Basel III
Pillar 3

Capital Adequacy and Risks
Disclosures as at 30 June 2018

Becoming a simpler, better bank

CommonwealthBank

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1 Introduction

The Commonwealth Bank of Australia (the Group) 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 in accordance with Board approved policy and APRA's prudential standard APS 330 "Public Disclosure". It presents information on the Group's capital adequacy and Risk Weighted Asset (RWA) calculations for credit risk including securitisation, 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 methodology.

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 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 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 external auditor (PwC) has performed certain procedures over the Pillar 3 report, including verifying disclosures are consistent with information contained in the Group's Profit Announcement, returns provided to APRA and source systems. PwC have provided recommendations to enhance the internal controls related to the calculation of RWAs and the Group has an action plan in place to implement these recommendations.

The Pillar 3 document is available on the Group's corporate website:

www.commbank.com.au/about-us/investors/shareholders.

The Group in Review

As at 30 June 2018, the Basel III Common Equity Tier 1 (CET1) ratio was 15.5% on an internationally comparable basis. The Group's Basel III CET1, Tier 1 and Total Capital ratios as measured on an APRA basis as at 30 June 2018 were 10.1%, 12.3% and 15.0% respectively.

The Group's Leverage Ratio, which is defined as Tier 1 Capital as a percentage of total exposures was 5.5% at 30 June 2018 on an APRA basis and 6.3% on an internationally comparable basis.

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 132% in the June 2018 half year and an LCR of 131% as at 30 June 2018.

On 1 January 2018, APRA introduced a Net Stable Funding Ratio (NSFR) requirement designed to encourage stable funding of core assets. APRA prescribed factors are used to determine the stable funding requirement of assets and the stability of alternative sources of funding.

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 manages financial and non-financial risks through its Risk Management Framework (Framework) that evolves with emerging risks arising from the changing business environment, better practice approaches, and regulatory and community expectations.

The application of the Framework has been 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, stress testing and the Group's bottom up view of economic capital. These views then cascade into considerations on what capital level is targeted.

The Group's management of its capital adequacy is supported by robust capital management processes applied in each Business Unit. The results are integrated into the Group's risk-adjusted performance and pricing processes.

Summary Group Capital Adequacy Ratios (Level 2)	30 Jun 18 %	31 Dec 17 %	30 Jun 17 %
Common Equity Tier 1	**10. 1**	10. 4	10. 1
Tier 1	**12. 3**	12. 4	12. 1
Tier 2	**2. 7**	2. 4	2. 1
Total Capital (APRA)	**15. 0**	14. 8	14. 2
Common Equity Tier 1 (Internationally Comparable) (1)	**15. 5**	16. 3	15. 6

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

2 Regulatory Capital Framework Overview

The Group is required to report the calculation of RWA and 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 banks.

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 1 Minimum Capital Requirements	**Pillar 2** Supervisory Review Process	**Pillar 3** Market Discipline
Credit Risk Interest Rate Risk in the Banking Book (1) Operational Risk Market Risk	Firm-wide risk oversight 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

(1) 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 Advanced Internal Ratings Based (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 33).

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

The Basel Committee on Banking Supervisions (BCBS) has implemented a set of capital, liquidity and funding reforms known as "Basel III". 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 major reforms are being implemented on a phased approach to 1 January 2022.

The capital reforms were implemented in Australia on 1 January 2013. APRA has adopted a more conservative approach than the minimum standards published by the BCBS and also adopted an accelerated timetable for implementation.

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 (DSIB) requirement of 1% and a countercyclical capital buffer (CCyB) of 0% (effective from 1 January 2016), brings the CET1 requirement to at least 8%. In December 2017, 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 section 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 its 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 under APRA's ADI Prudential Standard (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 2018 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.

www.commbank.com.au/about-us/investors/shareholders

3 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 (Commonwealth Bank of Australia) 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 the entities through which securitisation of Group assets is conducted; and
- **Level 3:** the conglomerate group including the Group's insurance and funds management businesses (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 (Commonwealth Bank of Australia). Additional disclosure of capital ratios relating to material ADIs within the Group together with CBA's own Level 1 capital ratios are included under APS 330 Table 6g of this report (page 7).

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. Commonwealth Bank of South Africa (CBSA) started operating under a banking licence granted by the South African Reserve Bank (SARB) from November 2017.

The CBA Board has approved the sale of Commonwealth Bank of South Africa (Holding Company) Limited ("TymeDigital") to the minority shareholder, African Rainbow Capital. The sale is subject to regulatory approval and potential sale price adjustments.

CommBank Europe Ltd (CBE), PT Bank Commonwealth (PTBC) and CBSA use Standardised Basel III methodology.

In December 2017 ownership of China County Banks transferred to Qilu Bank Co Ltd. in which Commonwealth Bank of Australia owns a non-controlling interest.

On 2 July 2018, CBA completed the sale of its life insurance business in New Zealand ("Sovereign") to AIA Group Limited ("AIA").

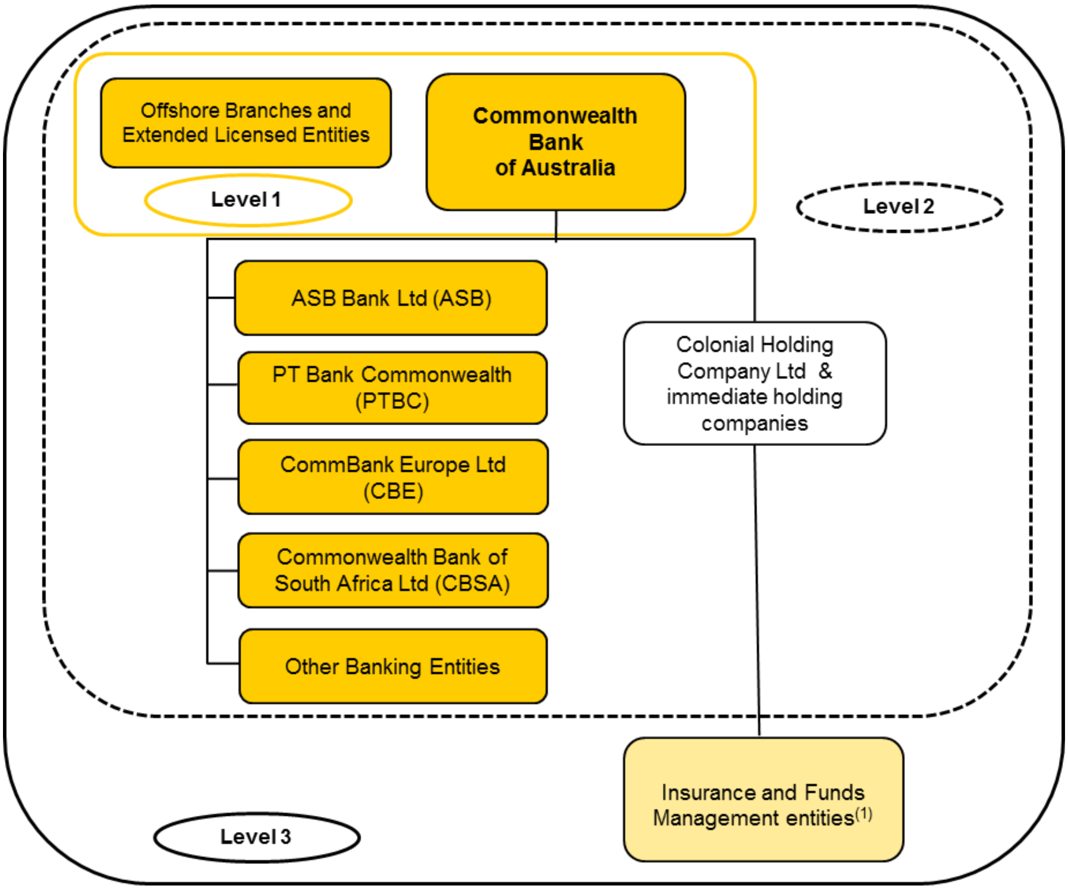
The Group is expected to complete the sale of its Australian life insurance operations (CMLA) and its non-controlling investment in BoComm Life by December 2018, subject to regulatory approvals.

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. 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



(1) Insurance and funds management operating subsidiaries. A detailed list of non-consolidated entities is provided in Appendix 13.5.

4 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, its 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 Committee. Three year capital forecasts are conducted on a quarterly basis and a detailed capital and strategic plan is presented to the Board annually.

Capital Management

The Group's CET1 ratio (APRA) was 10.1% as at 30 June 2018, a decrease of 30 basis points from 31 December 2017 and flat from 30 June 2017. The CET1 ratio was consistently well in excess of regulatory minimum capital adequacy requirements at all times throughout the full year ended 30 June 2018.

The decrease of 30 basis points over the half year ended 30 June 2018 was primarily driven by a number of unfavourable one-off impacts. These included higher Operational RWA driven by the capital adjustment required per the Enforceable Undertaking with APRA (-28 basis points) as detailed on page 11 and the inclusion of the Advice business in the regulatory consolidated group (-5 basis points). Further unfavourable one-off impacts included the additional provision for the AUSTRAC civil penalty of $325 million (-7 basis points) in the half year ended 30 June 2018, the maturity of the final tranche of Colonial Debt that was subject to transitional relief (-7 basis points), and the capital contribution into BoComm Life (-5 basis points) which will be fully reimbursed on completion of the sale to Mitsui Sumitomo Insurance Co. Ltd. Organic capital generation remained strong at 32 basis points, partly offset by various other movements (-10 basis points).

The sale of the Group's New Zealand life insurance operations was completed on 2 July 2018, resulting in an uplift in the Group's pro-forma CET1 ratio (APRA) of 27 basis points. The Group is expected to complete the sale of its Australian life insurance operations and its non-controlling investment in BoComm Life by December 2018, subject to regulatory approval, which will provide a further uplift of approximately 56 basis points. These impacts will be partly offset by the implementation of AASB 9 (-18bps) and AASB 15 (-3bps), resulting in a 30 June 2018 pro-forma CET1 ratio of approximately 10.7%. In June 2018, the Group announced it will demerge most of its wealth management and mortgage broking businesses, and undertake a strategic review of its general insurance business.

Capital Initiatives

The following significant capital initiatives were undertaken during the year:

Common Equity Tier 1 Capital

- The Dividend Reinvestment Plan (DRP) in respect of the 2017 final dividend, which included a 1.5% discount, was satisfied by the allocation of $1,573 million of ordinary shares, representing a participation rate of 39.5%; and
- The DRP in respect of the 2018 interim dividend was satisfied by the allocation of $536 million of ordinary shares, representing a participation rate of 15.3%.

Additional Tier 1 Capital

- In April 2018, the Group issued $1.365 billion of CommBank PERLS X Capital Notes (PERLS X), a Basel III compliant Additional Tier 1 security.

Tier 2 Capital

- In October 2017, the Group issued a EUR 1 billion subordinated note that is Basel III compliant Tier 2 capital; and
- In January 2018, the Group issued a USD 1.25 billion subordinated note that is Basel III compliant Tier 2 capital.

Other Regulatory Changes

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.

APRA's expectation is that the Australian major banks will operate with a CET1 ratio average benchmark of 10.5% or more by 1 January 2020.

Following finalisation of the reforms announced by the BCBS in December 2017 APRA has advised that these reforms have been accommodated within the targets set by APRA in July 2017.

In February 2018, APRA commenced consultation on their approach to the finalised BCBS reforms. As part of its revisions to the capital framework, APRA will consult on potential adjustments to the overall design of the capital framework to improve transparency, international comparability and flexibility.

Basel Committee on Banking Supervision (BCBS)

In December 2017, the BCBS released "Basel III: Finalising post-crisis reforms".

These reforms include:

- Revisions of Internal Ratings Based (IRB) approach to credit risk including: removal of the 1.06 scaling factor, constraints on the use of IRB for certain asset classes (large corporates, banks and financial institutions), and application of minimum input parameters to the remaining IRB credit exposures;
- Improved granularity and risk sensitivity for the standardised approach for credit risk;
- Removal of the operational risk Advanced Measurement Approach, replaced by a single risk sensitive standardised approach to be used by all banks; and

Other Regulatory Changes (continued)

- Introduction of an aggregate output floor based on the revised Basel III Standardised Approach RWA. The floor will be phased in over a 5 year period starting at 50% from 1 January 2022, increasing to 72.5% from 1 January 2027.

In March 2018, the BCBS issued a further consultation document on market risk: "Revisions to the minimum capital requirements for market risk". This included a number of changes to the identification and measurements under both the standardised and IRB approach.

All of the above reforms are scheduled to be implemented from 1 January 2022.

APRA

In response to the finalisation of the above reforms by the BCBS, in February 2018, APRA released: "Discussion paper – Revisions to the capital framework for authorised deposit-taking institutions". APRA is proposing to implement these reforms from 1 January 2021, 12 months in advance of the BCBS implementation timeframes.

Additional proposals addressed by APRA include:

- Increased capital requirements for investment and interest-only residential mortgage exposures and those exposures that are outside of APRA's proposed new mortgage serviceability criteria , and amendments to the correlation factor to dampen pro-cyclicality of risk weights;
- Higher correlation factors to apply in the Other Retail asset class (including credit cards);
- Large corporates and financial institutions will be subject to the Foundation Internal Ratings based approach;
- Removal of the slotting approach and introduction of two asset classes for commercial property;
- Merging of SME Retail and SME Corporate asset classes;
- Higher Credit Conversion Factors (CCFs) for off-balance sheet exposures;
- Mandate Loss Given Default (LGD) and Exposure At Default (EAD) estimates for certain non-retail portfolios; and
- Implementation of an output floor on 1 January 2021 without transitional phasing.

Further consultation will occur across 2018 culminating in the release of draft standards by mid 2019.

Other reforms

- Two new accounting standards, AASB 9 Financial Instruments and AASB 15 Revenue Recognition were implemented on 1 July 2018. The capital impact of implementing these standards are discussed on page 3. AASB 16 Leases will be implemented on 1 July 2019;
- APRA has finalised its prudential requirements for the standardised approach to counterparty credit risk (SA-CCR), and these will take effect from 1 July 2019;
- In November 2015, the Financial Stability Board released the Total Loss-absorbing Capacity (TLAC) standard for global systemically important banks (G-SIBs). APRA has indicated that it intends to consult on a minimum loss absorbing capacity framework later in 2018; and
- The RBNZ has commenced a comprehensive review of the capital adequacy framework applying to registered banks incorporated in New Zealand. In December 2017, the RBNZ published "in principle" proposals on the definition of capital. In July 2018, "in principle decisions" were announced requiring the four largest banks to report using both their own risk models as well as the standardised frameworks. The RBNZ aims to conclude key elements of the Capital Review in 2018, including setting of minimum capital ratios.

Group Regulatory Capital Position

Summary Group Capital Adequacy Ratios (Level 2)	30 Jun 18 %	31 Dec 17 %	30 Jun 17 %
Common Equity Tier 1	**10. 1**	10. 4	10. 1
Tier 1	**12. 3**	12. 4	12. 1
Tier 2	**2. 7**	2. 4	2. 1
Total Capital (APRA)	**15. 0**	14. 8	14. 2
Common Equity Tier 1 (Internationally Comparable) (1)	**15. 5**	16. 3	15. 6

(1) Analysis aligns with the 13 July 2015 APRA study titled “International capital comparison study”.

	APRA 30 Jun 18 $M	APRA 31 Dec 17 $M	APRA 30 Jun 17 $M
Ordinary Share Capital and Treasury Shares (1)	**37,535**	37,002	35,266
Reserves	**1,596**	1,423	1,788
Retained earnings	**28,018**	26,856	25,737
Non-controlling interests	**-**	-	-
Common Equity Tier 1 Capital before regulatory adjustments	**67,149**	65,281	62,791
Common Equity Tier 1 regulatory adjustments	**(20,612)**	(19,339)	(18,632)
Common Equity Tier 1 Capital	**46,537**	45,942	44,159
Additional Tier 1 Capital	**9,895**	8,523	8,525
Tier 1 Capital	**56,432**	54,465	52,684
Tier 2 Capital	**12,579**	10,622	9,392
Total Capital	**69,011**	65,087	62,076

(1) Inclusive of Treasury shares held by the Group’s life insurance operations and employee share scheme trusts ($265 million).

Further details on the composition of the Group’s capital are detailed in Appendix 13.

APS 330 Table 6g – Capital Ratios – Level 1 and Major Subsidiaries

Significant Group ADIs	30 Jun 18 %	31 Dec 17 %	30 Jun 17 %
CBA Level 1 CET1 Capital ratio	**10. 8**	11. 1	10. 7
CBA Level 1 Tier 1 Capital ratio	**12. 8**	12. 8	12. 4
CBA Level 1 Total Capital ratio	**15. 6**	15. 2	14. 5
ASB CET1 Capital ratio	**10. 6**	10. 6	10. 2
ASB Tier 1 Capital ratio	**12. 4**	12. 6	12. 3
ASB Total Capital ratio	**13. 9**	14. 1	13. 8

Capital

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 2018, the Group's internationally comparable CET1, Tier 1 and Total Capital ratios were 15.5%, 18.1% and 21.3% respectively. The basis of this analysis aligns with the APRA study.

The following table provides details on the differences, as at 30 June 2018, between the APRA Basel III capital requirements and the internationally comparable capital ratios.

Item	APRA Study Reference	Description of adjustment	CET1 %	Tier 1 %	Total Capital %
Basel III (APRA)			**10. 1**	**12. 3**	**15. 0**
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.	1. 0	0. 9	0. 8
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. 3
IRRBB RWA	3.3.2	APRA requires capital to be held for IRRBB. The BCBS does not have any capital requirement.	0. 6	0. 7	0. 8
Residential mortgages	3.3.1	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.	1. 8	2. 0	2. 5
Other retail standardised exposures	3.3.6	Risk weighting of 75%, rather than 100% under APRA's requirements.	0. 1	0. 1	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. 3	0. 4	0. 5
Specialised lending	3.3.5	Use of AIRB 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.	0. 7	0. 9	1. 0
Currency conversion	3.3.7	Increase in the A$ equivalent concessional threshold level for small business retail and small/medium enterprise corporate exposures.	0. 1	0. 1	0. 1
Subtotal (1)			15. 5	18. 3	21. 8
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. 2)	(0. 5)
Basel III (Internationally Comparable - aligns with APRA study)			**15. 5**	**18. 1**	**21. 3**

(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 9.

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.

5. Leverage Ratio

The Group's leverage ratio, defined as Tier 1 Capital as a percentage of total exposures, was 5.5% at 30 June 2018 on an APRA basis and 6.3% on an internationally comparable basis.

In December 2017, as part of the final calibration of the leverage ratio, the BCBS announced:

- Confirmation that the leverage ratio will have minimum regulatory requirement of 3%, effective from 1 January 2018; and
- Changes in the definition of exposures related to derivatives and off balance sheet items, effective from 1 January 2022.

In February 2018, APRA released additional refinements to the BCBS guidance including a minimum leverage ratio requirement of 4% for IRB banks. These changes are subject to consultation and are proposed to apply from 1 July 2019.

Summary Group Leverage Ratio (1)	30 Jun 18	31 Mar 18	31 Dec 17	30 Sep 17	30 Jun 17
Tier 1 Capital ($M)	**56,432**	53,750	54,465	52,592	52,684
Total Exposures ($M) (2)	**1,018,622**	1,032,125	1,012,503	1,011,801	1,027,958
Leverage Ratio (APRA) (%)	**5. 5**	5. 2	5. 4	5. 2	5. 1
Leverage Ratio (Internationally Comparable) (%) (3)	**6. 3**	5. 9	6. 1	5. 9	5. 8

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

(2) 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". Refer to Appendix 13.2 for the calculation of the 30 June 2018 exposures.

(3) The Tier 1 Capital included in the calculation of the internationally comparable leverage ratio aligns with the 13 July 2015 APRA study titled "International capital comparison study", and includes Basel III non-compliant Tier 1 instruments that are currently subject to transitional rules.

6 Risk Weighted Assets

Risk weighted assets 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.

APS 330 Table 6b to 6f – Basel III Capital Requirements (RWA)

	Risk Weighted Assets			Change in RWA for June 2018 half	
	30 Jun 18	31 Dec 17	30 Jun 17		
Asset Category	$M	$M	$M	$M	%
Credit Risk					
Subject to AIRB approach [(1)]					
Corporate [(2)]	**68,479**	69,252	74,663	(773)	(1. 1)
SME corporate [(2)]	**32,772**	33,521	33,067	(749)	(2. 2)
SME retail	**4,709**	4,675	4,838	34	0. 7
SME retail secured by residential mortgage	**2,458**	2,534	2,766	(76)	(3. 0)
Sovereign	**2,509**	2,186	2,154	323	14. 8
Bank	**11,097**	10,780	12,598	317	2. 9
Residential mortgage	**139,203**	136,047	134,969	3,156	2. 3
Qualifying revolving retail	**9,592**	8,524	9,414	1,068	12. 5
Other retail	**15,750**	15,413	15,101	337	2. 2
Total RWA subject to AIRB approach	**286,569**	282,932	289,570	3,637	1. 3
Specialised lending	**55,893**	56,183	58,752	(290)	(0. 5)
Subject to standardised approach					
Corporate	**1,246**	1,250	1,202	(4)	(0. 3)
SME corporate	**412**	279	510	133	47. 7
SME retail	**5,856**	5,701	6,172	155	2. 7
Sovereign	**222**	189	271	33	17. 5
Bank	**79**	63	136	16	25. 4
Residential mortgage	**5,627**	5,404	5,017	223	4. 1
Other retail	**1,593**	2,717	2,925	(1,124)	(41. 4)
Other assets	**5,241**	5,323	5,291	(82)	(1. 5)
Total RWA subject to standardised approach	**20,276**	20,926	21,524	(650)	(3. 1)
Securitisation	**2,890**	1,622	1,584	1,268	78. 2
Credit valuation adjustment [(3)]	**2,882**	4,498	4,958	(1,616)	(35. 9)
Central counterparties	**1,018**	824	871	194	23. 5
Total RWA for credit risk exposures	**369,528**	366,985	377,259	2,543	0. 7
Traded market risk	**8,255**	4,829	4,650	3,426	70. 9
Interest rate risk in the banking book	**24,381**	27,944	21,404	(3,563)	(12. 8)
Operational risk	**56,448**	41,078	33,750	15,370	37. 4
Total risk weighted assets	**458,612**	440,836	437,063	17,776	4. 0

(1) Pursuant to APRA requirements, RWA amounts derived from AIRB risk weight functions have been multiplied by a scaling factor of 1.06.
(2) Reclassification of AIRB SME Corporate (decrease $1,328 million) to AIRB Corporate (increase $1,879 million) due to changes in regulatory treatments.
(3) Adjustment to maturity treatments resulting in $1,050 million reduction.

