

# Basel III Pillar 3

**Capital Adequacy and Risks  
Disclosures as at 30 June 2017**

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**Commonwealth**Bank

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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.

APRA re-accredited the use of the AIRB approach for the Bankwest non-retail portfolio, effective from 30 September 2016. This change had minimal impact on the Group's capital.

The external auditor has performed certain agreed upon 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.

This document is available on the Group's corporate website [www.commbank.com.au/about-us/investors/shareholders](http://www.commbank.com.au/about-us/investors/shareholders).

### The Group in Review

After allowing for the APRA requirement to hold additional capital with respect to Australian residential mortgages, the Group continued to strengthen its capital position during the year.

As at 30 June 2017, the Basel III Common Equity Tier 1 (CET1) ratio was 15.6% 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 2017 were 10.1%, 12.1% and 14.2% respectively.

The Group's Leverage Ratio, which is defined as Tier 1 Capital as a percentage of total exposures was 5.1% at 30 June 2017 (31 December 2016: 4.9%) on an APRA basis and 5.8% (31 December 2016: 5.5%) 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 128.4% in the June 2017 full year.

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

The Group continues to monitor and take actions to enhance its strengthening risk culture. This includes a risk appetite framework and a risk accountability (Three Lines of Defence) model. The Group has a formal Risk Appetite Framework that creates clear obligations and transparency over risk management and strategy decisions. The Three Lines of Defence model requires business management to operate responsibly by taking well understood and managed risks that are appropriately and adequately priced.

The application of the Group's risk management framework has been reflected in the Group's overall asset quality and capital position. In particular, the Group remains in a select group of banking institutions with a 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 consolidated regulatory and economic capital requirements, and risk-adjusted performance and pricing processes.

	30 Jun 17	31 Dec 16	30 Jun 16
	%	%	%
<b>Summary Group Capital Adequacy Ratios (Level 2)</b>			
Common Equity Tier 1	10.1	9.9	10.6
Tier 1	12.1	11.5	12.3
Tier 2	2.1	2.2	2.0
<b>Total Capital (APRA)</b>	<b>14.2</b>	13.7	14.3
<b>Common Equity Tier 1 (Internationally Comparable)<sup>(1)</sup></b>	<b>15.6</b>	15.4	14.4

(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 on the Scope of Application). 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 <sup>(1)</sup> 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 2019.

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), bringing the CET1 requirement to at least 8%. In January 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 2017 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](http://www.commbank.com.au/about-us/investors/shareholders)

# Scope of Application

## 3 Scope of Application

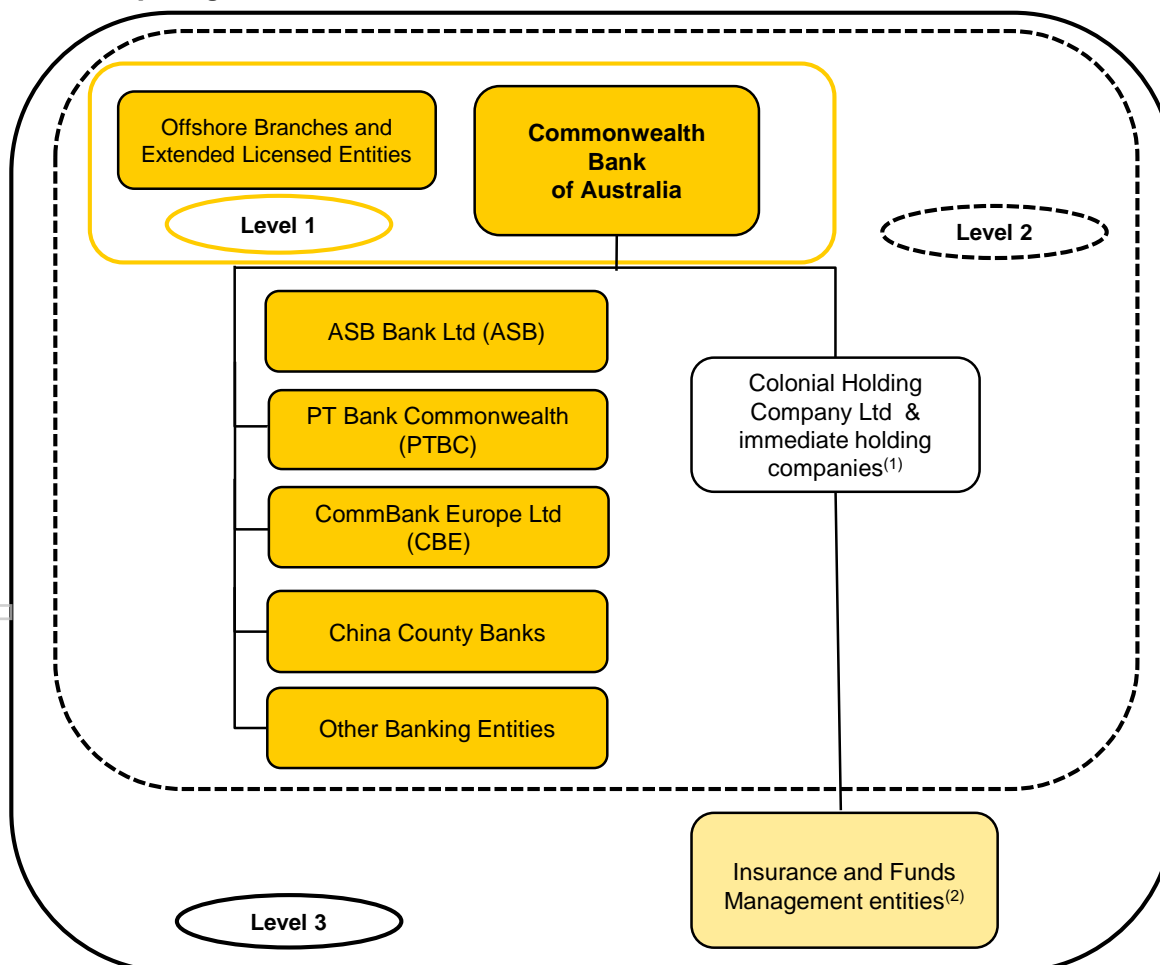
This document has been prepared in accordance with Board approved policy and reporting requirements set out in APS 330.

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).

### APS 330 reporting structure



(1) From 31 December 2016, a number of intermediate holding companies within the Colonial Group were transferred from Level 3 to the Level 2 Banking Group. Refer to page 6. This change had minimal impact on the Group's capital.

(2) 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 Committee of the Group and at regular intervals throughout the year to the 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 as measured on an APRA basis as at 30 June 2017 was 10.1%, compared with 9.9% at 31 December 2016 and 10.6% at 30 June 2016. The capital ratios were maintained well in excess of regulatory minimum requirements at all times throughout the year.

The Group's CET1 (APRA) ratio increased 20 basis points for the half year ended 30 June 2017. After allowing for further increases in capital requirements with respect to Australian residential mortgages, the underlying increase was 54 basis points on the prior half. This primarily reflected the impact of capital generated from earnings and prudent balance sheet management leading to lower risk weighted assets, partly offset by the December 2016 interim dividend (net of issuance of shares through the DRP) and the maturity of a further \$1 billion of Colonial debt.

The decrease in the Group's CET1 ratio across the June 2017 full year was driven by the APRA requirement to hold additional capital with respect to Australian residential mortgages, partly offset by continued sustained organic capital generation.

The Group's CET1 ratio as measured on an internationally comparable basis was 15.6% as at 30 June 2017, compared with 15.4% at 31 December 2016 and 14.4% at 30 June 2016.

Details on the major differences between the Basel III APRA and the Basel III internationally comparable ratios are provided on page 8.

### Capital Initiatives

The following significant capital initiatives were undertaken during the year:

#### Common Equity Tier 1 Capital

- The DRP in respect of the 2016 final dividend was satisfied by the issuance of \$586 million of ordinary shares representing a participation rate of 15.4%; and
- The DRP in respect of the 2017 interim dividend was satisfied by the issuance of \$558 million of ordinary shares, representing a participation rate of 16.3%.

#### Additional Tier 1 Capital

- In March 2017, the Bank issued \$1.64 billion of CommBank PERLS IX Capital Notes (PERLS IX), a Basel III compliant Additional Tier 1 security.

#### Tier 2 Capital

The Group issued a series of subordinated notes that are Basel III compliant Tier 2 capital:

- October 2016 USD750 million;
- November 2016 NZD400 million issued through ASB, its New Zealand subsidiary;
- December 2016 issued three separate JPY subordinated notes totalling JPY40 billion;
- March 2017 JPY13.3 billion; and
- March 2017 HKD608 million.

### Other Regulatory Changes

#### Unquestionably Strong Capital Ratios

In December 2014, the Government released the Financial Systems Inquiry's final report. In response to the final report, APRA undertook the following actions:

- Increased the capital requirements under AIRB approach for Australian residential mortgages to an average of at least 25% risk-weighting (effective from 1 July 2016) with the change aimed at increasing mortgage competition between the major banks and non-major banks; and
- Released an information paper in July 2017 in relation to establishing the quantum of additional capital required for the Australian banking sector to have capital ratios that are unquestionably strong.

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

APRA expects to release a discussion paper in 2017 covering:

- Proposed revisions to the regulatory capital framework required to support unquestionably strong capital ratios;
- Domestic application of the various BCBS reforms;
- Additional measures to address structural concentration of Australian residential mortgages; and
- Improving transparency and international comparability of capital ratios.

Following the discussion paper, APRA expects to release revised draft prudential standards in late 2018, with the release of the final standards in 2019 and implementation by 1 January 2021.

## Other Regulatory Changes (continued)

### Basel Committee on Banking Supervision (BCBS)

The BCBS has issued a number of consultation documents on:

- Design of a framework for the application of capital floors based on standardised approaches;
- Revisions to the standardised approach for credit risk;
- Implementation of constraints on the use of internal credit risk models; and
- Revisions to operational risk.

In addition, the BCBS completed a review of the trading book requirements in January 2016 with an effective implementation date of 1 January 2019. The review of IRRBB was completed in April 2016, with the BCBS concluding that there will be no requirement to include this risk in the regulatory capital calculations. However, additional disclosure requirements will be implemented from 1 January 2018.

In March 2017, APRA advised that finalisation of the trading book requirements for Australian regulatory purposes is not expected until early 2020, with implementation 12 months after the regulations have been finalised.

Following finalisation by the BCBS, APRA is expected to incorporate these issues with the implementation of the revised regulatory capital framework by 2021.

### Composition of Level 2 ADI Groups

In May 2014, APRA provided more clarity on the definition of the Level 2 Banking Group. Subsidiary intermediate holding companies are considered part of the Level 2 Group, regardless of the nature of any activity undertaken by their operating subsidiaries. As a result, capital benefits arising from the debt issued by the Colonial Group are being phased out. As at 30 June 2017 there is \$665 million in debt still subject to transitional relief, all of which matures in the next 12 months.

A number of intermediate holding companies within the Colonial Group were consolidated into the Level 2 Banking Group from 31 December 2016. This change had minimal impact on the Group's capital.

### Conglomerate Groups

APRA is extending its prudential supervision framework to Conglomerate Groups that have material operations in more than one APRA regulated industry and/or have one or more material unregulated entities. In March 2016 APRA advised that it was deferring finalisation of the capital requirements with respect to conglomerates until after the completion of other domestic and international policy initiatives. Non-capital related requirements, which include such items as governance, risk exposures and intra group exposures, are effective 1 July 2017 and have no impact on the Group's capital.



## Group Regulatory Capital Position

	30 Jun 17	31 Dec 16	30 Jun 16
	%	%	%
<b>Summary Group Capital Adequacy Ratios (Level 2)</b>			
Common Equity Tier 1	10.1	9.9	10.6
Tier 1	12.1	11.5	12.3
Tier 2	2.1	2.2	2.0
<b>Total Capital (APRA)</b>	<b>14.2</b>	<b>13.7</b>	<b>14.3</b>
<b>Common Equity Tier 1 (Internationally Comparable) <sup>(1)</sup></b>	<b>15.6</b>	<b>15.4</b>	<b>14.4</b>

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

	APRA 30 Jun 17 \$M	APRA 31 Dec 16 \$M	APRA 30 Jun 16 \$M
Ordinary Share Capital and Treasury Shares <sup>(1)</sup>	35,266	34,709	34,129
Reserves	1,788	1,992	2,591
Retained earnings	25,793	24,157	23,176
Non-controlling interests	-	-	-
Common Equity Tier 1 Capital before regulatory adjustments	62,847	60,858	59,896
Common Equity Tier 1 regulatory adjustments	(18,688)	(17,533)	(18,233)
Common Equity Tier 1 Capital	44,159	43,325	41,663
Additional Tier 1 Capital	8,525	6,893	6,890
Tier 1 Capital	52,684	50,218	48,553
Tier 2 Capital	9,392	9,373	7,924
<b>Total Capital</b>	<b>62,076</b>	<b>59,591</b>	<b>56,477</b>

(1) Inclusive of Treasury shares held by the Group's life insurance operations and employee share scheme trusts (\$295 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

	30 Jun 17	31 Dec 16	30 Jun 16
	%	%	%
<b>Significant Group ADIs</b>			
CBA Level 1 CET1 Capital ratio	10.7	10.3	11.0
CBA Level 1 Tier 1 Capital ratio	12.4	11.6	12.4
CBA Level 1 Total Capital ratio	14.5	13.7	14.5
ASB CET1 Capital ratio <sup>(1)</sup>	10.5	9.9	9.9
ASB Tier 1 Capital ratio <sup>(1)</sup>	12.6	12.2	12.3
ASB Total Capital ratio <sup>(1)</sup>	14.1	13.7	13.2

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

# 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 2017, the Group's internationally comparable CET1, Tier 1 and Total Capital ratios were 15.6%, 18.0% and 20.4% respectively. The basis of this analysis aligns with the APRA study.

The following table provides details on the differences, as at 30 June 2017, 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 %
<b>Basel III (APRA)</b>			<b>10.1</b>	<b>12.1</b>	<b>14.2</b>
Equity investments	Appendix 1 Items 1, 2, 4	Balances below prescribed threshold are risk weighted, compared to a 100% CET1 deduction under APRA's requirements.	0.9	0.8	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	0.2	0.2
IRRBB RWA	3.3.2	APRA requires capital to be held for IRRBB. The BCBS does not have any capital requirement.	0.5	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	2.1	2.4
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.	0.5	0.6	0.7
Non-retail undrawn commitments	3.3.4	Credit conversion factor of 75%, compared to 100% under APRA's requirements.	0.4	0.5	0.6
Specialised lending	3.3.5	Use of AIRB 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.	0.8	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
<b>Subtotal <sup>(1)</sup></b>			<b>15.6</b>	<b>18.2</b>	<b>21.0</b>
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)	(0.6)
<b>Basel III (Internationally Comparable - aligns with APRA study)</b>			<b>15.6</b>	<b>18.0</b>	<b>20.4</b>

(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 Basel III and, therefore, it is difficult to calculate the impact of such a

floor. APRA concluded in their 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 5.1% at 30 June 2017 on an APRA basis and 5.8% on an internationally comparable basis.

The BCBS has advised that the leverage ratio will migrate to a Pillar 1 minimum capital requirement of 3% from 1 January 2018. The BCBS will confirm the final calibration in 2017.

<b>Summary Group Leverage Ratio <sup>(1)</sup></b>	<b>30 Jun 17</b>	<b>31 Mar 17</b>	<b>31 Dec 16</b>	<b>30 Sep 16</b>	<b>30 Jun 16</b>
Tier 1 Capital (\$M)	52,684	50,008	50,218	47,568	48,553
Total Exposures (\$M) <sup>(2)</sup>	1,027,958	1,012,495	1,018,931	991,196	980,846
<b>Leverage Ratio (APRA) (%)</b>	<b>5.1</b>	4.9	4.9	4.8	5.0
<b>Leverage Ratio (Internationally Comparable) (%) <sup>(3)</sup></b>	<b>5.8</b>	5.6	5.5	5.4	5.6

(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 2017 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.

# Risk Weighted Assets

## 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)**

Asset Category	Risk Weighted Assets			Change in RWA for	
	30 Jun 17	31 Dec 16	30 Jun 16	June 2017 half	%
	\$M	\$M	\$M	\$M	%
<b>Credit Risk</b>					
<b>Subject to AIRB approach <sup>(1)</sup></b>					
Corporate <sup>(2)</sup>	74,663	79,392	71,682	(4,729)	(6. 0)
SME corporate <sup>(2)</sup>	33,067	35,239	29,957	(2,172)	(6. 2)
SME retail	4,838	4,747	4,953	91	1. 9
SME retail secured by residential mortgage	2,766	2,812	2,813	(46)	(1. 6)
Sovereign	2,154	6,742	6,622	(4,588)	(68. 1)
Bank	12,598	13,481	13,098	(883)	(6. 5)
Residential mortgage <sup>(3)</sup>	134,969	115,647	83,758	19,322	16. 7
Qualifying revolving retail	9,414	9,413	9,897	1	0. 0
Other retail	15,101	14,970	15,102	131	0. 9
<b>Total RWA subject to AIRB approach</b>	<b>289,570</b>	<b>282,443</b>	<b>237,882</b>	<b>7,127</b>	<b>2. 5</b>
<b>Specialised lending <sup>(2)</sup></b>	<b>58,752</b>	<b>60,504</b>	<b>56,795</b>	<b>(1,752)</b>	<b>(2. 9)</b>
<b>Subject to standardised approach</b>					
Corporate <sup>(2)</sup>	1,202	1,128	10,982	74	6. 6
SME corporate <sup>(2)</sup>	510	596	4,133	(86)	(14. 4)
SME retail	6,172	6,089	6,122	83	1. 4
Sovereign	271	242	268	29	12. 0
Bank	136	192	224	(56)	(29. 2)
Residential mortgage <sup>(2)</sup>	5,017	4,788	7,428	229	4. 8
Other retail	2,925	2,776	2,750	149	5. 4
Other assets	5,291	5,385	5,360	(94)	(1. 7)
<b>Total RWA subject to standardised approach</b>	<b>21,524</b>	<b>21,196</b>	<b>37,267</b>	<b>328</b>	<b>1. 5</b>
Securitisation	1,584	1,572	1,511	12	0. 8
Credit valuation adjustment	4,958	6,332	8,273	(1,374)	(21. 7)
Central counterparties	871	1,479	2,302	(608)	(41. 1)
<b>Total RWA for credit risk exposures</b>	<b>377,259</b>	<b>373,526</b>	<b>344,030</b>	<b>3,733</b>	<b>1. 0</b>
Traded market risk	4,650	5,707	9,439	(1,057)	(18. 5)
Interest rate risk in the banking book	21,404	23,498	7,448	(2,094)	(8. 9)
Operational risk	33,750	33,750	33,750	-	-
<b>Total risk weighted assets</b>	<b>437,063</b>	<b>436,481</b>	<b>394,667</b>	<b>582</b>	<b>0. 1</b>

(1) Pursuant to APRA requirements, RWA amounts derived from AIRB risk weight functions have been multiplied by a scaling factor of 1.06. Comparatives have been restated to conform to presentation in the current period.

