framework approved by the Board Risk and Compliance Committee. Supporting this framework is an internal Market Risk Standard document, which has a risk limit framework that includes asset, geographic and maturity concentration limits, and stress testing that is performed by the Market Risk Oversight function.

Commonwealth Bank Group Super Fund

The Commonwealth Bank Group Super Fund (the Fund) has a defined benefit portion that creates market risk for the Group. Risk Management and Human Resources provide oversight of the market risks of the Fund held and managed on behalf of the employees receiving defined benefit pension funds on behalf of the Group. For further information on the Fund, refer to Note 10.2 of the 2021 Annual Report.

Operational Risk



Operational Risk

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people, systems or from external events. It includes legal, regulatory, fraud, business continuity and technology risks. Operational risk excludes strategic and reputational risks, however the impact to brand and reputation arising from operational risk failures are considered.

Operational Risk Objectives

The Group's operational risk objectives are:

- The maintenance of an effective internal control environment and system;
- The demonstration of effective governance, including a consistent approach to operational risk management across the Group:
- Transparency, escalation and resolution of risk and control incidents and issues; and
- Transparent risk reporting to inform quality decision making.

The objectives are designed to support the achievement of the Group's financial and business goals.

Operational Risk Management Framework

The Operational Risk Management Framework (ORMF) is integral to the achievement of the Group's operational risk objectives and is embedded within business practices across the Group. It comprises four core components to ensure sound management and measurement of the Group's operational risk:

- Governance;
- Management, Measurement and Systems;
- Analytics, Review and Reporting; and
- People and Culture.

The ORMF is supported by a single platform, internally referred to as RiskInSite, which enables consistent application of the ORMF across the Group. This includes the assessment of operational risks, monitoring and review activities, escalation and remediation of control weaknesses, loss incident management and reporting to management and the Board.

Compliance Risk Management

Compliance risk is the risk of sanctions and financial loss the Group may suffer as a result of the Group's failure to comply with laws, regulations, rules, statements of regulatory policy, and codes of conduct applicable to its business activities.

The Group's Compliance Management Framework (CMF) is broadly consistent with the Australian Standard on Compliance Programs and aims to help meet the Group's obligations under the Corporations Act 2001 (Cth), the Group's Australian Financial Services Licence and Australian Credit Licences. The CMF also aims to support the Group's compliance with requirements in the offshore jurisdictions in which it operates. The CMF incorporates key mandatory requirements and roles and responsibilities for managing compliance risk. It captures compliance requirements, Group compliance policies, regulatory change and people and culture considerations.

The CMF is made up of components that together help to identify, assess, manage and report on compliance obligations and compliance risks. The CMF provides for the identification and understanding of the Group's obligations, implementation of controls, policies, processes and procedures to achieve compliance, monitoring and testing of framework effectiveness. It also provides for the escalation, remediation, and reporting of compliance incidents and compliance control weaknesses.

APRA Prudential Inquiry report findings

The APRA Prudential Inquiry report published on 1 May 2018 highlighted a number of areas for improvement in the ORMF and CMF. Following the report, the Group entered into an Enforceable Undertaking (EU) with APRA. Under the terms of the EU, the Group has undertaken a Remedial Action Plan (RAP), which has been endorsed by APRA. The plan outlines the actions it is taking to improve the ORMF and CMF. The Group has completed all of the milestones under the RAP, with a small number waiting assessment by the independent reviewer.

Roles and Responsibilities

Every staff member has a responsibility for managing operational risk and compliance. Individual responsibilities are articulated within the position descriptions for each role.

Within the Group, accountability for operational risk and compliance has been structured into a Three Lines of Accountability model, as per section 7. This is the subject of improvements under the RAP.

Risk Mitigation through Insurance

The Group insures against selected unexpected insurable operational risk losses. The Group's insurance program is structured based upon the Group's risk appetite. In designing the Group's insurance program, the adequacy and appropriateness of cover are considered along with the Group's operational risk profile. The insurance program is reviewed by the Board.

Capital Measurement Approach

The Group has approval from APRA to calculate its operational risk regulatory capital using the Basel II Advanced Measurement Approach (AMA), the requirements of which are unchanged under Basel III.

The Operational Risk Measurement System describes the Group's AMA methodology which combines internal and external loss data and judgement-based scenarios into loss distributions using Monte Carlo simulations, to calculate capital for the Group. Direct inputs into the model include scenarios (called Quantitative Risk Assessments), internal loss data and external loss data sourced from an external provider, the Operational Riskdata eXchange Association. Inputs to scenarios include internal and external loss data, business environment and internal control factors, and business judgement.

Operational risk capital is allocated across the Group's BUs and is used to assist in managing risks and drive risk-adjusted performance management in each BU.

Table 6e - Capital requirements for operational risk

	30 Jun 21	31 Dec 20	30 Jun 20
	\$M	\$M	\$M
Total operational risk RWA ¹	46,204	49,994	57,212

Refer to page 12 for commentary. 1

Liquidity Risk

12

Liquidity Risk

12.1 Liquidity and Funding Risk

Overview

The Group's liquidity and funding policies are designed to ensure it will meet its obligations as and when they fall due by ensuring it is able to issue debt on an unsecured or secured basis, has sufficient liquid assets to borrow against under repurchase agreements, or sell to raise immediate funds without adversely affecting the Group's net asset value.

The Group's liquidity policies are designed to ensure it maintains sufficient cash balances and liquid asset holdings to meet its obligations to customers, in both ordinary market conditions and during periods of extreme stress. These policies are intended to protect the value of the Group's operations during periods of unfavourable market conditions.

The Group's funding policies are designed to achieve diversified sources of funding by product, term, maturity date, investor type, investor location, currency and concentration, on a cost effective basis. This objective applies to the Group's wholesale and retail funding activities.

Liquidity and Funding Risk Management Framework

The CBA Board is ultimately responsible for the sound and prudent management of liquidity risk across the Group. The Group's liquidity and funding policies, structured under a formal Group Liquidity and Funding Risk Management Framework, are approved by the Board and agreed with APRA. The Group ALCO charter includes reviewing the management of assets and liabilities, reviewing liquidity and funding policies and strategies, as well as regularly monitoring compliance with those policies across the Group. Group Treasury manages the Group's liquidity and funding positions in accordance with the Group's Liquidity Policy and supporting standards and has ultimate authority to execute liquidity and funding decisions should the Group Contingency Funding Plan be activated. Risk Management provides oversight of the Group's liquidity and funding risks, compliance with Group policies and manages the Group's relationship with prudential regulators.

Subsidiaries within the Group apply their own liquidity and funding strategies to address their specific needs. The Group's New Zealand banking subsidiary, ASB, manages its own domestic liquidity and funding needs in accordance with its own liquidity policy and the policies of the Group. ASB's liquidity policy is also overseen by the RBNZ.