Risk Weighted Assets

Total RWA increased by $17.8 billion or 4.0% on the prior half to $458.6 billion; driven by higher Operational Risk, Traded Market Risk and Credit Risk RWA, partly offset by lower IRRBB RWA.

Credit Risk RWA

Credit Risk RWA increased by $2.5 billion or 0.7% on the prior half, driven by:

- Foreign currency movements ($1.6 billion);
- Implementation of revised APS 120 Securitisation requirements ($1.2 billion) and refresh of credit risk estimates across some portfolios ($1.0 billion);
- Reduction in credit quality across some Retail and Corporate portfolios ($0.9 billion);
- Data and methodology changes in the treatment of maturities on derivatives and loans (net $0.5 billion); and
- Growth in Retail Residential Mortgages ($2.2 billion).

These increases were partly offset by other volume reductions ($4.9 billion) mainly due to Corporate portfolio optimisation.

Traded Market Risk RWA

Traded Market Risk RWA increased by $3.4 billion or 70.9%. This was driven by the conservative treatment, under the internal model approach of some interest rate products, which is under review.

Interest Rate Risk in the Banking Book (IRRBB) RWA

IRRBB RWA decreased by $3.6 billion or 12.8% on the prior half. This was due to interest rate risk management activities and an increase in embedded gains.

Operational Risk RWA

Operational Risk RWA increased by $15.4 billion or 37.4% on the prior half year. This includes:

- An add-on required by APRA following the Prudential Inquiry findings ($12.5 billon);
- The inclusion of Wealth Management Advice in the Level 2 Banking Group from 30 June 2018, in accordance with APRA's expectations relating to the capital treatment of advice related activities ($2.3 billion); and
- The regular assessment of the Group's operational risk profile in the context of the evolving risk and regulatory environment ($0.6 billion).

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 RWA

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

		Credit RWA movement drivers				
	Change in RWA for June 18 half	Volume changes	FX changes	Credit risk estimates changes and regulatory treatments	Data and methodology changes	Change in credit quality
Asset Category	$M	$M	$M	$M	$M	$M
AIRB corporate including SME and specialised lending	(1,854)	(5,862)	1,382	356	1,220	1,050
AIRB bank	317	495	98	21	53	(350)
AIRB sovereign	323	(41)	65	1	10	288
AIRB consumer retail	4,561	1,530	109	1,847	-	1,075
Standardised (including other assets, CCP and CVA)	(2,072)	986	(38)	(1,172)	(792)	(1,056)
Securitisation exposures	1,268	236	1	1,156	-	(125)
Total credit RWA movement	**2,543**	**(2,656)**	**1,617**	**2,209**	**491**	**882**

7 Risk Management

Overview

The Group is exposed to both financial and non-financial risks arising from its operations. The Group manages these risks through its Risk Management Framework (Framework) that evolves with emerging risks arising from the changing business environment, better practice approaches, and regulatory and community expectations. The components of the Framework are illustrated below.

Following the publication in April of the Prudential Inquiry Panel report to APRA, the Group has committed to implement all of its recommendations. A number of the resulting actions will strengthen the Framework, particularly for the Operational and Compliance risk types. The Action Plan to deliver these changes has been endorsed by APRA and the changes will be embedded into the framework on the basis agreed.

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

Risk Management Framework

The Group's embedded Framework enables the appropriate development and implementation of strategies, policies and procedures to manage its risks. The Framework incorporates the requirements of APRA's prudential standard for risk management (CPS 220), and is 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 (Risk Appetite) and the maximum level of risk that the institution must operate within (Risk Tolerances).
- The Group Risk Management Approach (RMA) describes how the Group ensures the comprehensive management of risks across the Group in support of achieving its strategic goals.
- 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

The Framework is underpinned by key foundational components, in particular:

Risk Culture and Conduct Risk

Risk Culture is the collection of values, ideas, skills and habits that equip Group employees and directors to see and talk about risks, and make sound judgments in the absence of definitive rules, regulations or market signals. Culture is a key driver of conduct. The RAS requires business practices that are fair to the Group's customers and protects the fair and efficient operation of the market. This defines the Group's standard of good conduct. The Group's risk culture emphasises doing what is right, accountability, service, excellence and getting things done. APRA requires the CBA Board to form a view regarding the effectiveness of the institution's risk culture in keeping risk taking within appetite, and to take any corrective action that may be appropriate. The Board discusses culture and values on a continuous basis, and takes action whenever necessary.

Trust and Reputation

The reputation of the Group and trust of stakeholders are significant assets. Damage to the Group's reputation arises from negative perception on the part of customers, counterparties, shareholders, investors, debt holders, market analysts, regulators and other relevant stakeholders of the Group. The Group's purpose and values combined with the organisational culture and our conduct as an organisation and as individuals form the framework which protects this asset. Potential adverse reputational impacts are managed as an outcome of the Group's material risks. In addition the Group has a corporate responsibility plan focused on driving positive change through education, innovation and good business practice.

The four key elements that operationalise the Framework are:

Risk Governance

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 risk-taking activities.

The Board operates as the highest level of the Group's risk governance as specified in its Charter. In addition, an annual declaration is made by the chairs of the Board and Risk Committee to APRA on Risk Management as set out in the prudential standard (CPS220).

The Risk Committee oversees 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);
- Reviews regular reports from Management on the measurement of risk and the adequacy and effectiveness of the Group's risk management and internal controls systems;
- Monitors the health of the Group's risk culture (via both formal reports and through its dialogues with the risk leadership team and executive management) and reports any significant issues to the Board; and
- Forms a view on the independence of the risk function by meeting with the Group Chief Risk Officer (CRO) at the will of the Committee or the CRO.

The Group is rolling out a Three Lines of Accountability (3LoA) model which places accountability for risk ownership with Line 1 Business Units (BUs) while focussing the mandate of Line 2 Risk Teams on appetite and framework, oversight, assurance, challenge and advice (and elevates Line 1 Profit and Loss owners as accountable for decision making and risk management).

Line 3 Audit provides independent assurance to the Board, regulators and other stakeholders of the effectiveness of risk management, internal controls and governance. This model recognises that the business is best positioned to make optimal long-term risk-reward decisions that consider the full end-to-end value chain.

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;
- Quantifying the financial operating tolerances for material risks; and
- Clearly stating the types of risk outcomes to which the Group is intolerant.

Risk Reporting

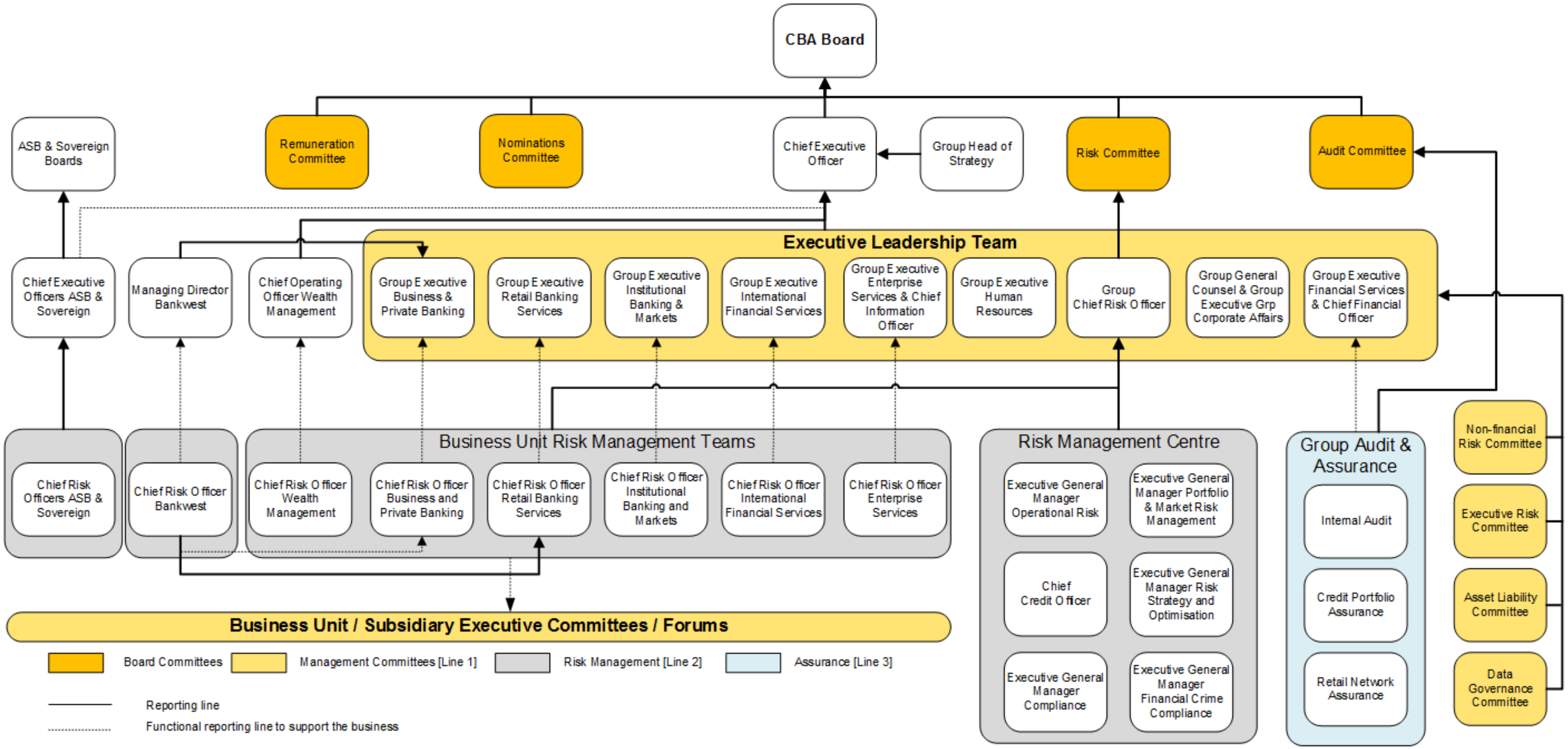
Regular management information is produced which allows financial and risk positions to be monitored against approved Risk Appetite and policy limits. At Board level, the majority of risk reporting is provided to the Board Risk Committee although select matters (e.g. regulatory relationships, strategic risk and reputational matters, capital, Liquidity Risk) are reported directly to the Board. Controls reporting is provided to the Audit Committee. The Chairs of the Board Risk and Audit Committees report to the Board following each Committee meeting.

Risk Management Infrastructure

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

- A Management Information System to measure and aggregate risks across the Group;
- A Risk-Adjusted-Performance Measurement (RAPM) process which is a means of assessing the performance of a business after adjustment for its risks and is used as a basis for executive incentives; and
- An Internal Capital Adequacy Assessment Process (ICAAP) used in combination with other risk management practices (including stress testing), to understand, manage and quantify the Group's risks; the outcomes of which are used to inform risk decisions, set capital buffers and assist strategic planning.

Risk Governance Structure



Material Risk Types

Risk Type	Description	Governing Policies and Key Management Committees	Key Limits, Standards and Measurement Approaches
Credit Risk (see section 8)	Credit risk is the potential for loss arising from the failure of a counterparty to meet their contractual obligations to the Group. At a portfolio level, credit risk includes concentration risk arising from interdependencies between customers, and concentrations of exposures to geographical regions and industry sectors.	**Governing Policies:** ▪ Group Credit Risk Principles, Framework and Governance ▪ Group and Business Unit Credit Risk Policies **Key Management Committee**: Executive Risk Committee	The following credit concentration frameworks set credit portfolio concentration limits: ▪ Large Credit Exposure Policy; ▪ Country Risk Exposure Policy; and ▪ Industry Sector Concentration Policy. Credit quality metrics with associated limits are set in the Group RAS for corporate and retail exposures and cascaded to BUs. Group and BU Credit Risk Policies cover the credit risk exposure cycle. The measurement of credit risk is primarily based on the APRA accredited Advanced Internal Ratings Based (AIRB) approach.
Market Risk (including Equity Risk) (see section 9 and section 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. This includes changes in interest rates, foreign exchange rates, equity and commodity prices, credit spreads, and the resale value of operating leased assets at maturity (lease residual value risk).	**Governing Policies:** ▪ The Group Market Risk Policy **Key Management Committee**: Asset and Liability Committee	The Group Market Risk Policy sets limits and standards with respect to the following: ▪ Traded Market Risk; ▪ Interest Rate Risk in the Banking Book (IRRBB); ▪ Residual Value Risk; ▪ Non-traded Equity Risk; and ▪ Market Risk in Insurance Businesses. The respective measurement approaches for these risks include: ▪ Value at Risk, Stress Testing; ▪ Market Value Sensitivity, Net Interest Earnings at Risk; ▪ Aggregate Residual Value Risk Weighted Exposure, Aggregate Residual Value Risk Margin; ▪ Aggregate Portfolio Limit; and ▪ Value at Risk.
Liquidity and Funding Risk (see 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).	**Governing Policies:** Group Liquidity Risk Management Policy **Key Management Committee:** Asset and Liability Committee	The Group Liquidity Risk Management Policy and Strategy sets limits and standards with respect to the following: ▪ The Liquidity Coverage Ratio, which requires liquid assets exceed modelled 30 day stress outflows; ▪ The Net Stable Funding Ratio, which encourages stable funding of core assets; ▪ Market and idiosyncratic stress test scenarios; and ▪ Limits that set tolerances for the sources and tenor of funding. The measurement of liquidity risk uses scenario analysis, covering both adverse and ordinary operating circumstances.

Operational Risk
(see section 11)
	Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events.	**Governing Policies:**
		▪ Operational Risk Management Framework (ORMF)
		▪ Group and Business Unit Operational Risk Policies
		
		Key Management Committee:
		Executive Leadership Team Non-Financial Risk Committee.
			▪ Group Risk Appetite Statement - Operational Risk metric in respect of:
			  ▪ Losses;
			  ▪ Residual Risk;
			  ▪ Internal Control environment; and
			  ▪ Issues.
			The measurement of operational risk capital is based on an APRA accredited Advanced Measurement Approach. The approach combines internal and external loss experience and business judgements captured through Scenario Analysis.

Material Risk Types (continued)

Risk Type	Description	Governing Policies and Key Management Committees	Key Limits, Standards and Measurement Approaches
Compliance Risk (see section 11)	Compliance risk is the risk of sanctions, financial loss, or reputational damage we 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 (not including operational risk failures) and includes societal expectations. Financial crime represents a sub-component of Compliance Risk and covers risks including Anti Money Laundering, Counter Terrorism Financing, Anti-Bribery and Corruption, and Sanctions.	**Governing Policies:** ▪ Group Compliance Risk Management Framework (CRMF) ▪ Group and Business Unit Compliance Policies **Key Management Committee:** Executive Leadership Team Non-Financial Risk Committee.	The CRMF sets the standards on how the Group identifies, assesses, manages, monitors and reports on Compliance Risk. The CRMF is supported by a number of key policies which are set out in the Group Risk Management Approach (RMA). Compliance Risk Measures are included in the Group Risk Appetite Statement (RAS).
Insurance Risk	Insurance risk is the risk of loss due to increases in policy benefits arising from variations in the incidence or severity of insured events. In the life insurance business this arises primarily through mortality (death) or morbidity (illness or injury) claims being greater than expected. In the general insurance business, variability arises mainly through weather related incidents and similar events, as well as general variability in home, motor and travel insurance claim amounts. Insurance risk also covers inadequacy in product design, pricing, underwriting, claims management and reinsurance management as well as variations in policy lapses, servicing expenses, and option take up rates.	**Governing Policies:** ▪ Product Management Policy ▪ Underwriting Policy ▪ Claims Management Policy ▪ Reinsurance Management Policy **Key Management Committee:** Executive Committees of insurance writing businesses	The key limits and standards with respect to insurance risk are set via the end-to-end policies of insurance writing businesses. The major methods include: ▪ 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; ▪ Regular review of insurance experience, so that product design, policy liabilities and pricing remains sound; ▪ Claims management to ensure that claims are paid within the agreed policy terms and that genuine claims are paid as soon as possible after documentation is received and reasonable investigations are undertaken; and ▪ Transferring a proportion of insurance risk to reinsurers to keep within risk appetite. Insurance risk is measured using actuarial techniques which are used to establish the likelihood and severity of possible insurance claims. Insurance risk is further monitored with key financial and performance metrics, such as loss ratios, new business volumes and lapse rates.
Strategic Risk	Strategic Risk is the risk of material value destruction or less than planned value creation arising from changes in the business environment (caused by macroeconomic conditions, competitive forces at work, technology, regulatory, political and social trends, customer preference, the environment or internal weaknesses, such as a poorly implemented or flawed strategy.	**Governing Policies:** ▪ The management of Strategic Risks is intrinsically interconnected with business management and is driven by the Group's Strategic Planning Cycle. **Key Management Committee:** Executive Leadership Team	Strategic risks are overseen by the Board. The Group's approach to managing Strategic Risks is to select a strategy that is expected to maximise long-term value for shareholders. While considering Group and BU strategic plans, the Board considers the most significant risks (current and emerging) arising from these plans. Strategic risk is assessed by using scenario analysis and stress testing to understand the potential impacts of changes in the external operating environment. The findings from these assessments are used to inform mitigating actions, including incorporating contingency (where appropriate) into the strategic and financial plans. Potential adverse climate change impacts are measured and managed as an outcome of all other material risks. In support of our commitment to limiting climate change in line with the Paris Agreement, and the responsible global transition to net zero emissions by 2050 we: ▪ Develop scenario analyses to understand the impacts of both transition and physical climate-related risks on our business and the implications for strategic and tactical portfolio decisions; and ▪ Have developed strong policy frameworks which consider Environmental, Social and Governance (ESG) issues, including climate change impacts in assessing our relationships with customers and suppliers. In addition, Corporate Responsibility programs: ▪ Outline our objectives for safeguarding the environment, whilst supporting economic growth and development; and ▪ Provide guidelines in monitoring and reducing our own greenhouse gas emissions and energy use.

8 Credit Risk

Credit risk is the potential of loss arising from failure of a counterparty to meet their contractual obligations. 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. In the insurance business, credit risk primarily arises from investment in bonds and notes, loans and from reliance on reinsurance.

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 Business Unit level. The key credit risk related functions support the overall risk management responsibilities of the Board Risk Committee and senior management as discussed in section 7 "Risk Management" of this document (page 12).

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 35 - 38).

Credit Risk Management Framework

The Board Risk Committee oversees the Group's Credit Risk Management approach 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 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 in 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.

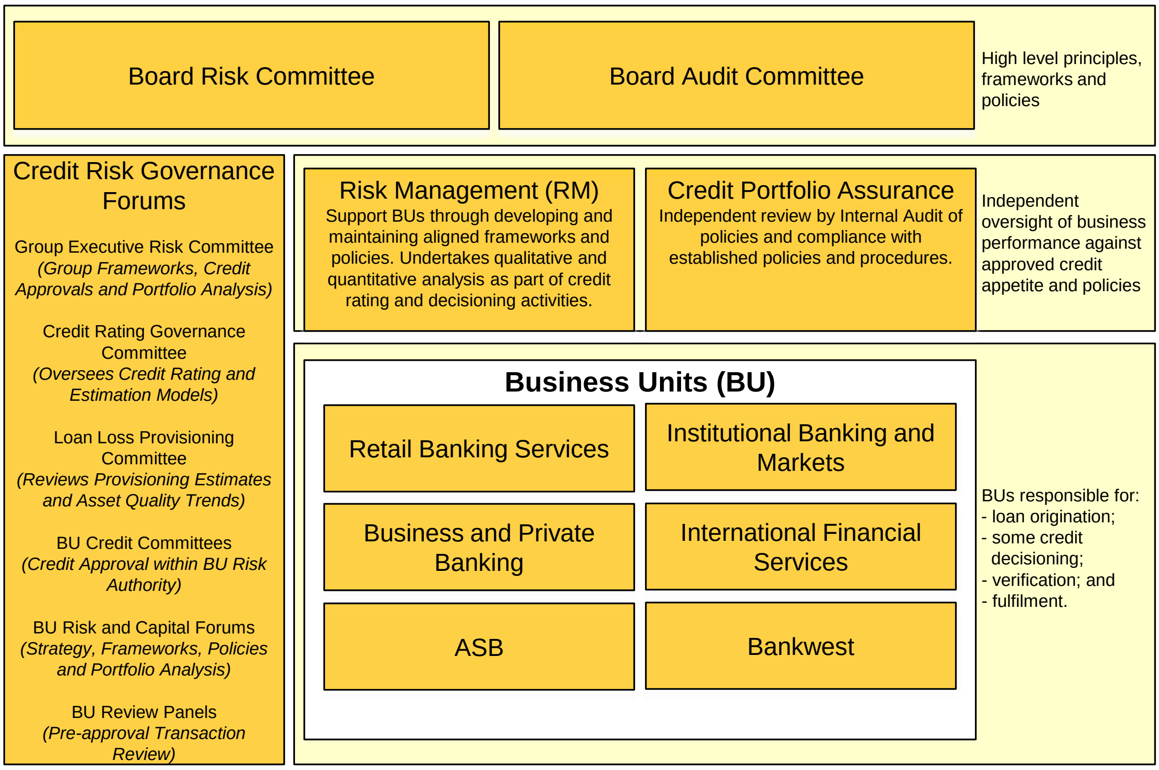
The Group's Risk Appetite Statement requires that there is appropriate diversification of credit risk. This is achieved through established policies that include limits for the key dimensions of the credit portfolio for:

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

Experts in each Business Unit search for ways to diversify credit risk exposure in the business, all within the policy limits.

