

# PILLAR 3 REPORT 2019



National  
Australia  
Bank



**Paul and Belinda Adams**  
**Coastal Hydroponics**  
NAB customer

“Together with NAB’s expertise and support in sourcing reliable export opportunities, Coastal Hydroponics is exploring global export markets and the prospect of installing innovative Cravo houses for the protected growing of their produce in the future.”

**Incorporating the  
requirements of APS 330**  
31 March 2019

## Table of Contents

### Section 1

Introduction	1
--------------	---

### Section 2

Regulatory Reform	2
-------------------	---

### Section 3

Capital	3
Capital Adequacy	3
Capital Structure	4
Detailed Capital Disclosures	5
Leverage Ratio	12

### Section 4

Credit Risk	14
General Disclosures	14
Standardised and Supervisory Slotting Portfolios	27
Internal Ratings-based Portfolios	28
Credit Risk Mitigation	32
Counterparty Credit Risk	34

### Section 5

Securitisation	35
----------------	----

### Section 6

Market Risk	38
-------------	----

### Section 7

Balance Sheet and Liquidity Risk	41
Interest Rate Risk in the Banking Book	41
Equity Holdings in the Banking Book	41
Liquidity Disclosures	42

### Section 8

Glossary	47
----------	----

### Section 9

Reference to APS 330	49
----------------------	----

## Section 1

## Introduction

National Australia Bank Limited (NAB) is an Authorised Deposit-taking Institution (ADI) subject to regulation by the Australian Prudential Regulation Authority (APRA) under the authority of the *Banking Act 1959* (Cth). This document has been prepared in accordance with APRA Prudential Standard APS 330 *Public Disclosure*.

APS 330 requires disclosure of information to the market relating to capital adequacy and risk management practices. APS 330 was established to implement the third pillar of the Basel Committee on Banking Supervision's (BCBS) framework for bank capital adequacy. In simple terms, the framework consists of three mutually reinforcing pillars.

Pillar 1 Minimum capital requirement	Pillar 2 Supervisory review process	Pillar 3 Market discipline
Minimum requirements for the level and quality of capital	Management's responsibility for capital adequacy to support risks beyond the minimum requirements, including an Internal Capital Adequacy Assessment Process (ICAAP)	Disclosure to the market of qualitative and quantitative aspects of risk management, capital adequacy and various risk metrics

This document provides information about risk exposures, capital adequacy and liquidity of the Group, being NAB and its controlled entities.

Amounts are presented in Australian dollars unless otherwise stated, and have been rounded to the nearest million dollars (\$m) except where indicated.

## Capital Adequacy Methodologies

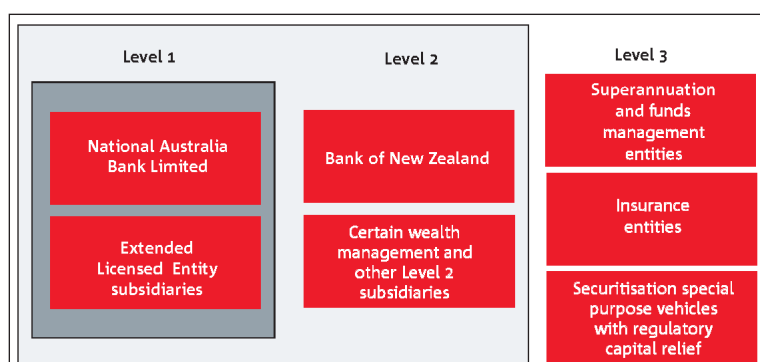
The following illustration sets out the Group's approach to measuring capital adequacy as at 31 March 2019.

Credit Risk	Operational Risk	Non-traded Market Risk	Traded Market Risk
Advanced Internal Ratings-Based Approach (IRB)	Advanced Measurement Approach (AMA)	Internal Model Approach (IMA)	Standardised and Internal Model Approach (IMA)

Bank of New Zealand (BNZ), is a wholly owned subsidiary of the Group and is a registered bank under the *Reserve Bank of New Zealand Act 1989*. BNZ is subject to capital adequacy requirements mandated by the Reserve Bank of New Zealand (RBNZ), under which BNZ applies the internal ratings-based approach. BNZ credit risk exposures consolidated in the Group exposures are calculated under RBNZ requirements.