Liquidity and Funding Policies and Management

The Group's liquidity and funding policies provide that:

- An excess of liquid assets over the minimum prescribed under APRA's LCR requirement is maintained. Australian ADIs are required to meet a 100% LCR, calculated as the ratio of high quality liquid assets to 30 day Net Cash Outflows (NCO) projected under a prescribed stress scenario;
- A surplus of stable funding from various sources, as measured by APRA's NSFR, is maintained. The NSFR is calculated by applying factors prescribed by APRA to assets and liabilities to determine a ratio of required stable funding to available stable funding which must be greater than 100%;
- Additional internal funding and liquidity metrics are calculated and stress tests additional to the LCR are run;
- Short and long term wholesale funding limits are established, monitored and reviewed regularly;

- The Group's wholesale funding market capacity is regularly assessed and used as a factor in funding strategies;
- Liquid assets are held in Australian dollar and foreign currency denominated securities in accordance with expected requirements;
- The Group has three categories of liquid assets within its domestic liquid assets portfolio. The first includes cash, government and Australian semi-government securities. The second includes Negotiable Certificates of Deposit, bank term securities, supranational bonds, Australian RMBS and other securities that meet RBA criteria for purchases under repurchase agreements. The final category is internal RMBS, being mortgages that have been securitised but retained by the Bank, that are repoeligible with the RBA using the Committed Liquidity Facility (CLF) and TFF; and
- Offshore branches and subsidiaries adhere to liquidity policies and hold appropriate foreign currency liquid assets to meet required regulations.

The Group's key funding tools include:

- Consumer retail funding base, which includes a wide range of retail transaction accounts, savings accounts and term deposits for individual consumers;
- Small business customer and institutional deposit base;
- Wholesale domestic and international funding programmes, which include Australian dollar Negotiable Certificates of Deposit, US and Euro Commercial Paper programmes, Australian dollar Domestic Debt Programme, US Medium-Term Note Programmes, Euro Medium-Term Note Programme, multi jurisdiction Covered Bond programme and Medallion securitisation programmes; and
- Access to the RBA TFF.
- The Group's key liquidity tools include:
- A liquidity management model that implements the established prudential liquidity requirements. This model is calibrated with a series of "stress" liquidity crisis scenarios, incorporating both systemic and idiosyncratic crisis assumptions, such that the Group will have sufficient liquid assets available to ensure it meets all of its obligations as and when they fall due;
- An additional liquidity management model that allows forecasting of liquidity needs on a daily basis;
- A regulatory liquidity management reporting system delivering granular customer and product type information to inform business decision making, product development and resulting in a greater awareness of the liquidity risk adjusted value of banking products;
- Central bank repurchase agreement facilities including the RBA's CLF that provide the Group with the ability to borrow funds on a secured basis, even when normal funding markets are unavailable; and
- A robust Contingency Funding Plan that is regularly tested so that it can be quickly activated when required.

12.2 Liquidity Coverage Ratio

The Group calculates its LCR position on a daily basis, ensuring a buffer is maintained over the minimum regulatory requirement of 100% and the Board's risk appetite. Over the June 2021 quarter, excess liquid assets averaged \$40 billion and the average LCR increased from 125% to 129%.

The Group's mix of liquid assets consists of HQLA, such as cash, deposits with central banks, Australian semi-government and Commonwealth government securities. Liquid assets also include repo-eligible securities with the RBA under the CLF and TFF, and securities classified as liquid assets by the RBNZ. Liquid assets are distributed across the Group to support regulatory and internal requirements and are consistent with the distribution of liquidity needs by currency. Average liquid assets increased over the quarter reflecting an increase in the Group's TFF allocation.

NCOs are modelled under an APRA prescribed 30 day severe liquidity stress scenario. The Group manages modelled NCOs by maintaining a large base of low LCR outflow customer deposits and actively managing its wholesale funding maturity profile as part of its overall liquidity management strategy. Average NCOs decreased over the quarter due to a reduction in wholesale funding maturities.

Table 20 - LCR Disclosure Template

	le 20 - LCR Disclosure remplate	00 h 04	00 km 04	04 Max 04	04 Max 04
		30 Jun 21 Total unweighted value	30 Jun 21 Total weighted value	31 Mar 21 Total unweighted value	31 Mar 21 Total weighted value
		(average) ¹	(average) ¹	(average) ¹	(average) ¹
		\$M	\$M	\$M	\$M
Liq	uid assets, of which:				
1	High quality liquid assets (HQLA)		127,954		122,931
2	Alternative liquid assets (ALA)		44,236		45,260
3	Reserve Bank of New Zealand (RBNZ) securities		3,287		3,169
Ca	sh outflows				
4	Retail deposits and deposits from small business customers, of which:	388,832	34,631	377,602	33,475
5	Stable deposits	216,487	10,824	212,500	10,625
6	Less stable deposits	172,345	23,807	165,102	22,850
7	Unsecured wholesale funding, of which:	175,727	78,596	172,161	81,845
8	Operational deposits (all counterparties) and deposits in networks for cooperative banks	79,412	19,457	66,472	16,232
9	Non-operational deposits (all counterparties)	86,003	48,827	91,024	50,948
10	Unsecured debt	10,312	10,312	14,665	14,665
11	Secured wholesale funding		1,319		1,106
12	Additional requirements, of which:	175,054	25,235	171,436	25,233
13	Outflows related to derivatives exposures and other collateral requirements	5,799	5,799	5,756	5,756
14	Outflows related to loss of funding on debt products	-	-	-	-
15	Credit and liquidity facilities	169,255	19,436	165,680	19,477
16	Other contractual funding obligations	6	-	8	-
17	Other contingent funding obligations	71,008	8,714	71,225	9,461
18	Total cash outflows		148,495		151,120
Ca	sh inflows				
19	Secured lending	2,037	890	6,204	1,708
20	Inflows from fully performing exposures	10,786	6,886	9,828	6,354
21	Other cash inflows	4,749	4,749	5,649	5,649
22	Total cash inflows	17,572	12,525	21,681	13,711
23	Total liquid assets		175,477		171,360
24	Total net cash outflows		135,970		137,409
25	Liquidity Coverage Ratio (%)		129		125
Nu	mber of data points used (Business Days)		61		55

1 The averages presented are calculated as simple averages of daily observations over the previous quarter.

12.3 Net Stable Funding Ratio

The NSFR requires Australian ADIs to have sufficient Available Stable Funding (ASF) to meet their Required Stable Funding (RSF) over a one year horizon. The Group calculates its NSFR position daily, ensuring a buffer is maintained over the regulatory requirement of 100% and the Board's risk appetite. The ASF and RSF are calculated by applying factors prescribed by APRA, to liabilities, assets and off Balance Sheet commitments.

The Group's main sources of ASF are deposits from retail and SME customers, wholesale funding and capital. The main contributors to RSF are residential mortgages and loans to business and corporate customers.

The increase in the NSFR from 124% to 129% from 31 March 2021 to 30 June 2021 reflects TFF drawings and strong deposit growth over the quarter, partly offset by growth in lending balances.