The Credit Portfolio Assurance Unit, part of Group Audit and Assurance, reviews credit portfolios and Business Unit 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 Board Audit and Risk Committees 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.

APS 330 Table 7i – Credit risk exposures by portfolio type and modelling approach

	30 June 2018						
		Off Balance Sheet					
Portfolio Type	On Balance Sheet $M	Non-market related $M	Market related $M	Total $M	Average exposure for June 2018 half [1] $M	Change in exposure for June 2018 half [2] $M	%
Subject to AIRB approach							
Corporate [3]	72,930	43,771	8,247	**124,948**	125,379	(862)	(0. 7)
SME corporate [3]	44,508	8,511	311	**53,330**	54,908	(3,156)	(5. 6)
SME retail	7,076	3,115	-	**10,191**	10,179	24	0. 2
SME retail secured by residential mortgage	4,132	1,354	-	**5,486**	5,562	(152)	(2. 7)
Sovereign	82,484	1,334	2,237	**86,055**	87,805	(3,501)	(3. 9)
Bank	31,034	687	9,087	**40,808**	39,687	2,243	5. 8
Residential mortgage	487,335	71,691	-	**559,026**	555,285	7,481	1. 4
Qualifying revolving retail	10,828	18,224	-	**29,052**	27,903	2,299	8. 6
Other retail	8,314	3,103	-	**11,417**	11,376	83	0. 7
Total AIRB approach	748,641	151,790	19,882	**920,313**	918,084	4,459	0. 5
Specialised lending	52,517	9,767	547	**62,831**	63,519	(1,377)	(2. 1)
Subject to standardised approach							
Corporate	1,030	216	-	**1,246**	1,266	(39)	(3. 0)
SME corporate	199	212	1	**412**	345	134	48. 2
SME retail	4,808	969	57	**5,834**	5,761	146	2. 6
Sovereign	484	9	-	**493**	447	93	23. 3
Bank	238	1	140	**379**	302	153	67. 7
Residential mortgage	11,429	1,759	-	**13,188**	12,901	574	4. 6
Other retail	1,481	111	-	**1,592**	2,149	(1,115)	(41. 2)
Other assets	8,902	-	-	**8,902**	10,091	(2,378)	(21. 1)
Central counterparties	-	-	7,196	**7,196**	6,370	1,653	29. 8
Total standardised approach	28,571	3,277	7,394	**39,242**	39,632	(779)	(1. 9)
Total credit exposures [4]	829,729	164,834	27,823	**1,022,386**	1,021,235	2,303	0. 2

(1) The simple average of balances as at 30 June 2018 and 31 December 2017.
(2) The difference between exposures as at 30 June 2018 and 31 December 2017.
(3) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(4) 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:

Asset Category	Total exposure change $M	Regulatory Exposure Driver
AIRB corporate (including SME) and specialised lending	**(5,523)**	Primarily reflects reduction in exposure due to corporate portfolio optimisation and changes to credit risk estimates in some portfolios, partly offset by FX movements.
AIRB sovereign	**(3,501)**	Primarily reflects reduction of exposure partly offset by FX movements.
AIRB bank	**2,243**	Primarily reflects volume growth and FX movements.
AIRB consumer retail	**9,863**	Primarily reflects growth in residential mortgages, AIRB accreditation of Bankwest credit card portfolio and FX movements.
Total advanced and specialised lending	**3,082**	
Standardised including other assets and central counterparties	**(779)**	Primarily reflects Bankwest credit card portfolio moving to AIRB consumer retail.
Total excluding securitisation and equity exposures	**2,303**	

APS 330 Table 7i – Credit risk exposures by portfolio type and modelling approach (continued)

	31 December 2017						
		Off Balance Sheet					
	On Balance Sheet	Non-market related	Market related	Total	Average exposure for December 2017 half [1]	Change in exposure for December 2017 half [2]	
Portfolio Type	$M	$M	$M	$M	$M	$M	%
Subject to AIRB approach							
Corporate	72,772	46,163	6,875	125,810	128,176	(4,732)	(3. 6)
SME corporate	46,337	9,551	598	56,486	55,719	1,534	2. 8
SME retail	6,992	3,175	-	10,167	10,228	(122)	(1. 2)
SME retail secured by residential mortgage	4,188	1,450	-	5,638	5,746	(216)	(3. 7)
Sovereign	86,734	1,245	1,577	89,556	90,984	(2,856)	(3. 1)
Bank	28,996	1,456	8,113	38,565	40,824	(4,519)	(10. 5)
Residential mortgage	478,121	73,424	-	551,545	548,956	5,178	0. 9
Qualifying revolving retail	9,887	16,866	-	26,753	26,935	(363)	(1. 3)
Other retail	8,260	3,074	-	11,334	11,180	309	2. 8
Total AIRB approach	742,287	156,404	17,163	915,854	918,748	(5,787)	(0. 6)
Specialised lending	52,955	10,574	679	64,208	65,626	(2,837)	(4. 2)
Subject to standardised approach							
Corporate	918	365	2	1,285	1,476	(382)	(22. 9)
SME corporate	196	80	2	278	394	(232)	(45. 5)
SME retail	4,687	951	50	5,688	5,924	(471)	(7. 6)
Sovereign	400	-	-	400	463	(125)	(23. 8)
Bank	225	1	-	226	337	(222)	(49. 6)
Residential mortgage	10,865	1,749	-	12,614	12,134	960	8. 2
Other retail	2,618	89	-	2,707	2,814	(214)	(7. 3)
Other assets	11,280	-	-	11,280	10,387	1,786	18. 8
Central counterparties	-	-	5,543	5,543	5,614	(143)	(2. 5)
Total standardised approach	31,189	3,235	5,597	40,021	39,543	957	2. 4
Total credit exposures [3]	826,431	170,213	23,439	1,020,083	1,023,917	(7,667)	(0. 7)

(1) The simple average of balances as at 31 December 2017 and 30 June 2017.
(2) The difference between exposures as at 31 December 2017 and 30 June 2017.
(3) Total credit risk exposures (calculated as EAD) do not include equities or securitisation exposures.

APS 330 Table 7i – Credit risk exposures by portfolio type and modelling approach (continued)

	30 June 2017						
		Off Balance Sheet					
Portfolio Type	On Balance Sheet $M	Non-market related $M	Market related $M	Total $M	Average exposure for June 2017 half [1] $M	Change in exposure for June 2017 half [2] $M	%
Subject to AIRB approach							
Corporate	72,930	50,677	6,935	130,542	131,220	(1,356)	(1. 0)
SME corporate	45,380	8,991	581	54,952	54,805	293	0. 5
SME retail	7,136	3,153	-	10,289	10,226	126	1. 2
SME retail secured by residential mortgage	4,453	1,401	-	5,854	5,931	(154)	(2. 6)
Sovereign	88,977	1,171	2,264	92,412	89,672	5,480	6. 3
Bank	32,537	2,519	8,028	43,084	43,839	(1,509)	(3. 4)
Residential mortgage	474,059	72,308	-	546,367	542,033	8,668	1. 6
Qualifying revolving retail	9,906	17,210	-	27,116	27,207	(182)	(0. 7)
Other retail	7,867	3,158	-	11,025	11,053	(55)	(0. 5)
Total AIRB approach	743,245	160,588	17,808	921,641	915,986	11,311	1. 2
Specialised lending	54,236	12,093	716	67,045	67,919	(1,749)	(2. 5)
Subject to standardised approach							
Corporate	1,005	223	439	1,667	1,413	509	44. 0
SME corporate	397	112	1	510	553	(85)	(14. 3)
SME retail	5,143	951	65	6,159	6,117	83	1. 4
Sovereign	499	26	-	525	514	22	4. 4
Bank	448	-	-	448	506	(117)	(20. 7)
Residential mortgage	10,015	1,639	-	11,654	11,382	543	4. 9
Other retail	2,821	100	-	2,921	2,847	148	5. 3
Other assets	9,494	-	-	9,494	9,908	(827)	(8. 0)
Central counterparties	-	-	5,686	5,686	5,386	600	11. 8
Total standardised approach	29,822	3,051	6,191	39,064	38,626	876	2. 3
Total credit exposures [3]	827,303	175,732	24,715	1,027,750	1,022,531	10,438	1. 0

(1) The simple average of balances as at 30 June 2017 and 31 December 2016.
(2) The difference between exposures as at 30 June 2017 and 31 December 2016.
(3) Total credit risk exposures (calculated as EAD) do not include equities or securitisation exposures.

APS 330 Table 7b – Credit risk exposure by portfolio type

Portfolio Type	As at 30 Jun 18 $M	Half year average [1] $M
Corporate [2]	**126,194**	126,645
SME corporate [2]	**53,742**	55,253
SME retail	**16,025**	15,940
SME retail secured by residential mortgage	**5,486**	5,562
Sovereign	**86,548**	88,252
Bank	**41,187**	39,989
Residential mortgage	**572,214**	568,186
Qualifying revolving retail	**29,052**	27,903
Other retail	**13,009**	13,525
Specialised lending	**62,831**	63,519
Other assets	**8,902**	10,091
Central counterparties	**7,196**	6,370
Total credit exposures [3]	**1,022,386**	1,021,235

Portfolio Type	As at 31 Dec 17 $M	Half year average [1] $M
Corporate	127,095	129,652
SME corporate	56,764	56,113
SME retail	15,855	16,152
SME retail secured by residential mortgage	5,638	5,746
Sovereign	89,956	91,447
Bank	38,791	41,161
Residential mortgage	564,159	561,090
Qualifying revolving retail	26,753	26,935
Other retail	14,041	13,994
Specialised lending	64,208	65,626
Other assets	11,280	10,387
Central counterparties	5,543	5,614
Total credit exposures [3]	1,020,083	1,023,917

Portfolio Type	As at 30 Jun 17 $M	Half year average [1] $M
Corporate	132,209	132,633
SME corporate	55,462	55,358
SME retail	16,448	16,343
SME retail secured by residential mortgage	5,854	5,931
Sovereign	92,937	90,186
Bank	43,532	44,345
Residential mortgage	558,021	553,415
Qualifying revolving retail	27,116	27,207
Other retail	13,946	13,900
Specialised lending	67,045	67,919
Other assets	9,494	9,908
Central counterparties	5,686	5,386
Total credit exposures [3]	1,027,750	1,022,531

(1) The simple average of closing balances of each half year.
(2) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(3) Total credit risk exposures do not include equities or securitisation exposures.

APS 330 Table 7c – Credit risk exposure by portfolio type and geographic distribution

	30 June 2018 (1)			
Portfolio Type	Australia $M	New Zealand $M	Other $M	Total $M
Corporate (2)	70,649	9,772	45,773	**126,194**
SME corporate (2)	37,687	15,439	616	**53,742**
SME retail (3)	17,870	3,007	634	**21,511**
Sovereign	48,486	4,429	33,633	**86,548**
Bank	19,792	2,146	19,249	**41,187**
Residential mortgage	514,576	57,145	493	**572,214**
Qualifying revolving retail	29,052	-	-	**29,052**
Other retail	9,860	2,824	325	**13,009**
Specialised lending	50,963	7,252	4,616	**62,831**
Other assets	6,945	540	1,417	**8,902**
Central counterparties	1,073	-	6,123	**7,196**
Total credit exposures (4)	806,953	102,554	112,879	**1,022,386**

	31 December 2017 (1)			
Portfolio Type	Australia $M	New Zealand $M	Other $M	Total $M
Corporate	72,785	10,162	44,148	127,095
SME corporate	39,668	15,146	1,950	56,764
SME retail (3)	18,022	2,895	576	21,493
Sovereign	49,625	5,106	35,225	89,956
Bank	17,959	1,907	18,925	38,791
Residential mortgage	508,476	55,226	457	564,159
Qualifying revolving retail	26,753	-	-	26,753
Other retail	10,927	2,765	349	14,041
Specialised lending	53,215	6,692	4,301	64,208
Other assets	9,723	430	1,127	11,280
Central counterparties	536	-	5,007	5,543
Total credit exposures (4)	807,689	100,329	112,065	1,020,083

	30 June 2017 (1)			
Portfolio Type	Australia $M	New Zealand $M	Other $M	Total $M
Corporate	75,293	9,103	47,813	132,209
SME corporate	39,497	15,049	916	55,462
SME retail (3)	18,429	3,058	815	22,302
Sovereign	54,284	3,830	34,823	92,937
Bank	20,726	1,761	21,045	43,532
Residential mortgage	501,252	56,278	491	558,021
Qualifying revolving retail	27,116	-	-	27,116
Other retail	10,771	2,826	349	13,946
Specialised lending	54,773	7,099	5,173	67,045
Other assets	7,767	735	992	9,494
Central counterparties	560	-	5,126	5,686
Total credit exposures (4)	810,468	99,739	117,543	1,027,750

(1) Balances are reported based on the risk domicile of the borrowers.
(2) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(3) Including SME retail secured by residential property.
(4) Total credit risk exposures do not include equities or securitisation exposures.

APS 330 Table 7d – Credit risk exposure by portfolio type and industry sector

	30 June 2018							
	Industry Sector							
Portfolio Type	**Residential mortgage $M**	**Other personal $M**	**Asset finance $M**	**Sovereign $M**	**Bank $M**	**Other finance $M**	**Agriculture $M**	**Mining $M**
Corporate (1)	-	-	3,125	-	-	28,155	2,456	10,396
SME corporate (1)	-	-	2,862	-	-	1,699	17,351	212
SME retail (2)	-	-	3,743	-	-	389	1,768	66
Sovereign	-	-	-	86,548	-	-	-	-
Bank	-	-	-	-	41,187	-	-	-
Residential mortgage	572,214	-	-	-	-	-	-	-
Qualifying revolving retail	-	29,052	-	-	-	-	-	-
Other retail	-	12,688	321	-	-	-	-	-
Specialised lending	-	-	21	-	-	3	79	1,748
Other assets	-	2,832	-	-	-	-	-	-
Central counterparties	-	-	-	-	-	7,196	-	-
Total credit exposures (3)	572,214	44,572	10,072	86,548	41,187	37,442	21,654	12,422

	Industry Sector							
Portfolio Type	**Manufacturing $M**	**Energy $M**	**Construction $M**	**Retail/ wholesale trade $M**	**Transport and storage $M**	**Property (4) $M**	**Other $M**	**Total $M**
Corporate (1)	10,708	7,408	2,815	11,952	15,832	8,362	24,985	**126,194**
SME corporate (1)	3,101	153	2,849	7,392	1,711	577	15,835	**53,742**
SME retail (2)	884	23	1,561	2,709	490	2,305	7,573	**21,511**
Sovereign	-	-	-	-	-	-	-	**86,548**
Bank	-	-	-	-	-	-	-	**41,187**
Residential mortgage	-	-	-	-	-	-	-	**572,214**
Qualifying revolving retail	-	-	-	-	-	-	-	**29,052**
Other retail	-	-	-	-	-	-	-	**13,009**
Specialised lending	64	2,209	70	132	2,152	53,899	2,454	**62,831**
Other assets	-	-	-	-	-	-	6,070	**8,902**
Central counterparties	-	-	-	-	-	-	-	**7,196**
Total credit exposures (3)	14,757	9,793	7,295	22,185	20,185	65,143	56,917	**1,022,386**

(1) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(2) SME retail business lending secured by residential property has been allocated by industry.
(3) Total credit risk exposures do not include equities or securitisation exposures.
(4) Property includes Real Estate Investment Trusts (REIT) and excludes Business Services.

APS 330 Table 7d – Credit risk exposure by portfolio type and industry sector (continued)

	31 December 2017							
	Industry Sector							
Portfolio Type	Residential mortgage $M	Other personal $M	Asset finance $M	Sovereign $M	Bank $M	Other finance $M	Agriculture $M	Mining $M
Corporate	-	-	3,032	-	-	27,220	2,362	9,844
SME corporate	-	-	2,830	-	-	3,232	17,048	232
SME retail (1)	-	-	3,770	-	-	381	1,777	57
Sovereign	-	-	-	89,956	-	-	-	-
Bank	-	-	-	-	38,791	-	-	-
Residential mortgage	564,159	-	-	-	-	-	-	-
Qualifying revolving retail	-	26,753	-	-	-	-	-	-
Other retail	-	13,694	347	-	-	-	-	-
Specialised lending	-	-	17	-	-	76	76	1,982
Other assets	-	2,782	-	-	-	-	-	-
Central counterparties	-	-	-	-	-	5,543	-	-
Total credit exposures (2)	564,159	43,229	9,996	89,956	38,791	36,452	21,263	12,115

	Industry Sector							
Portfolio Type	Manufacturing $M	Energy $M	Construction $M	Retail/ wholesale trade $M	Transport and storage $M	Property (3) $M	Other $M	Total $M
Corporate	10,969	7,832	2,838	12,820	16,615	8,085	25,478	127,095
SME corporate	3,091	371	2,883	7,428	1,959	684	17,006	56,764
SME retail (1)	825	22	1,461	2,492	472	1,986	8,250	21,493
Sovereign	-	-	-	-	-	-	-	89,956
Bank	-	-	-	-	-	-	-	38,791
Residential mortgage	-	-	-	-	-	-	-	564,159
Qualifying revolving retail	-	-	-	-	-	-	-	26,753
Other retail	-	-	-	-	-	-	-	14,041
Specialised lending	16	2,147	70	270	2,445	54,863	2,246	64,208
Other assets	-	-	-	-	-	-	8,498	11,280
Central counterparties	-	-	-	-	-	-	-	5,543
Total credit exposures (2)	14,901	10,372	7,252	23,010	21,491	65,618	61,478	1,020,083

(1) SME retail business lending secured by residential property has been allocated by industry.
(2) Total credit risk exposures do not include equities or securitisation exposures.
(3) Property includes REITs and excludes Business Services.

APS 330 Table 7d – Credit risk exposure by portfolio type and industry sector (continued)

	30 June 2017							
	Industry Sector							
Portfolio Type	Residential mortgage $M	Other personal $M	Asset finance $M	Sovereign $M	Bank $M	Other finance $M	Agriculture $M	Mining $M
Corporate	-	-	2,252	-	-	25,693	2,247	11,430
SME corporate	-	-	2,814	-	-	2,448	17,278	214
SME retail (1)	-	-	3,872	-	-	430	1,845	73
Sovereign	-	-	-	92,937	-	-	-	-
Bank	-	-	-	-	43,532	-	-	-
Residential mortgage	558,021	-	-	-	-	-	-	-
Qualifying revolving retail	-	27,116	-	-	-	-	-	-
Other retail	-	13,606	-	-	-	-	-	-
Specialised lending	-	-	4	-	-	-	77	1,903
Other assets	-	2,938	-	-	-	-	-	-
Central counterparties	-	-	-	-	-	5,686	-	-
Total credit exposures (2)	558,021	43,660	8,942	92,937	43,532	34,257	21,447	13,620

	Industry Sector							
Portfolio Type	Manufacturing $M	Energy $M	Construction $M	Retail/ wholesale trade $M	Transport and storage $M	Property (3) $M	Other $M	Total $M
Corporate	12,804	8,894	3,200	13,093	17,645	8,038	26,913	132,209
SME corporate	3,277	230	2,774	7,174	1,833	779	16,641	55,462
SME retail (1)	1,003	25	1,571	2,771	512	2,532	7,668	22,302
Sovereign	-	-	-	-	-	-	-	92,937
Bank	-	-	-	-	-	-	-	43,532
Residential mortgage	-	-	-	-	-	-	-	558,021
Qualifying revolving retail	-	-	-	-	-	-	-	27,116
Other retail	-	-	-	340	-	-	-	13,946
Specialised lending	-	1,975	71	167	3,029	57,209	2,610	67,045
Other assets	-	-	-	-	-	-	6,556	9,494
Central counterparties	-	-	-	-	-	-	-	5,686
Total credit exposures (2)	17,084	11,124	7,616	23,545	23,019	68,558	60,388	1,027,750

(1) SME retail business lending secured by residential property has been allocated by industry.
(2) Total credit risk exposures do not include equities or securitisation exposures.
(3) Property includes REITs and excludes Business Services.