## Scope of Application

APRA measures capital adequacy by assessing financial strength at three levels as illustrated below.



Level 1 comprises NAB and its subsidiary entities approved by APRA as part of the Extended Licensed Entity.

Level 2 comprises NAB and the entities it controls, excluding superannuation and funds management entities, insurance entities and securitisation special purpose vehicles to which assets have been transferred in accordance with the requirements for regulatory capital relief in APS 120 *Securitisation*. Level 2 controlled entities include BNZ and other financial entities such as broking, wealth advisory and leasing companies.

Level 3 comprises the consolidation of NAB and all of its subsidiaries.

This report applies to the Level 2 Group, headed by NAB, unless otherwise stated.



### Section 2

## Regulatory Reform

The Group remains focused on areas of regulatory change. Key reforms that may affect its capital and funding include:

#### *'Unquestionably Strong' and Basel III Revisions*

- In December 2017, the BCBS finalised the Basel III capital framework. APRA subsequently commenced consultation on revisions to the domestic capital framework in February 2018 and reaffirmed its intention to strengthen banking system resilience by establishing 'unquestionably strong' capital ratios. APRA expects major Australian banks to achieve Common Equity Tier 1 (CET1) capital ratios of at least 10.5% by 1 January 2020 based on existing risk-weighted assets (RWA) methodologies.
- APRA's consultation on revisions to the capital framework includes consideration of 'benchmarks for capital strength', 'risk sensitivity of the capital framework' and 'transparency, comparability and flexibility of the capital framework'. Consultation will continue in 2019 and 2020 for proposed implementation by 1 January 2022.
- APRA has also proposed a minimum leverage ratio requirement of 3.5% for IRB ADIs and a revised leverage ratio exposure measurement methodology from 1 January 2022. The Group's leverage ratio as at 31 March 2019 of 5.48% (under current methodology) is disclosed in further detail in Table 3.1B *Capital and Leverage Ratios*.
- APRA has finalised its prudential requirements for the standardised approach to counterparty credit risk (SA-CCR), which are introduced in the new Prudential Standard APS 180 *Counterparty Credit Risk*. These requirements will take effect from 1 July 2019.

#### *Increased Loss-absorbing Capacity for ADIs*

In November 2018, APRA released its consultation on the implementation of an Australian loss-absorbing capacity regime. APRA has proposed an increase in Total capital of between 4% and 5% of RWA for Domestic Systemically Important Banks (D-SIBs). Finalisation of requirements is expected in 2019 with implementation by 2023.

#### *RBNZ Capital Review*

In New Zealand, the RBNZ is undertaking a review of the capital adequacy framework applying to registered banks incorporated in New Zealand. In December 2018, the RBNZ proposed amendments to the amount of regulatory capital required of locally incorporated banks, including:

- increases in RWA for banks that use the internal ratings-based approach via internal ratings-based approach (IRB) recalibration, increased scalars and the introduction of standardised output floors
- an increase in the Tier 1 capital requirement to 16% of RWA.

The RBNZ is proposing various dates for implementation of the proposed changes, including increases in the Tier 1 capital requirement over a five year period to 2023.

Other regulatory changes of note include:

- The BCBS announced its revised market risk framework, which is due to come into effect from 1 January 2022 globally. APRA has advised that domestic timing will not be confirmed prior to global rules being finalised. While the Credit Value Adjustment (CVA) framework has been finalised by the BCBS, it may be subject to further recalibration as a result of the market risk framework review. APRA will commence consultation on the CVA framework post recalibration.
- APRA's standards on the non-capital components of the supervision of conglomerate groups (Level 3 framework) took effect on 1 July 2017. Level 3 capital requirements are expected to be determined following the finalisation of other domestic and international policy initiatives, with APRA advising that implementation will be no earlier than 2019.
- APRA's revised Related Entity framework will take effect from 2020.
- A new Australian Accounting Standard AASB 16 *Leases* is applicable from 1 October 2019. AASB 16 requires lessees to recognise leases (subject to certain exceptions) on-balance sheet in a manner comparable to the current accounting for finance leases, which is expected to impact RWA for non-lending asset exposures.

## Section 3

## Capital

## 3.1 Capital Adequacy

Table 3.1A: Risk-weighted Assets

The following table provides RWA for each risk type.