Table 21 - NSFR Disclosure Template

		As at 30 June 2021					
	-	Unv	eighted value	oy residual matu	rity		
		No Maturity	0 - 6 months	7 - 12 months	> 12 months	Weighted value	
		\$M	\$M	\$M	\$M	\$M	
Available	e Stable Funding (ASF) Item						
	Capital	78,239	_	-	30,480	108,719	
2	Regulatory Capital	78,239	_	-	30,480	108,719	
3	Other Capital Instruments		_	_	_	_	
	Retail deposits and deposits from small business customers	371,906	92,300	18	191	430,483	
5	Stable deposits ¹	209,770	40,009	14	19	237,323	
6	Less stable deposits ²	162,136	52,291	4	172	193,160	
	Wholesale funding	166,602	138,468	30,298	118,134	223,625	
8	Operational deposits	87,013			_	43,507	
9	Other wholesale funding	79,589	138,468	30,298	118,134	180,118	
	Liabilities with matching interdependent assets		-	-		-	
	Other liabilities	_	16,983	176	2,695	2,783	
12	NSFR derivative liabilities		4,570				
	All other liabilities and equity not included in the above						
13	categories	-	12,413	176	2,695	2,783	
14	Total ASF					765,610	
Required	d Stable Funding (RSF) Item						
15 a)	Total NSFR HQLA					4,062	
15 b)	ALA					8,114	
15 c)	RBNZ Securities					419	
16	Deposits held at other financial institutions for operational					_	
10	purposes					-	
17	Performing loans and securities	1,841	66,531	34,090	652,909	532,823	
18	Performing loans to financial institutions secured by Level 1 HQLA	1,555	4,658	82	-	662	
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions Performing loans to non-financial corporate clients, loans to	286	11,894	5,062	20,118	24,476	
20	retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs)	-	38,165	20,174	139,163	147,366	
21	of which: with a risk weight of less than or equal to 35% under APS 112	-	39	22	460	330	
22	Performing residential mortgages	-	8,445	8,224	486,717	352,320	
23	of which: with a risk weight equal to 35% under APS 112	_	7,279	7,088	397,521	275,208	
24	Securities that are not in default and do not qualify as HQLA,		3,369	548	6,911	7,999	
24	including exchange-traded equities	_	5,505	540	0,311	1,555	
	Assets with matching interdependent liabilities	-	-	-	-	-	
26	Other assets:	9,489	22,637	1,184	22,483	38,746	
27	Physical traded commodities, including gold	9,489	-	-	-	8,066	
28	Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	-	1,744	-	-	1,483	
29	NSFR derivative assets	-	7,151	-	-	2,582	
30	NSFR derivative liabilities before deduction of variation margin posted	-	8,550	-	-	1,710	
31	All other assets not included in the above categories	_	5,192	1,184	22,483	24,905	
	Off Balance Sheet items	_	193,848			10,068	
	Total RSF					594,232	
	Net Stable Funding Ratio (%)					129	

1 Stable deposits are the portion of deposits that are protected under the Financial Claims Scheme where depositors have an established relationship with the Bank or the deposits are in transactional accounts.

2 Less stable deposits are the portion of deposits that do not meet the requirements of stable deposits.

Liquidity Risk (continued)

12.3 Net Stable Funding Ratio (continued)

	-	Unv		at 31 March 2021 by residual matu		
		No Maturity		7 - 12 months		Weighte valu
		\$M	\$M	\$M	\$M	\$N
Availab	ble Stable Funding (ASF) Item					
1	Capital	75,067	-	-	30,028	105,095
2		75,067	_	-	30,028	105,095
3	Other Capital Instruments	-	_	_	· _	-
4	Retail deposits and deposits from small business customers	362,924	95,774	11	195	425,453
5	Stable deposits ¹	206,679	41,708	9	27	236,003
6	Less stable deposits 2	156,245	54,066	2	168	189,450
7	Wholesale funding	154,632	127,677	34,718	87,997	187,586
8	Operational deposits	68,650				34,325
9	Other wholesale funding	85,982	127,677	34,718	87,997	153,26
10	Liabilities with matching interdependent assets		127,017		07,007	100,201
11	Other liabilities	_	17,257	218	2 0 9 4	2 000
	-			210	2,981	3,090
12	NSFR derivative liabilities All other liabilities and equity not included in the above	-	5,890	-	-	-
13	categories	-	11,367	218	2,981	3,090
14	Total ASF					721,224
	ed Stable Funding (RSF) Item					
15 a)	Total NSFR HQLA					4,362
15 b)	ALA					7,22
15 c)	RBNZ Securities					410
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	987	65,788	34,292	639,719	521,665
18	Performing loans to financial institutions secured by Level 1 HQLA	698	4,163	-		486
19	Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	289	12,537	4,334	17,215	21,306
20	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)	-	37,035	21,755	133,755	142,989
21	of which: with a risk weight of less than or equal to 35% under	_	45	32	486	354
	APS 112					
22	Performing residential mortgages	_	8,221	7,869	482,903	349,633
23	of which: with a risk weight equal to 35% under APS 112	-	7,099	6,786	396,425	274,840
24	Securities that are not in default and do not qualify as HQLA,	-	3,832	334	5,846	7,251
25	including exchange-traded equities Assets with matching interdependent liabilities	_	_	_	_	_
25 26	Other assets:	9,515	25,206	889	24,439	38,593
20 27	Physical traded commodities, including gold	9,515				8,088
28	Assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)	_	1,614	_	_	1,372
29	NSFR derivative assets	_	6,232	_	_	342
	NSFR derivative liabilities before deduction of variation margin	—	0,232	-	-	542
30	posted	-	11,238	-	-	2,248
31	All other assets not included in the above categories	_	6,122	889	24,439	26,543
32	Off Balance Sheet items	-	188,157	-	, .co	8,608
	Total RSF		. 50,107			580,863
33						

1 Stable deposits are the portion of deposits that are protected under the Financial Claims Scheme where depositors have an established relationship with the Bank or the deposits are in transactional accounts.

2 Less stable deposits are the portion of deposits that do not meet the requirements of stable deposits.

Appendices



13.1 Detailed Capital Disclosures Template (APS 330 Attachment A)

The Group is applying the Basel III regulatory adjustments in full, as implemented by APRA. These tables should be read in conjunction with Appendix 13.3 Regulatory Balance Sheet and Appendix 13.4 Reconciliation between Detailed Capital Template and Regulatory Balance Sheet.

	30 Jun 21 Basel III APRA	30 Jun 21 Basel III Internationally Comparable
Summary Group Capital Adequacy Ratios (Level 2)	%	%
CET1	13. 1	19. 4
Tier 1	15. 7	22. 8
Total Capital	19. 8	28. 1

)		30 Jun 21 Basel III \$M	Reconciliation Table Reference
C	ommon Equity Tier 1 Capital: instruments and reserves		
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	38,420	Table A
2	Retained earnings	36,558	
3	Accumulated other comprehensive income (and other reserves)	3,249	
4	Directly issued capital subject to phase out from CET1 (only applicable to mutually-owned companies)	-	
5	Ordinary share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	-	Table B
6	Common Equity Tier 1 Capital before regulatory adjustments	78,227	
С	ommon Equity Tier 1 Capital: regulatory adjustments		
7	Prudential valuation adjustments	(8)	
8	Goodwill (net of related tax liability)	(6,017)	Table C
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	(1,570)	Table C
1(D Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	-	Table D
11	1 Cash flow hedge reserve	(467)	
12	² Shortfall of provisions to expected losses ¹	-	
13		-	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	(2)	
15	⁵ Defined benefit superannuation fund net assets ²	(364)	
16		-	
17	7 Reciprocal cross-holdings in common equity	-	
18	^B Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	Table G
19	9 Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	-	Table G
20	Mortgage service rights (amount above 10% threshold)	-	
2′	1 Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	-	Table D
22	2 Amount exceeding the 15% threshold		
23	3 of which: significant investments in the ordinary shares of financial entities	-	Table G
24	4 of which: mortgage servicing rights	-	
25	5 of which: deferred tax assets arising from temporary differences	-	Table D
	CET1 (Internationally Comparable)	69,799	

1 As at 30 June 2021, there is no shortfall with eligible credit provisions in excess of regulatory expected loss (pre-tax) using stressed LGD assumptions associated with the loan portfolio included in row 50. The Group's GRCL methodology results in an amount lower than the provision recognised for accounting purposes, resulting in no additional GRCL requirement.