(2) APRA re-accredited the use of the AIRB approach for the Bankwest non-retail portfolio, effective 30 September 2016.

(3) Includes APRA requirements to increase the average risk weight applied to Australian residential mortgages using the AIRB approach (30 June 2017: \$15.0 billion, 31 December 2016:\$32.0 billion).

## Risk Weighted Assets

Total Group RWA increased \$0.6 billion or 0.1% on the prior half to \$437.1 billion.

### Credit Risk Exposure and RWA

After allowing for an increase in risk weighted assets of \$15.0 billion to meet APRA requirements for Australian residential mortgages, there was a decrease of \$11.3 billion on the prior half. This was primarily due to:

- Refresh of credit risk estimates across non-retail portfolios;
- Improved credit quality across most non-retail portfolios;
- Foreign currency movements; and
- Reduction of exposure across corporate portfolios.

These decreases were partly offset by:

- A seasonal increase in retail arrears; and
- An increase in RWA for New Zealand residential mortgages due to changes in prudential requirements.

### Explanation of change in Credit RWA

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

Asset Category	Credit RWA movement drivers					
	Change in RWA for June 17 half	Volume changes	FX changes	Credit risk estimates changes and regulatory treatments <sup>(1)</sup>	Data and methodology changes	Change in credit quality
	\$M	\$M	\$M	\$M	\$M	\$M
AIRB corporate including SME and specialised lending	(8,608)	(1,659)	(1,226)	(614)	(618)	(4,491)
AIRB bank	(883)	(84)	(136)	(283)	(59)	(321)
AIRB sovereign	(4,588)	51	(19)	(4,257)	(22)	(341)
AIRB consumer retail <sup>(1)</sup>	19,454	2,461	(142)	16,652	(558)	1,041
Standardised (including other assets, CCP and CVA)	(1,654)	980	-	-	(1,015)	(1,619)
Securitisation exposures	12	30	(1)	-	-	(17)
<b>Total credit RWA movement</b>	<b>3,733</b>	<b>1,779</b>	<b>(1,524)</b>	<b>11,498</b>	<b>(2,272)</b>	<b>(5,748)</b>

(1) Includes \$15.0 billion due to APRA requirements to increase the average risk weight applied to Australian residential mortgages using the AIRB approach.

### Traded Market Risk RWA

Traded market risk RWA decreased by \$1.1 billion or 18.5%. The decrease resulted from reduced risk exposures measured under the Internal Model Approach and improved efficiency in capital management.

### Interest Rate Risk in the Banking Book (IRRBB) RWA

IRRBB RWA decreased by \$2.1 billion or 8.9%. This is a result of interest rate risk management activity and model enhancements offset by increased structural hedging.

### Operational Risk RWA

Operational Risk RWA remained unchanged over the prior half, representing the regulatory minimum threshold.

## 7 Risk Management

### 7.1 Risk Management Framework

The Group has an embedded Risk Management Framework (Framework) that 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 three key documentary components (described below), which are dynamic in nature and are reviewed on a regular basis in conjunction with each other. The inter-relationship between the documents is central to fostering challenge, review and transparency in strategic decisions, risk considerations and risk management practices across the Group.

This framework requires each business to plan and manage the outcome of its risk-taking activities including proactively managing its risk profile within risk appetite levels; using risk-adjusted outcomes and considerations as part of its day-to-day business decision-making processes; and establishing and maintaining appropriate risk controls.

#### Risk Appetite Statement

The Group's Risk Appetite Statement 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). In particular:

- The Risk Appetite gives consideration to the key business requirements of preserving capital adequacy, maintaining liquidity, protecting the franchise value, and achieving targeted performance. It allows management to accept risks within the context of its risk culture and defines actions of which the Group is intolerant; and
- Management proposes Risk Tolerances, expressed as risk limits and based on the risk appetite, risk profile and capital strength. The establishment and approval of Risk Tolerances are supported by Group-wide risk policies which are reviewed annually by Management and brought to the Board for its approval.

#### Business Plan (Significant Risks)

The Group's 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 Group gives consideration to significant risks arising from the Plan including:

- Components of strategy that may be challenged by the Risk Appetite Statement;
- Significant changes to risk profile, given the Plan, and necessary changes to the Risk Management Strategy to support its implementation; and
- Potential risk issues/challenges in executing the strategy, including mitigating actions or planned responses.

#### Risk Management Strategy

The Group's Risk Management Strategy (RMS) describes each material risk, the approach taken to manage these risks and how this is operationalised through governance, policies and procedures. The RMS is a document designed to facilitate dialogue between Management and the Board about risk management practices. The RMS, written by management and approved by the Board, comprises two parts:

- Part A – The Group's approach for managing risk in the context of the Group's Strategy and the Group's Risk Appetite Statement; and
- Part B – the key operational elements which give effect to this approach.

It documents the Group's key risk management practices across all major risk classes, and demonstrates how, collectively, the Group ensures the comprehensive management of risks across the Group in support of achieving its strategic goals. The major risk classes and the Group's approach to managing them is summarised in the table "Material Risk Types" (pages 15-16).

### 7.2 Key Operational Elements

#### 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 structure is illustrated in the diagram "Risk Governance Structure" (page 14).

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 (CPS 220).

The Risk Committee oversees the Framework and helps formulate the Group's risk appetite for consideration by the Board. In particular it:

- 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 risk management structure is a Three Lines of Defence (3LoD) model which supports the Framework by:

- Reinforcing that risk is best owned and managed where it occurs – so the business (Line 1) is responsible for the management of risk;
- Having a separate group of experienced staff with specific risk management skills (Line 2) to facilitate the development, and monitor/measure the effectiveness, of the risk management process and systems used by Line 1; and
- Having an independent third group (Line 3) provide assurance to the Board, regulators and other stakeholders on the appropriateness and effectiveness of the activities of Lines 1 and 2.



The Group CRO, who heads up the Line 2 Risk Management function, oversees independent risk management for the whole Group. This unit is comprised of both risk management teams embedded in the businesses and Group functional teams that develop policies, measurement approaches and controls for each type of risk. It also helps the Group understand risk aggregation to enable enterprise wide risk management. The Group CRO reports to the CEO and has direct and unfettered reporting requirements to the Risk Committee.

### Risk Culture

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 judgements in the absence of definitive rules, regulations or market signals.

The Group regards risk culture as an aspect of overall culture. As such, the Group's risk culture flourishes within an organisational context that emphasises and rewards integrity, accountability, collaboration, service and excellence. This encourages employees at all levels to "speak up" if they believe the Group as a whole, their part of the organisation or specific colleagues are conspicuously failing to uphold those values, damaging risk culture or taking ill-considered risks.

APRA requires the Group 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.

### Risk Policies & Procedures

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

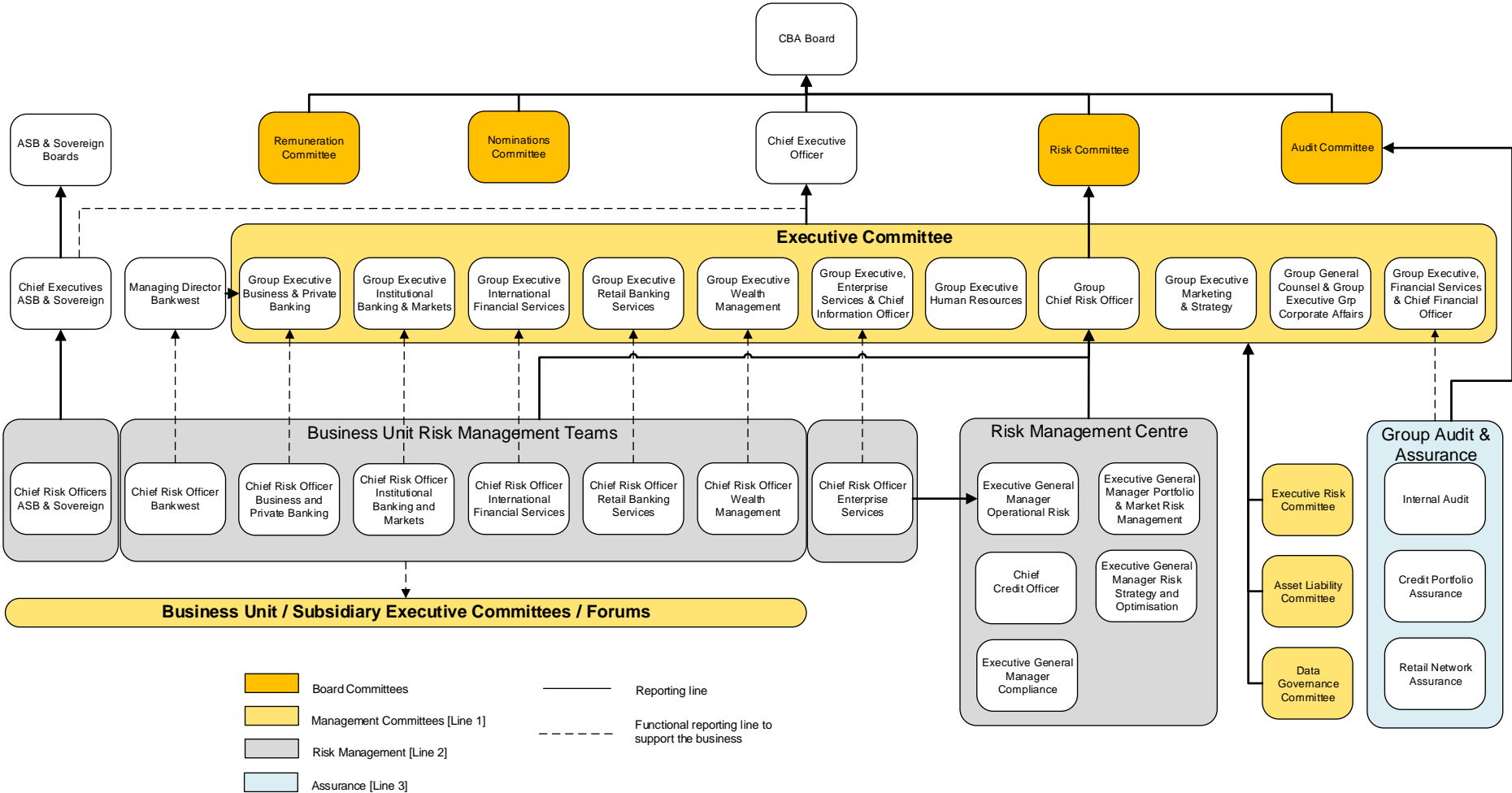
- Summarising the principles and practices to be used by the Group in identifying and assessing its material risks;
- Outlining a process for monitoring, communicating and reporting risk issues, including escalation procedures for the reporting of material risks; and
- Quantifying the limits (Risk Tolerances) for major risks and stating risk actions to which the Group is intolerant.

### Risk Management Infrastructure

The Framework is also supported by the following Group-wide processes:

- A Management Information System to measure and aggregate material 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
<b>Credit Risk</b> (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.	<b>Governing Policies:</b> <ul style="list-style-type: none"> <li>Group Credit Risk Management Frameworks; and</li> <li>Group level Credit Risk Policies.</li> </ul> <b>Key Management Committee:</b> Executive Risk Committee.	<p>The following key credit risk frameworks set credit portfolio concentration limits and standards:</p> <ul style="list-style-type: none"> <li>Large Credit Exposure Policy;</li> <li>Country Risk Exposure Policy;</li> <li>Industry Sector Concentration Policy; and</li> <li>Exposure to consumer credit products are managed within limits and standards set in the Group Level Risk Appetite Statement (RAS), Business Unit (BU) Level RAS and Credit Portfolio &amp; Product Standards.</li> </ul> <p>The measurement of credit risk is primarily based on an APRA accredited Advanced Internal Ratings Based (AIRB) approach.</p>
<b>Market Risk (including Equity Risk)</b> (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 assets underlying operating leases at maturity (lease residual value risk).	<b>Governing Policies:</b> <ul style="list-style-type: none"> <li>The Group Market Risk Manual;</li> <li>The Group Market Risk Policy; and</li> <li>Trading Book Policy Statement.</li> </ul> <b>Key Management Committee:</b> Asset and Liability Committee.	<p>The Group Market Risk Policy sets limits and standards with respect to:</p> <ul style="list-style-type: none"> <li>Traded Market Risk;</li> <li>Interest Rate Risk in the Banking Book;</li> <li>Residual Value Risk;</li> <li>Non-traded Equity Risk; and</li> <li>Market Risk in Insurance Businesses.</li> </ul> <p>The respective measurement approaches for these risks include:</p> <ul style="list-style-type: none"> <li>Value at Risk, Stress Testing;</li> <li>Market Value Sensitivity, Net Interest Earnings at Risk;</li> <li>Profit &amp; Loss Adjustment Account Balance, Aggregate Residual Value Risk Weighted Exposure, Aggregate Residual Value Risk Margin; and</li> <li>Aggregate Portfolio Limit.</li> </ul>
<b>Liquidity and Funding Risk</b> (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).	<b>Governing Policies:</b> <ul style="list-style-type: none"> <li>Group Liquidity Risk Management Policy and Strategy.</li> </ul> <b>Key Management Committee:</b> Asset and Liability Committee.	<p>The Group Liquidity Risk Management Policy and Strategy sets limits and standards with respect to the following:</p> <ul style="list-style-type: none"> <li>The Liquidity Coverage Ratio, which requires liquid assets exceed modelled 30 day stress outflows;</li> <li>Additional market and idiosyncratic stress test scenarios; and</li> <li>Limits that set tolerances for the sources and tenor of funding.</li> </ul> <p>The measurement of liquidity risk uses scenario analysis, covering both adverse and ordinary operating circumstances.</p>
<b>Operational Risk</b> (see section 11)	Operational risk is the risk of economic loss arising from inadequate or failed internal processes, people, systems or external events.	<b>Governing Policies:</b> <ul style="list-style-type: none"> <li>Group Operational Risk Management Framework.</li> </ul> <b>Key Management Committee:</b> <ul style="list-style-type: none"> <li>Executive Committee.</li> </ul>	<p>The Group Operational Risk Management Framework sets limits and standards with respect to the following:</p> <ul style="list-style-type: none"> <li>Investigation and reporting of loss, compliance and near miss incidents;</li> <li>Comprehensive Risk and Control Self-Assessment, control assurance and issues management processes; and</li> <li>Comprehensive Scenario Analysis assessment process (also called Quantitative Risk Assessments).</li> </ul> <p>The measurement of operational risk is based on an APRA accredited Advanced Measurement Approach. The approach combines internal and external loss experience and business judgements captured through Scenario Analysis.</p>

# Risk Management

## Material Risk Types (continued)

Risk Type	Description	Governing Policies and Key Management Committees	Key Limits, Standards and Measurement Approaches
<b>Compliance Risk</b> (see section 11)	<p>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 its Compliance Obligations.</p> <p>Compliance Obligations are formal requirements that may arise from various sources including but not limited to: laws; regulations; legislation; industry standards; rules; codes or guidelines.</p>	<p><b>Governing Policies:</b></p> <ul style="list-style-type: none"> <li>Group Operational Risk Management Framework;</li> <li>Compliance Risk Management Framework; and</li> <li>Compliance Incident Management Group Policy.</li> </ul> <p><b>Key Management Committee:</b></p> <ul style="list-style-type: none"> <li>Executive Committee.</li> </ul>	<p>The key limits with respect to compliance risk are set via the Group Operational Risk Management Framework. The Group Compliance Risk Management Framework sets standards with respect to the understanding of obligations, establishing policies and procedures, managing non-compliance, monitoring and reporting.</p> <p>The measurement of compliance risk is undertaken within the operational risk approach.</p>
<b>Insurance Risk</b>	<p>Insurance risk is the risk of loss due to increases in policy benefits arising from variations in the incidence or severity of insured events.</p> <p>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.</p> <p>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.</p>	<p><b>Governing Policies:</b></p> <ul style="list-style-type: none"> <li>Product Management Policy, Underwriting Policy, Claims Management Policy and Reinsurance Management Policy (end-to-end policies of insurance writing businesses).</li> </ul> <p><b>Key Management Committee:</b> Executive Committees of insurance writing businesses.</p>	<p>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:</p> <ul style="list-style-type: none"> <li>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;</li> <li>Regular review of insurance experience, so that product design, policy liabilities and pricing remains sound;</li> <li>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</li> <li>Transferring a proportion of insurance risk to reinsurers to keep within risk appetite.</li> </ul> <p>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.</p>
<b>Strategic Risk</b>	<p>Strategic risk is the risk of economic loss arising from changes in the business environment (caused by macroeconomic conditions, competitive forces at work, technology, regulatory or social trends) or internal weaknesses, such as a poorly implemented or flawed strategy.</p>	<p><b>Governing Policies:</b></p> <ul style="list-style-type: none"> <li>Group Risk Management Strategy (RMS).</li> </ul> <p><b>Key Management Committee:</b> Executive Committee.</p>	<p>The key limits and standards with respect to strategic risk are set via the Board's consideration of Group and BU strategic plans and the most significant risks (current and emerging) arising from these.</p> <p>Strategic risk is measured using a combination of judgemental assessments captured through Scenario Analysis and an internal profit simulation model.</p>
<b>Reputational Risk</b>	<p>Reputational risk arises from negative perception on the part of customers, counterparties, shareholders, investors, debt holders, market analysts, regulators, and other relevant parties of the Group.</p>	<p><b>Governing Policies:</b></p> <ul style="list-style-type: none"> <li>Group RMS;</li> <li>Group Environmental Policy; and</li> <li>Environmental, Social and Governance Lending Policy.</li> </ul> <p><b>Key Management Committee:</b> Executive Committee.</p>	<p>Potential adverse Reputational impacts are managed as an outcome of all other material risks. In addition the Group:</p> <ul style="list-style-type: none"> <li>Sets a range of conduct codes to ensure we provide a high level of service to our customers (as set out in Statement of Professional Practices); and</li> <li>Has a corporate responsibility plan focused on driving positive change through education, innovation and good business practice.</li> </ul>

## 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.

Credit Risk Management is one of the key inputs into the Group's integrated risk management framework. 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 Business Unit credit risk related functions support the overall risk management responsibilities of the 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 Risk Committee oversees the Group's Credit Risk Management Framework which is designed to achieve credit portfolio outcomes that are consistent with the Group's risk

and return expectations. The 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 financial obligations for repayment, acceptable forms of collateral and security, and the frequency of credit reviews.