	As at	
	31 Mar 19	30 Sep 18
	\$m	\$m
<b>Credit risk<sup>(1)</sup></b>		
<b>Subject to IRB approach</b>		
Corporate (including Small and Medium Enterprises (SME))	124,352	116,709
Sovereign	1,351	1,293
Bank	10,444	10,042
Residential mortgage	105,979	103,868
Qualifying revolving retail	3,822	3,993
Retail SME	6,575	6,531
Other retail	3,334	3,419
<b>Total IRB approach</b>	<b>255,857</b>	<b>245,855</b>
<b>Specialised lending</b>	<b>59,506</b>	<b>60,444</b>
<b>Subject to standardised approach</b>		
Residential mortgage	1,645	1,558
Corporate	4,733	4,670
Other	483	493
<b>Total standardised approach</b>	<b>6,861</b>	<b>6,721</b>
<b>Other</b>		
Securitisation exposures	4,739	4,598
Credit Value Adjustment	9,061	7,670
Central counterparty default fund contribution guarantee	823	1,138
Other <sup>(2)</sup>	8,550	4,955
<b>Total other</b>	<b>23,173</b>	<b>18,361</b>
<b>Total credit risk</b>	<b>345,397</b>	<b>331,381</b>
<b>Market risk</b>	9,190	9,460
<b>Operational risk</b>	40,945	37,500
<b>Interest rate risk in the banking book<sup>(3)</sup></b>	7,673	11,343
<b>Total RWA</b>	<b>403,205</b>	<b>389,684</b>

<sup>(1)</sup> Assets that are not subject to specific risk-weights incorporate a scaling factor of 1.06 in accordance with APS 113 Capital Adequacy: Internal Ratings-based Approach to Credit Risk.

<sup>(2)</sup> Other includes non-lending assets and RWA overlay adjustments for regulatory prescribed methodology requirements. The increase over the period is largely driven by higher RWA overlay adjustments reflecting a change in the recognition of certain off-balance sheet facilities.

<sup>(3)</sup> The decrease over the period is largely due to a change in rate shock methodology.

Table 3.1B: Capital and Leverage Ratios

The following tables provide:

- the key capital ratios for the Level 1 and Level 2 Group and for the Group's significant overseas bank subsidiary
- the leverage ratio for the Level 2 Group as at 31 March 2019 and for the three previous quarters

	As at	
	31 Mar 19	30 Sep 18
	%	%
<b>Capital ratios</b>		
Level 2 Common Equity Tier 1 capital ratio	10.40	10.20
Level 2 Tier 1 capital ratio	12.45	12.38
Level 2 Total capital ratio	14.00	14.12
Level 1 Common Equity Tier 1 capital ratio	10.64	10.43
Level 1 Tier 1 capital ratio	12.86	12.78
Level 1 Total capital ratio	14.50	14.65
Significant bank subsidiary <sup>(1)</sup>		
BNZ Common Equity Tier 1 capital ratio	10.60	10.56
BNZ Tier 1 capital ratio	11.96	11.96
BNZ Total capital ratio	13.57	13.59

<sup>(1)</sup> BNZ's capital ratios have been derived under the RBNZ's capital adequacy framework.

## Capital

### 3.1 Capital Adequacy (continued)

#### Leverage ratio

	As at			
	31 Mar 19	31 Dec 18	30 Sep 18	30 Jun 18
	\$m	\$m	\$m	\$m
Tier 1 capital	50,185	48,408	48,254	46,967
Total exposures <sup>(1)</sup>	915,138	930,879	896,120	900,904
<b>Leverage ratio (%)<sup>(1)</sup></b>	<b>5.48%</b>	<b>5.20%</b>	<b>5.38%</b>	<b>5.21%</b>

<sup>(1)</sup> The 30 June 2018 total exposures has been restated from that previously disclosed (\$887,837 million), resulting in a restatement to the leverage ratio at that date (previously disclosed as 5.29%).

### 3.2 Capital Structure

Regulatory capital is calculated in accordance with APS 111 *Capital Adequacy: Measurement of Capital*. The Group's capital structure comprises various forms of capital which are summarised in the table below.