2 In accordance with APRA regulations, the surplus in the Group's defined benefit superannuation fund, net of any deferred tax liability, is deducted from CET1.

13.1 Detailed Capital Disclosures Template (APS 330 Attachment A) (continued)

		30 Jun 21 Basel III \$M	Reconciliation Table Reference
	Specific Regulatory Adjustments	ΦIVI	Referenc
26	National specific regulatory adjustments (rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i, 26j)		
26a	of which: treasury shares	12	Table A
26b	of which: offset to dividends declared due to a dividend reinvestment plan (DRP), to the	12	Table A
200	extent that the dividends are used to purchase new ordinary shares issued by the ADI	-	
26c	of which: deferred fee income	_	
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23	(7,108)	Table G
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	(2,483)	Table D
26f	of which: capitalised expenses	(938)	
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	(219)	Table G
26h	of which: covered bonds in excess of asset cover in pools	_	
26i	of which: undercapitalisation of a non-consolidated subsidiary	_	
26j	of which: other national specific regulatory adjustments not reported in rows 26a to 26i	(227)	
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	-	
28	Total regulatory adjustments to Common Equity Tier 1 ¹	(19,391)	
29	Common Equity Tier 1 Capital (APRA)	58,836	
Additi	onal Tier 1 Capital: instruments		
30	Directly issued qualifying Additional Tier 1 instruments		
31	of which: classified as equity under applicable accounting standards	_	
32	of which: classified as liabilities under applicable accounting standards	11,875	Table E
33	Directly issued capital instruments subject to phase out from Additional Tier 1	133	Table E
34	Additional Tier 1 instruments (and CET1 instruments not included in row 5) issued by		
	subsidiaries and held by third parties (amount allowed in Group AT1)	-	
35	of which: instruments issued by subsidiaries subject to phase out	-	
36	Additional Tier 1 Capital before regulatory adjustments	12,008	Table E
Additi	onal Tier 1 Capital: regulatory adjustments		
37	Investments in own Additional Tier 1 instruments	-	
38	Reciprocal cross-holdings in Additional Tier 1 instruments	-	
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	-	
41	National specific regulatory adjustments (rows 41a, 41b, 41c)	_	
41a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	-	
41b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidations not reported in rows 39 and 40	-	
41c	of which: other national specific regulatory adjustments not reported in rows 41a and 41b	_	
42	Regulatory adjustments applied to Additional Tier 1 due to insufficient Tier 2 to cover deductions	_	
43	Total regulatory adjustments to Additional Tier 1 capital	_	
44	Additional Tier 1 Capital (AT1)	12,008	
45	Tier 1 Capital (T1=CET1+AT1)	70,844	
	Capital: instruments and provisions	.,	
46	Directly issued qualifying Tier 2 instruments	16,644	Table F
47	Directly issued capital instruments subject to phase out from Tier 2	266	Table F
48	Tier 2 instruments (and CET1 and AT1 instruments not included in rows 5 or 34) issued by		
	subsidiaries and held by third parties (amount allowed in group Tier 2)	-	
49	of which: instruments issued by subsidiaries subject to phase out	-	
50	Provisions	1,596	
51	Tier 2 Capital before regulatory adjustments	18,506	

1 Total regulatory adjustments to CET1 of \$19,391 million in Row 28 is net of APRA's allowance for treasury shares held by the Group's eligible employee share scheme trusts of \$12 million as detailed in Row 26a.

13.1 Detailed Capital Disclosures Template (APS 330 Attachment A) (continued)

		30 Jun 21 Basel III \$M	Reconciliatior Tabl Referenc
Tier 2	Capital: regulatory adjustments		
52	Investments in own Tier 2 instruments	(30)	
53	Reciprocal cross-holdings in Tier 2 instruments	-	
54	Investments in the Tier 2 Capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own	(4)	
54 55	more than 10% of the issued share capital (amount above 10% threshold) Significant investments in the Tier 2 Capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	_	
56	National specific regulatory adjustments (rows 56a, 56b, 56c)		
56a	of which: holdings of capital instruments in group members by other group members on behalf of third parties	-	
56b	of which: investments in the capital of financial institutions that are outside the scope of regulatory consolidation not reported in rows 54 and 55	-	
56c	of which: other national specific regulatory adjustments not reported in rows 56a and 56b	-	
57	Total regulatory adjustments to Tier 2 Capital	(34)	
58	Tier 2 Capital (T2)	18,472	
59	Total Capital (TC=T1+T2)	89,316	
60	Total risk weighted assets based on APRA standards	450,680	
Capit	al ratios and buffers		
61	CET1 (as a percentage of risk weighted assets)	13.1%	
62	Tier 1 (as a percentage of risk weighted assets)	15.7%	
63	Total Capital (as a percentage of risk weighted assets)	19.8%	
64	Buffer requirement (minimum CET1 requirement of 4.5% plus capital conservation buffer of 2.5% plus any countercyclical buffer requirements, expressed as a percentage of risk weighted assets)	8.0%	
65	of which: capital conservation buffer requirement	3.5%	
66	of which: ADI-specific countercyclical buffer requirements	-	Table H
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)	13.1%	
Natio	nal minima		
69	National Common Equity Tier 1 minimum ratio	-	
70	National Tier 1 minimum ratio	-	
71	National Total Capital minimum ratio	-	
Αmoι	Int below thresholds for deductions (not risk weighted)		
72	Non-significant investments in the capital of other financial entities	2,750	Table (
73	Significant investments in the ordinary shares of financial entities	4,358	Table (
74	Mortgage servicing rights (net of related tax liability)	-	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	2,483	Table [
Appli	cable 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)	214	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	218	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	1,382	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	2,185	
1 Jan	al instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 2022)		
80	Current cap on CET1 instruments subject to phase out arrangements	-	
81	Amount excluded from CET1 due to cap (excess over cap after redemptions and maturities)	-	
82	Current cap on AT1 instruments subject to phase out arrangements	525	
83	Amount excluded from AT1 instruments due to cap (excess over cap after redemptions and maturities)	-	Table B
84	Current cap on Tier 2 instruments subject to phase out arrangements Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	322	Table F

13.2 Detailed Leverage Disclosures Template (APS 330 Attachment E)

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

		30 Jun 21 Basel II APR \$M
1	Total consolidated assets as per published financial statements	1,091,962
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(5,806
3	Adjustment for assets held on the Balance Sheet in a fiduciary capacity pursuant to the Australian Accounting Standards but excluded from the leverage ratio exposure measure	-
4	Adjustments for derivative financial instruments	7,201
5	Adjustment for SFTs (i.e. repos and similar secured lending)	542
6	Adjustment for off Balance Sheet exposures (i.e. conversion to credit equivalent amounts of off Balance Sheet exposures)	103,343
7	Other adjustments	(19,181
8	Leverage ratio exposure	1,178,061
		30 Jun 2 Basel I APR \$1
On E	Balance Sheet exposures	
1	On Balance Sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	1,049,581
2	Asset amounts deducted in determining Tier 1 capital	(19,181
3	Total On Balance Sheet exposures (excluding derivatives and SFTs)	1,030,400
Deriv	vative exposures	
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	10,078
5	Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	17,697
6	Gross-up for derivatives collateral provided where deducted from the Balance Sheet assets pursuant to the Australian Accounting Standards	-
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	-
8	(Exempted central counterparty (CCP) leg of client-cleared trade exposures)	-
9	Adjusted effective notional amount of written credit derivatives	929
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(53
11	Total derivative exposures	28,651
	exposures	
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	15,125
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-
14	CCR exposure for SFT assets	542
15	Agent transaction exposures	-
16	Total SFT exposures	15,667
	r Off Balance Sheet exposures	
17	Off Balance Sheet exposure at gross notional amount	200,934
18	(Adjustments for conversion to credit equivalent amounts)	(97,591
19	Other Off Balance Sheet exposures	103,343
-	tal and total exposures	
20	Tier 1 Capital	70,844
21	Total exposures	1,178,061
	erage ratio	
22	Leverage ratio (%)	6.0

Level 2 Regulatory Balance Sheet as at 30 June 2021.