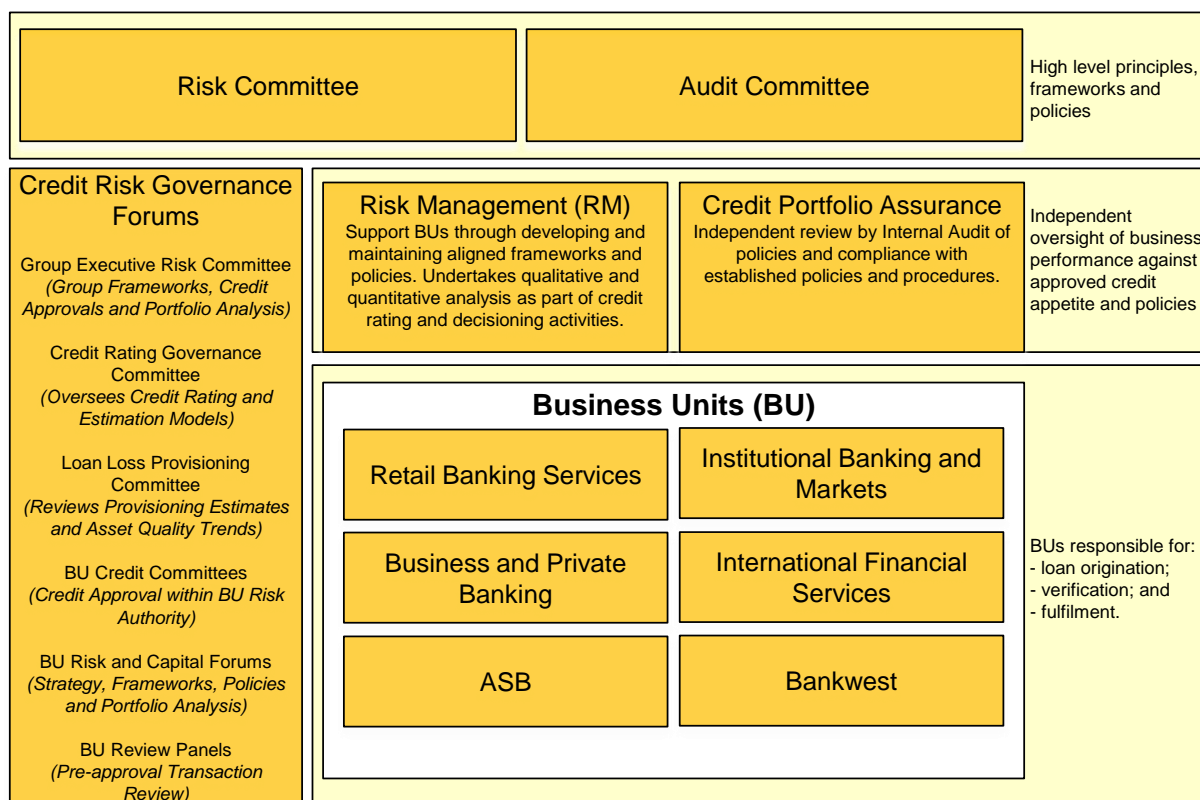
The Group's Risk Appetite Statement requires that there is appropriate diversification of credit risk. This is achieved through established policies that include limits for the key dimensions of the credit portfolio for:

- 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 Audit and Risk Committees as appropriate.

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



# Credit Risk

## 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**

Portfolio Type	30 June 2017				Average exposure for June 2017 half <sup>(1)</sup>	Change in exposure for June 2017 half <sup>(2)</sup>	
	Off Balance Sheet			Total			
	On Balance Sheet	Non-market related	Market related				
	\$M	\$M	\$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 <sup>(3)</sup>	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.

### 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	(2,840)	Primarily reflects reduction of exposure across corporate portfolios.
AIRB sovereign	5,480	Primarily reflects volume growth, partly offset by FX movements.
AIRB bank	(1,509)	Primarily reflects reduction of exposure and FX movements.
AIRB consumer retail	8,431	Primarily reflects volume growth, partly offset by securitisation of residential mortgages.
Total advanced and specialised lending	9,562	
Standardised including other assets and central counterparties	876	Primarily reflects volume growth.
Total excluding securitisation and equity exposures	10,438	



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

Portfolio Type	31 December 2016				Average exposure for December 2016 half <sup>(1)</sup>	Change in exposure for December 2016 half <sup>(2)</sup>	
	Off Balance Sheet			Total			
	On Balance Sheet	Non-market related	Market related				
	\$M	\$M	\$M				
Subject to AIRB approach							
Corporate <sup>(3) (4)</sup>	72,154	50,176	9,568	131,898	123,846	16,103	13. 9
SME corporate <sup>(3)</sup>	44,044	9,726	889	54,659	50,776	7,767	16. 6
SME retail	6,977	3,186	-	10,163	10,274	(222)	(2. 1)
SME retail secured by residential mortgage	4,566	1,442	-	6,008	5,868	280	4. 9
Sovereign	83,209	1,173	2,550	86,932	83,307	7,250	9. 1
Bank	30,455	2,584	11,554	44,593	43,104	2,978	7. 2
Residential mortgage	463,471	74,228	-	537,699	529,015	17,367	3. 3
Qualifying revolving retail	10,025	17,273	-	27,298	27,312	(27)	(0. 1)
Other retail	7,938	3,142	-	11,080	11,095	(30)	(0. 3)
Total AIRB approach	722,839	162,930	24,561	910,330	884,597	51,466	6. 0
Specialised lending <sup>(3) (4)</sup>	55,736	12,354	704	68,794	68,046	1,496	2. 2
Subject to standardised approach							
Corporate <sup>(3)</sup>	913	236	9	1,158	6,100	(9,883)	(89. 5)
SME corporate <sup>(3)</sup>	419	170	6	595	2,350	(3,510)	(85. 5)
SME retail	5,155	866	55	6,076	6,096	(41)	(0. 7)
Sovereign	503	-	-	503	519	(33)	(6. 2)
Bank	565	-	-	565	623	(115)	(16. 9)
Residential mortgage <sup>(3)</sup>	9,359	1,752	-	11,111	12,416	(2,610)	(19. 0)
Other retail	2,659	114	-	2,773	2,755	35	1. 3
Other assets	10,321	-	-	10,321	10,627	(612)	(5. 6)
Central counterparties	-	-	5,086	5,086	5,955	(1,737)	(25. 5)
Total standardised approach	29,894	3,138	5,156	38,188	47,441	(18,506)	(32. 6)
Total credit exposures <sup>(5)</sup>	808,469	178,422	30,421	1,017,312	1,000,084	34,456	3. 5

(1) The simple average of balances as at 31 December 2016 and 30 June 2016.

(2) The difference between exposures as at 31 December 2016 and 30 June 2016.

(3) APRA has re-accredited the use of the AIRB approach for the Bankwest non-retail portfolio, effective 30 September 2016. This increased AIRB Corporate (\$1.9 billion), AIRB SME Corporate (\$5.8 billion), and Specialised Lending (\$9.8 billion) which was offset by a reduction in standardised exposures.

(4) Specialised Lending includes an increase of \$9.8 billion from re-accreditation of Bankwest non-retail portfolios, offset by a reclassification of exposures to AIRB Corporate of \$9.5 billion.

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

## Credit Risk

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

Portfolio Type	30 June 2016				Average exposure for June 2016 half <sup>(1)</sup>	Change in exposure for June 2016 half <sup>(2)</sup>	
	Off Balance Sheet			Total			
	On	Non-	Market related				
	Balance Sheet	market related					
	\$M	\$M	\$M	\$M	\$M	\$M	%
Subject to AIRB approach							
Corporate	60,865	45,171	9,759	115,795	118,797	(6,004)	(4.9)
SME corporate	38,629	7,474	789	46,892	43,472	6,840	17.1
SME retail	7,293	3,065	27	10,385	10,664	(558)	(5.1)
SME retail secured by residential mortgage	4,624	1,104	-	5,728	5,766	(76)	(1.3)
Sovereign	75,848	1,299	2,535	79,682	78,872	1,620	2.1
Bank	27,823	2,324	11,468	41,615	41,829	(427)	(1.0)
Residential mortgage	447,283	73,049	-	520,332	510,634	19,396	3.9
Qualifying revolving retail	9,889	17,436	-	27,325	27,277	96	0.4
Other retail	7,944	3,166	-	11,110	11,053	114	1.0
Total AIRB approach	680,198	154,088	24,578	858,864	848,364	21,001	2.5
Specialised lending	52,102	13,123	2,073	67,298	66,191	2,214	3.4
Subject to standardised approach							
Corporate	9,105	1,837	99	11,041	10,709	664	6.4
SME corporate	3,783	302	20	4,105	4,320	(430)	(9.5)
SME retail	5,258	836	23	6,117	6,104	26	0.4
Sovereign	531	5	-	536	482	108	25.2
Bank	673	7	-	680	720	(79)	(10.4)
Residential mortgage	11,621	2,076	24	13,721	13,232	978	7.7
Other retail	2,652	86	-	2,738	2,734	6	0.2
Other assets	10,933	-	-	10,933	11,118	(371)	(3.3)
Central counterparties	-	-	6,823	6,823	5,663	2,321	51.6
Total standardised approach	44,556	5,149	6,989	56,694	55,082	3,223	6.0
Total credit exposures <sup>(3)</sup>	776,856	172,360	33,640	982,856	969,637	26,438	2.8

(1) The simple average of balances as at 30 June 2016 and 31 December 2015.

(2) The difference between exposures as at 30 June 2016 and 31 December 2015.

(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 17	Half year average <sup>(1)</sup>
	\$M	\$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
<b>Total credit exposures <sup>(2)</sup></b>	<b>1,027,750</b>	<b>1,022,531</b>

Portfolio Type	As at 31 Dec 16	Half year average <sup>(1)</sup>
	\$M	\$M
Corporate	133,056	129,946
SME corporate	55,254	53,126
SME retail	16,239	16,370
SME retail secured by residential mortgage	6,008	5,868
Sovereign	87,435	83,826
Bank	45,158	43,727
Residential mortgage	548,810	541,431
Qualifying revolving retail	27,298	27,312
Other retail	13,853	13,850
Specialised lending	68,794	68,046
Other assets	10,321	10,627
Central counterparties	5,086	5,955
<b>Total credit exposures <sup>(2)</sup></b>	<b>1,017,312</b>	<b>1,000,084</b>

Portfolio Type	As at 30 Jun 16	Half year average <sup>(1)</sup>
	\$M	\$M
Corporate	126,836	129,506
SME corporate	50,997	47,792
SME retail	16,502	16,768
SME retail secured by residential mortgage	5,728	5,766
Sovereign	80,218	79,354
Bank	42,295	42,548
Residential mortgage	534,053	523,866
Qualifying revolving retail	27,325	27,277
Other retail	13,848	13,787
Specialised lending	67,298	66,191
Other assets	10,933	11,119
Central counterparties	6,823	5,663
<b>Total credit exposures <sup>(2)</sup></b>	<b>982,856</b>	<b>969,637</b>

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

(2) Total credit risk exposures do not include equities or securitisation exposures.

## Credit Risk

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

Portfolio Type	30 June 2017 <sup>(1)</sup>			
	New			Total
	Australia \$M	Zealand \$M	Other \$M	
Corporate	75,293	9,103	47,813	132,209
SME corporate	39,497	15,049	916	55,462
SME retail <sup>(2)</sup>	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
<b>Total credit exposures <sup>(3)</sup></b>	<b>810,468</b>	<b>99,739</b>	<b>117,543</b>	<b>1,027,750</b>

Portfolio Type	31 December 2016 <sup>(1)</sup>			
	New			Total
	Australia \$M	Zealand \$M	Other \$M	
Corporate	76,248	9,450	47,358	133,056
SME corporate	39,388	14,781	1,085	55,254
SME retail <sup>(2)</sup>	18,414	3,003	830	22,247
Sovereign	49,955	3,572	33,908	87,435
Bank	19,662	2,316	23,180	45,158
Residential mortgage	492,186	56,128	496	548,810
Qualifying revolving retail	27,298	-	-	27,298
Other retail	10,795	2,810	248	13,853
Specialised lending	55,447	7,060	6,287	68,794
Other assets	8,367	603	1,351	10,321
Central counterparties	448	-	4,638	5,086
<b>Total credit exposures <sup>(3)</sup></b>	<b>798,208</b>	<b>99,723</b>	<b>119,381</b>	<b>1,017,312</b>

Portfolio Type	30 June 2016 <sup>(1)</sup>			
	New			Total
	Australia \$M	Zealand \$M	Other \$M	
Corporate	75,574	8,276	42,986	126,836
SME corporate	35,067	14,378	1,552	50,997
SME retail <sup>(2)</sup>	18,421	3,001	808	22,230
Sovereign	49,505	3,083	27,630	80,218
Bank	17,762	1,656	22,877	42,295
Residential mortgage	480,534	53,036	483	534,053
Qualifying revolving retail	27,325	-	-	27,325
Other retail	11,121	2,708	19	13,848
Specialised lending	49,583	7,492	10,223	67,298
Other assets	9,052	511	1,370	10,933
Central counterparties	451	-	6,372	6,823
<b>Total credit exposures <sup>(3)</sup></b>	<b>774,395</b>	<b>94,141</b>	<b>114,320</b>	<b>982,856</b>

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

(2) Including SME retail secured by residential property.

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

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

30 June 2017								
Industry Sector								
	Residential mortgage	Other personal	Asset finance	Sovereign	Bank	Other finance	Agriculture	Mining
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	-	-	2,252	-	-	25,693	2,247	11,430
SME corporate	-	-	2,814	-	-	2,448	17,278	214
SME retail <sup>(1)</sup>	-	-	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 <sup>(2)</sup>	558,021	43,660	8,942	92,937	43,532	34,257	21,447	13,620

Industry Sector								
	Manufacturing	Energy	Construction	Retail/ wholesale trade	Transport and storage	Property <sup>(3)</sup>	Other	Total
Portfolio Type	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$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 <sup>(1)</sup>	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	1,281	167	2,005	57,209	2,424	67,045
Other assets	-	-	-	-	-	-	6,556	9,494
Central counterparties	-	-	-	-	-	-	-	5,686
Total credit exposures <sup>(2)</sup>	17,084	11,124	8,826	23,545	21,995	68,558	60,202	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 Real Estate Investment Trusts (REIT) and excludes Business Services.