Common Equity Tier 1 (CET1) capital	Tier 1 capital	Total capital
CET1 capital consists of the sum of paid-up ordinary share capital, retained profits plus certain other items as defined in APS 111.	CET1 capital plus certain securities with complying loss absorbing characteristics known as Additional Tier 1 capital.	Tier 1 capital plus subordinated debt instruments with complying loss absorbing characteristics known as Tier 2 capital.

CET1 capital contains the highest quality and most effective loss absorbent components of capital, followed by Additional Tier 1 capital and then Tier 2 capital. Further details of Additional Tier 1 and Tier 2 securities are available online in the capital instruments section of the Group's website at <https://capital.nab.com.au/disclaimer-area/capital-instruments.phps#top>.

#### Restrictions on the Transfer of Funds or Regulatory Capital within the Group

Limits are placed on the level of exposure (debt and equity) that NAB may have to a related entity. The Conglomerate Group Aggregate Risk Exposure Policy requires consideration of excessive risk when setting risk limits between Group entities. Group Credit Policy on lending between entities in the Group requires intercompany transactions to be adequately controlled and comply with legal and regulatory requirements.

As the Group's significant overseas bank subsidiary, BNZ works with the Group to manage capital to target capital ranges approved by its board of directors. Any capital transfer is subject to maintaining adequate subsidiary and parent company capitalisation.

#### Table 3.2A: Regulatory Capital Structure

The following table provides the structure of regulatory capital for the Level 2 Group. A detailed breakdown as at 31 March 2019 is shown in Table 3.3A *Regulatory Capital Disclosure Template*.

	As at	
	31 Mar 19	30 Sep 18
	\$m	\$m
Common Equity Tier 1 capital before regulatory adjustments	51,896	49,489
Regulatory adjustments to Common Equity Tier 1 capital	(9,961)	(9,730)
<b>Common Equity Tier 1 capital (CET1)</b>	<b>41,935</b>	<b>39,759</b>
Additional Tier 1 capital before regulatory adjustments	8,250	8,495
Regulatory adjustments to Additional Tier 1 capital	-	-
<b>Additional Tier 1 capital (AT1)</b>	<b>8,250</b>	<b>8,495</b>
<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>50,185</b>	<b>48,254</b>
Tier 2 capital before regulatory adjustments	6,354	6,838
Regulatory adjustments to Tier 2 capital	(94)	(84)
<b>Tier 2 capital (T2)</b>	<b>6,260</b>	<b>6,754</b>
<b>Total capital (TC = T1 + T2)</b>	<b>56,445</b>	<b>55,008</b>

### 3.3 Detailed Capital Disclosures

#### Table 3.3A: Regulatory Capital Disclosure Template

The capital ratios for the Level 2 Group and other regulatory capital information are presented in the following regulatory capital disclosure template. The capital disclosure template is based on the post 1 January 2018 Basel III requirements as the Group is applying the regulatory adjustments under Basel III in full as implemented by APRA.

Explanation of how amounts in the template reconcile to the Level 2 Group balance sheet is contained in Table 3.3B *Reconciliation between the Group and Level 2 Group Balance Sheets* and Table 3.3C *Reconciliation between the Level 2 Group Balance Sheet and Regulatory Capital Disclosure Template*.

	<b>As at 31 Mar 19</b>
	<b>\$m</b>
<b>Common Equity Tier 1 capital: instruments and reserves</b>	
1 Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	34,905
2 Retained earnings	16,543
3 Accumulated other comprehensive income (and other reserves)	448
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)	-
<b>6 Common Equity Tier 1 capital before regulatory adjustments</b>	<b>51,896</b>
<b>Common Equity Tier 1 capital: regulatory adjustments</b>	
7 Prudential valuation adjustments	1
8 Goodwill (net of related tax liability)	2,874
9 Other intangibles other than mortgage servicing rights (net of related tax liability)	2,991
10 Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	69
11 Cash flow hedge reserve	74
12 Shortfall of provisions to expected losses	-
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	(18)
15 Defined benefit superannuation fund assets (net of related tax liability)	32
16 Investments in own shares (if not already netted off paid-in capital on reported balance sheet)	-
17 Reciprocal cross-holdings in common equity	-
18 Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-
19 Significant investments in the ordinary shares of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions (amount above 10% threshold)	-
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)	-
22 Amount exceeding the 15% threshold	-
23 of which: significant investments in the ordinary shares of financial entities	-
24 of which: mortgage servicing rights	-
25 of which: deferred tax assets arising from temporary differences	-
<b>APRA specific regulatory adjustments</b>	
26 National specific regulatory adjustments (sum of rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i and 26j)	3,938
26a of which: treasury shares	-
26b of which: offset to dividends declared under a dividend reinvestment plan (DRP), to the extent that the dividends are used to purchase new ordinary shares issued by the ADI	-
26c of which: deferred net fee income	649
26d of which: equity investments in financial institutions not reported in rows 18, 19 and 23 (adjusted for intangible assets held by those entities)	1,155
26e of which: deferred tax assets not reported in rows 10, 21 and 25	1,897
26f of which: capitalised expenses	138
26g of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	32
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	67
27 Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	-
<b>28 Total regulatory adjustments to Common Equity Tier 1</b>	<b>9,961</b>
<b>29 Common Equity Tier 1 capital (CET1)</b>	<b>41,935</b>