	I3.3 Regulatory Balance Sheet The following table provides details on the Group's Balance Sheet and the I
'	Assets
	Cash and liquid assets
	Receivables due from other financial institutions
	Assets at fair value through Income Statement
	Derivative assets
	Investment securities:
	At amortised cost
	At fair value through Other Comprehensive Income
	Assets held for sale
	Loans, bills discounted and other receivables
	Investment in regulatory non-consolidated subsidiaries
	Property, plant and equipment
	Investment in associates and joint ventures
	Intangible assets
	Deferred tax assets
	Other assets
	Total assets
	Liabilities
	Deposits and other public borrowings
	Payables due to other financial institutions
	Liabilities at fair value through Income Statement
	Derivative liabilities
	Current tax liabilities
	Deferred tax liabilities
	Liabilities held for sale
	Provisions
	Term funding from central banks
	Debt issues
	Bills payable and other liabilities
	Loan capital
	Total liabilities
	Net assets
	Shareholders' Equity
	Ordinary Share capital
	Reserves
	Retained profits
	Shareholders' Equity attributable to Equity holders of the Bank
	Non-controlling interests
	Total Shareholders' Equity
	Reflects the deconsolidation of the insurance and funds management entities conducted. These entities are classified as non-consolidated subsidiaries by APRA

	Group Balance Sheet	A 45	Level 2 Regulatory Balance Sheet	Template/ Reconciliation Table
	\$M	Adjustment ¹ \$M	\$M	Reference
Assets				
Cash and liquid assets	100,041	(110)	99,931	
Receivables due from other financial institutions	5,085	-	5,085	
Assets at fair value through Income Statement	36,970	(335)	36,635	Table G
Derivative assets	21,449	-	21,449	
Investment securities:				Table G
At amortised cost	4,278	-	4,278	
At fair value through Other Comprehensive Income	86,560	-	86,560	
Assets held for sale	1,201	(1,189)	12	Table G
Loans, bills discounted and other receivables	811,356	(5,097)	806,259	
Investment in regulatory non-consolidated subsidiaries	-	545	545	Table G
Property, plant and equipment	5,284	_	5,284	
Investment in associates and joint ventures	3,941	_	3,941	Table G
Intangible assets	6,942	700	7,642	Table C
Deferred tax assets	2,067	19	2,086	Table D
Other assets	6,788	(339)	6,449	
Total assets	1,091,962	(5,806)	1,086,156	
Liabilities				
Deposits and other public borrowings	766,381	967	767,348	
Payables due to other financial institutions	19,059	-	19,059	
Liabilities at fair value through Income Statement	8,381	-	8,381	
Derivative liabilities	18,486	-	18,486	
Current tax liabilities	135	-	135	
Deferred tax liabilities	228	-	228	Table D
Liabilities held for sale	405	(304)	101	
Provisions	3,733	(416)	3,317	
Term funding from central banks	51,856	-	51,856	
Debt issues	103,003	(5,214)	97,789	
Bills payable and other liabilities	12,217	(352)	11,865	
Loan capital	29,360	-	29,360	Table E
Total liabilities	1,013,244	(5,319)	1,007,925	
Net assets	78,718	(487)	78,231	
Shareholders' Equity				
Ordinary Share capital	38,420	-	38,420	Row 1, Table A
Reserves	3,249	-	3,249	Row 3
Retained profits	37,044	(486)	36,558	Row 2
Shareholders' Equity attributable to Equity holders of the Bank	78,713	(486)	78,227	
Non-controlling interests	5	(1)	4	Table B
Total Shareholders' Equity	78,718	(487)	78,231	

es and those entities through which securitisation of the Group's assets are RA and are excluded from the Level 2 Regulatory Consolidated Banking Group.

Level 2

13.4 Reconciliation between Detailed Capital Disclosures Template and Regulatory Balance Sheet

The following tables provide additional information on the differences between the detailed capital disclosures template (Appendix 13.1) and the Regulatory Balance Sheet (Appendix 13.3).

	30 Jun 21	Templat
Table A	\$M	Reference
Share Capital		
Ordinary Share Capital	38,420	
Total per Balance Sheet (Ordinary Share Capital Internationally Comparable) ¹	38,420	Row
Treasury Shares held by the Group's employee share scheme trusts (APRA specific adjustment)	12	Row 26
Total Ordinary Share Capital and Treasury Shares (APRA)	38,432	
	30 Jun 21	Templa
Table B	50 Juli 21 \$M	Reference
Non-Controlling Interests		
Total per Balance Sheet ¹	4	
Less other non controlling interests not included in capital	(4)	
Total per Capital Template (APRA and Internationally Comparable)	-	Row
Table C	30 Jun 21 \$M	Templa Reference
	φινι	Relefend
Goodwill and Other Intangibles		
Total per Balance Sheet ¹	7,642	
Less capitalised software and other intangibles separately disclosed in template	(1,625)	
Total per Capital Template - Goodwill (APRA and Internationally Comparable)	6,017	Row
Other intangibles (including capitalised software) per Balance Sheet	1,625	
Less deferred tax liability associated with other intangibles	(55)	
Total per Capital Template - Other Intangibles (APRA and Internationally Comparable)	1,570	Row
	30 Jun 21	Templa
Table D	\$M	Reference
Deferred Tax Assets		
Deferred tax assets per Balance Sheet ¹	2,086	
Less deferred tax liabilities per Balance Sheet ¹	(228)	
Net Deferred Tax Assets ²	1,858	
Adjustments required in accordance with APRA prudential standards ³	625	
Deferred tax asset adjustment before applying prescribed thresholds (APRA specific adjustment)	2,483	Row 20
Less amounts below prescribed threshold - risk weighted 4	(2,483)	Row
Total per Capital Template (Internationally Comparable)		Row 10, 21, 2

1 Represents the balance per Level 2 Regulatory Balance Sheet.

Represents the balance of deferred tax assets net of deferred tax liabilities per Level 2 Regulatory Balance Sheet.

3 Represents the deferred tax balances associated with reserves ineligible for inclusion in regulatory capital, the general reserve for credit losses, intangibles, and the impact of limitations of netting of balances within the same geographic tax authority.

The BCBS allows these items to be risk weighted at 250% if the balance falls below prescribed threshold levels. APRA require these to be deducted from CET1.