## Credit Risk

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

Portfolio Type	31 December 2016							
	Industry Sector							
	Residential mortgage	Other personal	Asset finance	Sovereign	Bank	Other finance	Agriculture	Mining
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	-	-	2,198	-	-	26,795	2,412	11,059
SME corporate	-	-	2,914	-	-	2,532	16,832	217
SME retail <sup>(1)</sup>	-	-	3,799	-	-	481	1,806	66
Sovereign	-	-	-	87,435	-	-	-	-
Bank	-	-	-	-	45,158	-	-	-
Residential mortgage	548,810	-	-	-	-	-	-	-
Qualifying revolving retail	-	27,298	-	-	-	-	-	-
Other retail	-	13,618	-	-	-	-	-	-
Specialised lending	-	-	4	-	-	-	82	2,279
Other assets	-	2,977	-	-	-	-	-	-
Central counterparties	-	-	-	-	-	5,086	-	-
<b>Total credit exposures <sup>(2)</sup></b>	<b>548,810</b>	<b>43,893</b>	<b>8,915</b>	<b>87,435</b>	<b>45,158</b>	<b>34,894</b>	<b>21,132</b>	<b>13,621</b>

Portfolio Type	Industry Sector							
	Manufacturing	Energy	Construction	Retail/ wholesale trade	Transport and storage	Property <sup>(3)</sup>	Other	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	12,287	9,255	3,552	15,161	17,859	7,878	24,600	133,056
SME corporate	3,269	580	2,710	7,129	1,857	603	16,611	55,254
SME retail <sup>(1)</sup>	1,002	31	1,514	2,762	493	1,994	8,299	22,247
Sovereign	-	-	-	-	-	-	-	87,435
Bank	-	-	-	-	-	-	-	45,158
Residential mortgage	-	-	-	-	-	-	-	548,810
Qualifying revolving retail	-	-	-	-	-	-	-	27,298
Other retail	-	-	-	235	-	-	-	13,853
Specialised lending	-	1,721	1,049	243	1,378	58,826	3,212	68,794
Other assets	-	-	-	-	-	-	7,344	10,321
Central counterparties	-	-	-	-	-	-	-	5,086
<b>Total credit exposures <sup>(2)</sup></b>	<b>16,558</b>	<b>11,587</b>	<b>8,825</b>	<b>25,530</b>	<b>21,587</b>	<b>69,301</b>	<b>60,066</b>	<b>1,017,312</b>

(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)

Portfolio Type	30 June 2016							
	Industry Sector							
	Residential mortgage	Other personal	Asset finance	Sovereign	Bank	Other finance	Agriculture	Mining
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	-	-	2,079	-	-	24,838	1,744	10,858
SME corporate	-	364	2,846	-	-	2,614	15,553	260
SME retail <sup>(1)</sup>	-	501	3,775	-	-	495	1,733	58
Sovereign	-	-	-	80,218	-	-	-	-
Bank	-	-	-	-	42,295	-	-	-
Residential mortgage	530,804	-	-	-	-	111	259	7
Qualifying revolving retail	-	27,325	-	-	-	-	-	-
Other retail	-	13,848	-	-	-	-	-	-
Specialised lending	-	-	7	-	-	7	195	3,573
Other assets	-	3,176	-	-	-	-	5	-
Central counterparties	-	-	-	-	-	6,823	-	-
<b>Total credit exposures <sup>(2)</sup></b>	<b>530,804</b>	<b>45,214</b>	<b>8,707</b>	<b>80,218</b>	<b>42,295</b>	<b>34,888</b>	<b>19,489</b>	<b>14,756</b>

Portfolio Type	Industry Sector							
	Retail/							
	Manufacturing	Energy	Construction	wholesale trade	Transport and storage	Property <sup>(3)</sup>	Other	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Corporate	12,045	7,732	2,881	15,237	12,142	14,992	22,288	126,836
SME corporate	2,915	41	2,483	6,084	2,344	702	14,791	50,997
SME retail <sup>(1)</sup>	949	32	1,439	2,695	484	1,940	8,129	22,230
Sovereign	-	-	-	-	-	-	-	80,218
Bank	-	-	-	-	-	-	-	42,295
Residential mortgage	127	-	168	580	98	1,448	451	534,053
Qualifying revolving retail	-	-	-	-	-	-	-	27,325
Other retail	-	-	-	-	-	-	-	13,848
Specialised lending	-	2,244	1,138	184	6,592	48,359	4,999	67,298
Other assets	9	-	-	3	-	-	7,740	10,933
Central counterparties	-	-	-	-	-	-	-	6,823
<b>Total credit exposures <sup>(2)</sup></b>	<b>16,045</b>	<b>10,049</b>	<b>8,109</b>	<b>24,783</b>	<b>21,660</b>	<b>67,441</b>	<b>58,398</b>	<b>982,856</b>

(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.

## Credit Risk

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

30 June 2017					
Portfolio Type	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
	\$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 <sup>(1)</sup>	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
<b>Total credit exposures <sup>(2)</sup></b>	<b>123,508</b>	<b>312,860</b>	<b>502,609</b>	<b>88,773</b>	<b>1,027,750</b>

31 December 2016					
Portfolio Type	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
	\$M	\$M	\$M	\$M	\$M
Corporate	23,726	100,197	8,819	314	133,056
SME corporate	14,254	33,787	7,213	-	55,254
SME retail <sup>(1)</sup>	4,449	13,354	4,444	-	22,247
Sovereign	23,897	38,830	24,708	-	87,435
Bank	21,586	23,478	94	-	45,158
Residential mortgage	20,287	26,917	446,993	54,613	548,810
Qualifying revolving retail	-	-	-	27,298	27,298
Other retail	146	5,505	3,149	5,053	13,853
Specialised lending	17,210	47,897	3,687	-	68,794
Other assets	3,050	719	349	6,203	10,321
Central counterparties	874	4,209	3	-	5,086
<b>Total credit exposures <sup>(2)</sup></b>	<b>129,479</b>	<b>294,893</b>	<b>499,459</b>	<b>93,481</b>	<b>1,017,312</b>

30 June 2016					
Portfolio Type	≤ 12mths	1 ≤ 5yrs	> 5 years	No specified maturity	Total
	\$M	\$M	\$M	\$M	\$M
Corporate	21,868	98,992	5,524	452	126,836
SME corporate	12,904	29,865	8,228	-	50,997
SME retail <sup>(1)</sup>	4,328	13,461	4,441	-	22,230
Sovereign	18,356	35,733	26,129	-	80,218
Bank	23,819	18,450	26	-	42,295
Residential mortgage	19,379	20,788	437,580	56,306	534,053
Qualifying revolving retail	-	-	-	27,325	27,325
Other retail	105	5,224	3,347	5,172	13,848
Specialised lending	17,041	44,507	5,647	103	67,298
Other assets	3,244	855	344	6,490	10,933
Central counterparties	1,452	5,364	7	-	6,823
<b>Total credit exposures <sup>(2)</sup></b>	<b>122,496</b>	<b>273,239</b>	<b>491,273</b>	<b>95,848</b>	<b>982,856</b>

(1) Including SME retail secured by residential property.

(2) 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.

## Credit Risk

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

30 June 2017			
	<b>General reserve for credit losses <sup>(1)</sup></b>	<b>Specific provision <sup>(1)</sup></b>	<b>Total provisions</b>
	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Collective provision <sup>(2)</sup>	2,486	261	2,747
Individual provisions <sup>(2)</sup>	-	980	980
<b>Total provisions</b>	2,486	1,241	3,727
Additional GRCL requirement <sup>(3)</sup>	589	-	589
<b>Total regulatory provisions</b>	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.

31 December 2016			
	<b>General reserve for credit losses <sup>(1)</sup></b>	<b>Specific provision <sup>(1)</sup></b>	<b>Total provisions</b>
	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Collective provision <sup>(2)</sup>	2,561	246	2,807
Individual provisions <sup>(2)</sup>	-	1,017	1,017
<b>Total provisions</b>	2,561	1,263	3,824
Additional GRCL requirement <sup>(3)</sup>	532	-	532
<b>Total regulatory provisions</b>	3,093	1,263	4,356

(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 \$532 million in order to maintain the required minimum GRCL.

30 June 2016			
	<b>General reserve for credit losses <sup>(1)</sup></b>	<b>Specific provision <sup>(1)</sup></b>	<b>Total provisions</b>
	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Collective provision <sup>(2)</sup>	2,562	256	2,818
Individual provisions <sup>(2)</sup>	-	944	944
<b>Total provisions</b>	2,562	1,200	3,762
Additional GRCL requirement <sup>(3)</sup>	552	-	552
<b>Total regulatory provisions</b>	3,114	1,200	4,314

(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 \$552 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 2017					
Industry Sector	Impaired assets \$M	Past due loans ≥ 90 days \$M	Specific provision balance <sup>(1)</sup> \$M	Net full year charges for individual provisions \$M	Full year actual losses <sup>(2)</sup> \$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
<b>Total</b>	<b>3,187</b>	<b>2,669</b>	<b>1,241</b>	<b>478</b>	<b>1,138</b>

(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.

31 December 2016					
Industry Sector	Impaired assets \$M	Past due loans ≥ 90 days \$M	Specific provision balance <sup>(1)</sup> \$M	Net half year charges for individual provisions \$M	Half year actual losses <sup>(2)</sup> \$M
Home loans	1,102	1,883	308	71	54
Other personal	239	25	173	-	327
Asset finance	68	5	27	5	22
Sovereign	-	-	-	-	-
Bank	9	-	9	(1)	-
Other finance	19	6	18	-	5
Agriculture	458	54	64	17	26
Mining	236	7	72	-	6
Manufacturing	336	36	138	5	14
Energy	12	-	13	9	12
Construction	41	37	20	4	20
Wholesale/retail trade	251	66	81	72	13
Transport and storage	199	18	68	52	1
Property	167	102	92	(2)	7
Other	238	101	180	43	36
<b>Total</b>	<b>3,375</b>	<b>2,340</b>	<b>1,263</b>	<b>275</b>	<b>543</b>

(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 2016.

## Credit Risk

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

Industry Sector	30 June 2016				
	Impaired assets \$M	Past due loans ≥ 90 days \$M	Specific provision balance <sup>(1)</sup> \$M	Net full year charges for individual provisions \$M	Full year actual losses <sup>(2)</sup> \$M
Home loans	1,032	1,899	269	112	85
Other personal	269	27	191	-	637
Asset finance	104	3	41	53	50
Sovereign	-	-	-	-	-
Bank	10	-	10	-	-
Other finance	20	5	23	2	(18)
Agriculture	386	51	65	1	90
Mining	174	8	82	119	92
Manufacturing	338	38	141	102	17
Energy	12	-	3	(5)	-
Construction	50	24	33	21	10
Wholesale/retail trade	67	58	37	49	67
Transport and storage	183	11	18	15	3
Property	217	97	103	15	37
Other	254	122	184	108	122
<b>Total</b>	<b>3,116</b>	<b>2,343</b>	<b>1,200</b>	<b>592</b>	<b>1,192</b>

(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 2016.



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

Portfolio	30 June 2017				
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance <sup>(1)</sup>	Net full year	Full year actual losses <sup>(2)</sup>
				charges for individual provisions	
	\$M	\$M	\$M	\$M	\$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
<b>Total</b>	<b>3,187</b>	<b>2,669</b>	<b>1,241</b>	<b>478</b>	<b>1,138</b>

(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.

Portfolio	31 December 2016				
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance <sup>(1)</sup>	Net half year	Half year actual losses <sup>(2)</sup>
				charges for individual provisions	
	\$M	\$M	\$M	\$M	\$M
Corporate including SME, specialised lending and central counterparties	2,025	432	773	205	162
Sovereign	-	-	-	-	-
Bank	9	-	9	(1)	-
Residential mortgage	1,102	1,883	308	71	54
Qualifying revolving retail	96	-	58	-	123
Other retail	143	25	115	-	204
<b>Total</b>	<b>3,375</b>	<b>2,340</b>	<b>1,263</b>	<b>275</b>	<b>543</b>

(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 2016.

Portfolio	30 June 2016				
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance <sup>(1)</sup>	Net full year	Full year actual losses <sup>(2)</sup>
				charges for individual provisions	
	\$M	\$M	\$M	\$M	\$M
Corporate including SME, specialised lending and central counterparties	1,805	417	730	480	470
Sovereign	-	-	-	-	-
Bank	10	-	10	-	-
Residential mortgage	1,032	1,899	269	112	85
Qualifying revolving retail	106	-	65	-	264
Other retail	163	27	126	-	373
<b>Total</b>	<b>3,116</b>	<b>2,343</b>	<b>1,200</b>	<b>592</b>	<b>1,192</b>

(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 2016.

### Factors impacting the loss experience

The overall quality of the portfolio was stable during the financial year ended 30 June 2017. 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 three basis points. Group actual losses reduced by \$54 million on the prior year due to a reduction in commercial portfolio losses. This was partly offset by an increase in other personal and home loan losses.

## Credit Risk

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

Geographic Region <sup>(1)</sup>	30 June 2017		
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance
	\$M	\$M	\$M
Australia	2,387	2,518	1,051
New Zealand	443	93	77
Other	357	58	113
<b>Total</b>	<b>3,187</b>	<b>2,669</b>	<b>1,241</b>

Geographic Region <sup>(1)</sup>	31 December 2016		
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance
	\$M	\$M	\$M
Australia	2,468	2,218	1,053
New Zealand	550	75	76
Other	357	47	134
<b>Total</b>	<b>3,375</b>	<b>2,340</b>	<b>1,263</b>

Geographic Region <sup>(1)</sup>	30 June 2016		
	Impaired assets	Past due loans ≥ 90 days	Specific provision balance
	\$M	\$M	\$M
Australia	2,475	2,226	1,033
New Zealand	508	74	82
Other	133	43	85
<b>Total</b>	<b>3,116</b>	<b>2,343</b>	<b>1,200</b>

(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 17 \$M	31 Dec 16 \$M	30 Jun 16 \$M
Australia	2,646	2,650	2,665
New Zealand	238	251	241
Other	191	192	208
<b>Total GRCL</b>	<b>3,075</b>	<b>3,093</b>	<b>3,114</b>

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

	Half Year Ended		
	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Movement in Collective Provisions</b>			
Opening balance	2,807	2,818	2,801
Net charge against profit and loss	293	324	340
Recoveries	103	107	105
Other	(5)	1	3
Write-offs	(451)	(443)	(431)
<b>Total collective provisions</b>	<b>2,747</b>	<b>2,807</b>	<b>2,818</b>
Less collective provisions transferred to specific provisions	(261)	(246)	(256)
Additional GRCL requirement <sup>(1)</sup>	589	532	552
<b>General reserve for credit losses</b>	<b>3,075</b>	<b>3,093</b>	<b>3,114</b>

(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 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Movement in Individual Provisions</b>			
Opening balance for the period	1,017	944	909
Net new and increased provisioning	300	370	454
Net write back of provisions no longer required	(97)	(95)	(102)
Discount unwind to interest income	(15)	(16)	(14)
Other	22	21	36
Write-offs	(247)	(207)	(339)
<b>Total individual provisions</b>	<b>980</b>	<b>1,017</b>	<b>944</b>
Add collective provisions transferred to specific provisions	261	246	256
<b>Specific provisions</b>	<b>1,241</b>	<b>1,263</b>	<b>1,200</b>

### 8.3 Portfolios Subject to Standardised and Supervisory Risk-Weights

CommBank Europe Limited, PT Bank Commonwealth (Indonesia), CBA South Africa and the China County Banks 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 (China, India and Vietnam); and
- Central counterparties.

Bankwest Division:

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

ASB Bank Limited:

- Personal loans and Retail SME.

All exposures in the following entities:

- CommBank Europe Limited;
- PT Bank Commonwealth (Indonesia);
- CBA South Africa; and
- China County Banks.

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.

# Credit Risk

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

Standardised Approach Exposures	Exposure After Credit Risk Mitigation <sup>(1)</sup>		
	30 Jun 17 <sup>(2)</sup>	31 Dec 16 <sup>(2)</sup>	30 Jun 16
	\$M	\$M	\$M
<b>Risk Weight</b>			
0%	2,203	2,742	3,013
20%	3,360	3,091	3,690
35%	7,617	7,190	7,421
50%	3,741	3,808	3,668
75%	635	518	471
100%	15,783	15,714	31,353
150%	39	39	255
> 150%	-	-	-
Capital deductions	-	-	-
<b>Total</b>	<b>33,378</b>	<b>33,102</b>	<b>49,871</b>

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

(2) Includes impact of re-accreditation of Bankwest non-retail portfolios.

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

Other Assets <sup>(1)</sup>	31 December 2016		
	Exposure \$M	Risk weight %	RWA \$M
Cash	2,713	-	-
Cash items in course of collection	291	20	58
Margin lending <sup>(2)</sup>	2,977	33	987
Fixed and forward purchase assets	1,511	100	1,511
Other	2,829	≥100	2,829
<b>Total</b>	<b>10,321</b>	<b>52</b>	<b>5,385</b>

Other Assets <sup>(1)</sup>	30 June 2016		
	Exposure \$M	Risk weight %	RWA \$M
Cash	2,936	-	-
Cash items in course of collection	653	20	131
Margin lending <sup>(2)</sup>	3,176	33	1,061
Fixed and forward purchase assets	1,466	100	1,466
Other	2,702	≥100	2,702
<b>Total</b>	<b>10,933</b>	<b>49</b>	<b>5,360</b>

(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 <sup>(1)</sup>	30 Jun 17 <sup>(2)</sup>	31 Dec 16 <sup>(2)</sup>	30 Jun 16
	\$M	\$M	\$M
<b>Risk Weight</b>			
0%	492	508	562
70%	19,555	18,781	26,406
90%	40,528	42,524	34,594
115%	5,621	6,198	5,306
250%	849	783	430
<b>Total exposures</b>	<b>67,045</b>	<b>68,794</b>	<b>67,298</b>

(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.

(2) Includes impact of re-accreditation of Bankwest non-retail portfolios.

## 8.4 Portfolios Subject to Internal Ratings Based Approaches

The Group, with the exception 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).