3.3 Detailed Capital Disclosures (continued)

		As at 31 Mar 19
		\$m
<b>Additional Tier 1 capital: instruments</b>		
30	Directly issued qualifying Additional Tier 1 instruments	6,433
31	of which: classified as equity under applicable accounting standards	-
32	of which: classified as liabilities under applicable accounting standards	6,433
33	Directly issued capital instruments subject to phase out from Additional Tier 1	1,817
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 Additional Tier 1)	-
35	of which: instruments issued by subsidiaries subject to phase out	-
<b>36</b>	<b>Additional Tier 1 capital before regulatory adjustments</b>	<b>8,250</b>
<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)	-
41	National specific regulatory adjustments (sum of rows 41a, 41b and 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	-
<b>43</b>	<b>Total regulatory adjustments to Additional Tier 1 capital</b>	<b>-</b>
<b>44</b>	<b>Additional Tier 1 capital (AT1)</b>	<b>8,250</b>
<b>45</b>	<b>Tier 1 capital (T1 = CET1 + AT1)</b>	<b>50,185</b>
<b>Tier 2 capital: instruments and provisions</b>		
46	Directly issued qualifying Tier 2 instruments	5,232
47	Directly issued capital instruments subject to phase out from Tier 2	496
48	Tier 2 instruments (and CET1 and Additional Tier 1 instruments not included in rows 5 or 34) issued by subsidiaries and held by third parties (amount allowed in group Tier 2)	447
49	of which: instruments issued by subsidiaries subject to phase out	-
50	Provisions <sup>(1)</sup>	179
<b>51</b>	<b>Tier 2 capital before regulatory adjustments</b>	<b>6,354</b>
<b>Tier 2 capital: regulatory adjustments</b>		
52	Investments in own Tier 2 instruments	75
53	Reciprocal cross-holdings in Tier 2 instruments	-
54	Investments in the Tier 2 capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation, net of eligible short positions, where the ADI does not own more than 10% of the issued share capital (amount above 10% threshold)	-
55	Significant investments in the Tier 2 capital banking, financial and insurance entities that are outside the scope of regulatory consolidation (net of eligible short positions)	-
56	National specific regulatory adjustments (sum of rows 56a, 56b and 56c)	19
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	19
56c	of which: other national specific regulatory adjustments not reported in rows 56a and 56b	-
<b>57</b>	<b>Total regulatory adjustments to Tier 2 capital</b>	<b>94</b>
<b>58</b>	<b>Tier 2 capital (T2)</b>	<b>6,260</b>
<b>59</b>	<b>Total capital (TC = T1 + T2)</b>	<b>56,445</b>
<b>60</b>	<b>Total RWA based on APRA standards</b>	<b>403,205</b>

<sup>(1)</sup> Provisions consists of surplus provisions on non-defaulted exposures subject to the IRB approach (\$134m) and the GRCL for exposures subject to the standardised approach (\$45m).