13.4 Reconciliation between Detailed Capital Disclosures Template and Regulatory Balance Sheet (continued)

	30 Jun 21	Template
Table E	\$M	Reference
Additional Tier 1 Capital		
Total Loan Capital per Balance Sheet ¹	29,360	
Less fair value hedge adjustments ²	(434)	
Total Loan Capital net of issue costs at their contractual values	28,926	
Less amount related to Tier 2 Capital Instruments	(16,962)	
Total Tier 1 Loan Capital	11,964	
Add issue costs ³	44	
Less Basel III transitional relief amortisation for directly issued instruments ⁴	-	Row 8
Less Basel III transitional relief amortisation for instruments issued by subsidiaries ⁴	-	Row 8
Total per Capital Template (APRA)	12,008	Row 3
Additional Tier 1 Capital Instruments comprises		
Basel III Complying Instruments		
PERLS VII	3,000	
PERLS VIII	1,450	
PERLS IX	1,640	
PERLS X	1,365	
PERLS XI	1,590	
PERLS XII	1,650	
PERLS XIII	1,180	
	11,875	Row
Basel III Non-Complying Instruments		
Other Instruments	133	
Less Basel III transitional relief amortisation for directly issued instruments ⁴	-	Row 8
· · · · · · · · · · · · · · · · · · ·	133	Row 3
Total Basel III Non Complying Instruments	133	
Total Additional Tier 1 Capital Instruments (APRA)	12,008	Row 3
	20 Jun 24	Tomala
Table F	30 Jun 21 \$M	Templat Reference
	iii Ģ	Noici Chi
Tier 2 Capital Instruments	16.062	

Less Basel III transitional relief amortisation for directly issued instruments ⁴	-	Row 85
Less amortisation of instruments ⁶	-	
Add issue costs ³	36	
Less amount of Tier 2 debt issued by subsidiary ineligible for inclusion in the Group's Capital 5	(88)	
Total included in Balance Sheet	16,962	
Tier 2 Capital Instruments		

Represents the balance per Level 2 Regulatory Balance Sheet.

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

Unamortised issue costs relating to capital instruments are netted off against each instrument in the Balance Sheet. For regulatory capital purposes, these capital instruments are shown at face value. The unamortised issue costs are deducted from CET1 as part of capitalised expenses in Row 26f in the Detailed Capital Disclosures Template.

4 Basel III transitional arrangements apply to directly issued capital instruments and instruments issued by subsidiaries not compliant with the new Basel III requirements.

5 Represents notes issued by the Group through ASB, its New Zealand subsidiary. The amount of these notes that contributes to ASB capital in excess of its minimum regulatory requirements is not eligible for inclusion in the Group's capital.

6 APRA requires these instruments to be amortised by 20% of the original amount during each of the last five years to maturity. This is in addition to Basel III transitional arrangements.

Details on the main features of Capital instruments included in the Group's regulatory capital (Ordinary Share Capital, Additional Tier 1 Capital and Tier 2 Capital) as required by APS 330 Attachment B can be found at <u>Commbank.com.au/regulatorydisclosures</u>

13.4 Reconciliation between Detailed Capital Disclosures Template and Regulatory Balance Sheet (continued)

	30 Jun 21	Template
Table G	\$M	Reference
Equity Investments		
Investment in commercial entities	219	Row 26g
Investments in significant financial entities	3,813	Row 26d, 73
Investments in non-significant financial entities	2,750	Row 26d, 72
	6,782	
Equity investment in non-consolidated subsidiaries	545	Row 26d, 73
Total equity investments before applying prescribed thresholds APRA specific adjustment ¹	7,327	
Less amounts risk weighted under Internationally Comparable ²	(7,327)	
Total per Capital Template (Internationally Comparable)	-	Row 18, 19, 23

Equity investments are classified in the Level 2 Regulatory Balance Sheet across Investments in Associate, Assets held for Sale, Investment Securities and Investment in non-consolidated subsidiaries. In addition, the Group has loans and undrawn commitments (off Balance Sheet) which are deemed in the nature of equity for regulatory capital purposes.

The aggregate of investments in significant financial entities of \$3,813 million, investments in non-significant financial entities of \$2,750 million and equity investment in non-consolidated subsidiaries of \$545 million is a total of \$7,108 million and is included in Row 26d in the Detailed Capital Disclosures Template. The BCBS allows for equity investments to be concessionally risk weighted provided they are below prescribed thresholds. APRA requires such items to be deducted 100% from CET1. The remaining balance of \$219 million related to investments in commercial entities are risk weighted under Internationally Comparable methodology, with no prescribed threshold limits.

Countercyclical Capital Buffer

The Countercyclical Capital Buffer (CCyB), which is effective for Australian ADIs from 1 January 2016, represents an extension to the capital conservation buffer and may require an ADI to hold additional CET1 of up to 2.5%. The CCyB is calculated as the sum of the specific buffer set by APRA with respect to Australian private sector exposures and the weighted average for offshore private sector exposures where the CCyB has been enacted.

Table H	RWA ¹ \$M	Jurisdictional Buffer %	ADI Specific Buffer ² %	Template Reference
Country ³				
Hong Kong	656	1.000	0. 001764	
Norway	514	1.000	0. 001381	
Luxembourg	347	0. 500	0. 000466	
Others	370,359	-	-	
Total	371,876		0. 003611	Row 66

Represents total private sector (excludes Banks and Sovereigns) credit and specific market risk RWA.

Calculated as each country share of total private sector credit and specific market RWA multiplied by the CCyB applicable in each country.

Represents country of ultimate risk as at 30 June 2021.

13.5 Entities excluded from Level 2 Regulatory Consolidated Group

The legal entities included within the accounting scope of consolidation, but excluded from the Level 2 Regulatory Consolidated Group are detailed below.

The total assets and liabilities should not be aggregated as some of the entities listed are holding companies for other entities included in the table below.

Entity name	Total Assets \$M	Total Liabilities \$M
(a) Securitisation		
Medallion Trust Series 2017-1	998	999
Medallion Trust Series 2017-2	1,238	1,240
Medallion Trust Series 2018-1	1,634	1,637
Medallion Trust Series 2018-1P	352	353
Medallion Trust Series 2019-1	1,006	1,008

Entity name	Total Assets \$M	Total Liabilities \$M
(b) Insurance and Funds Management		
Avanteos Investments Limited	91	29
Avanteos Pty Ltd	-	_
CBA Captive Insurance Pte Ltd	111	15
Colonial Mutual Superannuation Pty Ltd	_	_
Colonial Services Pty Limited	67	67
Commonwealth Custodial Services Pty Ltd	1	1
Commonwealth Insurance Limited	1,144	878
Colonial First State Investments Limited	1,012	415
Premium Alternative Investments Pty Limited	-	-
Premium Plantations Pty Limited	_	-
Premium Plantations Services Pty Ltd		_

13.6 List of APRA APS 330 Tables

The following schedule lists the quantitative tables in this document as referenced in APS 330 paragraphs 12, 47 and Attachments A to H.