APS 330 Table 7e – Credit risk exposure by portfolio type and residual contractual maturity

	30 June 2018				
	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
Portfolio Type	$M	$M	$M	$M	$M
Corporate [1]	23,514	92,324	10,127	229	**126,194**
SME corporate [1]	12,170	36,788	4,784	-	**53,742**
SME retail [2]	4,491	13,095	3,925	-	**21,511**
Sovereign	29,518	32,438	24,592	-	**86,548**
Bank	20,831	20,235	121	-	**41,187**
Residential mortgage	16,365	38,587	467,716	49,546	**572,214**
Qualifying revolving retail	-	-	-	29,052	**29,052**
Other retail	165	5,730	2,909	4,205	**13,009**
Specialised lending	13,409	45,618	3,804	-	**62,831**
Other assets	3,199	503	-	5,200	**8,902**
Central counterparties	732	6,464	-	-	**7,196**
Total credit exposures [3]	124,394	291,782	517,978	88,232	**1,022,386**

	31 December 2017				
	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
Portfolio Type	$M	$M	$M	$M	$M
Corporate	22,579	96,551	7,600	365	127,095
SME corporate	12,172	39,000	5,592	-	56,764
SME retail [2]	4,467	13,008	4,018	-	21,493
Sovereign	26,018	39,677	24,261	-	89,956
Bank	18,061	20,622	108	-	38,791
Residential mortgage	16,228	38,248	460,666	49,017	564,159
Qualifying revolving retail	-	-	-	26,753	26,753
Other retail	163	5,764	3,098	5,016	14,041
Specialised lending	14,427	47,040	2,741	-	64,208
Other assets	2,872	469	340	7,599	11,280
Central counterparties	736	4,807	-	-	5,543
Total credit exposures [3]	117,723	305,186	508,424	88,750	1,020,083

	30 June 2017				
	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
Portfolio Type	$M	$M	$M	$M	$M
Corporate	22,331	101,758	7,861	259	132,209
SME corporate	12,397	36,813	6,252	-	55,462
SME retail [2]	4,656	13,487	4,159	-	22,302
Sovereign	25,985	43,698	23,254	-	92,937
Bank	19,573	23,661	298	-	43,532
Residential mortgage	18,067	35,492	453,577	50,885	558,021
Qualifying revolving retail	-	-	-	27,116	27,116
Other retail	214	5,658	3,088	4,986	13,946
Specialised lending	16,168	47,148	3,729	-	67,045
Other assets	2,997	579	391	5,527	9,494
Central counterparties	1,120	4,566	-	-	5,686
Total credit exposures [3]	123,508	312,860	502,609	88,773	1,027,750

(1) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(2) Including SME retail secured by residential property.
(3) Total credit risk exposures do not include equities or securitisation exposures.

8.2. Past Due and Impaired Exposures, Provisions and Reserve

Provisioning for Impairment

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

Accounting Standard AASB 139 "Financial Instruments: Recognition and Measurement" (AASB 139) requires the Group to assess whether a financial asset or a group of financial assets is impaired. Impairment losses are recognised if there is objective evidence of impairment. Separate accounting provisions are also raised under AASB 137 "Provisions, Contingent Liabilities and Contingent Assets" for non-financial instruments.

The Group assesses its provisioning for impairment in accordance with AASB 139 and recognises both individually assessed provisions and collectively assessed provisions.

This is done by a monthly assessment of the quality of the credit portfolio to determine the loan loss 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 guarantees, for the expected life. Any shortfall of the Group's provisions eligible for inclusion in the GRCL are deducted from CET1.

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

Individually Assessed and Collective Provisions

The Group assesses at each Balance Sheet date whether there is any objective evidence of impairment.

If there is objective evidence of impairment, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of the expected future cash flows discounted at the financial asset's original effective interest rate. Short-term balances are not discounted. Individually assessed provisions are made against financial assets that are individually significant, or which have been individually assessed as impaired.

All other loans and advances that do not have an individually assessed provision are assessed collectively for impairment. Collective provisions are maintained to reduce the carrying amount of portfolios of similar loans and advances to their estimated recoverable amounts.

The evaluation process for these collective provisions is subject to a series of estimates and judgements depending on how the portfolio is managed:

- Risk-rated segment – the risk rating, including the frequency of default and Loss Given Default rates, and loss history are considered; or
- Retail-managed segment – the history of arrears, past loss experience and collateral are reviewed for the various portfolios and average loss experience is applied.

Current developments in portfolios including performance, quality and economic conditions are also considered as part of the collective provisioning process. Changes in these estimates can have a direct impact on the level of provisions determined.

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 "Credit Quality". Most of the collective provisions raised under the 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 unsecured retail products 90 days or more past due.

Reconciliation of Australian Accounting Standards and APS 220 based credit provisions and APS 330
Table 7j – General reserve for credit losses

	30 June 2018		
	General reserve for credit losses [1] $M	Specific provision [1] $M	Total provisions $M
Collective provision [2]	2,484	279	**2,763**
Individual provisions [2]	-	870	**870**
Total provisions	2,484	1,149	**3,633**
Additional GRCL requirement [3]	589	-	**589**
Total regulatory provisions	3,073	1,149	**4,222**

(1) Provisions classified according to APS 220 "Credit Quality".
(2) Provisions according to the Australian Accounting Standards.
(3) The Group has recognised a deduction from CET1 of $589 million in order to maintain the required minimum GRCL.

	31 December 2017		
	General reserve for credit losses [1] $M	Specific provision [1] $M	Total provisions $M
Collective provision [2]	2,525	247	2,772
Individual provisions [2]	-	978	978
Total provisions	2,525	1,225	3,750
Additional GRCL requirement [3]	554	-	554
Total regulatory provisions	3,079	1,225	4,304

(1) Provisions classified according to APS 220 "Credit Quality".
(2) Provisions according to the Australian Accounting Standards.
(3) The Group has recognised a deduction from CET1 of $554 million in order to maintain the required minimum GRCL.

	30 June 2017		
	General reserve for credit losses [1] $M	Specific provision [1] $M	Total provisions $M
Collective provision [2]	2,486	261	2,747
Individual provisions [2]	-	980	980
Total provisions	2,486	1,241	3,727
Additional GRCL requirement [3]	589	-	589
Total regulatory provisions	3,075	1,241	4,316

(1) Provisions classified according to APS 220 "Credit Quality".
(2) Provisions according to the Australian Accounting Standards.
(3) The Group has recognised a deduction from CET1 of $589 million in order to maintain the required minimum GRCL.

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

APS 330 Table 7f (i) – Impaired, past due, specific provisions and write-offs charged by industry sector

	30 June 2018				
Industry Sector	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net full year charges for individual provisions $M	Full year actual losses (2) $M
Home loans	1,357	2,773	343	103	125
Other personal	302	23	180	2	654
Asset finance	67	4	19	21	18
Sovereign	-	-	-	-	-
Bank	9	-	9	-	-
Other finance	9	4	7	(2)	7
Agriculture	463	40	81	13	31
Mining	304	4	29	(31)	32
Manufacturing	60	35	46	(27)	86
Energy	1	-	-	(3)	-
Construction	37	22	22	11	13
Wholesale/retail trade	66	84	40	(4)	56
Transport and storage	171	13	72	32	(3)
Property	83	59	76	5	24
Other	250	155	225	243	175
Total	3,179	3,216	1,149	363	1,218

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2018.

	31 December 2017				
Industry Sector	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net half year charges for individual provisions $M	Half year actual losses (2) $M
Home loans	1,243	2,249	344	45	55
Other personal	268	23	154	1	321
Asset finance	71	2	20	9	7
Sovereign	-	-	-	-	-
Bank	9	-	9	-	-
Other finance	21	1	14	1	5
Agriculture	510	53	86	14	8
Mining	379	13	51	(17)	3
Manufacturing	74	37	61	(25)	72
Energy	6	-	3	-	-
Construction	32	19	14	(1)	10
Wholesale/retail trade	96	65	58	(2)	28
Transport and storage	129	10	48	2	10
Property	90	74	69	(1)	16
Other	439	114	294	185	29
Total	3,367	2,660	1,225	211	564

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2017.

APS 330 Table 7f (i) – Impaired, past due, specific provisions and write-offs charged by industry sector (continued)

	30 June 2017				
Industry Sector	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net full year charges for individual provisions $M	Full year actual losses (2) $M
Home loans	1,204	2,243	343	144	115
Other personal	297	25	178	2	671
Asset finance	77	2	30	30	34
Sovereign	-	-	-	-	-
Bank	9	-	9	(1)	-
Other finance	25	3	18	2	5
Agriculture	389	52	72	21	32
Mining	252	13	67	3	21
Manufacturing	197	52	142	19	14
Energy	7	-	3	15	19
Construction	55	27	26	8	22
Wholesale/retail trade	175	67	84	97	33
Transport and storage	135	12	48	70	37
Property	111	79	80	12	29
Other	254	94	141	56	106
Total	3,187	2,669	1,241	478	1,138

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2017.

APS 330 Table 7f (ii) – Impaired, past due, specific provisions and write-offs charged by portfolio

	30 June 2018				
Portfolio	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net full year charges for individual provisions $M	Full year actual losses (2) $M
Corporate including SME, specialised lending and central counterparties	1,511	420	617	258	439
Sovereign	-	-	-	-	-
Bank	9	-	9	-	-
Residential mortgage	1,357	2,773	343	103	125
Qualifying revolving retail	149	-	67	-	283
Other retail	153	23	113	2	371
Total	3,179	3,216	1,149	363	1,218

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2018.

	31 December 2017				
Portfolio	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net half year charges for individual provisions $M	Half year actual losses (2) $M
Corporate including SME, specialised lending and central counterparties	1,847	388	718	165	188
Sovereign	-	-	-	-	-
Bank	9	-	9	-	-
Residential mortgage	1,243	2,249	344	45	55
Qualifying revolving retail	116	-	55	-	124
Other retail	152	23	99	1	197
Total	3,367	2,660	1,225	211	564

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2017.

	30 June 2017				
Portfolio	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance (1) $M	Net full year charges for individual provisions $M	Full year actual losses (2) $M
Corporate including SME, specialised lending and central counterparties	1,677	401	711	333	352
Sovereign	-	-	-	-	-
Bank	9	-	9	(1)	-
Residential mortgage	1,204	2,243	343	144	115
Qualifying revolving retail	131	-	65	-	255
Other retail	166	25	113	2	416
Total	3,187	2,669	1,241	478	1,138

(1) Specific provision balance includes certain Australian Accounting Standards collective provisions on some past due loans ≥ 90 days.
(2) 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 2017.

Factors impacting the loss experience

The overall quality of the portfolio was stable during the financial year ended 30 June 2018. Gross impaired assets as a proportion of gross loans and advances (GLAAs) marginally decreased by one basis point and total provisions as a proportion of GLAAs reduced by two basis points. Group actual losses increased by $80 million on the prior year led by an increase in corporate losses. This was partly offset by a decrease in losses for other retail portfolios.

APS 330 Table 7g (i) – Impaired, past due and specific provisions by geographic region

	30 June 2018		
Geographic Region [1]	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance $M
Australia	2,229	3,085	947
New Zealand	487	100	61
Other	463	31	141
Total	3,179	3,216	1,149

	31 December 2017		
Geographic Region [1]	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance $M
Australia	2,175	2,535	903
New Zealand	540	83	66
Other	652	42	256
Total	3,367	2,660	1,225

	30 June 2017		
Geographic Region [1]	Impaired assets $M	Past due loans ≥ 90 days $M	Specific provision balance $M
Australia	2,387	2,518	1,051
New Zealand	443	93	77
Other	357	58	113
Total	3,187	2,669	1,241

(1) 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.

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

APS 330 Table 7g (ii) – GRCL by geographic region

Geographic Region	30 Jun 18 $M	31 Dec 17 $M	30 Jun 17 $M
Australia	**2,689**	2,709	2,646
New Zealand	**225**	215	238
Other	**159**	155	191
Total GRCL	**3,073**	3,079	3,075

APS 330 Table 7h (i) – Movement in collective provisions and general reserve for credit losses

	Half Year Ended		
	30 Jun 18	31 Dec 17	30 Jun 17
Movement in Collective Provisions	$M	$M	$M
Opening balance	**2,772**	2,747	2,807
Net charge against profit and loss	**331**	385	293
Recoveries	**97**	104	103
Other	**1**	(31)	(5)
Write-offs	**(438)**	(433)	(451)
Total collective provisions	**2,763**	2,772	2,747
Less collective provisions transferred to specific provisions	**(279)**	(247)	(261)
Additional GRCL requirement (1)	**589**	554	589
General reserve for credit losses	**3,073**	3,079	3,075

(1) The Group has recognised these amounts as a deduction from CET1 in order to maintain the required minimum GRCL.

APS 330 Table 7h (ii) – Movement in individual provisions and specific provisions

	Half Year Ended		
	30 Jun 18	31 Dec 17	30 Jun 17
Movement in Individual Provisions	$M	$M	$M
Opening balance for the period	**978**	980	1,017
Net new and increased provisioning	**255**	370	300
Net write back of provisions no longer required	**(103)**	(159)	(97)
Discount unwind to interest income	**(11)**	(14)	(15)
Other	**64**	36	22
Write-offs	**(313)**	(235)	(247)
Total individual provisions	**870**	978	980
Add collective provisions transferred to specific provisions	**279**	247	261
Specific provisions	**1,149**	1,225	1,241

8.3 Portfolios Subject to Standardised and Supervisory Risk-Weights

CommBank Europe Limited, PT Bank Commonwealth (Indonesia) and Commonwealth Bank South Africa operate under the Standardised Basel III approach and are consolidated at Level 2.

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:

Commonwealth Bank of Australia:

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

Bankwest Division:

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

ASB Bank Limited:

- Personal loans and Retail SME.

All exposures in the following entities:

- CommBank Europe Limited;
- PT Bank Commonwealth (Indonesia); and
- Commonwealth Bank of South Africa Ltd.

The Group continues to review portfolios that use the Standardised approach. Approval to apply the Advanced approach will be sought from APRA when the volume of exposure 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” 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 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.

APS 330 Table 8b – Exposures subject to standardised and supervisory risk-weights

Standardised Approach Exposures	Exposure After Credit Risk Mitigation [1]		
	30 Jun 18	31 Dec 17 [2]	30 Jun 17 [2]
	$M	$M	$M
Risk Weight			
0%	**1,679**	4,026	2,203
20%	**2,947**	2,677	3,360
35%	**8,889**	8,400	7,617
50%	**3,510**	3,567	3,741
75%	**880**	796	635
100%	**14,104**	14,964	15,783
150%	**37**	45	39
> 150%	**-**	3	-
Capital deductions	**-**	-	-
Total	**32,046**	34,478	33,378

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

Other Assets [1]	30 June 2018		
	Exposure	Risk weight	RWA
	$M	%	$M
Cash	1,680	-	-
Cash items in course of collection	51	20	10
Margin lending [2]	2,832	31	891
Fixed and forward purchase assets	1,462	100	1,462
Other	2,877	≥100	2,878
Total	8,902	59	5,241

Other Assets [1]	31 December 2017		
	Exposure	Risk weight	RWA
	$M	%	$M
Cash	4,025	-	-
Cash items in course of collection	114	20	23
Margin lending [2]	2,782	32	904
Fixed and forward purchase assets	1,525	100	1,525
Other	2,834	≥100	2,871
Total	11,280	47	5,323

Other Assets [1]	30 June 2017		
	Exposure	Risk weight	RWA
	$M	%	$M
Cash	1,739	-	-
Cash items in course of collection	607	20	121
Margin lending [2]	2,938	33	960
Fixed and forward purchase assets	1,567	100	1,567
Other	2,643	≥100	2,643
Total	9,494	56	5,291

(1) Other Assets are included in Standardised Approach Exposures table above.
(2) Margin lending against listed instruments are risk weighted at 20%. Other unlisted instruments are risk weighted at 100%.

Specialised Lending Exposures Subject to Supervisory Slotting [1]	30 Jun 18	31 Dec 17	30 Jun 17
	$M	$M	$M
Risk Weight			
0%	**196**	372	492
70%	**17,722**	17,389	19,555
90%	**39,356**	41,049	40,528
115%	**4,315**	4,762	5,621
250%	**1,242**	636	849
Total exposures	**62,831**	64,208	67,045

(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 APRA Prudential Standard APS 113 "Capital Adequacy: Internal Ratings-based Approach to Credit Risk".

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 customer Probabilities of Default (PD), facility Loss Given Default (LGD), and facility Exposure at Default (EAD). These are inputs into the estimation of Expected Loss (EL) and Unexpected Loss (UL) for the credit portfolio.

The Credit Rating 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 Business Unit 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 twelve month 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 APS 330 Table 9c (page 37).

PD estimates are based on a long-run average default rate for the Group's historical data. 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 commercial exposures including bank and sovereign exposures. Commercial 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 of the Institutional Banking business. 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, 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 to assist with the rating decision.

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 and Private Banking Business Units across the Group (including within CBA, Bankwest 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 under expert judgement. 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 through-the-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 non-commercial 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.

Probability of Default (continued)

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 on 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 APS 330 Table 9b (page 38).

(ii) Retail Managed Segment

This segment has sub-segments covering housing loan, credit card, personal loan facilities, some leasing products, some unsecured commercial lending, and most secured commercial lending up to $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 auto-decisioned 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.

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 on 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 Support Unit.

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 an assessment is made that the security does not cover the facility and all outstanding interest and fees.

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, 90 days over limit or 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;
- Loan workout costs (effectively the costs of providing a facility that is not generating an interest return) and management expenses (realisation costs);
- Time estimated to achieve all possible payments; and
- The discount factor applied to reflect the time value of money and the uncertainty of future cash flows.

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

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.

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%; 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-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 and what types are acceptable and appropriate in order to mitigate credit risk, including valuation parameters, review frequency and independence of valuation.

Collateral types are discussed in further detail in section 8.5 "Credit Risk Mitigation" (page 48).

Exposure at Default

The dollar amount of 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 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 undrawn amount 12 months prior to default, to 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.

APS 330 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.
Middle market and local business banking exposures	PD Rating Tools 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 of these.

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 long-run 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.

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 unexpected loss.

There are two measures of UL. The regulatory measure used to determine the regulatory capital requirement, and an internal measure based on the Group's economic capital model.

The regulatory measure is calculated based on the Basel III Framework using a 99.9% probability that UL will not be exceeded.

Economic Capital

The economic capital measure takes into account portfolio specific characteristics (e.g. industry segment) and allows for diversification effects between obligors within a portfolio segment as well as across different portfolio segments. Economic capital is the currency of risk measurement using a 99.95% probability that UL is not exceeded.

The Group primarily evaluates risk-adjusted portfolio performance based on the return on economic capital. Economic capital is an input to pricing models and strategic decision making within the Group.

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 collective provisions;
- Capital budgeting - through modelling of business plans under expected and stressed scenarios, and the calculation of economic capital; 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) at 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 Committee approved Model Policy to ensure independent validation and testing of assigned risk estimates.

Credit Risk

APS 330 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% - 0.040%	AAA to AA-	Aaa to Aa3
Strong	B1 to C3	>0.040% - 0.453%	A+ to BBB-	A1 to Baa3
Pass	D1 to E3	>0.453% - 6.096%	BB+ to B-	Ba1 to B3
Weak/doubtful	F1 to G3	>6.096%	CCC to C	Caa to Ca
Restructured	R	22.22%	-	-
Defaulted	H	100%	D	C

Credit Risk Exposure Subject to the AIRB Approach

APS 330 Table 9d (i) – Non-Retail exposures by portfolio type and PD band

	30 June 2018							
	PD Band							
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Non Retail [1]	$M	$M	$M	$M	$M	$M	$M	$M
Total credit risk exposures								
Corporate [2]	-	44,913	48,002	30,182	585	673	593	**124,948**
SME corporate [2]	-	493	3,798	43,888	2,405	1,569	1,177	**53,330**
SME retail [3]	-	-	3,240	9,202	2,883	228	124	**15,677**
Sovereign	78,043	7,488	234	290	-	-	-	**86,055**
Bank	-	38,214	2,375	95	-	-	124	**40,808**
Total	78,043	91,108	57,649	83,657	5,873	2,470	2,018	**320,818**
Undrawn commitments [4]								
Corporate [2]	-	16,232	18,085	9,031	150	203	70	**43,771**
SME corporate [2]	-	80	886	7,148	199	127	71	**8,511**
SME retail [3]	-	-	1,565	2,475	408	17	4	**4,469**
Sovereign	997	239	41	57	-	-	-	**1,334**
Bank	-	554	126	7	-	-	-	**687**
Total	997	17,105	20,703	18,718	757	347	145	**58,772**
Exposure - weighted average EAD ($M)								
Corporate	-	2. 813	1. 850	0. 770	0. 519	0. 806	2. 139	**1. 925**
SME corporate	-	0. 836	0. 238	0. 260	0. 229	0. 239	0. 277	**0. 262**
SME retail [3]	-	-	0. 046	0. 043	0. 057	0. 029	0. 078	**0. 046**
Sovereign	7. 650	7. 808	0. 404	0. 549	-	-	-	**7. 620**
Bank	-	10. 270	4. 448	0. 789	-	-	41. 245	**10. 003**
Exposure - weighted average LGD (%)								
Corporate	-	54. 6	49. 3	43. 4	37. 4	54. 6	54. 1	**49. 8**
SME corporate	-	50. 5	29. 4	29. 9	30. 4	33. 2	36. 2	**30. 3**
SME retail [3]	-	-	31. 0	34. 1	31. 1	42. 0	38. 1	**33. 0**
Sovereign	5. 6	59. 2	47. 5	59. 7	-	-	-	**10. 6**
Bank	-	59. 5	59. 3	59. 1	-	-	60. 0	**59. 5**
Exposure - weighted average risk weight (%) [5]								
Corporate	-	30. 4	56. 4	81. 9	126. 6	290. 9	82. 6	**54. 9**
SME corporate	-	24. 7	30. 3	54. 2	83. 7	145. 8	289. 4	**61. 5**
SME retail [3]	-	-	17. 5	43. 3	66. 3	113. 2	361. 9	**45. 7**
Sovereign	1. 5	12. 5	38. 7	121. 4	-	-	-	**3. 0**
Bank	-	25. 4	57. 0	86. 6	-	-	-	**27. 4**

(1) Total credit risk exposures do not include specialised lending, equity or securitisation exposures.
(2) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.
(3) Including SME retail secured by residential property.
(4) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(5) Includes 1.06 scaling factor.