## 3.3 Detailed Capital Disclosures (continued)

		<b>As at 31 Mar 19</b>
		<b>\$m</b>
<b>Capital ratios and buffers</b>		
61	Common Equity Tier 1 (as a percentage of RWA)	10.40%
62	Tier 1 (as a percentage of RWA)	12.45%
63	Total capital (as a percentage of RWA)	14.00%
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 RWA) <sup>(1)</sup>	8.05%
65	of which: capital conservation buffer requirement <sup>(1)</sup>	3.50%
66	of which: ADI-specific countercyclical buffer requirements	0.05%
67	of which: G-SIB buffer requirement	n/a
68	Common Equity Tier 1 available to meet buffers (as a percentage of RWA)	10.40%
<b>National minima (if different from Basel III)</b>		
69	National Common Equity Tier 1 minimum ratio (if different from Basel III minimum)	n/a
70	National Tier 1 minimum ratio (if different from Basel III minimum)	n/a
71	National Total capital minimum ratio (if different from Basel III minimum)	n/a
<b>Amounts below the thresholds for deduction (not risk-weighted)<sup>(2)</sup></b>		
72	Non-significant investments in the capital of other financial entities	733
73	Significant investments in the ordinary shares of financial entities (adjusted for intangible assets held by those entities)	422
74	Mortgage servicing rights (net of related tax liability)	-
75	Deferred tax assets arising from temporary differences (net of related tax liability)	1,897
<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)	45
77	Cap on inclusion of provisions in Tier 2 under standardised approach	275
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	134
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	1,940
<b>Capital instruments subject to phase-out arrangements (applicable between 1 January 2018 and 1 January 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 Additional Tier 1 instruments subject to phase out arrangements	1,817
83	Amount excluded from Additional Tier 1 due to cap (excess over cap after redemptions and maturities)	128
84	Current cap on Tier 2 instruments subject to phase out arrangements	1,687
85	Amount excluded from Tier 2 due to cap (excess over cap after redemptions and maturities)	-

<sup>(1)</sup> The buffer requirement includes a 1.0% D-SIB capital buffer.

<sup>(2)</sup> Amounts below the thresholds for deduction under Basel III requirements are an APRA specific regulatory adjustment.

### 3.3 Detailed Capital Disclosures (continued)

**Table 3.3B: Reconciliation between the Group and Level 2 Group Balance Sheets**

The following table provides the Group's balance sheet and adjustments to derive the Level 2 Group balance sheet as at 31 March 2019. The adjustments remove the assets, liabilities and equity balances of Level 3 entities deconsolidated for regulatory purposes, and reinstates any intragroup assets and liabilities, treating them as external to the Level 2 Group.

The template and reconciliation references are either directly to rows in Table 3.3A *Regulatory Capital Disclosure Template* or to reconciliations to the disclosure template in Table 3.3C *Reconciliation between the Level 2 Group Balance Sheet and Regulatory Disclosure Template*.

	Group balance sheet	Adjustments	Level 2 Group balance sheet	Template row or reconciliation table reference
	\$m	\$m	\$m	
<b>Assets</b>				
Cash and liquid assets	54,044	(192)	53,852	
Due from other banks	27,418	-	27,418	
Trading instruments	84,043	-	84,043	
Debt instruments	42,873	-	42,873	
Other financial assets	8,827	(164)	8,663	
Hedging derivatives	3,055	-	3,055	
Loans and advances	585,730	(3,065)	582,665	
of which: deferred net fee income	649	-	649	Row 26c
Due from customers on acceptances	3,096	-	3,096	
Property, plant and equipment	1,133	-	1,133	
Due from controlled entities	-	100	100	
Investment in non-consolidated controlled entities	-	431	431	Table A
Goodwill and other intangible assets	5,872	(16)	5,856	Table A
Deferred tax assets	2,232	2	2,234	Table C
Other assets	8,620	(229)	8,391	
<b>Total assets</b>	<b>826,943</b>	<b>(3,133)</b>	<b>823,810</b>	
<b>Liabilities</b>				
Due to other banks	36,960	-	36,960	
Trading instruments	23,287	-	23,287	
Other financial liabilities	32,973	-	32,973	
of which: change in own credit worthiness	18	-	18	Row 14
Hedging derivatives	2,985	-	2,985	
Deposits and other borrowings	518,692	-	518,692	
Current tax liabilities	229	(12)	217	
Provisions	2,568	(11)	2,557	
Due to controlled entities	-	248	248	
Bonds, notes and subordinated debt	140,699	(3,055)	137,644	
Other debt issues	6,509	-	6,509	
Other liabilities	7,950	(53)	7,897	
<b>Total liabilities</b>	<b>772,852</b>	<b>(2,883)</b>	<b>769,969</b>	
<b>Net assets</b>	<b>54,091</b>	<b>(250)</b>	<b>53,841</b>	
<b>Equity</b>				
Issued and paid-up ordinary share capital	34,905	-	34,905	Row 1
Other contributed equity	1,945	-	1,945	Table D
<b>Contributed equity</b>	<b>36,850</b>	<b>-</b>	<b>36,850</b>	
Foreign currency translation reserve	283	(10)	273	
Asset revaluation reserve	82	-	82	
Cost of hedging reserve	(191)	-	(191)	
Cash flow hedge reserve	74	-	74	Row 11
Equity-based compensation reserve	160	-	160	
Debt instruments at fair value through other comprehensive income reserve	47	-	47	
Equity instruments at fair value through other comprehensive income reserve	3	-	3	
<b>Reserves</b>	<b>458</b>	<b>(10)</b>	<b>448</b>	Row 3
Retained profits	16,776	(233)	16,543	Row 2
<b>Total equity (parent entity interest)</b>	<b>54,084</b>	<b>(243)</b>	<b>53,841</b>	
Non-controlling interest in controlled entities	7	(7)	-	
<b>Total equity</b>	<b>54,091</b>	<b>(250)</b>	<b>53,841</b>	