Obligor that are risk-rated have their PD rating assigned via expert judgement and the appropriate PD Rating Tool. Obligor 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-decided 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 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 2017							Total \$M
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	PD Band		10% < 100%	Default	
Non Retail <sup>(1)</sup>	\$M	\$M	\$M	0.5% < 3%	3% < 10%	\$M	\$M	\$M
<b>Total credit risk exposures</b>								
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 <sup>(2)</sup>	-	-	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
<b>Total</b>	<b>85,909</b>	<b>90,784</b>	<b>66,326</b>	<b>82,806</b>	<b>6,598</b>	<b>2,505</b>	<b>2,205</b>	<b>337,133</b>
<b>Undrawn commitments <sup>(3)</sup></b>								
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 <sup>(2)</sup>	-	-	1,484	2,591	442	27	10	4,554
Sovereign	961	160	42	8	-	-	-	1,171
Bank	-	1,985	453	81	-	-	-	2,519
<b>Total</b>	<b>961</b>	<b>18,404</b>	<b>26,761</b>	<b>20,387</b>	<b>828</b>	<b>344</b>	<b>227</b>	<b>67,912</b>
<b>Exposure - weighted average EAD (\$M)</b>								
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 <sup>(2)</sup>	-	-	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
<b>Exposure - weighted average LGD (%)</b>								
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 <sup>(2)</sup>	-	-	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
<b>Exposure - weighted average risk weight (%) <sup>(4)</sup></b>								
Corporate	-	29.8	55.5	80.6	152.4	246.1	100.6	54.0
SME corporate	-	23.8	30.5	51.0	79.7	139.6	221.7	56.8
SME retail <sup>(2)</sup>	-	-	16.7	40.7	64.1	109.2	309.7	44.4
Sovereign	1.3	12.4	42.5	111.1	-	-	-	2.2
Bank	-	24.8	59.6	86.5	-	-	-	27.6

(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) Excludes 1.06 scaling factor.

## Credit Risk

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

	31 December 2016							
	PD Band							
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Non Retail <sup>(1)</sup>								
Total credit risk exposures								
Corporate	-	45,509	55,922	28,379	410	643	1,035	131,898
SME corporate	-	1,101	4,137	42,711	3,415	2,085	1,210	54,659
SME retail <sup>(2)</sup>	-	-	3,178	9,544	3,017	271	161	16,171
Sovereign	79,975	6,694	116	147	-	-	-	86,932
Bank	-	39,810	4,426	233	-	-	124	44,593
Total	79,975	93,114	67,779	81,014	6,842	2,999	2,530	334,253
Undrawn commitments <sup>(3)</sup>								
Corporate	-	17,377	22,797	9,435	155	217	195	50,176
SME corporate	-	84	1,233	7,877	306	181	45	9,726
SME retail <sup>(2)</sup>	-	-	1,525	2,634	439	18	12	4,628
Sovereign	941	183	42	7	-	-	-	1,173
Bank	-	2,003	509	72	-	-	-	2,584
Total	941	19,647	26,106	20,025	900	416	252	68,287
Exposure - weighted average EAD (\$M)								
Corporate	-	3. 194	2. 536	0. 754	0. 348	0. 840	1. 437	2. 357
SME corporate	-	0. 530	0. 308	0. 282	0. 251	0. 219	0. 265	0. 284
SME retail <sup>(2)</sup>	-	-	0. 040	0. 042	0. 054	0. 044	0. 081	0. 044
Sovereign	8. 618	6. 648	0. 212	0. 325	-	-	-	8. 441
Bank	-	8. 701	4. 298	1. 221	-	-	41. 244	8. 315
Exposure - weighted average LGD (%)								
Corporate	-	57. 2	53. 4	45. 7	45. 4	48. 0	52. 8	53. 0
SME corporate	-	60. 6	34. 5	30. 6	32. 3	34. 9	35. 7	31. 9
SME retail <sup>(2)</sup>	-	-	31. 8	33. 8	31. 1	40. 1	37. 8	33. 0
Sovereign	26. 3	59. 2	50. 7	58. 3	-	-	-	28. 9
Bank	-	60. 9	59. 3	60. 5	-	-	61. 3	60. 7
Exposure - weighted average risk weight (%) <sup>(4)</sup>								
Corporate	-	31. 3	59. 1	81. 9	154. 9	247. 9	207. 2	56. 8
SME corporate	-	28. 9	36. 0	52. 9	85. 1	142. 5	243. 6	60. 8
SME retail <sup>(2)</sup>	-	-	17. 0	40. 6	64. 0	107. 1	309. 2	44. 1
Sovereign	6. 6	13. 3	43. 1	121. 3	-	-	-	7. 3
Bank	-	25. 3	55. 3	87. 2	-	-	-	28. 5

(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) Excludes 1.06 scaling factor.

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

	30 June 2016							
	PD Band							
	0 < 0.03%	0.03% < 0.15%	0.15% < 0.5%	0.5% < 3%	3% < 10%	10% < 100%	Default	Total
Non Retail <sup>(1)</sup>	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Total credit risk exposures								
Corporate	-	39,144	48,646	26,055	300	981	669	115,795
SME corporate	-	1,093	3,906	36,771	2,661	1,495	966	46,892
SME retail <sup>(2)</sup>	-	-	2,925	9,494	3,266	236	192	16,113
Sovereign	73,028	6,323	226	105	-	-	-	79,682
Bank	-	37,051	4,036	403	-	-	125	41,615
Total	73,028	83,611	59,739	72,828	6,227	2,712	1,952	300,097
Undrawn commitments <sup>(3)</sup>								
Corporate	-	14,262	20,887	9,497	96	318	111	45,171
SME corporate	-	102	1,059	5,867	255	145	46	7,474
SME retail <sup>(2)</sup>	-	-	1,285	2,475	390	9	10	4,169
Sovereign	984	225	82	8	-	-	-	1,299
Bank	-	1,825	308	184	-	-	7	2,324
Total	984	16,414	23,621	18,031	741	472	174	60,437
Exposure - weighted average EAD (\$M)								
Corporate	-	3. 129	2. 614	0. 743	0. 293	0. 730	1. 377	2. 338
SME corporate	-	0. 547	0. 299	0. 264	0. 213	0. 186	0. 274	0. 268
SME retail <sup>(2)</sup>	-	-	0. 017	0. 032	0. 030	0. 029	0. 033	0. 029
Sovereign	7. 844	6. 260	0. 397	0. 239	-	-	-	7. 687
Bank	-	6. 847	4. 089	1. 665	-	-	20. 790	6. 571
Exposure - weighted average LGD (%)								
Corporate	-	57. 5	56. 6	46. 7	44. 7	68. 1	55. 2	54. 7
SME corporate	-	60. 6	33. 0	30. 8	32. 6	37. 3	36. 0	32. 1
SME retail <sup>(2)</sup>	-	-	32. 4	34. 2	31. 6	42. 6	38. 5	33. 5
Sovereign	23. 3	58. 5	52. 6	57. 2	-	-	-	26. 2
Bank	-	60. 7	60. 9	61. 1	-	-	61. 3	60. 8
Exposure - weighted average risk weight (%) <sup>(4)</sup>								
Corporate	-	29. 9	60. 5	82. 0	142. 0	315. 1	243. 3	58. 4
SME corporate	-	23. 7	32. 4	53. 4	84. 4	154. 4	264. 0	60. 3
SME retail <sup>(2)</sup>	-	-	17. 3	40. 8	64. 2	111. 5	307. 6	45. 5
Sovereign	7. 0	15. 1	36. 8	120. 2	-	-	-	7. 8
Bank	-	26. 2	57. 0	84. 7	-	-	-	29. 7

(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) Excludes 1.06 scaling factor.

## Credit Risk

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

	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
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
Retail								
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 <sup>(1)</sup>								
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 (%) <sup>(2)</sup>								
Residential mortgage	6.2	16.7	24.3	35.7	92.7	127.4	162.3	23.3
Qualifying revolving retail	-	5.3	13.4	45.4	132.4	216.2	330.9	32.8
Other retail	26.3	-	75.3	118.8	149.4	203.4	393.4	129.2

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

(2) Excludes 1.06 scaling factor.

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

	31 December 2016							
	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	151,213	155,926	97,628	116,713	5,326	7,524	3,369	537,699
Qualifying revolving retail	-	14,803	3,587	5,586	2,694	487	141	27,298
Other retail	56	-	342	8,307	1,705	546	124	11,080
Total	151,269	170,729	101,557	130,606	9,725	8,557	3,634	576,077
Undrawn commitments <sup>(1)</sup>								
Residential mortgage	55,780	8,472	4,353	5,494	57	55	17	74,228
Qualifying revolving retail	-	11,652	2,643	2,447	465	64	2	17,273
Other retail	54	-	301	2,456	297	32	2	3,142
Total	55,834	20,124	7,297	10,397	819	151	21	94,643
Exposure - weighted average EAD (\$M)								
Residential mortgage	0.243	0.284	0.251	0.227	0.239	0.242	0.257	0.251
Qualifying revolving retail	-	0.010	0.009	0.009	0.008	0.008	0.009	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	20.2	20.6	21.1	20.4	20.2	20.3	20.4
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	99.0	99.6	99.1	98.5
Exposure - weighted average risk weight (%) <sup>(2)</sup>								
Residential mortgage	5.0	14.1	21.5	33.0	93.8	125.7	165.3	20.3
Qualifying revolving retail	-	5.3	13.4	45.0	132.7	219.3	325.2	32.5
Other retail	26.3	-	75.3	118.6	149.5	202.0	282.2	127.5

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

(2) Excludes 1.06 scaling factor.

## Credit Risk

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

	30 June 2016							
	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	147,436	147,136	86,308	120,759	5,925	9,452	3,316	520,332
Qualifying revolving retail	-	14,390	3,652	5,704	2,874	547	158	27,325
Other retail	58	-	349	8,268	1,706	586	143	11,110
Total	147,494	161,526	90,309	134,731	10,505	10,585	3,617	558,767
Undrawn commitments <sup>(1)</sup>								
Residential mortgage	54,121	8,633	3,731	6,368	126	56	14	73,049
Qualifying revolving retail	-	11,562	2,741	2,573	489	69	2	17,436
Other retail	55	-	310	2,476	293	29	3	3,166
Total	54,176	20,195	6,782	11,417	908	154	19	93,651
Exposure - weighted average EAD (\$M)								
Residential mortgage	0.239	0.275	0.269	0.213	0.216	0.248	0.257	0.246
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	20.2	20.3	21.1	21.1	20.1	20.2	20.4
Qualifying revolving retail	-	88.0	88.0	88.0	88.0	88.0	88.0	88.0
Other retail	108.2	-	108.6	97.7	99.0	99.5	99.1	98.4
Exposure - weighted average risk weight (%) <sup>(2)</sup>								
Residential mortgage	3.1	9.2	14.7	23.8	70.9	100.3	174.1	15.2
Qualifying revolving retail	-	5.3	13.4	45.1	132.4	219.0	323.3	34.2
Other retail	26.2	-	75.3	118.6	149.5	199.9	307.1	128.2

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

(2) Excludes 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

Portfolio Type	30 June 2017		
	Full year losses in reporting period		
	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
<b>Total corporate including SME and specialised lending</b>	<b>317</b>	<b>(24)</b>	<b>293</b>
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
<b>Total AIRB and specialised lending portfolios</b>	<b>1,199</b>	<b>(190)</b>	<b>1,009</b>

Portfolio Type	31 December 2016		
	Half year losses in reporting period		
	Gross write-offs \$M	Recoveries \$M	Actual losses \$M
Corporate	20	(1)	19
SME corporate	54	(5)	49
SME retail (including SME retail secured by residential mortgages)	24	(6)	18
Specialised lending	24	-	24
<b>Total corporate including SME and specialised lending</b>	<b>122</b>	<b>(12)</b>	<b>110</b>
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	56	(2)	54
Qualifying revolving retail	163	(40)	123
Other retail	213	(43)	170
<b>Total AIRB and specialised lending portfolios</b>	<b>554</b>	<b>(97)</b>	<b>457</b>

Portfolio Type	30 June 2016		
	Full year losses in reporting period		
	Gross write-offs \$M	Recoveries \$M	Actual losses \$M
Corporate	124	(35)	89
SME corporate	124	(6)	118
SME retail (including SME retail secured by residential mortgages)	86	(12)	74
Specialised lending	48	-	48
<b>Total corporate including SME and specialised lending</b>	<b>382</b>	<b>(53)</b>	<b>329</b>
Sovereign	-	-	-
Bank	-	-	-
Residential mortgage (excluding SME retail secured by residential mortgages)	86	(4)	82
Qualifying revolving retail	335	(71)	264
Other retail	375	(75)	300
<b>Total AIRB and specialised lending portfolios</b>	<b>1,178</b>	<b>(203)</b>	<b>975</b>

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

Portfolio Type	30 June 2017	
	Full year	Regulatory
	actual loss	one year expected loss estimate
	\$M	\$M
Corporate	112	726
SME corporate	98	732
SME retail (including SME retail secured by residential mortgages)	38	128
Specialised lending	45	874
<b>Total corporate including SME and specialised lending</b>	<b>293</b>	<b>2,460</b>
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
<b>Total AIRB and specialised lending portfolios</b>	<b>1,009</b>	<b>4,736</b>

Portfolio Type	31 December 2016	
	Half year	Regulatory
	actual loss	one year expected loss estimate
	\$M	\$M
Corporate	19	729
SME corporate	49	761
SME retail (including SME retail secured by residential mortgages)	18	128
Specialised lending	24	905
<b>Total corporate including SME and specialised lending</b>	<b>110</b>	<b>2,523</b>
Sovereign	-	8
Bank	-	143
Residential mortgage (excluding SME retail secured by residential mortgages)	54	1,003
Qualifying revolving retail	123	509
Other retail	170	512
<b>Total AIRB and specialised lending portfolios</b>	<b>457</b>	<b>4,698</b>

Portfolio Type	30 June 2016	
	Full year	Regulatory
	actual loss	one year expected loss estimate
	\$M	\$M
Corporate	89	595
SME corporate	118	589
SME retail (including SME retail secured by residential mortgages)	74	137
Specialised lending	48	846
<b>Total corporate including SME and specialised lending</b>	<b>329</b>	<b>2,167</b>
Sovereign	-	7
Bank	-	143
Residential mortgage (excluding SME retail secured by residential mortgages)	82	1,032
Qualifying revolving retail	264	547
Other retail	300	534
<b>Total AIRB and specialised lending portfolios</b>	<b>975</b>	<b>4,430</b>

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 9 financial years to 30 June 2017. 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**

Portfolio Type	As at 30 June 2017	
	Average estimated PD	Average actual PD
	%	%
Corporate	1.33	0.89
SME corporate	2.23	1.94
SME retail (including SME retail secured by residential mortgages)	1.77	0.87
Specialised lending <sup>(1)</sup>	n/a	1.57
Sovereign <sup>(2)</sup>	0.62	0.02
Bank <sup>(2)</sup>	0.29	0.26
Residential mortgage (excluding SME retail secured by residential mortgages)	0.87	0.74
Qualifying revolving retail	1.94	2.04
Other retail	4.83	4.53

(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 2015 financial years. LGDs for retail portfolios are based on accounts that defaulted in 2009 to 2016 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**

Portfolio Type	As at 30 June 2017		
	Average estimated downturn LGD	Average actual LGD	Ratio of estimated EAD to actual EAD
	%	%	
Corporate	55.0	39.9	1.1
SME corporate	33.1	21.1	1.1
SME retail (including SME retail secured by residential mortgages)	31.6	20.9	1.2
Specialised lending <sup>(1)</sup>	n/a	33.5	1.1
Sovereign	61.3	1.3	1.8
Bank <sup>(2)</sup>	65.4	109.9	1.8
Residential mortgage (excluding SME retail secured by residential mortgages) <sup>(3)</sup>	20.8	6.3	1.0
Qualifying revolving retail	87.2	69.7	1.1
Other retail	96.6	77.3	1.0

(1) Average estimated LGD is not relevant for specialised lending under Supervisory Slotting approach.

(2) Actual LGDs for Banks 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 circumstances where acceptable and appropriate collateral is to be taken to mitigate credit risk, including valuation parameters, review frequency and independence of valuation. The Chief Credit Officer (or delegate) is responsible for approving acceptable collateral types.

The type, liquidity, carrying and realisation costs on collateral held 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 regularly updates;
- Insurance - steps are taken to ensure that the commercial property taken as collateral is adequately insured against damage or destruction;
- 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 security 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.

All home loans are secured by fixed charges over borrowers' residential properties, other properties (including commercial and broad acre), or cash (usually in the form of a charge over a deposit). Further, 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 100% of the principal amount at default plus interest.

#### Non-Real Estate Collateral

Non-real estate collateral values are only extended for LGD purposes where there is a sound process for determining the value of the collateral. Monitoring processes appropriate for the specific exposures attributable to the collateral 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);
- Guarantees by company directors supporting commercial lending;
- 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 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, after applying the 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 (aggregated) counterparties 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 PD 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 2017					
	Total exposure <sup>(1)</sup>	Eligible financial collateral	Exposures covered by guarantees	Exposures covered by credit derivatives	Coverage
	\$M	\$M	\$M	\$M	%
<b>Advanced approach<sup>(2)</sup></b>					
Corporate	130,542	-	1,374	117	1.1
SME corporate	54,952	-	-	-	-
SME retail <sup>(3)</sup>	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	-	-	-	-
<b>Total advanced approach</b>	<b>921,641</b>	<b>-</b>	<b>1,935</b>	<b>457</b>	<b>0.3</b>
<b>Specialised lending</b>	<b>67,045</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Standardised approach</b>					
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	-	-	-	-
<b>Total standardised approach</b>	<b>39,064</b>	<b>32</b>	<b>-</b>	<b>-</b>	<b>0.1</b>
<b>Total exposures</b>	<b>1,027,750</b>	<b>32</b>	<b>1,935</b>	<b>457</b>	<b>0.2</b>

31 December 2016					
	Total exposure <sup>(1)</sup>	Eligible financial collateral	Exposures covered by guarantees	Exposures covered by credit derivatives	Coverage
	\$M	\$M	\$M	\$M	%
<b>Advanced approach<sup>(2)</sup></b>					
Corporate	131,898	-	1,728	6	1.3
SME corporate	54,659	-	-	-	-
SME retail <sup>(3)</sup>	16,171	-	-	-	-
Sovereign	86,932	-	-	-	-
Bank	44,593	-	754	425	2.6
Residential mortgage	537,699	-	-	-	-
Qualifying revolving retail	27,298	-	-	-	-
Other retail	11,080	-	-	-	-
<b>Total advanced approach</b>	<b>910,330</b>	<b>-</b>	<b>2,482</b>	<b>431</b>	<b>0.3</b>
<b>Specialised lending</b>	<b>68,794</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Standardised approach</b>					
Corporate	1,158	-	-	-	-
SME corporate	595	1	-	-	0.2
SME retail	6,076	5	-	-	0.1
Sovereign	503	-	-	-	-
Bank	565	-	-	-	-
Residential mortgage	11,111	-	-	-	-
Other retail	2,773	-	-	-	-
Other assets	10,321	-	-	-	-
Central clearing counterparties	5,086	-	-	-	-
<b>Total standardised approach</b>	<b>38,188</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total exposures</b>	<b>1,017,312</b>	<b>6</b>	<b>2,482</b>	<b>431</b>	<b>0.3</b>

(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.