APS 330 Table 9d (i) – Non-Retail exposures by portfolio type and PD band (continued)

	31 December 2017							
	PD Band							
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Non Retail (1)	$M	$M	$M	$M	$M	$M	$M	$M
Total credit risk exposures								
Corporate	-	42,717	52,840	28,710	369	482	692	125,810
SME corporate	-	1,581	5,085	44,363	2,570	1,511	1,376	56,486
SME retail (2)	-	-	3,266	9,310	2,797	303	129	15,805
Sovereign	82,436	6,945	143	32	-	-	-	89,556
Bank	-	36,085	2,271	85	-	-	124	38,565
Total	82,436	87,328	63,605	82,500	5,736	2,296	2,321	326,222
Undrawn commitments (3)								
Corporate	-	15,485	21,002	9,242	158	145	131	46,163
SME corporate	-	199	1,331	7,562	217	123	119	9,551
SME retail (2)	-	-	1,593	2,578	422	27	5	4,625
Sovereign	979	221	35	10	-	-	-	1,245
Bank	-	1,229	184	43	-	-	-	1,456
Total	979	17,134	24,145	19,435	797	295	255	63,040
Exposure - weighted average EAD ($M)								
Corporate	-	2. 768	2. 456	0. 746	0. 337	0. 816	1. 912	2. 156
SME corporate	-	1. 062	0. 315	0. 270	0. 232	0. 232	0. 291	0. 294
SME retail (2)	-	-	0. 044	0. 043	0. 055	0. 031	0. 079	0. 045
Sovereign	5. 890	7. 227	0. 269	0. 054	-	-	-	5. 983
Bank	-	9. 171	3. 509	0. 591	-	-	41. 245	8. 921
Exposure - weighted average LGD (%)								
Corporate	-	55. 0	49. 7	43. 8	41. 1	52. 9	53. 2	50. 2
SME corporate	-	43. 4	34. 4	29. 9	29. 6	34. 3	35. 9	30. 9
SME retail (2)	-	-	31. 7	34. 0	31. 0	39. 1	39. 2	33. 1
Sovereign	5. 6	57. 9	50. 4	56. 2	-	-	-	9. 7
Bank	-	59. 5	60. 0	58. 2	-	-	60. 0	59. 5
Exposure - weighted average risk weight (%) (4)								
Corporate	-	31. 0	56. 8	82. 0	146. 1	282. 0	99. 4	55. 1
SME corporate	-	21. 0	36. 7	52. 8	79. 7	148. 3	264. 5	59. 4
SME retail (2)	-	-	17. 9	43. 1	66. 5	108. 2	321. 0	45. 6
Sovereign	1. 5	12. 8	40. 9	122. 0	-	-	-	2. 4
Bank	-	26. 1	56. 6	100. 0	-	-	-	28. 0

(1) Total credit risk exposures do not include specialised lending, equity or securitisation exposures.
(2) Including SME retail secured by residential property.
(3) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(4) Includes 1.06 scaling factor.

APS 330 Table 9d (i) – Non-Retail exposures by portfolio type and PD band (continued)

	30 June 2017							
	PD Band							
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Non Retail [1]	$M	$M	$M	$M	$M	$M	$M	$M
Total credit risk exposures								
Corporate	-	43,775	55,337	29,688	479	526	737	130,542
SME corporate	-	1,165	4,494	43,375	3,023	1,719	1,176	54,952
SME retail [2]	-	-	3,150	9,469	3,096	260	168	16,143
Sovereign	85,909	6,283	195	25	-	-	-	92,412
Bank	-	39,561	3,150	249	-	-	124	43,084
Total	85,909	90,784	66,326	82,806	6,598	2,505	2,205	337,133
Undrawn commitments [3]								
Corporate	-	16,109	23,599	10,503	147	193	126	50,677
SME corporate	-	150	1,183	7,204	239	124	91	8,991
SME retail [2]	-	-	1,484	2,591	442	27	10	4,554
Sovereign	961	160	42	8	-	-	-	1,171
Bank	-	1,985	453	81	-	-	-	2,519
Total	961	18,404	26,761	20,387	828	344	227	67,912
Exposure - weighted average EAD ($M)								
Corporate	-	3. 163	2. 671	0. 786	0. 481	0. 604	1. 448	2. 384
SME corporate	-	0. 695	0. 299	0. 281	0. 262	0. 214	0. 301	0. 288
SME retail [2]	-	-	0. 042	0. 043	0. 054	0. 030	0. 085	0. 045
Sovereign	6. 577	5. 894	0. 388	0. 056	-	-	-	6. 516
Bank	-	9. 524	3. 667	1. 083	-	-	41. 244	9. 138
Exposure - weighted average LGD (%)								
Corporate	-	55. 2	51. 1	45. 4	43. 4	50. 1	51. 2	51. 2
SME corporate	-	59. 4	32. 4	30. 1	30. 8	34. 5	35. 0	31. 2
SME retail [2]	-	-	31. 4	34. 0	31. 5	41. 0	37. 1	33. 1
Sovereign	5. 6	57. 2	52. 5	56. 1	-	-	-	9. 2
Bank	-	59. 4	60. 0	59. 3	-	-	60. 0	59. 5
Exposure - weighted average risk weight (%) [4]								
Corporate	-	31. 6	58. 8	85. 4	161. 5	260. 9	106. 6	57. 2
SME corporate	-	25. 2	32. 3	54. 1	84. 5	148. 0	235. 0	60. 2
SME retail [2]	-	-	17. 7	43. 1	67. 9	115. 8	328. 3	47. 1
Sovereign	1. 4	13. 1	45. 1	117. 8	-	-	-	2. 3
Bank	-	26. 3	63. 2	91. 7	-	-	-	29. 3

(1) Total credit risk exposures do not include specialised lending, equity or securitisation exposures.
(2) Including SME retail secured by residential property.
(3) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(4) Includes 1.06 scaling factor.

APS 330 Table 9d (ii) – Retail exposures by portfolio type and PD band

	30 June 2018							
	PD Band							
	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	$M
Total credit risk exposures								
Residential mortgage	149,608	167,058	96,786	124,768	7,450	8,809	4,547	**559,026**
Qualifying revolving retail	204	15,078	4,118	6,253	2,665	566	168	**29,052**
Other retail	51	-	320	8,255	2,043	597	151	**11,417**
Total	149,863	182,136	101,224	139,276	12,158	9,972	4,866	**599,495**
Undrawn commitments (1)								
Residential mortgage	53,678	6,157	4,138	7,464	155	90	9	**71,691**
Qualifying revolving retail	174	12,036	3,062	2,464	416	70	2	**18,224**
Other retail	49	-	279	2,429	247	97	2	**3,103**
Total	53,901	18,193	7,479	12,357	818	257	13	**93,018**
Exposure - weighted average EAD ($M)								
Residential mortgage	0. 252	0. 306	0. 271	0. 223	0. 239	0. 230	0. 263	**0. 261**
Qualifying revolving retail	0. 005	0. 010	0. 008	0. 009	0. 008	0. 008	0. 008	**0. 009**
Other retail	0. 004	-	0. 002	0. 009	0. 008	0. 001	0. 005	**0. 006**
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19. 8	19. 7	20. 5	21. 4	20. 0	20. 1	**20. 0**
Qualifying revolving retail	81. 0	84. 9	84. 2	84. 3	84. 8	84. 1	84. 6	**84. 6**
Other retail	108. 6	-	108. 6	97. 1	98. 1	101. 4	98. 6	**97. 9**
Exposure - weighted average risk weight (%) (2)								
Residential mortgage	6. 7	17. 8	25. 9	37. 6	98. 6	134. 5	181. 3	**24. 9**
Qualifying revolving retail	3. 2	5. 5	13. 7	45. 9	135. 1	214. 0	307. 5	**33. 0**
Other retail	27. 9	-	79. 8	125. 6	156. 7	217. 2	406. 4	**137. 9**

(1) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(2) Includes 1.06 scaling factor.

APS 330 Table 9d (ii) – Retail exposures by portfolio type and PD band (continued)

	31 December 2017							
	PD Band							
	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	$M
Total credit risk exposures								
Residential mortgage	151,496	161,838	94,808	123,005	7,049	9,485	3,864	551,545
Qualifying revolving retail	-	14,917	3,409	5,342	2,516	438	131	26,753
Other retail	53	-	325	8,456	1,783	585	132	11,334
Total	151,549	176,755	98,542	136,803	11,348	10,508	4,127	589,632
Undrawn commitments (1)								
Residential mortgage	55,679	6,081	4,036	7,362	156	101	9	73,424
Qualifying revolving retail	-	11,705	2,475	2,202	426	56	2	16,866
Other retail	51	-	284	2,407	236	93	3	3,074
Total	55,730	17,786	6,795	11,971	818	250	14	93,364
Exposure - weighted average EAD ($M)								
Residential mortgage	0. 249	0. 302	0. 269	0. 220	0. 234	0. 227	0. 258	0. 257
Qualifying revolving retail	-	0. 010	0. 009	0. 009	0. 008	0. 008	0. 008	0. 009
Other retail	0. 004	-	0. 002	0. 009	0. 007	0. 001	0. 004	0. 006
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19. 8	19. 7	20. 4	21. 3	20. 0	20. 1	20. 0
Qualifying revolving retail	-	85. 0	85. 0	85. 0	85. 0	85. 0	85. 0	85. 0
Other retail	108. 6	-	108. 6	97. 2	98. 1	101. 3	98. 8	97. 9
Exposure - weighted average risk weight (%) (2)								
Residential mortgage	6. 6	17. 7	25. 9	37. 6	98. 7	136. 1	174. 3	24. 7
Qualifying revolving retail	-	5. 4	13. 7	46. 3	135. 3	221. 2	306. 4	31. 9
Other retail	27. 9	-	79. 8	125. 2	156. 5	217. 5	369. 2	136. 0

(1) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(2) Includes 1.06 scaling factor.

APS 330 Table 9d (ii) – Retail exposures by portfolio type and PD band (continued)

	30 June 2017							
	PD Band							
	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	$M
Total credit risk exposures								
Residential mortgage	150,230	158,031	93,258	124,827	7,117	9,030	3,874	546,367
Qualifying revolving retail	-	14,745	3,528	5,521	2,681	480	161	27,116
Other retail	54	-	332	8,252	1,732	518	137	11,025
Total	150,284	172,776	97,118	138,600	11,530	10,028	4,172	584,508
Undrawn commitments (1)								
Residential mortgage	54,395	6,057	4,007	7,583	161	90	15	72,308
Qualifying revolving retail	-	11,770	2,605	2,320	455	58	2	17,210
Other retail	52	-	291	2,476	304	32	3	3,158
Total	54,447	17,827	6,903	12,379	920	180	20	92,676
Exposure - weighted average EAD ($M)								
Residential mortgage	0. 246	0. 297	0. 267	0. 220	0. 235	0. 227	0. 255	0. 255
Qualifying revolving retail	-	0. 010	0. 009	0. 009	0. 009	0. 008	0. 008	0. 009
Other retail	0. 004	-	0. 002	0. 009	0. 003	0. 005	0. 005	0. 006
Exposure - weighted average LGD (%)								
Residential mortgage	20. 0	19. 8	19. 7	20. 5	21. 3	20. 1	20. 2	20. 1
Qualifying revolving retail	-	88. 0	88. 0	88. 0	88. 0	88. 0	88. 0	88. 0
Other retail	108. 6	-	108. 6	97. 8	98. 9	99. 7	99. 0	98. 4
Exposure - weighted average risk weight (%) (2)								
Residential mortgage	6. 6	17. 7	25. 8	37. 8	98. 3	135. 0	172. 0	24. 7
Qualifying revolving retail	-	5. 6	14. 2	48. 1	140. 3	229. 2	350. 8	34. 8
Other retail	27. 9	-	79. 8	125. 9	158. 4	215. 6	417. 0	137. 0

(1) The credit exposure value of undrawn commitments included in Total credit risk exposures above.
(2) Includes 1.06 scaling factor.

Analysis of Losses

The following tables provide a summary of financial losses by AIRB portfolio (APS 330 Table 9e) and a comparison of financial losses to regulatory EL estimates (APS 330 Table 9f (i)).

APS 330 Table 9e – Actual losses by portfolio type

	30 June 2018 Full year losses in reporting period		
Portfolio Type	Gross write-offs $M	Recoveries $M	Actual losses $M
Corporate	198	(3)	195
SME corporate	96	(6)	90
SME retail (including SME retail secured by residential mortgages)	51	(13)	38
Specialised lending	25	-	25
Total corporate including SME and specialised lending	370	(22)	348
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	128	(3)	125
Qualifying revolving retail	372	(89)	283
Other retail	410	(76)	334
Total AIRB and specialised lending portfolios	1,280	(190)	1,090

	31 December 2017 Half year losses in reporting period		
Portfolio Type	Gross write-offs $M	Recoveries $M	Actual losses $M
Corporate	78	(1)	77
SME corporate	45	(3)	42
SME retail (including SME retail secured by residential mortgages)	20	(5)	15
Specialised lending	17	-	17
Total corporate including SME and specialised lending	160	(9)	151
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	56	(1)	55
Qualifying revolving retail	165	(41)	124
Other retail	207	(43)	164
Total AIRB and specialised lending portfolios	588	(94)	494

	30 June 2017 Full year losses in reporting period		
Portfolio Type	Gross write-offs $M	Recoveries $M	Actual losses $M
Corporate	113	(1)	112
SME corporate	107	(9)	98
SME retail (including SME retail secured by residential mortgages)	52	(14)	38
Specialised lending	45	-	45
Total corporate including SME and specialised lending	317	(24)	293
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	119	(4)	115
Qualifying revolving retail	333	(78)	255
Other retail	430	(84)	346
Total AIRB and specialised lending portfolios	1,199	(190)	1,009

APS 330 Table 9f (i) – Historical loss analysis by portfolio type

Portfolio Type	30 June 2018 Full year actual loss $M	30 June 2018 Regulatory one year expected loss estimate $M
Corporate	195	713
SME corporate	90	573
SME retail (including SME retail secured by residential mortgages)	38	115
Specialised lending	25	704
Total corporate including SME and specialised lending	348	2,105
Sovereign	-	5
Bank	-	138
Residential mortgage (excluding SME retail secured by residential mortgages)	125	1,125
Qualifying revolving retail	283	527
Other retail	334	553
Total AIRB and specialised lending portfolios	1,090	4,453

Portfolio Type	31 December 2017 Half year actual loss $M	31 December 2017 Regulatory one year expected loss estimate $M
Corporate	77	765
SME corporate	42	715
SME retail (including SME retail secured by residential mortgages)	15	124
Specialised lending	17	768
Total corporate including SME and specialised lending	151	2,372
Sovereign	-	4
Bank	-	137
Residential mortgage (excluding SME retail secured by residential mortgages)	55	1,089
Qualifying revolving retail	124	465
Other retail	164	525
Total AIRB and specialised lending portfolios	494	4,592

Portfolio Type	30 June 2017 Full year actual loss $M	30 June 2017 Regulatory one year expected loss estimate $M
Corporate	112	726
SME corporate	98	732
SME retail (including SME retail secured by residential mortgages)	38	128
Specialised lending	45	874
Total corporate including SME and specialised lending	293	2,460
Sovereign	-	4
Bank	-	140
Residential mortgage (excluding SME retail secured by residential mortgages)	115	1,101
Qualifying revolving retail	255	522
Other retail	346	509
Total AIRB and specialised lending portfolios	1,009	4,736

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.

Accuracy of Risk Estimates

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

Probability of Default

APS 330 Table 9f (ii) compares estimates of long-run PD to actual default rates averaged over 10 financial years to 30 June 2018.

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.

APS 330 Table 9f (ii) – Accuracy of risk estimates – PD

	As at 30 June 2018	
Portfolio Type	Average estimated PD %	Average actual PD %
Corporate	1. 30	0. 82
SME corporate	2. 23	1. 93
SME retail (including SME retail secured by residential mortgages)	1. 79	0. 85
Specialised lending (1)	n/a	1. 54
Sovereign (2)	0. 61	0. 02
Bank (2)	0. 29	0. 24
Residential mortgage (excluding SME retail secured by residential mortgages)	0. 87	0. 75
Qualifying revolving retail	1. 94	2. 02
Other retail	4. 86	4. 58

(1) Average estimated PD not relevant for specialised lending under the Supervisory Slotting approach.
(2) Actual PDs based on a 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 2016 financial years. LGDs for retail portfolios are based on accounts that defaulted in 2009 to 2017 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.

APS 330 Table 9f (iii) – Accuracy of risk estimates – LGD and EAD

	As at 30 June 2018		
Portfolio Type	Average estimated downturn LGD %	Average actual LGD %	Ratio of estimated EAD to actual EAD
Corporate	51. 3	39. 6	1. 1
SME corporate	33. 2	19. 7	1. 1
SME retail (including SME retail secured by residential mortgages)	32. 0	20. 0	1. 2
Specialised lending (1)	n/a	32. 0	1. 1
Sovereign (2)	61. 3	1. 3	1. 8
Bank (2)	65. 4	109. 9	1. 8
Residential mortgage (excluding SME retail secured by residential mortgages) (3)	20. 7	6. 2	1. 0
Qualifying revolving retail	87. 5	69. 8	1. 1
Other retail	97. 2	76. 8	1. 0

(1) Average estimated LGD is not relevant for specialised lending under Supervisory Slotting approach.
(2) Actual LGDs based on a 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 as follows:

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 Business Unit CRO 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 value of the collateral should be up-to-date, which the Group monitors and when appropriate, updates;
- 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 for 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, other properties (including commercial and broad acre), or cash (usually in the form of a charge over a deposit). With the exception of some relatively small portfolios, for loans with a Loan to Valuation (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 - 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. APS 330 Table 10b and 10c (page 49) 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 Executive Risk Committee and the Risk 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 sub-portfolios. 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.

APS 330 Table 10b and 10c – Credit risk mitigation

	30 June 2018				
	Total exposure [1] $M	Eligible financial collateral $M	Exposures covered by guarantees $M	Exposures covered by credit derivatives $M	Coverage %
Advanced approach [2]					
Corporate [3]	124,948	-	680	342	0. 8
SME corporate [3]	53,330	-	-	-	-
SME retail [4]	15,677	-	-	-	-
Sovereign	86,055	-	-	-	-
Bank	40,808	-	227	139	0. 9
Residential mortgage	559,026	-	-	-	-
Qualifying revolving retail	29,052	-	-	-	-
Other retail	11,417	-	-	-	-
Total advanced approach	920,313	-	907	481	0. 2
Specialised lending	62,831	-	-	-	-
Standardised approach					
Corporate	1,246	-	-	-	-
SME corporate	412	38	-	-	9. 2
SME retail	5,834	7	-	-	0. 1
Sovereign	493	-	-	-	-
Bank	379	-	-	-	-
Residential mortgage	13,188	1	-	-	-
Other retail	1,592	-	-	-	-
Other assets	8,902	-	-	-	-
Central clearing counterparties	7,196	-	-	-	-
Total standardised approach	39,242	46	-	-	0. 1
Total exposures	1,022,386	46	907	481	0. 1

	31 December 2017				
	Total exposure [1] $M	Eligible financial collateral $M	Exposures covered by guarantees $M	Exposures covered by credit derivatives $M	Coverage %
Advanced approach [2]					
Corporate	125,810	-	1,509	171	1. 3
SME corporate	56,486	-	-	-	-
SME retail [4]	15,805	-	-	-	-
Sovereign	89,556	-	-	-	-
Bank	38,565	-	728	284	2. 6
Residential mortgage	551,545	-	-	-	-
Qualifying revolving retail	26,753	-	-	-	-
Other retail	11,334	-	-	-	-
Total advanced approach	915,854	-	2,237	455	0. 3
Specialised lending	64,208	-	-	-	-
Standardised approach					
Corporate	1,285	-	-	-	-
SME corporate	278	32	-	-	11. 5
SME retail	5,688	6	-	-	0. 1
Sovereign	400	-	-	-	-
Bank	226	-	-	-	-
Residential mortgage	12,614	-	-	-	-
Other retail	2,707	-	-	-	-
Other assets	11,280	-	-	-	-
Central clearing counterparties	5,543	-	-	-	-
Total standardised approach	40,021	38	-	-	0. 1
Total exposures	1,020,083	38	2,237	455	0. 3

(1) 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.
(2) Advanced approach: Exposure for derivatives and guarantees is after netting and financial collateral.
(3) Including SME retail secured by residential property.
(4) Reclassification of $4.0 billion of exposure from AIRB SME Corporate to AIRB Corporate due to changes in regulatory treatments.

APS 330 Table 10b and 10c – Credit risk mitigation (continued)

	30 June 2017				
	Total exposure [1] $M	Eligible financial collateral $M	Exposures covered by guarantees $M	Exposures covered by credit derivatives $M	Coverage %
Advanced approach [2]					
Corporate	130,542	-	1,374	117	1. 1
SME corporate	54,952	-	-	-	-
SME retail [3]	16,143	-	-	-	-
Sovereign	92,412	-	-	-	-
Bank	43,084	-	561	340	2. 1
Residential mortgage	546,367	-	-	-	-
Qualifying revolving retail	27,116	-	-	-	-
Other retail	11,025	-	-	-	-
Total advanced approach	921,641	-	1,935	457	0. 3
Specialised lending	67,045	-	-	-	-
Standardised approach					
Corporate	1,667	-	-	-	-
SME corporate	510	26	-	-	5. 1
SME retail	6,159	6	-	-	0. 1
Sovereign	525	-	-	-	-
Bank	448	-	-	-	-
Residential mortgage	11,654	-	-	-	-
Other retail	2,921	-	-	-	-
Other assets	9,494	-	-	-	-
Central clearing counterparties	5,686	-	-	-	-
Total standardised approach	39,064	32	-	-	0. 1
Total exposures	1,027,750	32	1,935	457	0. 2

(1) 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.
(2) Advanced approach: Exposure for derivatives and guarantees is after netting and financial collateral.
(3) 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;
- Global Markets Cross-Product Collateralisation 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 wrong-way 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.