	APS 330 Table	Title	Page No.
	Para 12a	Regulatory Balance Sheet	83
	Para 12b	Entities excluded from Level 2 Regulatory Consolidated Group	87
	Para 12c and 12d	Reconciliation between Detailed Capital Template and Regulatory Balance Sheet	84
	Para 48	Summary Group Leverage Ratio	10
	1	Detailed Capital Disclosures Template	79
	1.2	Private sector credit exposures by geographic region (Countercyclical Capital Buffer)	86
	2	Main features of capital instruments ¹	n/a
	5a	Total securitisation activity for the reporting period	67
	5b	Summary of total securitisation exposures retained or purchased	67
	6b to 6f	Basel III Capital Requirements (RWA)	11
	6e	Capital requirements for operational risk	74
	6g	Capital ratios – Level 1 and Major Subsidiaries	8
	7b	Credit risk exposure by portfolio type	24
	7c	Credit risk exposure by portfolio type and geographic distribution	25
	7d	Credit risk exposure by portfolio type and industry sector	26
	7e	Credit risk exposure by portfolio type and residual contractual maturity	29
3	7f (i)	Impaired, past due, specific provisions and write-offs charged by industry sector	32
	7f (ii)	Impaired, past due, specific provisions and write-offs charged by portfolio	34
	7g (i)	Impaired, past due and specific provisions by geographic region	35
	7g (ii)	GRCL by geographic region	35
	7h (i)	Movement in collective provisions and general reserve for credit losses	36
	7h (ii)	Movement in individual provisions and specific provisions	36
	7i	Credit risk exposures by portfolio type and modelling approach	21
	7j	General reserve for credit losses	31
	8b	Exposures subject to standardised and supervisory risk weights	37
	9b	Internal ratings structure for credit risk exposures and mapping to external ratings	40
	9c	PD rating methodology by portfolio segment	40
	9d (i)	Non-Retail exposures by portfolio type and PD band	41
	9d (ii)	Retail exposures by portfolio type and PD band	44
ノ	9e	Actual losses by portfolio type	47
	9f (i)	Historical loss analysis by portfolio type	48
	9f (ii)	Accuracy of risk estimates – PD	49
	9f (iii)	Accuracy of risk estimates – LGD and EAD	49
	10b and 10c	Credit risk mitigation	51
	11b (i)	Counterparty credit risk derivative exposure under the SA-CCR method	54
	11b (ii)	Counterparty credit risk derivative exposure	55
	11c	Counterparty credit risk derivative transactions	55
	12g	Banking book exposures securitised	58
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1 Details can be found at <u>Commbank.com.au/regulatorydisclosures</u>

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Details can be found at Commbank.com.au/regulatorydisclosures

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13.8 Glossary

Facility (CLF)

Term	Definition
Additional Tier 1 Capital (AT1)	Additional Tier 1 Capital is concept defined by APRA and consists of high quality capital that essentially provides a permanent and unrestricted commitment of funds, is freely available to absorb losses, ranks behind the claims of depositors and other more senior creditors in the event of a wind-up, and provides for fully discretionary capital distributions.
Advanced Internal Ratings-based (AIRB) Approach	This approach is used to measure credit risk in accordance with the Group's Basel III accreditation that allows the Group to use internal estimates of PD, LGD and EAD for the purposes of calculating regulatory capital.
Advanced Measurement Approach (AMA)	Used to measure operational risk in accordance with the Group's Basel III accreditation that allows the Group to use its own internal model for the purposes of calculating regulatory capital.
Alternate Liquid Asset (ALA)	Assets that qualify for inclusion in the numerator of the LCR in jurisdictions where there is insufficient supply of HQLA.
ASB	ASB Bank Limited – a subsidiary of the Commonwealth Bank of Australia that is directly regulated by the RBNZ.
Australian Accounting Standards	The Australian Accounting Standards as issued by the Australian Accounting Standards Board (AASB).
Australian Prudential Regulation Authority (APRA)	The Australian Prudential Regulation Authority is an independent statutory authority that supervises institutions across banking, insurance and superannuation, and is accountable to the Australian parliament. The regulator of banks, insurance companies and superannuation funds, credit unions, building societies and friendly societies in Australia.
Authorised Deposit-taking Institution (ADI)	ADIs are corporations that are authorised under the Banking Act 1959 to carry on banking business in Australia.
Banking Book	The banking book is a term for assets on a bank's Balance Sheet that are expected to be held to maturity, usually consisting of customer loans to and deposits from retail and corporate customers. The banking book can also include those derivatives that are used to hedge exposures arising from the banking book activity, including interest rate risk.
Basel II	Refers to the Basel Committee on Banking Supervision's Revised Framework for International Convergence of Capital Measurement and Capital Standards issued in June 2006 and as subsequently amended.
Basel 2.5	Refers to the Basel II framework revised (2009) to include additional requirements such as the Incremental Risk Charge (IRC), Stressed VaR (SVaR), the treatment of securitisation exposure and the Comprehensive Risk Measure (CRM) for certain correlation trading activities.
Basel III	Refers to the Basel Committee on Banking Supervision's framework for more resilient banks and banking systems issued December 2010 (revised June 2011) and Capital requirements for bank exposures to central counterparties (July 2012).
СВА	Commonwealth Bank of Australia – the head entity of the Group.
Central Counterparty (CCP)	A clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, thereby ensuring the future performance of open contracts.
Collective Provision	All loans and receivables that do not have an individually assessed provision are assessed collectively for impairment. The collective provision is maintained to reduce the carrying value of the portfolio of loans to their estimated recoverable amounts. These provisions are reported in the Group's Financial Statements in accordance with Australian Accounting Standards (AASB 9 <i>Financial Instruments</i>).
Committed Liquidity	The Reserve Bank of Australia (RBA) provides the CLF to participating ADIs under the LCR, as a shortfall in

 uidity
 The Reserve Bank of Australia (RBA) provides the CLF to participating ADIs under the LCR, as a shortfall in Commonwealth government and semi-government securities exists in Australia. ADIs can draw under the CLF in a liquidity crisis against qualifying securities pledged to the RBA. The amount of the CLF for each ADI is set by APRA annually.

13.8 Glossary (continued)

Term	Definition
Common Equity Tier 1 (CET1) Capital	The highest quality of capital available to the Group reflecting the permanent and unrestricted commitment of funds that are freely available to absorb losses. It comprises ordinary share capital, retained earnings and
	reserves less prescribed deductions.
Corporate	Basel asset class - includes commercial credit risk where annual revenues are \$50 million or more.
Countercyclical Capital Buffer (CCyB)	An extension of the capital conservation buffer that can be imposed by the national authority to protect the banking sector from periods of excess credit growth that have often been associated with the build-up of system-wide risk.
Counterparty Credit Risk (CCR)	The risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows.
Credit Equivalent Amount	The credit equivalent amount is a measure, prescribed by the regulator, to quantify credit risk for off Balance Sheet instruments, such as interest rate derivatives. The credit equivalent amount of a market related off Balance Sheet transaction calculated using the current exposure method is the sum of current credit exposure and potential future credit exposure of these contracts.
Credit Valuation Adjustment (CVA) Risk	The risk of mark-to-market losses related to deterioration in the credit quality of a derivative counterparty.
Exposure at Default (EAD)	The extent to which a bank may be exposed upon default of an obligor.
Extended Licenced Entity (ELE)	An Extended Licensed Entity is comprised of an ADI and each subsidiary of an ADI as specified in any approval granted by APRA in accordance with Prudential Standard APS 222 Associations with Related Entities.
External Credit Assessment Institution (ECAI)	For example: Moody's Investor Services, S&P Global Ratings or Fitch Ratings.
General Reserve for Credit Losses (GRCL)	APS 220 <i>Credit Quality</i> (APS 220) requires the Group to establish a reserve that covers credit losses prudently estimated, but not certain to arise, over the full life of all individual facilities making up the business of the ADI. Most of the Group's collective provisions are included in the GRCL. An excess of required GRCL over the Group's collective provisions is recognised as a deduction from CET1.
Group	Commonwealth Bank of Australia and its subsidiaries.
High Quality Liquid Assets (HQLA)	Assets are considered to be high quality liquid assets if they can be easily and immediately converted into cash at little or no loss of value.
Impaired Assets	Facilities are classified as impaired where there is doubt as to whether the full amounts due, including interest and other payments due, will be achieved in a timely manner.
Individual provisions	Provisions made against individual facilities in the credit-rated managed segment where there is objective evidence of impairment and full recovery of principal and interest is considered doubtful. These provisions are as reported in the Group's Financial Statements in accordance with the Australian Accounting Standards (AASB 9 Financial Instruments). Also known as individually assessed provisions or IAP.
Interest Rate Risk in the Banking Book (IRRBB)	Interest Rate Risk in the Banking Book (IRRBB) is the risk that the Bank's profit derived from Net Interest Income (interest earned less interest paid), in current and future periods, is adversely impacted from changes in interest rates. This is measured from two perspectives: firstly by quantifying the change in the net present value of the Balance Sheet's future earnings potential, and secondly as the anticipated change to Net Interest Income earned over 12 months. This calculation is driven by APRA regulations with further detail outlined in the Bank's Basel III Pillar 3 report.
Level 1	The Parent Bank (Commonwealth Bank of Australia) and offshore branches (the Bank) and APRA approved Extended Licensed Entities.