## Credit Risk

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

	30 June 2016				
	<b>Total exposure</b> <sup>(1)</sup>	<b>Eligible financial collateral</b>	<b>Exposures covered by guarantees</b>	<b>Exposures covered by credit derivatives</b>	<b>Coverage</b>
	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>%</b>
<b>Advanced approach</b> <sup>(2)</sup>					
Corporate	115,795	-	958	8	0.8
SME corporate	46,892	-	-	-	-
SME retail <sup>(3)</sup>	16,113	-	-	-	-
Sovereign	79,682	-	-	-	-
Bank	41,615	-	475	689	2.8
Residential mortgage	520,332	-	-	-	-
Qualifying revolving retail	27,325	-	-	-	-
Other retail	11,110	-	-	-	-
<b>Total advanced approach</b>	<b>858,864</b>	<b>-</b>	<b>1,433</b>	<b>697</b>	<b>0.3</b>
<b>Specialised lending</b>	<b>67,298</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Standardised approach</b>					
Corporate	11,041	145	-	-	1.3
SME corporate	4,105	15	-	-	0.4
SME retail	6,117	5	-	-	0.1
Sovereign	536	-	-	-	-
Bank	680	-	-	-	-
Residential mortgage	13,721	9	-	-	0.1
Other retail	2,738	-	-	-	-
Other assets	10,933	-	-	-	-
Central clearing counterparties	6,823	-	-	-	-
<b>Total standardised approach</b>	<b>56,694</b>	<b>174</b>	<b>-</b>	<b>-</b>	<b>0.3</b>
<b>Total exposures</b>	<b>982,856</b>	<b>174</b>	<b>1,433</b>	<b>697</b>	<b>0.2</b>

(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 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.

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 possible thresholds 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 2017, the maximum additional collateral that could be posted to other counterparties based on the Group's current rating is \$477 million. As at 30 June 2017, a unilateral one-notch and two-notch downgrade in the Group's rating would have resulted in a further \$480 million and \$560 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.



## Credit Risk

**APS 330 Table 11b (i) Counterparty credit risk derivative exposure under the current exposure method** <sup>(1)</sup>

	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
Gross positive fair value	29,779	45,579	45,165
Netting benefits	(18,110)	(25,708)	(23,347)
Netted current credit exposure	11,669	19,871	21,818
Collateral held, of which:			
Cash	(6,649)	(10,241)	(10,608)
Net derivatives credit exposure	5,020	9,630	11,210
Potential Future Exposure under the Current Exposure Method	14,009	15,705	15,607
<b>Exposure at Default</b>	<b>19,029</b>	<b>25,335</b>	<b>26,817</b>

(1) Excluding exposures to CCPs.

**APS 330 Table 11b (ii) Counterparty credit risk derivative exposure** <sup>(1)</sup>

	Current Credit Exposure	Current Credit Exposure	Current Credit Exposure
	30 Jun 17	31 Dec 16	30 Jun 16
Exposure type	\$M	\$M	\$M
Interest rate contracts	8,444	10,110	14,823
Foreign currency contracts	20,540	34,741	28,644
Equity contracts	6	6	9
Credit derivatives	48	46	47
Commodities and other	741	676	1,642
<b>Total</b>	<b>29,779</b>	<b>45,579</b>	<b>45,165</b>

(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
<b>Notional Value by Product type as at 30 June 17</b> <sup>(1) (2)</sup>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Credit default swaps	893	-	102	3,616
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
<b>Total</b>	<b>893</b>	<b>-</b>	<b>102</b>	<b>3,616</b>

	Own Credit Portfolio as		Intermediation Activity as	
	Protection buyer	Protection seller	Protection buyer	Protection seller
<b>Notional Value by Product type as at 31 December 16</b> <sup>(1) (2)</sup>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Credit default swaps	872	-	624	4,336
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
<b>Total</b>	<b>872</b>	<b>-</b>	<b>624</b>	<b>4,336</b>

	Own Credit Portfolio as		Intermediation Activity as	
	Protection buyer	Protection seller	Protection buyer	Protection seller
<b>Notional Value by Product type as at 30 June 16</b> <sup>(1) (2)</sup>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>	<b>\$M</b>
Credit default swaps	897	-	3,148	3,549
Total return swaps	-	-	-	-
Credit options	-	-	-	-
Other	-	-	-	-
<b>Total</b>	<b>897</b>	<b>-</b>	<b>3,148</b>	<b>3,549</b>

(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 - where assets are sold to a Special Purpose Vehicle (SPV), which issues notes in different tranches with different risk and return profiles. Cash flow arising from those assets is used by the SPV to pay the coupons and principal on the notes issued by the SPV; or
- Synthetic transactions - where only the underlying credit risk or part of the credit risk is transferred to a third party without the ownership of assets being transferred to the SPV.

### 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 the 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 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). As the Group bears the majority of residual risks and rewards of the SPVs, they are consolidated;
- 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 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 \$49 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 which are consolidated into the Group's financial statements.

### Strategic Issues

For the Group, securitisation has 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 intermediation 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 three approaches the Group uses are the Ratings-Based Approach, the Internal Assessment Approach (IAA) or the Supervisory Formula Approach (SFA).

### IAA Process

The Group may use the IAA methodology for unrated securitisation exposures where the underlying assets are residential mortgages (excluding reverse mortgages), equipment finance, personal loans, trade receivables or auto loans.

IAA Models are developed, audited, reviewed and maintained in accordance with the Bank's Model Policy to ensure appropriate levels of independence, accountability and internal assessment process review.

IAA models must reflect the publicly available methodologies of External Credit Assessment Institutions (ECAI) that rate securitisations for the relevant underlying asset class. If publicly available, the stress factors for determining credit enhancement requirements must be at least as conservative as the rating criteria of those ECAI. The Group may use S&P Global Ratings, Fitch Ratings or Moody's Investors Service criteria.

The internal ratings determined by the IAA models may be used for regulatory and economic capital, as well as for internal risk measurement and reporting. From 1 January 2018, the IAA model will no longer be used for regulatory capital.

## 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 a 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 rating of the securities in a warehouse is 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 and Business Banking Product Risk Debt 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 review (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 monitor 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 an immaterial exposure to resecuritisation transactions and does not actively participate in resecuritisation activity.

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 IAA 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 the Group bears the majority of residual risks and rewards. For regulatory purposes, for the year ended 30 June 2017 the Group achieved capital relief for \$2.4 billion of assets issued externally in RMBS with \$12.7 billion not achieving 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 will 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 2017 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 2017.

Synthetic securitisations are assessed in accordance with the same policies as non-synthetic securitisations. Any derivatives are treated in accordance with the requirements of AASB 139.

Assets are valued according to the normal methods appropriate to the asset class. At both 30 June 2017 and 31 December 2016, the Group had no assets considered to be categorised as awaiting securitisation.

The Group recognises all contractual commitments, such as liquidity lines, and applies the accounting policies as set out in the Group's 2017 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

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

Underlying Asset	31 December 2016			
	Group originated assets	Group originated assets - non	Group originated assets - internal	Third party originated assets
	capital relief <sup>(1)</sup>	capital relief <sup>(2)</sup>	RMBS <sup>(3)</sup>	assets <sup>(4)</sup>
	\$M	\$M	\$M	\$M
Residential mortgage	104	11,411	65,044	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
<b>Total</b>	<b>104</b>	<b>11,411</b>	<b>65,044</b>	<b>-</b>

Underlying Asset	30 June 2016			
	Group originated assets	Group originated assets - non	Group originated assets - internal	Third party originated assets
	capital relief <sup>(1)</sup>	capital relief <sup>(2)</sup>	RMBS <sup>(3)</sup>	assets <sup>(4)</sup>
	\$M	\$M	\$M	\$M
Residential mortgage	836	13,026	84,178	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
<b>Total</b>	<b>836</b>	<b>13,026</b>	<b>84,178</b>	<b>-</b>

(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 2017				
Group originated assets securitised				
Underlying Asset	Outstanding exposure	Impaired	Past due	Losses recognised
	\$M	\$M	\$M	\$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	-

31 December 2016				
Group originated assets securitised				
Underlying Asset	Outstanding exposure	Impaired	Past due	Losses recognised
	\$M	\$M	\$M	\$M
Residential mortgage	76,559	21	458	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	76,559	21	458	-

30 June 2016				
Group originated assets securitised				
Underlying Asset	Outstanding exposure	Impaired	Past due	Losses recognised
	\$M	\$M	\$M	\$M
Residential mortgage	98,040	22	533	-
Credit cards and other personal loans	-	-	-	-
Auto and equipment finance	-	-	-	-
Commercial loans	-	-	-	-
Other	-	-	-	-
Total	98,040	22	533	-

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 2017.

## Credit Risk

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

The Group securitised \$8,089 million new exposures in the banking book during the full year ended 30 June 2017.

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

Underlying Asset	Half year ended 31 December 2016	
	Total exposures securitised	Recognised gain or loss on sale
	\$M	\$M
Residential mortgages	750	-
Credit cards and other personal loans	-	-
Auto and equipment finance	-	-
Commercial loans	64	-
Other	-	-
<b>Total</b>	<b>814</b>	<b>-</b>

Underlying Asset	Full year ended 30 June 2016	
	Total exposures securitised	Recognised gain or loss on sale
	\$M	\$M
Residential mortgages	5,557	-
Credit cards and other personal loans	-	-
Auto and equipment finance	275	-
Commercial loans	-	-
Other	-	-
<b>Total</b>	<b>5,832</b>	<b>-</b>



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

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	-	-	-
<b>Total securitisation exposures in the banking book</b>	<b>11,745</b>	<b>3,033</b>	<b>14,778</b>

31 December 2016			
Securitisation Facility Type	On Balance Sheet \$M	Off Balance Sheet \$M	Total exposures \$M
Liquidity support facilities	-	108	108
Warehouse facilities	3,861	2,471	6,332
Derivative facilities	2	-	2
Holdings of securities	7,759	-	7,759
Other	-	-	-
<b>Total securitisation exposures in the banking book</b>	<b>11,622</b>	<b>2,579</b>	<b>14,201</b>

30 June 2016			
Securitisation Facility Type	On Balance Sheet \$M	Off Balance Sheet \$M	Total exposures \$M
Liquidity support facilities	-	110	110
Warehouse facilities	4,037	1,789	5,826
Derivative facilities	16	-	16
Holdings of securities	7,995	-	7,995
Other	-	-	-
<b>Total securitisation exposures in the banking book</b>	<b>12,048</b>	<b>1,899</b>	<b>13,947</b>

## Credit Risk

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

Total securitisation exposures in the banking book increased by \$831 million or 6.0% during the full year ended 30 June 2017. The corresponding RWA increased by \$73 million or 4.8%, mainly due to overall growth in warehouse exposures.

30 June 2017						
Risk Weight Band	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
	\$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
<b>Total</b>	<b>14,778</b>	<b>-</b>	<b>14,778</b>	<b>1,582</b>	<b>-</b>	<b>1,582</b>

31 December 2016						
Risk Weight Band	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	14,024	-	14,024	1,465	-	1,465
> 25% ≤ 35%	30	-	30	11	-	11
> 35% ≤ 50%	125	-	125	62	-	62
> 50% ≤ 75%	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-
> 650% ≤ 1250%	5	17	22	4	29	33
<b>Total</b>	<b>14,184</b>	<b>17</b>	<b>14,201</b>	<b>1,542</b>	<b>29</b>	<b>1,571</b>

30 June 2016						
Risk Weight Band	Exposures		Total	Risk Weighted Assets		Total
	Securitisation	Resecuritisation	exposures	Securitisation	Resecuritisation	RWA
	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	13,716	-	13,716	1,356	-	1,356
> 25% ≤ 35%	35	-	35	12	-	12
> 35% ≤ 50%	160	-	160	80	-	80
> 50% ≤ 75%	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-
> 650% ≤ 1250%	16	20	36	-	61	61
<b>Total</b>	<b>13,927</b>	<b>20</b>	<b>13,947</b>	<b>1,448</b>	<b>61</b>	<b>1,509</b>

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

Total securitisation exposures deducted from Tier 1 and Tier 2 Capital decreased by \$12 million during the full year ended 30 June 2017, mainly due to the overall run-off of subordinated tranches.

Underlying Asset	Common Equity Tier 1 Capital		
	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
Residential mortgage	19	19	31
Credit cards and other personal loans	-	-	-
Auto and equipment finance	-	-	-
Commercial loans	-	-	-
Other	-	-	-
<b>Total</b>	<b>19</b>	<b>19</b>	<b>31</b>

**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 securitisation exposures**

As at 30 June 2017, banking book securitisation exposures without credit risk mitigation was \$nil (31 December 2016: \$17 million, 30 June 2016: \$20 million).

The Group did not have any securitisation 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 2017.

**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 2017, relating to \$21 million residential mortgages (31 December 2016: \$1 million, 30 June 2016: \$29 million), \$2 million auto and equipment finance (31 December 2016: \$2 million, 30 June 2016: \$nil), and \$1 million personal finance (31 December 2016: \$nil million) 30 June 2016: \$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 \$20 million as at 30 June 2017 (31 December 2016: \$11 million, 30 June 2016: \$20 million), all of which are traditional securitisations. This consists of:

- Securities held in the trading book subject to the Standard Method of \$10 million (31 December 2016: \$nil, 30 June 2016: \$5 million); and
- Derivatives held in the trading book subject to the Internal Models Approach (IMA) of \$10 million (31 December 2016: \$11 million, 30 June 2016: \$15 million).

## Credit Risk

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

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

Securitisation Facility Type	31 December 2016		
	On Balance Sheet	Off Balance Sheet	Total exposures
	\$M	\$M	\$M
Liquidity support facilities	-	-	-
Warehouse facilities	-	-	-
Derivative facilities	3	8	11
Holdings of securities	-	-	-
Other	-	-	-
<b>Total securitisation exposures in the trading book</b>	<b>3</b>	<b>8</b>	<b>11</b>

Securitisation Facility Type	30 June 2016		
	On Balance Sheet	Off Balance Sheet	Total exposures
	\$M	\$M	\$M
Liquidity support facilities	-	-	-
Warehouse facilities	-	-	-
Derivative facilities	7	8	15
Holdings of securities	5	-	5
Other	-	-	-
<b>Total securitisation exposures in the trading book</b>	<b>12</b>	<b>8</b>	<b>20</b>

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

The Group has \$10 million of derivatives exposures held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2017 (31 December 2016: \$11 million, 30 June 2016: \$15 million).

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

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

Risk Weight Band	31 December 2016			
	IAA Approach	RBA Approach	SFA Approach	Total exposures
	\$M	\$M	\$M	\$M
≤ 25%	-	-	11	11
> 25% ≤ 35%	-	-	-	-
> 35% ≤ 50%	-	-	-	-
> 50% ≤ 75%	-	-	-	-
> 75% ≤ 100%	-	-	-	-
> 100% ≤ 650%	-	-	-	-
> 650% ≤ 1250%	-	-	-	-
<b>Total</b>	-	-	11	11

Risk Weight Band	30 June 2016			
	IAA Approach	RBA Approach	SFA Approach	Total exposures
	\$M	\$M	\$M	\$M
≤ 25%	-	3	17	20
> 25% ≤ 35%	-	-	-	-
> 35% ≤ 50%	-	-	-	-
> 50% ≤ 75%	-	-	-	-
> 75% ≤ 100%	-	-	-	-
> 100% ≤ 650%	-	-	-	-
> 650% ≤ 1250%	-	-	-	-
<b>Total</b>	-	3	17	20

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

The Group has \$212 million of RWA held in the trading book subject to IMA (default risk) under APS 116 as at 30 June 2017 (31 December 2016: \$194 million, 30 June 2016: \$185 million).

## Credit Risk

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

30 June 2017										
Risk Weight Band	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
	\$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%	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	1	-	1	-	-	-	2	-

31 December 2016										
Risk Weight Band	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M	\$M
≤ 25%	-	-	-	-	1	-	-	-	1	-
> 25% ≤ 35%	-	-	-	-	-	-	-	-	-	-
> 35% ≤ 50%	-	-	-	-	-	-	-	-	-	-
> 50% ≤ 75%	-	-	-	-	-	-	-	-	-	-
> 75% ≤ 100%	-	-	-	-	-	-	-	-	-	-
> 100% ≤ 650%	-	-	-	-	-	-	-	-	-	-
> 650% ≤ 1250%	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	1	-	-	-	1	-

30 June 2016										
Risk Weight Band	IAA Approach		RBA Approach		SFA Approach		Standardised Approach		Total Capital Requirements	
	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation	Securitisation	Resecuritisation
	\$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%	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	-	-	-	-	2	-	-	-	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 2017 (31 December 2016: \$nil; 30 June 2016: \$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 securitisation exposures**

The Group did not have any trading book securitisation exposures without credit risk mitigation as at 30 June 2017 (31 December 2016: \$nil; 30 June 2016: \$nil).