Credit Support Annexes (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 Global Markets Cross Product Collateralisation and Netting Policies. 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 (including "zero" for most counterparties), 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 30% 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 2018, the maximum additional collateral that could be posted to other counterparties based on the Group's current rating is $555.5 million. As at 30 June 2018, a unilateral one-notch and two-notch downgrade in the Group's rating would have resulted in a further $38.2 million and $118 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.

APS 330 Table 11b (i) Counterparty credit risk derivative exposure under the current exposure method [(1)]

	30 Jun 18 $M	31 Dec 17 $M	30 Jun 17 $M
Gross positive fair value	31,595	24,360	29,779
Netting benefits	(18,919)	(14,406)	(18,110)
Netted current credit exposure	12,676	9,954	11,669
Collateral held, of which:			
Cash	(5,748)	(5,144)	(6,649)
Net derivatives credit exposure	6,928	4,810	5,020
Potential Future Exposure under the Current Exposure Method	13,699	13,086	14,009
Exposure at Default	20,627	17,896	19,029

(1) Excluding exposures to CCPs.

APS 330 Table 11b (ii) Counterparty credit risk derivative exposure [(1)]

	Current Credit Exposure	Current Credit Exposure	Current Credit Exposure
Exposure type	30 Jun 18 $M	31 Dec 17 $M	30 Jun 17 $M
Interest rate contracts	6,333	7,155	8,444
Foreign currency contracts	24,761	16,734	20,540
Equity contracts	5	4	6
Credit derivatives	24	51	48
Commodities and other	472	416	741
Total	31,595	24,360	29,779

(1) Excluding exposures to CCPs.

APS 330 Table 11c Counterparty credit risk derivative transactions

	Own Credit Portfolio as		Intermediation Activity as	
	Protection buyer	Protection seller	Protection buyer	Protection seller
Notional Value by Product type as at 30 June 18 [(1) (2)]	$M	$M	$M	$M
Credit default swaps	1,488	-	46	1,920
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
Total	1,488	-	46	1,920

	Own Credit Portfolio as		Intermediation Activity as	
	Protection buyer	Protection seller	Protection buyer	Protection seller
Notional Value by Product type as at 31 December 17 [(1) (2)]	$M	$M	$M	$M
Credit default swaps	919	-	41	3,158
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
Total	919	-	41	3,158

	Own Credit Portfolio as		Intermediation Activity as	
	Protection buyer	Protection seller	Protection buyer	Protection seller
Notional Value by Product type as at 30 June 17 [(1) (2)]	$M	$M	$M	$M
Credit default swaps	893	-	102	3,616
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
Total	893	-	102	3,616

(1) Excluding exposures to CCPs.
(2) Notional values are presented for credit derivatives with positive fair values and include credit derivative hedges.

8.7 Securitisation

Securitisation is defined as a 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 securitisations - a securitisation where the pool is transferred (or assigned) to, and held by, or otherwise held directly in its name by, an 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 program of CBA and ASB originated residential mortgage loans, and the Swan Programme is the Group's securitisation program of Bankwest 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 Reserve Bank of Australia (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 $61 billion 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 to generate additional liquidity for the Group. These RMBS are eligible collateral for repurchase agreements with the RBA.

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 APRA's Prudential Standard APS 120 "Securitisation" (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 Ratings-Based Approach or the Supervisory Formula Approach (SFA).

Securitisation Risk Management Framework

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 assessment 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 securities in a warehouse 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.

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 held for trading or are available-for-sale, the transactions are monitored under the Group's market risk management framework (refer section 10, page 67). 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). At a minimum, the following reviews are undertaken:

Externally-rated exposures:

- External ratings are reviewed on a weekly basis via a report that tracks rating changes; and
- The underlying pool and transaction performance is reviewed monthly via an internally produced report and/or reports provided by issuers.

The Group has no exposure to resecuritisation transactions and does not actively participate in resecuritisation activities.

Third-party unrated client securitisation exposures:

- The Bank receives periodic and detailed pool performance data from the issuer/trust manager. The pool performance data reports are extracted and reviewed for changes in underlying pool quality;
- Dynamic models are run monthly to determine the required credit support; and
- Formal credit reviews are conducted at least annually for all third-party client exposures.

Group-originated securitisation program exposures:

- Formal reviews are conducted at least annually for all Medallion and Swan exposures; and
- The Bank receives the monthly Investor reports and underlying pool data.

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 the Group's Treasury.

Where the Group has sold assets to a 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 and Swan programs are consolidated for accounting purposes. As at 30 June 2018 the Group achieved capital relief for $4.2 billion of assets in externally issued RMBS with $10.1 billion not achieving capital relief.

The Group holds less than 20% (excepting 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 and Swan programs does not exceed 10% of the Group's Level 2 capital (excepting 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 139 "Financial Instruments" (AASB 139); 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 structured entity 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 Note 1 of the 2018 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. This process did not change in 2018.

Assets are valued according to the normal methods appropriate to the asset class. As at 30 June 2018 and 31 December 2017, 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 Group's 2018 Annual Report. The Group provides support for securitisation transactions to the extent of those contractual obligations.

APS 330 Table 12g (i) – Banking book exposures securitised – traditional securitisation

	30 June 2018			
Underlying Asset	Group originated assets capital relief (1) $M	Group originated assets - non capital relief (2) $M	Group originated assets - internal RMBS(3) $M	Third party originated assets (4) $M
Residential mortgage	4,234	10,078	60,740	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	4,234	10,078	60,740	-

	31 December 2017			
Underlying Asset	Group originated assets capital relief (1) $M	Group originated assets - non capital relief (2) $M	Group originated assets - internal RMBS(3) $M	Third party originated assets (4) $M
Residential mortgage	4,732	11,219	59,824	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	4,732	11,219	59,824	-

	30 June 2017			
Underlying Asset	Group originated assets capital relief (1) $M	Group originated assets - non capital relief (2) $M	Group originated assets - internal RMBS(3) $M	Third party originated assets (4) $M
Residential mortgage	2,443	12,666	49,080	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	2,443	12,666	49,080	-

(1) Group originated assets (capital relief) comprise CBA Medallion and Bankwest Swan Trusts subject to capital treatment under APS 120.
(2) Group originated assets (non-capital relief) comprise CBA Medallion and Bankwest Swan Trusts subject to capital treatment under APS 113.
(3) Group originated assets (internal RMBS) comprise CBA Medallion, Bankwest Swan and ASB Medallion Trusts held for contingent liquidity purposes.
(4) Third-party originated assets comprise assets managed and sponsored by the Group.

APS 330 Table 12g (ii) – Banking book exposures securitised – synthetic securitisation

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.

APS 330 Table 12g (iii) – Total banking book exposures securitised

APS 330 Table 12g (i) discloses the total banking book exposures securitised by the Group.

APS 330 Table 12h – Past due and impaired banking book exposures by asset type

	30 June 2018			
	Group originated assets securitised			
Underlying Asset	Outstanding exposure $M	Impaired $M	Past due $M	Losses recognised $M
Residential mortgage	75,052	7	234	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	75,052	7	234	-

	31 December 2017			
	Group originated assets securitised			
Underlying Asset	Outstanding exposure $M	Impaired $M	Past due $M	Losses recognised $M
Residential mortgage	75,775	3	116	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	75,775	3	116	-

	30 June 2017			
	Group originated assets securitised			
Underlying Asset	Outstanding exposure $M	Impaired $M	Past due $M	Losses recognised $M
Residential mortgage	64,189	26	61	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	64,189	26	61	-

APS 330 Table 12i – Banking book exposures intended to be securitised

The Group does not have any outstanding banking book exposures that are intended to be securitised at 30 June 2018.

APS 330 Table 12j (i) – Banking book activity for the reporting period

The Group securitised $6,485 million new exposures in the banking book during the full year ended 30 June 2018.

	Full year ended 30 June 2018	
Underlying Asset	Total exposures securitised $M	Recognised gain or loss on sale $M
Residential mortgages	5,445	-
Credit cards and other personal loans	200	-
Auto and equipment finance	349	-
Commercial loans	491	-
Other	-	-
Total	6,485	-

	Half year ended 31 December 2017	
Underlying Asset	Total exposures securitised $M	Recognised gain or loss on sale $M
Residential mortgages	3,819	-
Credit cards and other personal loans	200	-
Auto and equipment finance	349	-
Commercial loans	491	-
Other	-	-
Total	4,859	-

	Full year ended 30 June 2017	
Underlying Asset	Total exposures securitised $M	Recognised gain or loss on sale $M
Residential mortgages	6,887	-
Credit cards and other personal loans	-	-
Auto and equipment finance	1,138	-
Commercial loans	64	-
Other	-	-
Total	8,089	-

APS 330 Table 12k – Banking book securitisation exposures retained or purchased

	30 June 2018		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	240	240
Warehouse facilities	4,632	2,501	7,133
Derivative facilities	56	10	66
Holdings of securities	7,885	-	7,885
Other	-	-	-
Total securitisation exposures in the banking book	12,573	2,751	15,324

	31 December 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	205	205
Warehouse facilities	3,519	2,206	5,725
Derivative facilities	116	12	128
Holdings of securities	8,013	-	8,013
Other	-	-	-
Total securitisation exposures in the banking book	11,648	2,423	14,071

	30 June 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	122	122
Warehouse facilities	4,161	2,904	7,065
Derivative facilities	59	7	66
Holdings of securities	7,525	-	7,525
Other	-	-	-
Total securitisation exposures in the banking book	11,745	3,033	14,778

APS 330 Table 12I (i) – Banking book exposure by risk weighting

Total securitisation exposures in the banking book increased by $529 million or 3.6% during the full year ended 30 June 2018. The corresponding RWA increased by $1,300 million or 82.2%, mainly due to the implementation of the new APS 120 effective from 1 January 2018.

	30 June 2018					
	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	$M	$M	$M	$M	$M	$M
≤ 25%	14,880	-	**14,880**	2,705	-	**2,705**
> 25% ≤ 35%	195	-	**195**	58	-	**58**
> 35% ≤ 50%	150	-	**150**	62	-	**62**
> 50% ≤ 75%	82	-	**82**	57	-	**57**
> 75% ≤ 100%	-	-	**-**	-	-	**-**
> 100% ≤ 650%	-	-	**-**	-	-	**-**
> 650% ≤ 1250%	-	-	**-**	-	-	**-**
Total	15,307	-	**15,307**	2,882	-	**2,882**

	31 December 2017					
	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	$M	$M	$M	$M	$M	$M
≤ 25%	14,028	-	**14,028**	1,421	-	**1,421**
> 25% ≤ 35%	25	-	**25**	9	-	**9**
> 35% ≤ 50%	-	-	**-**	-	-	**-**
> 50% ≤ 75%	-	-	**-**	-	-	**-**
> 75% ≤ 100%	-	-	**-**	-	-	**-**
> 100% ≤ 650%	-	-	**-**	-	-	**-**
> 650% ≤ 1250%	18	-	**18**	190	-	**190**
Total	14,071	-	**14,071**	1,620	-	**1,620**

	30 June 2017					
	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
Risk Weight Band	$M	$M	$M	$M	$M	$M
≤ 25%	14,605	-	**14,605**	1,506	-	**1,506**
> 25% ≤ 35%	29	-	**29**	10	-	**10**
> 35% ≤ 50%	125	-	**125**	63	-	**63**
> 50% ≤ 75%	-	-	**-**	-	-	**-**
> 75% ≤ 100%	-	-	**-**	-	-	**-**
> 100% ≤ 650%	-	-	**-**	-	-	**-**
> 650% ≤ 1250%	19	-	**19**	3	-	**3**
Total	14,778	-	**14,778**	1,582	-	**1,582**

APS 330 Table 12l (ii) – Banking book exposure deducted entirely from capital

Total securitisation exposures deducted from Tier 1 capital decreased by $16 million during the half year ended 31 December 2017 and then increased by $14 million during the half year ended 30 June 2018. This is mainly due to a subordinated investment exposure being reclassified as non-subordinated in December 2017, hence non capital deducted under the old APS120. However, under the new APS120 effective from January 2018, it is subject to Tier 1 capital deduction.

	Common Equity Tier 1 Capital		
	30 Jun 18	31 Dec 17	30 Jun 17
Underlying Asset	$M	$M	$M
Residential mortgage	17	3	19
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
Total	17	3	19

APS 330 Table 12m – Banking book exposures subject to early amortisation

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

APS 330 Table 12n – Banking book resecuritisation exposures

As at 30 June 2018, banking book resecuritisation exposures without credit risk mitigation was nil (31 December 2017: nil, 30 June 2017: nil).

The Group did not have any resecuritisation exposures subject to credit risk mitigation.

The Group did not have any exposure to third-party guarantors providing guarantees for securitised assets.

APS 330 Table 12o (i) – Trading book exposures securitised – traditional securitisation

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

APS 330 Table 12o (ii) – Trading book exposures securitised – synthetic securitisation

The Group has not undertaken any synthetic securitisation in the trading book.

APS 330 Table 12o (iii) – Total trading book exposures securitised

The Group has not securitised any exposures in the trading book.

APS 330 Table 12p – Trading book exposures intended to be securitised

The Group does not have any outstanding trading book exposures that are intended to be securitised at 30 June 2018.

APS 330 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 2018, relating to $40 million residential mortgages (31 December 2017: $4 million, 30 June 2017: $21 million), $1 million auto and equipment finance (31 December 2017: $1 million, 30 June 2017: $2 million), and $1 million personal finance (31 December 2017: $nil million, 30 June 2017: $1 million) exposures.

APS 330 Table 12r – Trading book exposures subject to APS 116

The aggregate amount of exposures securitised by the Group and subject to Prudential Standard APS 116 "Capital Adequacy: Market Risk" was $40 million as at 30 June 2018 (31 December 2017: $13 million, 30 June 2017: $20 million), all of which are traditional securitisations. This consists of:

- Securities held in the trading book subject to the Standard Method of $22 million (31 December 2017: nil , 30 June 2017: $10 million); and
- Derivatives held in the trading book subject to the Internal Models Approach (IMA) of $18 million (31 December 2017: $13 million, 30 June 2017: $10 million).

APS 330 Table 12s – Trading book exposures retained or purchased subject to APS 120

	30 June 2018		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	-	-
Warehouse facilities	-	-	-
Derivative facilities	4	14	18
Holdings of securities	22	-	22
Other	-	-	-
Total securitisation exposures in the trading book	26	14	40

	31 December 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	-	-
Warehouse facilities	-	-	-
Derivative facilities	3	10	13
Holdings of securities	-	-	-
Other	-	-	-
Total securitisation exposures in the trading book	3	10	13

	30 June 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	-	-
Warehouse facilities	-	-	-
Derivative facilities	3	7	10
Holdings of securities	10	-	10
Other	-	-	-
Total securitisation exposures in the trading book	13	7	20

APS 330 Table 12t (i) – Trading book exposures retained/purchased subject to IMA

The Group has $18 million of derivatives exposures held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2018 (31 December 2017: $13 million, 30 June 2017: $10 million).

APS 330 Table 12t (ii) – Trading book exposures subject to APS 120 by risk weighting

	30 June 2018			
	IAA Approach	RBA Approach	SFA Approach	Total exposures
Risk Weight Band	$M	$M	$M	$M
≤ 25%	-	35	5	**40**
> 25% ≤ 35%	-	-	-	**-**
> 35% ≤ 50%	-	-	-	**-**
> 50% ≤ 75%	-	-	-	**-**
> 75% ≤ 100%	-	-	-	**-**
> 100% ≤ 650%	-	-	-	**-**
> 650% ≤ 1250%	-	-	-	**-**
Total	-	35	5	**40**

	31 December 2017			
	IAA Approach	RBA Approach	SFA Approach	Total exposures
Risk Weight Band	$M	$M	$M	$M
≤ 25%	-	-	13	**13**
> 25% ≤ 35%	-	-	-	**-**
> 35% ≤ 50%	-	-	-	**-**
> 50% ≤ 75%	-	-	-	**-**
> 75% ≤ 100%	-	-	-	**-**
> 100% ≤ 650%	-	-	-	**-**
> 650% ≤ 1250%	-	-	-	**-**
Total	-	-	13	**13**

	30 June 2017			
	IAA Approach	RBA Approach	SFA Approach	Total exposures
Risk Weight Band	$M	$M	$M	$M
≤ 25%	-	10	10	**20**
> 25% ≤ 35%	-	-	-	**-**
> 35% ≤ 50%	-	-	-	**-**
> 50% ≤ 75%	-	-	-	**-**
> 75% ≤ 100%	-	-	-	**-**
> 100% ≤ 650%	-	-	-	**-**
> 650% ≤ 1250%	-	-	-	**-**
Total	-	10	10	**20**

APS 330 Table 12u (i) – RWA of trading book exposures retained/purchased subject to IMA

The Group has $360 million of RWA held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2018 (31 December 2017: $241 million, 30 June 2017: $212 million).

APS 330 Table 12u (ii) – Capital requirements (RWA) of trading book exposures subject to APS 120 by risk weighting

	30 June 2018									
	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
≤ 25%	-	-	7	-	1	-	-	-	8	-
> 25% ≤ 35%	-	-	-	-	-	-	-	-	-	-
> 35% ≤ 50%	-	-	-	-	-	-	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	-	-	-	-	-	-	-
Total	-	-	7	-	1	-	-	-	8	-

	31 December 2017									
	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
≤ 25%	-	-	-	-	2	-	-	-	2	-
> 25% ≤ 35%	-	-	-	-	-	-	-	-	-	-
> 35% ≤ 50%	-	-	-	-	-	-	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	2	-	-	-	2	-

	30 June 2017									
	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
Risk Weight Band	$M	$M	$M	$M	$M	$M	$M	$M	$M	$M
≤ 25%	-	-	1	-	1	-	-	-	2	-
> 25% ≤ 35%	-	-	-	-	-	-	-	-	-	-
> 35% ≤ 50%	-	-	-	-	-	-	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	-	-	-	-	-	-	-
Total	-	-	1	-	1	-	-	-	2	-

APS 330 Table 12u (iii) – Trading book exposures entirely deducted from capital

The Group has no trading book exposures that are deducted entirely from Common Equity Tier 1 capital as at 30 June 2018 (31 December 2017: nil; 30 June 2017: nil).

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.

APS 330 Table 12v – Trading book exposures subject to early amortisation

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

APS 330 Table 12w – Trading book resecuritisation exposures

The Group did not have any trading book resecuritisation exposures without credit risk mitigation as at 30 June 2018 (31 December 2017: nil; 30 June 2017: nil).

The Group did not have any resecuritisation exposures subject to credit risk mitigation.

The Group did not have any third-party guarantors providing guarantees for securitised assets.

APS 330 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 APS 330 Table 12j (banking book) and APS 330 Table 12q (trading book).

The total exposures securitised in the full year to 30 June 2018 was $6,527 million (30 June 2017: $8,113 million). The total exposures securitised in the half year to 31 December 2017 was $4,864 million.

APS 330 Table 5b – Summary of total securitisation exposures retained or purchased

	As at 30 June 2018		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	240	240
Warehouse facilities	4,632	2,501	7,133
Derivative facilities	60	24	84
Holdings of securities	7,907	-	7,907
Other	-	-	-
Total securitisation exposures	12,599	2,765	15,364

	As at 31 December 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	205	205
Warehouse facilities	3,519	2,206	5,725
Derivative facilities	119	22	141
Holdings of securities	8,013	-	8,013
Other	-	-	-
Total securitisation exposures	11,651	2,433	14,084

	As at 30 June 2017		
Securitisation Facility Type	On Balance Sheet $M	Off Balance Sheet $M	Total exposures $M
Liquidity support facilities	-	122	122
Warehouse facilities	4,161	2,904	7,065
Derivative facilities	62	14	76
Holdings of securities	7,535	-	7,535
Other	-	-	-
Total securitisation exposures	11,758	3,040	14,798

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 Committee and monitoring by an independent Market Risk Management function. The method of measurement applied to banking book securities is determined by the Group's accounting policies. This varies depending on the significance of the holding between equity accounting and measurement at fair value.

Significant holdings (generally interests above 20%) are treated as associates under the equity accounting method. This treatment recognises investments at cost plus the Group's share of undistributed post-acquisition profit or loss and other reserves. Other holdings are recognised at fair value.

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

Changes in the value of equity investments in the banking book are recognised in the income statement, or an equity reserve based on their accounting classification.

Under the application of Basel III, APRA requires that these equity investments be deducted 100% from CET1.

APS 330 Table 16b to 16f – Equity investment exposures

	30 June 2018	
Equity Investments	**Balance Sheet value $M**	**Fair value $M**
Value of listed (publicly traded) equities	1,747	1,553
Value of unlisted (privately held) equities	1,177	1,173
Total	2,924	2,726

	31 December 2017	
Equity Investments	**Balance Sheet value $M**	**Fair value $M**
Value of listed (publicly traded) equities	1,579	1,548
Value of unlisted (privately held) equities	1,083	1,121
Total	2,662	2,669

	30 June 2017	
Equity Investments	**Balance Sheet value $M**	**Fair value $M**
Value of listed (publicly traded) equities	1,412	1,882
Value of unlisted (privately held) equities	1,213	1,459
Total	2,625	3,341

	Half year ended		
Gains/(Losses) on Equity Investments	**30 Jun 18 $M**	**31 Dec 17 $M**	**30 Jun 17 $M**
Cumulative realised gains in reporting period	**-**	-	20
Total unrealised (losses)/gains	**183**	192	(46)

10 Market Risk

Market risk is the potential of an adverse impact on the Group's earnings or capital from changes in interest rates, foreign exchange rates, equity and commodity prices, credit spreads, and the resale value of assets under operating leases at maturity (lease residual value risk).

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, market risk arising from the insurance business, 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 Committee and senior executive management via the Group's Asset and Liability Committee (ALCO). The Portfolio and Market Risk Management (PMRM) unit provides support to the Risk 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 on page 68 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 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 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 volatility and correlation between different markets. 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.