13.8 Glossary (continued)

Term	Definition
Level 2	The level at which the Group reports its capital adequacy to APRA, being the Consolidated Banking Group comprising the ADI and all of its subsidiary entities other than the insurance and funds management businesses and certain entities through which securitisation of Group assets is conducted. This is the basis on which the report has been produced.
Level 3	The conglomerate group including the Group's insurance and funds management businesses (the Group).
Leverage Ratio	Tier 1 Capital divided by total exposures, with this ratio expressed as a percentage.
Liquidity Coverage Ratio (LCR)	The LCR is a quantitative liquidity measure that is part of the Basel III reforms. It was implemented by APRA in Australia on 1 January 2015. It requires Australian ADIs to hold sufficient liquid assets to meet 30 day net cash outflows projected under an APRA-prescribed stress scenario.
Loss Given Default (LGD)	An estimate of the expected severity of loss for a credit exposure following a default event. LGD represents the fraction of EAD that is not expected to be recovered following default.
Monte Carlo Simulation	A method of random sampling to achieve numerical solutions to mathematical problems.
Net Cash Outflows (NCO)	Net cash outflows in the LCR are calculated by applying prescribed run-off factors on liabilities and various off Balance Sheet exposures that can generate a cash outflow in the next 30 days.
Net Stable Funding Ratio (NSFR)	The NSFR more closely aligns the behaviour term of assets and liabilities. It is the ratio of the amount of available stable funding (ASF) to the amount of required stable funding (RSF). ASF is the portion of an ADI's capital and liabilities expected to be a reliable source of funds over a one year time horizon. RSF is a function of the liquidity characteristics and residual maturities of an ADI's assets and off Balance Sheet activities.
Other Assets	Basel asset class – primarily includes Cash, Investments in Related Entities, Fixed Assets and Margin Lending.
Other Retail	Basel asset class – primarily includes retail credit exposures not otherwise classed as a residential mortgage, SME retail or a qualifying revolving retail asset.
Past Due	Facilities are past due when a contracted amount, including principal or interest, has not been met when due or it is otherwise outside contracted arrangements.
Probability of Default (PD)	The likelihood that a debtor fails to meet an obligation or contractual commitment.
Prudential Capital Ratio (PCR)	The regulatory minimum CET1, Tier 1 and Total Capital ratios that the Group is required to maintain at all times.
Qualifying Revolving Retail (QRR)	Basel asset class – represents revolving exposures to individuals less than \$0.1m, unsecured and unconditionally cancellable by the Group. Only Australian retail credit cards qualify for this AIRB asset class.
RBA	Reserve Bank of Australia.
RBNZ	Reserve Bank of New Zealand.
Residential Mortgage	Basel asset class – retail exposures secured by residential mortgage property.
Risk Weighted Assets (RWA)	The value of the Group's On and off Balance Sheet assets are adjusted by risk weights calculated according to various APRA prudential standards.
Scaling Factor	In order to broadly maintain the aggregate level of capital in the global financial system post implementation of Basel II, the Basel Committee on Banking Supervision applies a scaling factor to the RWA amounts for credit risk under the IRB approach of 1.06.
Securities Financing Transactions (SFT)	APRA defines securities financing transactions as transactions such as repurchase agreements, reverse repurchase agreements, and security lending and borrowing, and margin lending transactions, where the value of the transactions dependence to the market value to the transactions are trained to the transactions.

APRA defines securities financing transactions as transactions such as repurchase agreements, reverse repurchase agreements, and security lending and borrowing, and margin lending transactions, where the value of the transactions depends on the market valuation of securities and the transactions are typically subject to margin agreements.

13.8 Glossary (continued)

Term	Definition
Securitisation	Basel asset class – Group originated securitised exposures and the provision of facilities to customers in relation to securitisation activities.
SME Corporate	Basel asset class – Small and Medium Enterprise (SME) commercial credit risk where annual revenues are less than \$50 million and exposures are greater than \$1 million.
SME Retail	Basel asset class – Small and Medium Enterprise (SME) exposures up to \$1 million that are not secured by residential mortgage property.
SME Retail Secured by Residential Mortgage	Basel asset class – Small and Medium Enterprise (SME) exposures up to \$1 million that are partly or fully secured by residential mortgage property.
Sovereign	Basel asset class – primarily includes claims on Australian and foreign governments, central banks (including Reserve Bank of Australia), international banking agencies and regional development banks.
Specialised Lending	Basel asset classes subject to the supervisory slotting approach and which include Income Producing Real Estate (IPRE), object finance, project finance and commodity finance.
Specific Provisions	APS 220 <i>Credit Quality</i> (APS 220) requires ADIs to report as specific provisions all provisions for impairment assessed by an ADI on an individual basis in accordance with the Australian Accounting Standards and that portion of provisions assessed on a collective basis which are deemed ineligible to be included in the General Reserve for Credit Losses (which are primarily collective provisions on some defaulted assets).
Standardised Approach	An alternate approach to the assessment of credit, operational and traded market risk whereby an ADI uses external ratings agencies to assist in assessing credit risk and/or the application of specific values provided by regulators to determine RWA.
Stressed Value-at-Risk (SVaR)	Stressed Value-at-Risk (SVaR) uses the same methodology as Value-at-Risk (VaR) except that the historical data used is taken from a one year observation period of significant market volatility as seen during the Global Financial Crisis.
Term Funding Facility (TFF)	A facility provided by the RBA to certain ADIs to support lending to Australian businesses.
Tier 1 Capital	Comprises CET1 and Additional Tier 1 Capital.
Tier 2 Capital	Capital items that fall short of the necessary conditions to qualify as Tier 1 Capital.
Total Capital	Comprises CET1, Additional Tier 1 Capital and Tier 2 Capital.
Total Exposures (as used in the leverage ratio)	The sum of on Balance Sheet items, derivatives, securities financing transactions (SFTs), and off Balance Sheet items, net of any Tier 1 regulatory deductions that are already included in these items, as outlined in APS 110 <i>Capital Adequacy</i> (APS 110) Attachment D.
Trading Book	Exposures, including derivative products and other off-balance sheet instruments that are held either with a trading intent or to hedge other elements of the trading book.
Value-at-Risk (VAR)	Value-at-Risk (VaR) is a measure of potential loss using historically observed market volatility and correlation

between different markets.