The Group did not have any securitisation 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 recognised gain or loss 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 2017 was \$8,113 million (30 June 2016: \$5,862 million). The total exposures securitised in the half year to 31 December 2016 was \$817 million.

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

Securitisation Facility Type	As at 30 June 2017		
	On Balance Sheet	Off Balance Sheet	Total
	\$M	\$M	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	-	-	-
<b>Total securitisation exposures</b>	<b>11,758</b>	<b>3,040</b>	<b>14,798</b>

Securitisation Facility Type	As at 31 December 2016		
	On Balance Sheet	Off Balance Sheet	Total
	\$M	\$M	exposures \$M
Liquidity support facilities	-	108	108
Warehouse facilities	3,861	2,471	6,332
Derivative facilities	5	8	13
Holdings of securities	7,759	-	7,759
Other	-	-	-
<b>Total securitisation exposures</b>	<b>11,625</b>	<b>2,587</b>	<b>14,212</b>

Securitisation Facility Type	As at 30 June 2016		
	On Balance Sheet	Off Balance Sheet	Total
	\$M	\$M	exposures \$M
Liquidity support facilities	-	110	110
Warehouse facilities	4,037	1,789	5,826
Derivative facilities	23	8	31
Holdings of securities	8,000	-	8,000
Other	-	-	-
<b>Total securitisation exposures</b>	<b>12,060</b>	<b>1,907</b>	<b>13,967</b>

# Equity Risk

## 9 Equity Risk

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

The Group holds equity investments in the banking book for both capital gain and strategic reasons. Equity investments acquired for strategic reasons require approval from the relevant Finance and Risk management functions, including governance by the 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 as discussed above.

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 2017	
	Balance	Fair
	Sheet value	value
	\$M	\$M
<b>Equity Investments</b>		
Value of listed (publicly traded) equities	1,412	1,882
Value of unlisted (privately held) equities	1,213	1,459
<b>Total</b>	2,625	3,341

	31 December 2016	
	Balance	Fair
	Sheet value	value
	\$M	\$M
<b>Equity Investments</b>		
Value of listed (publicly traded) equities	1,442	1,968
Value of unlisted (privately held) equities	1,295	1,620
<b>Total</b>	2,737	3,588

	30 June 2016	
	Balance	Fair
	Sheet value	value
	\$M	\$M
<b>Equity Investments</b>		
Value of listed (publicly traded) equities	461	461
Value of unlisted (privately held) equities	2,651	2,669
<b>Total</b>	3,112	3,130

	Half year ended		
	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Gains/(Losses) on Equity Investments</b>			
Cumulative realised gains in reporting period	20	427	140
Total unrealised (losses)/gains	(46)	58	552



## 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 underlying 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 Risk Committee and is expressed via its 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 also conform to prudential regulatory requirements.

The market risk profile of the Group is overseen by the Risk Committee and the senior executive management of the Group 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 areas support 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 areas are responsible for the daily monitoring and analysis of risk positions. Senior Management oversees market risk performance against risk and return expectations on a monthly basis. The 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.

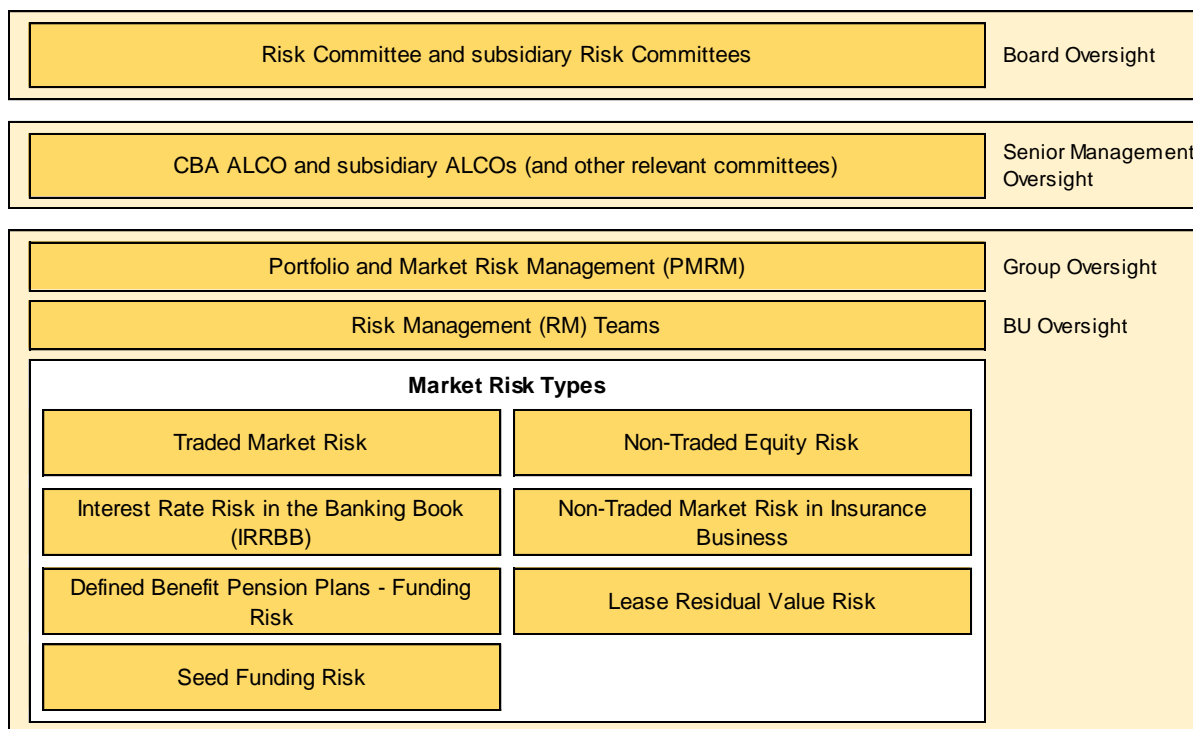
Stressed VaR is calculated for Traded market risk using the same methodology as the regular Traded market risk VaR except that the historical data is taken from a one year observation period of significant market volatility as seen during the Global Financial Crisis (GFC).

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 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 institutional, corporate, middle market and retail customers.

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 Risk Committee. Risk is monitored by the independent Market Risk Oversight function.

CVA is comparable to Traded market risk and is managed using a VaR and stress-testing framework. The Risk Committee and the Group's ALCO regularly monitor CVA exposures. Daily oversight is managed by the independent Market Risk Oversight function. The Basel III framework has required a CVA regulatory capital charge since 1 January 2013.

#### 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.

	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Traded Market Risk RWA by Modelling Approach <sup>(1)</sup></b>			
Internal Model Approach	3,727	4,863	7,469
Standard Method	923	844	1,970
<b>Total Traded Market Risk RWA</b>	<b>4,650</b>	<b>5,707</b>	<b>9,439</b>

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**

	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Exposure Type</b>			
Interest rate risk	72.8	66.9	84.2
Equity risk	0.3	0.5	73.3
Foreign exchange risk	0.7	0.1	0.1
Commodity risk	-	-	-
<b>Total</b>	<b>73.8</b>	<b>67.5</b>	<b>157.6</b>
<b>Risk Weighted Asset equivalent <sup>(1)</sup></b>	<b>923</b>	<b>844</b>	<b>1,970</b>

(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 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			
	Mean value	Maximum value	Minimum value	As at balance date
	\$M	\$M	\$M	\$M
<b>Average VaR <sup>(1)</sup></b>				
Over the 6 months to 30 June 2017	27	36	19	33
Over the 6 months to 31 December 2016	66	135	25	29
Over the 6 months to 30 June 2016	71	127	29	127
	Aggregate SVaR Over the Reporting Period			
	Mean value	Maximum value	Minimum value	As at balance date
	\$M	\$M	\$M	\$M
<b>Stressed VaR <sup>(1)</sup></b>				
Over the 6 months to 30 June 2017	69	104	43	74
Over the 6 months to 31 December 2016	113	172	67	95
Over the 6 months to 30 June 2016	128	178	79	110

(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 2017 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 2017 is illustrated in APS 330 Table 14f (iv).

**APS 330 Table 14f(ii) - Summary Table of the Number of Back-Testing Outliers <sup>(1)</sup>**

Over the 6 months to 30 June 2017	-
Over the 6 months to 31 December 2016	-
Over the 6 months to 30 June 2016	1

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

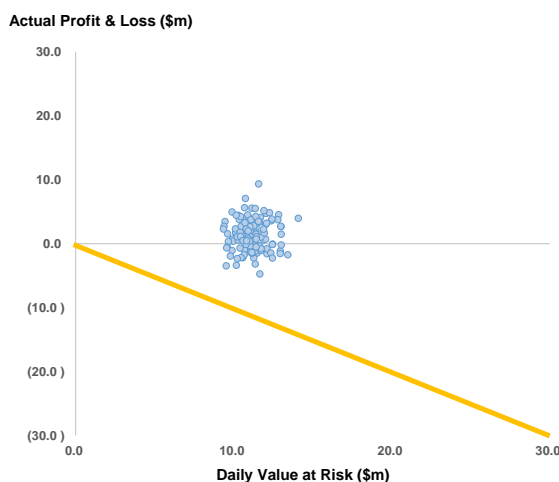
# Market Risk

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

Over the Reporting Period January 2017 to 30 June 2017		
	Hypothetical loss	VaR 99%
Date	\$M	\$M
	-	-
Over the Reporting Period 1 July 2016 to 31 December 2016		
	Hypothetical loss	VaR 99%
Date	\$M	\$M
	-	-
Over the Reporting Period 1 January 2016 to 30 June 2016		
	Hypothetical loss	VaR 99%
Date	\$M	\$M
21 January 2016	(9.6)	(8.1)

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

1 January 2017 to 30 June 2017



## 10.2 Non-Traded Market Risk

Non-traded market risk activities are governed by the Group market risk framework approved by the 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 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		
	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
<b>Stress Testing: Interest Rate Shock Applied</b>			
<b>AUD</b>			
200 basis point parallel increase	(1,140)	(1,171)	(1,068)
200 basis point parallel decrease	1,192	1,147	1,205
<b>NZD</b>			
200 basis point parallel increase	(251)	(283)	(264)
200 basis point parallel decrease	267	301	282
<b>USD</b>			
200 basis point parallel increase	(89)	-	-
200 basis point parallel decrease	96	-	-
<b>Other</b>			
200 basis point parallel increase	(18)	(18)	(18)
200 basis point parallel decrease	18	18	18
<b>Regulatory RWA <sup>(1)</sup></b>			
	\$M	\$M	\$M
Interest rate risk in the banking book	21,404	23,498	7,448

(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 through business activities in Wealth Management. This activity is subject to governance arrangements approved by the Risk Committee, and is monitored within the 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 2017 VaR measure is \$26 million (30 June 2016: \$34 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 2017.

## 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 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 Human Resources provide oversight of the market risks of the Fund held and managed on behalf of the employees receiving defined benefit pension funds on behalf of the Group. Regular reporting is provided to senior management via the Group's ALCO and the Risk Committee on the status of the surplus, risk sensitivities and risk management options. For further information on the Fund, refer to Note 35 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. The Group continually faces issues or incidents that have the potential to disrupt normal business operations, exposing the Group to loss, reputation and/or regulatory scrutiny.

### Operational Risk Objectives

The Group's operational risk objectives 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 Group continues to enhance the ORMF, supported by its strategic investment into a single platform (internally referred to as RiskInSite) to enable: consistent application of the ORMF across the Group; transparency; reporting of risk management activities for business management; and monitoring and review activities.

### 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.

The Group's Compliance Risk Management Framework (CRMF) is consistent with the Australian Standard on Compliance Programs and is designed 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 supports the Group's compliance with obligations in offshore jurisdictions in which it operates. The CRMF incorporates key mandatory requirements and roles and responsibilities for achieving compliance. It captures Compliance Obligations, 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.

### 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 Defence" as per section 7.2.

### Operational Risk Policies

There are several areas within the Group responsible for providing policies and guidance to reduce the likelihood of an operational risk event occurring and actions that can be taken when the event occurs. These areas may also issue policies to communicate the Group's requirements for managing selected risks.

### 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 Group appoints an external advisor to provide insurance risk management advice and to deliver the optimal insurance program. The insurance program is subject to review by the Executive Committee, the Risk Committee and the Board.

### Capital Measurement Approach

Capital attributed to operational risks is calculated according to the Group's Economic Capital Framework using the Group's AMA methodology for operational risk.

The Group follows a mathematically determined loss distribution approach to measure operational risk. This involves separate modelling of the frequency and severity of risks at a component level and then aggregating the simulated losses from these components into loss distributions. Monte Carlo simulations are used to produce regulatory and economic capital results for the Group and each business.

This modelling system has been subject to review by APRA and other independent third parties. The operational risk measurement approach integrates the use of relevant factors as follows:

#### Direct inputs

- Scenario analysis to capture business judgments (also called Quantitative Risk Assessments); and
- Internal loss data.

#### Indirect inputs

- External loss data (sourced from external providers such as Operational Riskdata eXchange association (ORX));
- Business environment and internal control factors; and
- Judgmental overlays and benchmarks.

## 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 this information is used to assist risk review and to drive risk-adjusted performance management metrics for 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. During March 2016, APRA granted the Group permission to apply its new proposed Advanced Measurement Approach model for Operational Risk capital. The new model covers overseas operations which were previously computed using the Standardised Approach.

**APS330 Table 6e - Capital requirements for operational risk**

	30 Jun 17	31 Dec 16	30 Jun 16
	\$M	\$M	\$M
Total operational risk RWA <sup>(1)</sup>	33,750	33,750	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. Group 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;
- Additional internal funding and liquidity metrics are also 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 as required. 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 securitisation program.

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

## Liquidity Risk

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 \$37 billion over the June quarter. Higher liquid assets and lower Net Cash Outflows (NCOs) over the quarter saw an increase in the LCR from 124% to 135%. The Group's mix of liquid assets consists of High Quality Liquid Assets, 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 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. The composition of the liquid asset portfolio has remained relatively stable over the June quarter.

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 \$9 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 secured and unsecured wholesale funding fell by \$7 billion driven by seasonally high maturities as at 31 March 2017 and lower than average maturities as at 30 June 2017.

**APS 330 Table 20 - LCR disclosure template**

	30 Jun 17	30 Jun 17	31 Mar 17	31 Mar 17
	Total	Total	Total	Total
	unweighted	weighted	unweighted	weighted
	value	value	value	value
	(average) <sup>(1)</sup>	(average) <sup>(1)</sup>	(average) <sup>(1)</sup>	(average) <sup>(1)</sup>
	\$M	\$M	\$M	\$M
<b>Liquid assets, of which:</b>				
1 High-quality liquid assets (HQLA)		95,755		93,978
2 Alternative liquid assets (ALA)		42,412		43,154
3 Reserve Bank of New Zealand (RBNZ) securities		6,511		6,440
<b>Cash outflows</b>				
4 Retail deposits and deposits from small business customers, of which:	274,607	23,755	272,439	22,893
5 Stable deposits	157,361	7,868	159,611	7,981
6 Less stable deposits	117,246	15,887	112,828	14,912
7 Unsecured wholesale funding, of which:	122,440	67,157	126,561	72,101
8 Operational deposits (all counterparties) and deposits in networks for cooperative banks	25,398	6,243	24,744	6,079
9 Non-operational deposits (all counterparties)	86,761	50,633	86,759	50,964
10 Unsecured debt	10,281	10,281	15,058	15,058
11 Secured wholesale funding		1,414		3,568
12 Additional requirements, of which:	165,356	23,823	165,025	25,084
13 Outflows related to derivatives exposures and other collateral requirements	7,098	7,098	8,121	8,121
14 Outflows related to loss of funding on debt products	-	-	-	-
15 Credit and liquidity facilities	158,258	16,725	156,904	16,963
16 Other contractual funding obligations	2,849	52	2,898	95
17 Other contingent funding obligations	84,712	10,525	86,097	10,690
<b>18 Total cash outflows</b>		126,726		134,431
<b>Cash inflows</b>				
19 Secured lending	15,016	3,555	14,400	3,564
20 Inflows from fully performing exposures	11,542	8,287	10,626	7,628
21 Other cash inflows	7,408	7,408	6,969	6,969
<b>22 Total cash inflows</b>	33,966	19,250	31,995	18,161
<b>23 Total liquid assets</b>		144,678		143,572
<b>24 Total net cash outflows</b>		107,476		116,270
<b>25 Liquidity Coverage Ratio (%)</b>		135		124
<b>Number of data points used (Business Days)</b>		61		63

(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 capital disclosures detailed in the template below represent the post 1 January 2018 Basel III common disclosure requirements. 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.

	30 Jun 17 Basel III APRA	30 Jun 17 Basel III Internationally Comparable
Summary Group Capital Adequacy Ratios (Level 2)	%	%
CET1	10.1	15.6
Tier 1	12.1	18.0
Total Capital	14.2	20.4

	30 Jun 17 Basel III \$M	Reconciliation Table Reference
<b>Common Equity Tier 1 Capital: instruments and reserves</b>		
1 Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	35,067	Table A
2 Retained earnings	25,793	
3 Accumulated other comprehensive income (and other reserves)	1,788	
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	62,648	
<b>Common Equity Tier 1 Capital: regulatory adjustments</b>		
7 Prudential valuation adjustments	-	
8 Goodwill (net of related tax liability)	(7,620)	Table C
9 Other intangibles other than mortgage servicing rights (net of related tax liability)	(2,144)	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	107	
12 Shortfall of provisions to expected losses <sup>(1)</sup>	(630)	
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	(128)	
15 Defined benefit superannuation fund net assets <sup>(2)</sup>	(298)	
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)	51,934	

(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 \$218 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.