VaR is modelled at a 97.5% confidence level over a 1-day holding period for trading book positions. A 20-day holding period is used for Interest Rate Risk in the Banking Book (IRRBB), insurance business market risk and Non-traded equity risk.

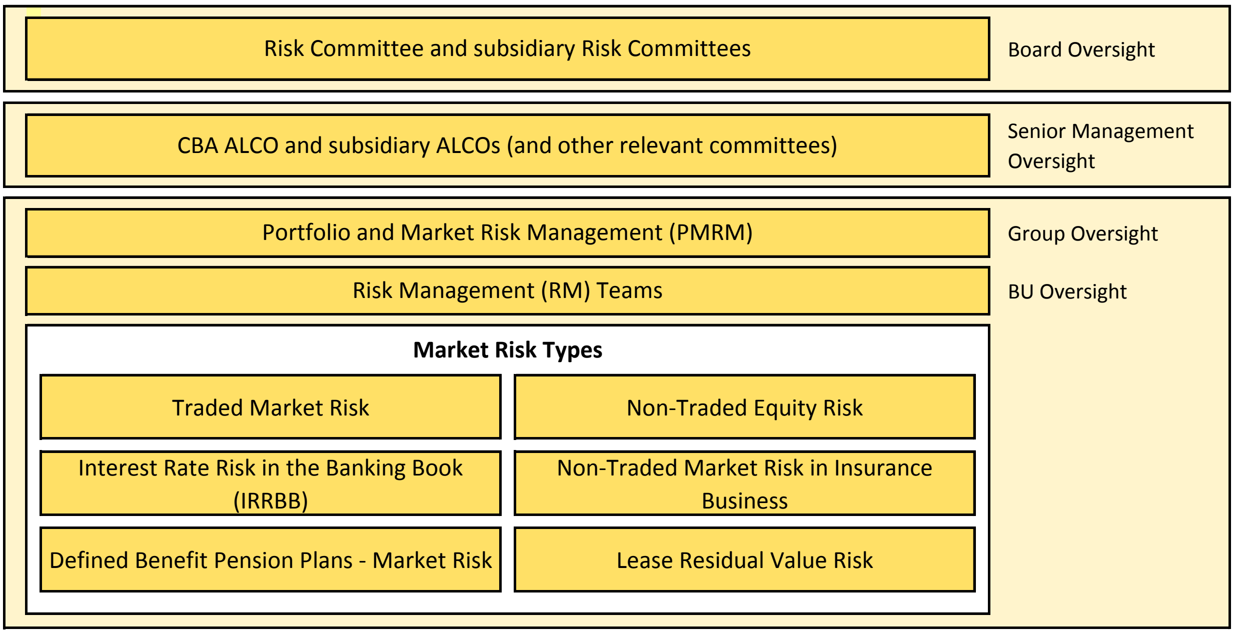
Stressed VaR is calculated for Traded market risk using the same methodology as the regular Traded market risk VaR except that the historical data is taken from a one year observation period of significant market volatility as seen during the Global Financial Crisis (GFC).

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 97.5%. Management then uses these results in decisions to manage the economic impact of market risk positions.

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 Committee and the Group's ALCO on a regular basis. Stress tests also include a range of forward looking macro scenario stresses.

Market Risk

Market Risk Governance



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 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, foreign exchange, equity, commodity and credit spread 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.

Capital Calculation Methods (continued)

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

Traded Market Risk RWA by Modelling Approach [(1)]	30 Jun 18 $M	31 Dec 17 $M	30 Jun 17 $M
Internal Model Approach	**7,477**	3,951	3,727
Standard Method	**778**	878	923
Total Traded Market Risk RWA	**8,255**	4,829	4,650

(1) Refer to page 11 for commentary.

The capital requirement for Traded market risk under the Standard Method is disclosed in APS 330 Table 13b.

APS 330 Table 13b – Traded Market Risk under the Standard Method

Exposure Type	30 Jun 18 $M	31 Dec 17 $M	30 Jun 17 $M
Interest rate risk	**61. 9**	69. 9	72. 8
Equity risk	**0. 2**	0. 2	0. 3
Foreign exchange risk	**0. 1**	0. 1	0. 7
Commodity risk	**-**	-	-
Total	**62. 2**	70. 2	73. 8
Risk Weighted Asset equivalent [(1)]	**778**	878	923

(1) Risk Weighted Asset equivalent is the capital requirements multiplied by 12.5 in accordance with APRA Prudential Standard APS 110.

Traded Market Risk Internal Model

The VaR and Stressed VaR (SVaR) results calculated under the Internal Model Approach are summarised in APS 330 Table 14f (i).

APS 330 Table 14f (i) – Value-at-Risk and Stressed Value-at-Risk for trading portfolios under the Internal Model Approach

	Aggregate Value-at-Risk Over the Reporting Period			
Average VaR [(1)]	Mean value $M	Maximum value $M	Minimum value $M	As at balance date $M
Over the 6 months to 30 June 2018	59	103	26	67
Over the 6 months to 31 December 2017	28	37	19	30
Over the 6 months to 30 June 2017	27	36	19	33

	Aggregate SVaR Over the Reporting Period			
Stressed VaR [(1)]	Mean value $M	Maximum value $M	Minimum value $M	As at balance date $M
Over the 6 months to 30 June 2018	117	178	65	123
Over the 6 months to 31 December 2017	79	104	56	67
Over the 6 months to 30 June 2017	69	104	43	74

(1) 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 2018 there were no back-test outliers. The back-test results are summarised in APS 330 Table 14f (ii) and details of these are provided in APS 330 Table 14f (iii). A comparison of VaR with actual gains or losses during the 6 months to 30 June 2018 is illustrated in APS 330 Table 14f (iv).

APS 330 Table 14f (ii) - Summary Table of the Number of Back-Testing Outliers [(1)]

Over the 6 months to 30 June 2018	-
Over the 6 months to 31 December 2017	-
Over the 6 months to 30 June 2017	-

(1) 1 day, 99% confidence interval over the reporting period.

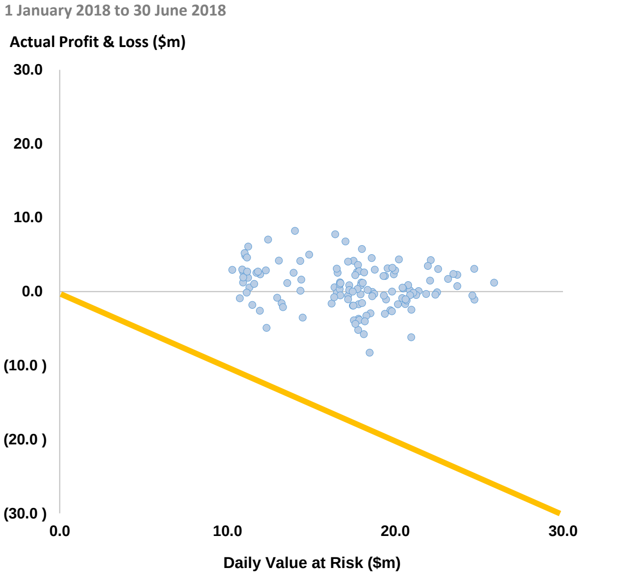
APS 330 Table 14f (iii): Details of Back-Test Outliers

	Over the Reporting Period January 2018 to 30 June 2018	
	Hypothetical loss	VaR 99%
Date	$M	$M
	-	-

	Over the Reporting Period 1 July 2017 to 31 December 2017	
	Hypothetical loss	VaR 99%
Date	$M	$M
	-	-

	Over the Reporting Period 1 January 2017 to 30 June 2017	
	Hypothetical loss	VaR 99%
Date	$M	$M
	-	-

APS 330 Table 14f (iv): Comparison of VaR estimates with actual gains/losses experiences



10.2 Non-Traded Market Risk

Non-traded market risk activities are governed by the Group market risk framework approved by the Board Risk Committee. The Group market risk 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 Bank, manages its own domestic interest rate risk in the banking book in accordance with its own interest rate 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 interest rate risk in the banking book 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 the 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 Bank 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, 97.5% 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 its economic value of equity through the application of the VaR methodology.

A 20-day 97.5% 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 twelve 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 APRA's Prudential Standard APS 110 "Capital Adequacy".

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 Committee and the Group ALCO on a regular basis.

The Stress Testing figures in APS 330 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 APS 330 Table 17b includes the Regulatory RWA for IRRBB.

APS 330 Table 17b – Interest Rate Risk in the Banking Book

	Change in Economic Value		
Stress Testing: Interest Rate Shock Applied	**30 Jun 18 $M**	**31 Dec 17 $M**	**30 Jun 17 $M**
AUD			
200 basis point parallel increase	**(1,259)**	(1,597)	(1,140)
200 basis point parallel decrease	**1,368**	1,736	1,192
NZD			
200 basis point parallel increase	**(269)**	(295)	(251)
200 basis point parallel decrease	**287**	312	267
USD			
200 basis point parallel increase	**(76)**	(66)	(89)
200 basis point parallel decrease	**87**	71	96
Other			
200 basis point parallel increase	**19**	16	(18)
200 basis point parallel decrease	**(19)**	(19)	18

Regulatory RWA (1)	**30 Jun 18 $M**	**31 Dec 17 $M**	**30 Jun 17 $M**
Interest rate risk in the banking book	**24,381**	27,944	21,404

(1) Refer to page 11 for commentary.

Market Risk

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 primary exposure to this risk arises from its New Zealand banking and insurance, Asian and US operations. This risk is managed in accordance with the following Risk Committee approved principles:

- Permanently deployed capital in a foreign jurisdiction is not hedged; and
- Forecast earnings from the Group's New Zealand banking and insurance subsidiaries are hedged.

The management of structural foreign exchange risk is regularly reported to the Group's ALCO.

Non-Traded Equity Risk

The Group retains Non-traded equity risk primarily through business activities in Wealth Management. This activity is subject to governance arrangements approved by the Risk Committee, and is monitored within the Board Risk Management function.

A 20-day, 97.5% confidence VaR is used to measure the economic impact of adverse changes in value. The 30 June 2018 VaR measure is $21 million (30 June 2017: $26 million) (refer also to section 9 "Equity Risk", page 66).

Market Risk in Insurance Businesses

There are two main sources of market risk in the Life Insurance businesses: (i) market risk arising from guarantees made to policyholders; and (ii) market risk arising from the investment of Shareholders' capital.

Guarantees (to Policyholders)

All financial assets within the Life Insurance Statutory Funds directly support either the Group's life insurance or life investment contracts. Market risk arises for the Group on contracts where the liabilities to policyholders are guaranteed by the Group. The Group manages this risk by having an asset and liability management framework which includes the use of hedging instruments. The Group also monitors the risk on a monthly basis.

Shareholders' Capital

A portion of financial assets held within the Insurance business, both within the Statutory Funds and in the Shareholders' Funds of the Life Insurance company represents shareholder (Group) capital. Market risk also arises for the Group on the investment of this capital. Shareholders' funds in the Australian Life Insurance businesses are invested 99% in income assets (cash and fixed interest) and 1% in growth assets as at 30 June 2018.

Lease Residual Value Risk

The Group takes lease residual value risk on assets such as industrial, mining, rail, aircraft, marine, technology, healthcare and other equipment. A lease residual value guarantee then exposes the Group to the movement in second-hand prices of these assets. The lease residual value risk within the Group is controlled through a risk management framework approved by the Board Risk 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. Wealth Risk Management and Group Corporate Affairs 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. Regular reporting is provided to senior management via the Group's ALCO and the Board Risk Committee on the status of the surplus, risk sensitivities and risk management options. For further information on the Fund, refer to Note 10.2 of the Annual Report.

11 Operational Risk

Operational risk is defined as the risk of loss arising from inadequate or failed internal processes, people, systems or from external events, exposing the Group to loss, reputational damage and/or regulatory scrutiny.

Operational Risk Objectives

The Group's operational risk objectives are designed to support the achievement of its financial and business goals, through:

- 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
- Making decisions based upon an informed risk-return analysis and appropriate standards of professional practice.

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. The core components are:

- 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; including assessment of operational risks, monitoring and review activities, escalation and remediation of control weaknesses and loss incident management, and reporting to management and Boards.

Compliance Risk Management

Compliance risk is the risk of legal or regulatory sanctions, material financial loss, or loss of reputation that the Group may incur as a result of its failure to comply with the requirements of relevant laws, regulations, industry standards, rules, codes and guidelines, and includes societal expectations.

The Group's Compliance Risk Management Framework (CRMF) is broadly consistent with the Australian Standard on Compliance Programs and aims to help meet the Group's obligations under the Corporations Act 2001, the Group's Australian Financial Services Licence and Australian Credit Licences. The CRMF also aims to support the Group's compliance with obligations in offshore jurisdictions in which it operates. The CRMF incorporates key mandatory requirements and roles and responsibilities for managing compliance risk. It captures Compliance Obligations, Group Policies, Group Policies, Regulatory Change and People and Culture considerations.

The CRMF provides for the assessment of compliance risks, implementation of controls, monitoring and testing of framework effectiveness and the escalation, remediation and reporting of compliance incidents and control weaknesses.

APRA Prudential Inquiry report findings

The Prudential Inquiry Panel's report to APRA published in April 2018 highlighted a number of areas for improvement in the ORMF and CRMF. The Group has embarked on a remedial action plan to deliver these improvements.

Roles and Responsibilities

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

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

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 and risk retention strategies.

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 subject to review by the Executive Leadership Team, the Board Risk Committee and the Board.

Capital Measurement Approach

Operational Risk Capital is calculated using the Group's Advanced Measurement Approach (AMA) methodology.

The Operational Risk Measurement System (ORMS) 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 produce regulatory and economic capital for the Group and each business unit. Direct inputs into the model include scenarios (called Quantitative Risk Assessments), internal loss data and external loss data sourced from external providers such as the Operational Riskdata eXchange association (ORX). Inputs to scenarios include internal and external loss data, business environment and internal control factors, and business judgement.

Operational Risk

Economic Capital Calculation

The outcomes of the operational risk capital measurement process include an economic capital requirement based on a 99.95% confidence interval that is calibrated to the Group's overall target AA debt rating.

A primary outcome of the economic capital framework is that capital for operational risk is allocated across the Group's Business Units and is used to assist in managing risks and driving risk-adjusted performance management in each Business Unit.

Regulatory Capital Calculation

The Group has approval from APRA to calculate its operational risk regulatory capital using the Basel II Advanced Measurement Approach, the requirements of which are unchanged under Basel III. The Group uses the AMA model APRA granted permission for it to use in March 2016 for calculating Operational Risk Capital.

APS330 Table 6e - Capital requirements for operational risk

	30 Jun 18	31 Dec 17	30 Jun 17
	$M	$M	$M
Total operational risk RWA (1)	**56,448**	41,078	33,750

(1) Refer to page 11 for commentary.

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 borrow funds on an unsecured basis, has sufficient liquid assets to borrow against on a secured basis, 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 has an Asset and Liability Committee (ALCO), the charter of which 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 policies and has ultimate authority to execute liquidity decisions should the Group Contingent 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 Colonial Group apply their own liquidity and funding strategies to address their specific needs. The Group's New Zealand banking subsidiary, ASB Bank, manages its own domestic liquidity and funding needs in accordance with its own liquidity policies and the policies of the Group. ASB's liquidity policy is also overseen by the Reserve Bank of New Zealand.

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 Liquidity Coverage Ratio (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 projected under a prescribed stress scenario;
- A surplus of stable funding from various sources, as measured by APRA's Net Stable Funding Ratio (NSFR) requirement introduced on 1 January 2018 is maintained. Australian ADIs are required to meet a 100% NSFR, calculated by applying prescribed factors to the ratio of stable funding to core assets;
- 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;
- Balance Sheet assets that cannot be liquidated quickly are funded with stable deposits or term borrowings that meet minimum maturity requirements with appropriate liquidity buffers;
- 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 bills, bank term securities, supranational bonds, Australian Residential Mortgage-backed Securities (RMBS) and securities that meet certain Reserve Bank of Australia (RBA) criteria for purchases under reverse repo. The final category is internal RMBS, being mortgages that have been securitised but retained by the Bank, that are repo-eligible with the RBA under stress; and
- Offshore branches and subsidiaries adhere to liquidity policies and hold appropriate foreign currency liquid assets to meet required regulations. All securities are central bank repo-eligible under normal market conditions.

The Group's key funding tools include:

- Its consumer retail funding base, which includes a wide range of retail transaction accounts, savings accounts and term deposits for individual consumers;
- Its small business customer and institutional deposit base; and
- Its wholesale international and domestic funding programs which include its Australian dollar negotiable certificates of deposit; Australian dollar bank bills; Asian Transferable Certificates of Deposit program; Australian, U.S. and Euro Commercial Paper programs; U.S. Extendible Notes programs; Australian dollar Domestic Debt Program; U.S.144a and 3a2 Medium-Term Note Programs; Euro Medium-Term Note Program; multi jurisdiction Covered Bond program; and its Medallion and Swan securitisation programs.

The Group's key liquidity tools include:

- 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;
- A liquidity management model similar to a "maturity ladder" or "liquidity gap analysis", that allows forecasting of liquidity needs on a daily basis;
- An additional liquidity management model that implements the agreed prudential liquidity policies. 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;
- Central bank repurchase agreement facilities including the RBA's open-ended Committed Liquidity Facility that

provide the Group with the ability to borrow funds on a secured basis, even when normal funding markets are unavailable; and

- A robust Contingent Funding Plan that is regularly tested so that it can be activated in case of need due to a liquidity event.

12.2 Liquidity Coverage Ratio Disclosure

The Group calculates its LCR position on a daily basis, ensuring a buffer is maintained over the minimum regulatory requirement and the Board's risk appetite. Excess liquid assets averaged $36 billion over the June quarter. LCR was largely stable with lower liquid assets and lower Net Cash Outflows (NCOs) over the quarter. The Group's mix of liquid assets consists of High Quality Liquid Assets (HQLA), being cash, deposits with central banks, Australian Semi-Government and Commonwealth Government securities. Liquid assets also includes repo-eligible securities with the Reserve Bank of Australia under the Committed Liquidity Facility (CLF) and securities classified as liquid assets by the Reserve Bank of New Zealand. Liquid assets are distributed across the Group to support regulatory and internal requirements and are consistent with the distribution of liquidity needs by currency.

NCOs represent modelled Net Cash Outflows under an APRA-prescribed 30 day severe liquidity stress scenario. The Group manages its funding profile and deposit mix taking into consideration NCOs as part of its overall liquidity management strategy. The Group's 30 day modelled NCO decreased by $4 billion over the June quarter. Modelled NCOs associated with the Group's large stable funding base of retail and SME customers were little changed. NCOs from unsecured wholesale funding fell by $4 billion driven by reduced short-term wholesale funding. Movement in liquid assets were broadly aligned with movement in the modelled NCOs.

APS 330 Table 20 - LCR disclosure template

		30 Jun 18 Total unweighted value (average) [1] $M	30 Jun 18 Total weighted value (average) [1] $M	31 Mar 18 Total unweighted value (average) [1] $M	31 Mar 18 Total weighted value (average) [1] $M
Liquid assets, of which:					
1	High-quality liquid assets (HQLA)		**87,424**		90,839
2	Alternative liquid assets (ALA)		**47,823**		47,886
3	Reserve Bank of New Zealand (RBNZ) securities		**7,253**		6,641
Cash outflows					
4	Retail deposits and deposits from small business customers, of which:	**285,323**	**25,161**	277,899	24,633
5	Stable deposits	**158,644**	**7,932**	154,753	7,738
6	Less stable deposits	**126,679**	**17,229**	123,146	16,895
7	Unsecured wholesale funding, of which:	**121,927**	**64,422**	124,759	68,214
8	Operational deposits (all counterparties) and deposits in networks for cooperative banks	**32,554**	**8,028**	32,970	8,132
9	Non-operational deposits (all counterparties)	**79,441**	**46,462**	78,086	46,379
10	Unsecured debt	**9,932**	**9,932**	13,703	13,703
11	Secured wholesale funding		**1,044**		1,281
12	Additional requirements, of which:	**160,605**	**22,970**	161,272	22,737
13	Outflows related to derivatives exposures and other collateral requirements	**7,816**	**7,816**	7,775	7,775
14	Outflows related to loss of funding on debt products	**-**	**-**	-	-
15	Credit and liquidity facilities	**152,789**	**15,154**	153,497	14,962
16	Other contractual funding obligations	**33**	**17**	27	19
17	Other contingent funding obligations	**79,725**	**8,838**	79,857	9,642
18	**Total cash outflows**		**122,452**		126,526
Cash inflows					
19	Secured lending	**6,188**	**1,510**	9,121	2,058
20	Inflows from fully performing exposures	**11,520**	**8,079**	11,028	7,997
21	Other cash inflows	**5,933**	**5,933**	6,006	6,006
22	**Total cash inflows**	**23,641**	**15,522**	26,155	16,061
23	**Total liquid assets**		**142,500**		145,366
24	**Total net cash outflows**		**106,930**		110,465
25	**Liquidity Coverage Ratio (%)**		**133**		132
Number of data points used (Business Days)			**61**		62

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

13 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 section 13.3 Regulatory Balance Sheet and section 13.4 Reconciliation between Detailed Capital Template and Regulatory Balance Sheet.

Summary Group Capital Adequacy Ratios (Level 2)	30 Jun 18 Basel III APRA %	30 Jun 18 Basel III Internationally Comparable %
CET1	10. 1	15. 5
Tier 1	12. 3	18. 1
Total Capital	15. 0	21. 3

		30 Jun 18 Basel III $M	Reconciliation Table Reference
Common Equity Tier 1 Capital: instruments and reserves			
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	**37,355**	Table A
2	Retained earnings	**28,018**	
3	Accumulated other comprehensive income (and other reserves)	**1,596**	
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	**66,969**	
Common Equity Tier 1 Capital: regulatory adjustments			
7	Prudential valuation adjustments	**-**	
8	Goodwill (net of related tax liability)	**(8,021)**	Table C
9	Other intangibles other than mortgage servicing rights (net of related tax liability)	**(2,057)**	Table C
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	**-**	Table D
11	Cash-flow hedge reserve	**160**	
12	Shortfall of provisions to expected losses (1)	**(624)**	
13	Securitisation gain on sale (as set out in paragraph 562 of Basel II framework)	**-**	
14	Gains and losses due to changes in own credit risk on fair valued liabilities	**(116)**	
15	Defined benefit superannuation fund net assets (2)	**(407)**	
16	Investments in own shares (if not already netted off paid-in capital on reported Balance Sheet)	**(1)**	
17	Reciprocal cross-holdings in common equity	**-**	
18	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	**-**	Table G
19	Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	**-**	Table G
20	Mortgage service rights (amount above 10% threshold)	**-**	
21	Deferred tax assets arising from temporary differences (amount above 10% threshold, net of related tax liability)	**-**	Table D
22	Amount exceeding the 15% threshold		
23	of which: significant investments in the ordinary shares of financial entities	**-**	Table G
24	of which: mortgage servicing rights	**-**	
25	of which: deferred tax assets arising from temporary differences	**-**	Table D
	CET1 (Internationally Comparable)	**55,903**	

(1) Represents regulatory expected loss (pre-tax) using stressed loss given default assumptions associated with the loan portfolio in excess of eligible credit provisions of $212 million and general reserve for credit losses of $412 million (post tax, with the associated tax amount incorporated in the row 26e adjustment).

(2) In accordance with APRA regulations, the surplus in the Group's defined benefit superannuation fund, net of any deferred tax liability, must be deducted from Common Equity Tier 1.

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

		30 Jun 18 Basel III $M	Reconciliation Table Reference
APRA Specific Regulatory Adjustments			
26	National specific regulatory adjustments (rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i, 26j)	-	
26a	of which: treasury shares	180	Table A
26b	of which: offset to dividends declared due to a dividend reinvestment plan (DRP), to the extent that the dividends are used to purchase new ordinary shares issued by the ADI	-	
26c	of which: deferred fee income	-	
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23	(6,320)	Table G
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	(1,911)	Table D
26f	of which: capitalised expenses	(714)	
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	(121)	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	(480)	
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 CET1 (1)	(20,432)	
29	CET1 (APRA)	46,537	
Additional 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	9,455	Table E
33	Directly issued capital instruments subject to phase out from Additional Tier 1	135	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	505	Table E
36	Additional Tier 1 Capital before regulatory adjustments	10,095	Table E
Additional Tier 1 Capital: regulatory adjustments			
37	Investments in own Additional Tier 1 instruments	-	
38	Reciprocal cross-holdings in Additional Tier 1 instruments	-	
39	Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-	
40	Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	(200)	
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	(200)	
44	Additional Tier 1 Capital (AT1)	9,895	
45	Tier 1 Capital (T1=CET1+AT1)	56,432	
Tier 2 Capital: instruments and provisions			
46	Directly issued qualifying Tier 2 instruments	11,262	Table F
47	Directly issued capital instruments subject to phase out from Tier 2	1,166	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	176	
51	Tier 2 Capital before regulatory adjustments	12,604	

(1) Total regulatory adjustments to CET1 of $20,432 million in row 28 is net of APRA's allowance for treasury shares held by the Group's employee share scheme trusts of $180 million as detailed in row 26a.

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

		30 Jun 18 Basel III $M	Reconciliation Table Reference
Tier 2 Capital: regulatory adjustments			
52	Investments in own Tier 2 instruments	(15)	
53	Reciprocal cross-holdings in Tier 2 instruments	-	
54	Investments in the Tier 2 Capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	(10)	
55	Significant investments in the Tier 2 Capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions	-	
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	(25)	
58	Tier 2 Capital (T2)	12,579	
59	Total Capital (TC=T1+T2)	69,011	
60	Total risk weighted assets based on APRA standards	458,612	
Capital ratios and buffers			
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	10.1%	
62	Tier 1 (as a percentage of risk weighted assets)	12.3%	
63	Total Capital (as a percentage of risk weighted assets)	15.0%	
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)	10.1%	
National minima			
69	National Common Equity Tier 1 minimum ratio	-	
70	National Tier 1 minimum ratio	-	
71	National Total Capital minimum ratio	-	
Amount below thresholds for deductions (not risk weighted)			
72	Non-significant investments in the capital of other financial entities	217	Table G
73	Significant investments in the ordinary shares of financial entities	6,103	Table G
74	Mortgage servicing rights (net of related tax liability)	-	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	1,911	Table D
Applicable caps on the inclusion of provisions in Tier 2			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	176	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	302	
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	-	
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	2,072	
Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 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	2,098	
83	Amount excluded from AT1 instruments due to cap (excess over cap after redemptions and maturities)	-	Table E
84	Current cap on Tier 2 instruments subject to phase out arrangements	1,290	
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	-	Table F

13.2 Detailed Leverage Disclosures Template (APS 330 Attachment E)

APS 330 Table 19 – Summary comparison of accounting assets vs leverage ratio exposure measure

		30 Jun 18 Basel III APRA $M
1	Total consolidated assets as per published financial statements	975,165
2	Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(18,091)
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	1,504
5	Adjustment for SFTs (i.e. repos and similar secured lending)	1,010
6	Adjustment for Off Balance Sheet exposures (i.e. conversion to credit equivalent amounts of Off Balance Sheet exposures)	79,564
7	Other adjustments	(20,530)
8	**Leverage ratio exposure**	**1,018,622**

APS 330 Table 18 – Leverage ratio disclosure template

		30 Jun 18 Basel III APRA $M
On Balance Sheet exposures		
1	On Balance Sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	908,571
2	Asset amounts deducted in determining Tier 1 capital	(20,530)
3	**Total On Balance Sheet exposures (excluding derivatives and SFTs)**	**888,041**
Derivative exposures		
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	13,191
5	Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	17,730
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	3,637
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(914)
11	**Total derivative exposures**	**33,644**
SFT exposures		
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	16,363
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	-
14	CCR exposure for SFT assets	1,010
15	Agent transaction exposures	-
16	**Total SFT exposures**	**17,373**
Other Off Balance Sheet exposures		
17	Off Balance Sheet exposure at gross notional amount	175,196
18	(Adjustments for conversion to credit equivalent amounts)	(95,632)
19	**Other Off Balance Sheet exposures**	**79,564**
Capital and total exposures		
20	Tier 1 Capital	56,432
21	Total exposures	1,018,622
Leverage ratio		
22	Leverage ratio (%)	5.5

13.3 Regulatory Balance Sheet

The following table provides details on the Commonwealth Bank of Australia Group's Balance Sheet and the Level 2 Regulatory Balance Sheet as at 30 June 2018.

	Group Balance Sheet $M	Adjustment [1] $M	Level 2 Regulatory Balance Sheet $M	Template/ Reconciliation Table Reference
Assets				
Cash and liquid assets	36,417	(317)	36,100	
Receivables due from other financial institutions	9,222	(9)	9,213	
Assets at fair value through Income Statement:				
Trading	32,254	(110)	32,144	
Insurance	372	(372)	-	
Other	258	(258)	-	
Derivative assets	32,133	7	32,140	
Available-for-sale investments	82,240	(463)	81,777	Table G
Loans, bills discounted and other receivables	743,365	(4,233)	739,132	
Bank acceptances of customers	379	-	379	
Investment in regulatory non-consolidated subsidiaries	-	3,474	3,474	Table G
Property, plant and equipment	2,576	(14)	2,562	
Investment in associates and joint ventures	2,842	43	2,885	Table G
Intangible assets	9,023	1,130	10,153	Table C
Deferred tax assets	1,439	(52)	1,387	Table D
Other assets	6,991	(1,263)	5,728	
Assets held for sale	15,654	(15,654)	-	
Total assets	975,165	(18,091)	957,074	
Liabilities				
Deposits and other public borrowings	622,234	3,277	625,511	
Payables due to other financial institutions	20,899	-	20,899	
Liabilities at fair value through Income Statement	10,247	-	10,247	
Derivative liabilities	28,472	3	28,475	
Bank acceptances	379	-	379	
Current tax liabilities	952	(36)	916	
Deferred tax liabilities	-	-	-	Table D
Other provisions	1,889	(232)	1,657	
Insurance policy liabilities	451	(451)	-	
Debt issues	172,294	(4,321)	167,973	
Managed funds units on issue	-	-	-	
Bills payable and other liabilities	11,596	(1,049)	10,547	
Loan capital	22,992	-	22,992	Table E
Liabilities held for sale	14,900	(14,900)	-	
Total liabilities	907,305	(17,709)	889,596	
Net assets	67,860	(382)	67,478	
Shareholders' Equity				
Share capital:				
Ordinary share capital	37,270	85	37,355	Row 1, Table A
Reserves	1,676	(80)	1,596	Row 3
Retained profits	28,360	(342)	28,018	Row 2
Shareholders' Equity attributable to Equity holders of the Bank	67,306	(337)	66,969	
Non-controlling interests	554	(45)	509	Table B
Total Shareholders' Equity	67,860	(382)	67,478	

(1) Reflects the deconsolidation of the insurance and funds management entities and those entities through which securitisation of the Group's assets are conducted. These entities are classified as non-consolidated subsidiaries by APRA and are excluded from the Level 2 Regulatory Consolidated Banking Group.

13.4 Reconciliation between Detailed Capital Template and Regulatory Balance Sheet

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

Table A	30 Jun 18 $M	Template Reference
Share Capital		
Ordinary Share Capital	37,270	
Add Treasury Shares held by the Group's life insurance operations	85	
Total per Balance Sheet (Ordinary Share Capital Internationally Comparable) (1)	37,355	Row 1
Treasury Shares held by the Group's employee share scheme trusts (APRA specific adjustment)	180	Row 26a
Total Ordinary Share Capital and Treasury Shares (APRA)	37,535	

Table B	30 Jun 18 $M	Template Reference
Non-Controlling Interests		
Total per Balance Sheet (1)	509	
Less ASB perpetual Shares transferred to Additional Tier 1 Capital (refer Table E)	(505)	
Less other non controlling interests not included in capital	(4)	
Total per Capital Template (APRA and Internationally Comparable)	-	Row 5

Table C	30 Jun 18 $M	Template Reference
Goodwill & Other Intangibles		
Total per Balance Sheet (1)	10,153	
Less capitalised software and other intangibles separately disclosed in template	(2,132)	
Total per Capital Template - Goodwill (APRA and Internationally Comparable)	8,021	Row 8
Other intangibles (including capitalised software) per Balance Sheet	2,132	
Less DTL associated with other intangibles	(75)	
Total per Capital Template - Other Intangibles (APRA and Internationally Comparable)	2,057	Row 9

Table D	30 Jun 18 $M	Template Reference
Deferred Tax Assets		
Deferred tax assets per Balance Sheet (1)	1,387	
Less deferred tax liabilities per Balance Sheet (1)	-	
Net Deferred Tax Assets (2)	1,387	
Adjustments required in accordance with APRA prudential standards (3)	524	
Deferred tax asset adjustment before applying prescribed thresholds (APRA specific adjustment)	1,911	Row 26e
Less amounts below prescribed threshold - risk weighted (4)	(1,911)	Row 75
Total per Capital Template (Internationally Comparable)	-	Row 10, 21, 25

(1) Represents the balance per Level 2 Regulatory Balance Sheet.
(2) 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.
(4) 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 Capital.

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

Table E	30 Jun 18 $M	Template Reference
Additional Tier 1 Capital		
Total Loan Capital per Balance Sheet [(1)]	22,992	
Less fair value hedge adjustments [(2)]	(6)	
Total Loan Capital net of issue costs at their contractual values	22,986	
Less amount related to Tier 2 Capital Instruments	(13,460)	
Total Tier 1 Loan Capital	9,526	
Add ASB perpetual Shares transferred from Non-Controlling interest (refer Table B)	505	
Add issue costs [(3)]	64	
Less Basel III transitional relief amortisation for directly issued instruments [(4)]	-	Row 83
Less Basel III transitional relief amortisation for instruments issued by subsidiaries [(4)]	-	Row 83
Total per Capital Template (APRA)	10,095	Row 36
Additional Tier 1 Capital Instruments comprises		
Basel III Complying Instruments		
PERLS VI	2,000	
PERLS VII	3,000	
PERLS VIII	1,450	
PERLS IX	1,640	
PERLS X	1,365	
	9,455	Row 32
Basel III Non-Complying Instruments		
Other Instruments	135	
Less Basel III transitional relief amortisation for directly issued instruments [(4)]	-	Row 83
	135	Row 33
Basel III Non Complying Instruments - issued by subsidiaries		
ASB preference shares	505	
Less Basel III transitional relief amortisation for instruments issued by subsidiaries [(4)]	-	Row 33
	505	Row 35
Total Basel III Non Complying Instruments	640	
Total Additional Tier 1 Capital Instruments (APRA)	10,095	Row 36

Table F	30 Jun 18 $M	Template Reference
Tier 2 Capital Instruments		
Total included in Balance Sheet	13,460	
Less amount of Tier 2 debt issued by subsidiary ineligible for inclusion in the Group's Capital [(5)]	(125)	
Add issue costs [(3)]	40	
Less amortisation of instruments [(6)]	(947)	
Less Basel III transitional relief amortisation for directly issued instruments [(4)]	-	Row 85
Total per Capital Template (APRA and Internationally Comparable)	12,428	Row 46, 47

(1) 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.
(3) 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 Capital 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 www.commbank.com.au/about-us/investors/shareholders.

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

Table G	30 Jun 18 $M	Template Reference
Equity Investments		
Investment in commercial entities	**121**	Row 26g
Investments in significant financial entities	**2,629**	Row 26d, 73
Investments in non-significant financial entities	**217**	Row 26d, 72
	2,967	
Equity investment in non-consolidated subsidiaries	**3,474**	Row 26d, 73
Total Equity Investments before applying prescribed thresholds APRA specific adjustment (1)	**6,441**	
Less amounts risk weighted under Internationally Comparable (2)	**(6,441)**	
Total per Capital Template (Internationally Comparable)	**-**	Row 18, 19, 23

(1) Equity Investments are classified in the Level 2 Regulatory Balance Sheet across Investments in Associates, Assets held for Sale, Available-for-Sale Securities and Investment in non-consolidated subsidiaries. In addition, the Group has undrawn commitments (Off-Balance Sheet) which are deemed in the nature of equity for Regulatory Capital purposes.

(2) The aggregate of investments in significant financial entities of $2,629 million, investments in non-significant financial entities of $217 million and equity investment in non-consolidated subsidiaries of $3,474 million is a total of $6,320 million and is included in row 26d in the Capital 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 capital. The remaining balance of $121 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 ADI's 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

Country (1)	RWA (2) $M	Jurisdictional Buffer %	ADI Specific Buffer (3) %	Template Reference
United Kingdom	7,014	0.500%	0.010%	
Hong Kong	645	1.875%	0.003%	
Norway	844	2.000%	0.005%	
Sweden	89	2.000%	0.001%	
Others	345,267	0.000%	0.000%	
Total	**353,859**		**0.019%**	**Row 66**

(1) Represents country of ultimate risk as at 30 June 2018.
(2) Represents total private sector (excludes Banks and Sovereigns) credit and specific market risk RWA.
(3) Calculated as each country share of total private sector credit and specific market RWA multiplied by the CCyB applicable in each country.

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	1,911	1,911
Medallion Trust Series 2017-2	2,355	2,355
Swan Trust Series 2010-1	77	77

Entity name	Total Assets $M	Total Liabilities $M
(b) Insurance and Funds Management		
Avanteos Investments Limited	63	17
Avanteos Pty Ltd	-	-
CFSPAI Europe Co Limited	1	-
CFSPAI Europe Holdco Limited	-	-
CISL (NO. 1) Pty Limited	-	-
Colonial (UK) Trustees Limited	1	1
Colonial First State Asset Management (Australia) Limited	64	50
Colonial First State Investments Limited	614	258
Colonial First State Infrastructure Holdings Limited	44	27
Colonial First State Infrastructure Managers (Australia) Pty Limited	2	2
Colonial First State Managed Infrastructure Limited	26	15
Colonial Mutual Superannuation Pty Ltd	11	-
Colonial Services Pty Limited	-	-
Commonwealth Custodial Services Pty Ltd	-	-
Commonwealth Insurance Limited	968	698
EDIF II GP Sarl	5	4
Emerald Holding Company Pty Limited	-	-
First Gas Consolidated Group	1,449	1,091
First State European Diversified Infrastructure Sarl	2	2
First State Infrastructure Managers (International) Limited	3	3
First State Investments Fund Management Sarl	70	69
First State Investment Management (UK) Limited	114	32
First State Investment Services (UK) Limited	230	186
First State Investments (Hong Kong) Limited	214	127
First State Investments (Japan) Limited	-	-
First State Investments (NZ) Limited	1	-
First State Investments (Singapore)	108	57
First State Investments (UK) Limited	372	352
First State Investments (US) LLC	21	11
First State Investments GIP Management Sarl	7	6
First State Investments International Inc	-	-
First State Investments International Limited	88	43
First State Nominees (Hong Kong) Limited	-	-
Jacques Martin Administration and Consulting Pty Ltd	4	1
Premium Alternative Investments Pty Limited	-	-
Premium Plantations Pty Limited	-	-
Premium Plantations Services Pty Ltd	-	-
PT Commonwealth Life	677	501
PT First State Investments Indonesia	6	3
Realindex Investments Pty Limited	10	7
Sovereign Assurance Company Limited	1,875	1,272
Sovereign Services Limited	74	23
Sovereign Superannuation Funds Limited	6	-
Sovereign Superannuation Trustees Limited	-	-
St Andrew's Australia Pty Ltd	-	-
The Colonial First State Global Asset Management Seeding Trust	53	53
The Colonial Mutual Life Assurance Society Limited	12,478	10,705
Total Keen Investment Limited	-	-
Water Utilities Group	87	11
Westside Properties Limited	23	1

13.6 List of APRA APS 330 Tables

The following schedule lists the quantitative tables in this document as referenced in APRA Prudential Standard APS 330 "Capital Adequacy: Public Disclosure of Prudential Information" paragraphs 12, 47 and Attachments A to H.(1)

(1) Details can be found at www.commbank.com.au/about-us/investors/shareholders.

13.6 List of APRA APS 330 Tables (continued)

(1) Details can be found at www.commbank.com.au/about-us/investors/shareholders.

Appendices

13.7 List of Supplemental Tables and Diagrams

13.8 Glossary

Term	Definition
Additional Tier 1 Capital	Additional Tier 1 Capital is a Basel III defined concept and consists of high quality capital that essentially includes providing 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.
Australian Accounting Standards	The Australian Accounting Standards as issued by the Australian Accounting Standards Board.
Authorised Deposit-taking Institution (ADI)	Includes banks, building societies and credit unions which are authorised by APRA to take deposits from customers.
Advanced Internal Ratings Based (AIRB) Approach	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.
Australian Prudential Regulation Authority (APRA)	The regulator of banks, insurance companies and superannuation funds, credit unions, building societies and friendly societies in Australia.
ADI Prudential Standards (APS)	APRA's ADI Prudential Standards. For more information, refer to the APRA website.
ASB	ASB Bank Limited – a subsidiary of the Commonwealth Bank of Australia that is directly regulated by the Reserve Bank of New Zealand.
Bank	Basel asset class – includes claims on ADIs and overseas banks.
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).
BoComm Life	BoComm Life Insurance Company Limited – an association of the Group.
CBA	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.
Committed Liquidity Facility (CLF)	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.
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.

13.8 Glossary (continued)

Term	Definition
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 as reported in the Group's Financial Statements in accordance with the Australian Accounting Standards (AASB 139 "Financial Instruments: Recognition and Measurement").
Corporate	Basel asset class – includes commercial credit risk where annual revenues exceed $50 million.
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.
External Credit Assessment Institution (ECAI)	For example; Moody's Investor Services, S&P Global Ratings or Fitch Ratings.
Extended Licensed Entity (ELE)	APRA may deem an entity of an ADI to be part of the ADI itself for the purposes of measuring the ADIs exposures to related entities.
General Reserve for Credit Losses (GRCL)	APS 220 Credit Quality 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 General Reserve for Credit Losses. An excess of required General Reserve for Credit Losses over the Group's collective provisions is recognised as a deduction from CET1.
Group	Commonwealth Bank of Australia and its subsidiaries.
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 139 "Financial Instruments: Recognition and Measurement"). Also known as individually assessed provisions or IAP.
Interest Rate Risk in the Banking Book (IRRBB)	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 the Net Interest Income earned over 12 months. The IRRBB in APS 117 Capital Adequacy regulatory capital requirement is calculated using the net present value approach.
Level 1	Represents the ADI and each entity of the ADI that has been approved as an extended licenced entity by APRA.
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 entities and entities through which securitisation of Group assets is conducted. This is the basis on which this report has been produced.
Level 3	The conglomerate group including the Group's insurance and wealth management business.
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)	The fraction of EAD that is not expected to be recovered following default.

13.8 Glossary (continued)

Term	Definition
Net Cash Outflows	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 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.
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.
Residential Mortgage	Basel asset class – retail exposures secured by residential mortgage property.
RBA	Reserve Bank of Australia.
RBNZ	Reserve Bank of New Zealand.
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. For more information, refer to the APRA website.
SARB	South African Reserve Bank.
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 risk weighted asset amounts for credit risk under the AIRB approach of 1.06.
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	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 Credit Quality 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).

13.8 Glossary (continued)

Term	Definition
Stressed VaR	Stressed Value at Risk 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.
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 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 “Capital Adequacy” (APS 110) Attachment D.