# Appendices

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

		30 Jun 17 Reconciliation	
		Basel III	Table
		\$M	Reference
<b>APRA Specific Regulatory Adjustments</b>			
26	National specific regulatory adjustments (rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i, 26j)	-	
26a	of which: treasury shares	199	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	(5,175)	Table G
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	(1,683)	Table D
26f	of which: capitalised expenses	(707)	
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	(124)	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	(285)	
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 <sup>(1)</sup>	(18,489)	
29	CET1 (APRA)	44,159	
<b>Additional Tier 1 Capital: instruments</b>			
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	8,090	Table E
33	Directly issued capital instruments subject to phase out from Additional Tier 1	130	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	8,725	Table E
<b>Additional Tier 1 Capital: regulatory adjustments</b>			
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)	8,525	
45	Tier 1 Capital (T1=CET1+AT1)	52,684	
<b>Tier 2 Capital: instruments and provisions</b>			
46	Directly issued qualifying Tier 2 instruments	7,744	Table F
47	Directly issued capital instruments subject to phase out from Tier 2	1,495	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	182	
51	Tier 2 Capital before regulatory adjustments	9,421	

(1) Total regulatory adjustments to CET1 of \$18,489 million in row 28 is net of APRA's allowance for treasury shares held by the Group's employee share scheme trusts of \$199 million as detailed in row 26a.

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

		30 Jun 17 Reconciliation	
		Basel III	Table
		\$M	Reference
<b>Tier 2 Capital: regulatory adjustments</b>			
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)	(14)	
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	(29)	
58	Tier 2 Capital (T2)	9,392	
59	Total Capital (TC=T1+T2)	62,076	
60	Total risk weighted assets based on APRA standards	437,063	
<b>Capital ratios and buffers</b>			
61	Common Equity Tier 1 (as a percentage of risk weighted assets)	10.1%	
62	Tier 1 (as a percentage of risk weighted assets)	12.1%	
63	Total Capital (as a percentage of risk weighted assets)	14.2%	
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) <sup>(1)</sup>	5.6%	
<b>National minima</b>			
69	National Common Equity Tier 1 minimum ratio	-	
70	National Tier 1 minimum ratio	-	
71	National Total Capital minimum ratio	-	
<b>Amount below thresholds for deductions (not risk weighted)</b>			
72	Non-significant investments in the capital of other financial entities	140	Table G
73	Significant investments in the ordinary shares of financial entities	5,035	Table G
74	Mortgage servicing rights (net of related tax liability)	-	
75	Deferred tax assets arising from temporary differences (net of related tax liability)	1,683	Table D
<b>Applicable caps on the inclusion of provisions in Tier 2</b>			
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	182	
77	Cap on inclusion of provisions in Tier 2 under standardised approach	342	
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	2,099	
<b>Capital instruments subject to phase-out arrangements (only applicable between 1 Jan 2018 and 1 Jan 2022)</b>			
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	2,623	
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	1,612	
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	-	Table F

(1) Represents the amount of CET1 over and above the CET1 minimum of 4.5%.

## Appendices

### 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 17
	Basel III
	APRA
	\$M
1 Total consolidated assets as per published financial statements	976,374
2 Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(17,362)
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	489
5 Adjustment for SFTs (i.e. repos and similar secured lending)	1,617
6 Adjustment for Off Balance Sheet exposures (i.e. conversion to credit equivalent amounts of Off Balance Sheet exposures)	86,101
7 Other adjustments	(19,261)
<b>8 Leverage ratio exposure</b>	<b>1,027,958</b>

**APS 330 Table 18 – Leverage ratio disclosure template**

	30 Jun 17
	Basel III
	APRA
	\$M
<b>On Balance Sheet exposures</b>	
1 On Balance Sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	901,631
2 Asset amounts deducted in determining Tier 1 capital	(19,261)
<b>3 Total On Balance Sheet exposures (excluding derivatives and SFTs)</b>	<b>882,370</b>
<b>Derivative exposures</b>	
4 Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	13,604
5 Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	16,798
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	4,023
10 (Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(2,220)
<b>11 Total derivative exposures</b>	<b>32,205</b>
<b>SFT exposures</b>	
12 Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	25,665
13 (Netted amounts of cash payables and cash receivables of gross SFT assets)	-
14 CCR exposure for SFT assets	1,617
15 Agent transaction exposures	-
<b>16 Total SFT exposures</b>	<b>27,282</b>
<b>Other Off Balance Sheet exposures</b>	
17 Off Balance Sheet exposure at gross notional amount	185,132
18 (Adjustments for conversion to credit equivalent amounts)	(99,031)
<b>19 Other Off Balance Sheet exposures</b>	<b>86,101</b>
<b>Capital and total exposures</b>	
20 Tier 1 Capital	52,684
21 Total exposures	1,027,958
<b>Leverage ratio</b>	
22 Leverage ratio (%)	5.1



## 13.3 Regulatory Balance Sheet

The following table provides details on the Commonwealth Bank of Australia Group's Balance Sheet and the Level 2<sup>(1)</sup> Regulatory Balance Sheet as at 30 June 2017.

	Group		Level 2	Template/
	Balance	Adjustment <sup>(2)</sup>	Regulatory	Reconciliation
	Sheet		Sheet	Table
	\$M	\$M	\$M	Reference
<b>Assets</b>				
Cash and liquid assets	45,850	(412)	45,438	
Receivables due from other financial institutions	10,037	(82)	9,955	
Assets at fair value through Income Statement:				
Trading	32,704	(319)	32,385	
Insurance	13,669	(13,669)	-	
Other	1,111	(315)	796	
Derivative assets	31,724	(8)	31,716	
Available-for-sale investments	83,535	(488)	83,047	Table G
Loans, bills discounted and other receivables	731,762	(2,443)	729,319	
Bank acceptances of customers	463	-	463	
Investment in regulatory non-consolidated subsidiaries	-	3,338	3,338	Table G
Property, plant and equipment	3,873	(1,207)	2,666	
Investment in associates and joint ventures	2,778	(190)	2,588	Table G
Intangible assets	10,024	(252)	9,772	Table C
Deferred tax assets	962	464	1,426	Table D
Other assets	7,882	(1,779)	6,103	
<b>Total assets</b>	<b>976,374</b>	<b>(17,362)</b>	<b>959,012</b>	
<b>Liabilities</b>				
Deposits and other public borrowings	626,655	2,387	629,042	
Payables due to other financial institutions	28,432	-	28,432	
Liabilities at fair value through Income Statement	10,392	-	10,392	
Derivative liabilities	30,330	(20)	30,310	
Bank acceptances	463	-	463	
Current tax liabilities	1,450	(44)	1,406	
Deferred tax liabilities	332	(201)	131	Table D
Other provisions	1,780	(320)	1,460	
Insurance policy liabilities	12,018	(12,018)	-	
Debt issues	167,571	(2,494)	165,077	
Managed funds units on issue	2,577	(2,577)	-	
Bills payable and other liabilities	11,932	(1,529)	10,403	
Loan capital	18,726	-	18,726	Table E
<b>Total liabilities</b>	<b>912,658</b>	<b>(16,816)</b>	<b>895,842</b>	
<b>Net assets</b>	<b>63,716</b>	<b>(546)</b>	<b>63,170</b>	
<b>Shareholders' Equity</b>				
Share capital:				
Ordinary share capital	34,971	96	35,067	Row 1, Table A
Reserves	1,869	(81)	1,788	Row 3
Retained profits	26,330	(537)	25,793	Row 2
<b>Shareholders' Equity attributable to Equity holders of the Bank</b>	<b>63,170</b>	<b>(522)</b>	<b>62,648</b>	
Non-controlling interests	546	(24)	522	Table B
<b>Total Shareholders' Equity</b>	<b>63,716</b>	<b>(546)</b>	<b>63,170</b>	

(1) Level 2 Balance Sheet is based on the revised definition of Level 2 Group, following clarification provided by APRA in May 2014. The Group implemented the change effective from 31 December 2016.

(2) 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.

## Appendices

### 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 17 \$M	Template Reference
<b>Share Capital</b>		
Ordinary Share Capital	34,971	
Add Treasury Shares held by the Group's life insurance operations	96	
Total per Balance Sheet (Ordinary Share Capital Internationally Comparable) <sup>(1)</sup>	35,067	Row 1
Treasury Shares held by the Group's employee share scheme trusts (APRA specific adjustment)	199	Row 26a
<b>Total Ordinary Share Capital and Treasury Shares (APRA)</b>	<b>35,266</b>	

**Table B**

	30 Jun 17 \$M	Template Reference
<b>Non-Controlling Interests</b>		
Total per Balance Sheet <sup>(1)</sup>	522	
Less ASB perpetual Shares transferred to Additional Tier 1 Capital (refer Table E)	(505)	
Less other non controlling interests not included in capital	(17)	
<b>Total per Capital Template (APRA and Internationally Comparable)</b>	<b>-</b>	Row 5

**Table C**

	30 Jun 17 \$M	Template Reference
<b>Goodwill &amp; Other Intangibles</b>		
Total per Balance Sheet <sup>(1)</sup>	9,772	
Less capitalised software and other intangibles separately disclosed in template	(2,152)	
<b>Total per Capital Template - Goodwill (APRA and Internationally Comparable)</b>	<b>7,620</b>	Row 8
Other intangibles (including capitalised software) per Balance Sheet	2,152	
Less DTL associated with other intangibles	(8)	
<b>Total per Capital Template - Other Intangibles (APRA and Internationally Comparable)</b>	<b>2,144</b>	Row 9

**Table D**

	30 Jun 17 \$M	Template Reference
<b>Deferred Tax Assets</b>		
Deferred tax assets per Balance Sheet <sup>(1)</sup>	1,426	
Less deferred tax liabilities per Balance Sheet <sup>(1)</sup>	(131)	
<b>Net Deferred Tax Assets <sup>(2)</sup></b>	<b>1,295</b>	
Adjustments required in accordance with APRA prudential standards <sup>(3)</sup>	388	
Deferred tax asset adjustment before applying prescribed thresholds (APRA specific adjustment)	1,683	Row 26e
Less amounts below prescribed threshold - risk weighted <sup>(4)</sup>	(1,683)	Row 75
<b>Total per Capital Template (Internationally Comparable)</b>	<b>-</b>	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 17 \$M	Template Reference
<b>Additional Tier 1 Capital</b>		
Total Loan Capital per Balance Sheet <sup>(1)</sup>	18,726	
Less fair value hedge adjustments <sup>(2)</sup>	(256)	
Total Loan Capital net of issue costs at their contractual values	18,470	
Less amount related to Tier 2 Capital Instruments	(10,310)	
Total Tier 1 Loan Capital	8,160	
Add ASB perpetual Shares transferred from Non-Controlling interest (refer Table B)	505	
Add issue costs <sup>(3)</sup>	60	
Less Basel III transitional relief amortisation for directly issued instruments <sup>(4)</sup>	-	Row 83
Less Basel III transitional relief amortisation for instruments issued by subsidiaries <sup>(4)</sup>	-	Row 83
<b>Total per Capital Template (APRA)</b>	<b>8,725</b>	<b>Row 36</b>
<b>Additional Tier 1 Capital Instruments comprises</b>		
<b>Basel III Complying Instruments</b>		
PERLS VI	2,000	
PERLS VII	3,000	
PERLS VIII	1,450	
PERLS IX	1,640	
	8,090	Row 32
<b>Basel III Non-Complying Instruments</b>		
Other Instruments	130	
Less Basel III transitional relief amortisation for directly issued instruments <sup>(4)</sup>	-	Row 83
	130	Row 33
<b>Basel III Non Complying Instruments - issued by subsidiaries</b>		
ASB preference shares	505	
Less Basel III transitional relief amortisation for instruments issued by subsidiaries <sup>(4)</sup>	-	Row 33
	505	Row 35
<b>Total Basel III Non Complying Instruments</b>	<b>635</b>	
<b>Total Additional Tier 1 Capital Instruments (APRA)</b>	<b>8,725</b>	<b>Row 36</b>

**Table F**

	30 Jun 17 \$M	Template Reference
<b>Tier 2 Capital Instruments</b>		
Total included in Balance Sheet	10,310	
Less amount of Tier 2 debt issued by subsidiary ineligible for inclusion in the Group's Capital <sup>(5)</sup>	(142)	
Add issue costs <sup>(3)</sup>	33	
Less amortisation of instruments <sup>(6)</sup>	(962)	
Less Basel III transitional relief amortisation for directly issued instruments <sup>(4)</sup>	-	Row 85
<b>Total per Capital Template (APRA and Internationally Comparable)</b>	<b>9,239</b>	<b>Row 46, 47</b>

(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](http://www.commbank.com.au/about-us/investors/shareholders).

## Appendices

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

**Table G**

	30 Jun 17 \$M	Template Reference
<b>Equity Investments</b>		
Investment in commercial entities	124	Row 26g
Investments in significant financial entities	2,362	Row 26d, 73
Investments in non-significant financial entities	140	Row 26d, 72
	<b>2,626</b>	
Equity investment in non-consolidated subsidiaries	3,338	Row 26d, 73
Less transitional arrangements granted in respected Colonial debt <sup>(1)</sup>	(665)	Row 26d, 73
Total Equity Investments before applying prescribed thresholds APRA specific adjustment <sup>(2)</sup>	<b>5,299</b>	
Less amounts risk weighted under Internationally Comparable <sup>(3)</sup>	<b>(5,299)</b>	
<b>Total per Capital Template (Internationally Comparable)</b>	<b>-</b>	Row 18, 19, 23

(1) The capital benefit arising from the debt issued by the Colonial debt is being phased out, with APRA granting transitional arrangements in line with the maturity profile of the debt.

(2) 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.

(3) The aggregate of investments in significant financial entities of \$2,362 million, investments in non-significant financial entities of \$140 million and equity investment in non-consolidated subsidiaries of \$2,673 million (net of Colonial debt transitional arrangements) is a total of \$5,175 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 \$124 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 <sup>(1)</sup>	RWA <sup>(2)</sup> \$M	Jurisdictional Buffer %	ADI Specific Buffer <sup>(3)</sup> %	Template Reference
Hong Kong	766	1.250%	0.003%	
Norway	873	1.500%	0.004%	
Sweden	32	2.000%	0.000%	
Others	358,427	0.000%	0.000%	
<b>Total</b>	<b>360,098</b>		<b>0.007%</b>	<b>Row 66</b>

(1) Represents country of ultimate risk as at 30 June 2017.

(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
<b>(a) Securitisation</b>		
Medallion Trust Series 2017-1	2,404	2,404
Swan Trust Series 2010-1	95	95

Entity name	Total Assets \$M	Total Liabilities \$M
<b>(b) Insurance and Funds Management</b>		
Avanteos Investments Limited	55	15
Avanteos Pty Ltd	-	-
BW Financial Advice Limited	10	5
CFS Seeding Trust	24	24
CFSPAI Europe Co Limited	-	-
CFSPAI Europe Holdco Limited	-	-
CISL (NO. 1) Pty Limited	-	-
Colonial (UK) Trustees Limited	1	1
Colonial First State Asset Management (Australia) Limited	133	104
Colonial First State Investments Limited	558	237
Colonial First State Infrastructure Holdings Limited	25	13
Colonial First State Infrastructure Managers (Australia) Pty Limited	2	2
Colonial First State Managed Infrastructure Limited	18	8
Colonial Mutual Superannuation Pty Ltd	12	-
Colonial Services Pty Limited	-	-
Commonwealth Custodial Services Pty Ltd	-	-
Commonwealth Financial Planning Limited	190	154
Commonwealth Insurance Limited	1,036	745
Count Financial Limited	39	12
Emerald Holding Company Pty Limited	-	-
Financial Wisdom Limited	33	24
Finconnect (Australia) Pty Ltd	51	5
First Gas Consolidated Group	1,461	1,145
First State European Diversified Infrastructure Sarl	2	1
First State Infrastructure Managers (International) Limited	3	3
First State Investments Fund Management Sarl	32	30
First State Investment Management (UK) Limited	68	-
First State Investment Services (UK) Limited	221	197
First State Investments (Hong Kong) Limited	202	114
First State Investments (Japan) Limited	-	-
First State Investments (NZ) Limited	1	-
First State Investments (Singapore)	145	62
First State Investments (UK) Limited	319	300
First State Investments (US) LLC	15	9
First State Investments GIP Management Sarl	2	-
First State Investments International Inc	-	-
First State Investments International Limited	70	11
First State Nominees (Hong Kong) Limited	-	-
FSIC Limited	-	-
Jacques Martin Administration and Consulting Pty Ltd	5	1
Premium Alternative Investments Pty Limited	-	-
Premium Plantations Pty Limited	-	-
Premium Plantations Services Pty Ltd	-	-
PT Commonwealth Life	698	543
PT First State Investments Indonesia	6	5

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Entity name	Total Assets \$M	Total Liabilities \$M
Realindex Investments Pty Limited	10	9
Sovereign Assurance Company Limited	2,025	1,365
Sovereign Services Limited	65	23
Sovereign Superannuation Funds Limited	7	-
Sovereign Superannuation Trustees Limited	-	-
St Andrew's Australia Pty Ltd	-	-
The Colonial First State Global Asset Management Seeding Trust	318	318
The Colonial Mutual Life Assurance Society Limited	12,747	11,066
Total Keen Investment Limited	-	-
Water Utilities Group	46	8
Westside Properties Limited	24	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 and H.

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

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### 13.6 List of APRA APS 330 Tables (continued)

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

## 13.7 List of Supplemental Tables and Diagrams

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## 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 web site.
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).
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.
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.



## 13.8 Glossary (continued)

Term	Definition
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 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.
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 APS117 IRRBB 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.
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.
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.

# Appendices

## 13.8 Glossary (continued)

Term	Definition
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 web site.
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 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).
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.