## 3.3 Detailed Capital Disclosures (continued)

**Table 3.3C: Reconciliation between the Level 2 Group Balance Sheet and Regulatory Capital Disclosure Template**

	As at 31 Mar 19 \$m	Disclosure template row
<b>Table A</b>		
Goodwill and other intangible assets	5,856	
Investment in non-consolidated controlled entities (Level 3 entities)	431	
<b>Total</b>	<b>6,287</b>	
<i>Less</i>		
Goodwill	2,874	Row 8
Other intangible assets other than mortgage-servicing rights (net of related tax liability)	2,991	Row 9
<b>Investment in non-consolidated controlled entities (adjusted for intangible assets held by those entities)</b>	<b>422</b>	Row 73
<i>Add</i>		
Non-significant equity investments in financial entities	733	Row 72
<b>Equity investments in financial entities</b>	<b>1,155</b>	Row 26d
<b>Table B</b>		
	As at 31 Mar 19 \$m	Disclosure template row
Non-defaulted expected loss	2,634	
<i>Less</i>		
Collective provision for credit impairment	2,813	
<i>Add</i>		
Standardised approach general reserve for credit losses	45	Row 50, 76
IRB approach surplus provisions on non-defaulted exposures	134	Row 50, 78
<b>Non-defaulted: shortfall of provisions to expected losses</b>	<b>-</b>	
Defaulted expected loss	1,701	
<i>Less</i>		
Individual provision for credit impairment	707	
Partial write-offs	578	
Collective provision for credit impairment for defaulted exposures subject to the IRB approach	434	
<b>Defaulted: surplus of provisions to expected loss (i.e. nil shortfall)</b>	<b>(18)</b>	
<b>Gross deduction of shortfall of provisions to expected losses</b>	<b>-</b>	Row 12
<b>Table C</b>		
	As at 31 Mar 19 \$m	Disclosure template row
Deferred tax assets	2,234	
<i>Less</i>		
Deferred tax assets that rely on future profitability	69	Row 10
Unrealised revaluation on funding vehicles	332	
<i>Add</i>		
Deferred tax liabilities included in the other regulatory adjustments	63	
Impact of calculating the deduction on a jurisdictional basis	1	
<b>Deferred tax assets APRA specific regulatory adjustment</b>	<b>1,897</b>	Row 26e
<b>Table D</b>		
	As at 31 Mar 19 \$m	Disclosure template row
Face value of NAB Convertible Preference Shares	1,717	
Face value of NAB Capital Notes	1,343	
Face value of NAB Capital Notes II	1,499	
Face value of NAB Capital Notes III	1,874	
<b>Directly issued qualifying Additional Tier 1 instruments classified as liabilities</b>	<b>6,433</b>	Row 32
<b>Directly issued qualifying Additional Tier 1 instruments classified as equities</b>	<b>-</b>	Row 31
<b>Directly issued qualifying Additional Tier 1 instruments</b>	<b>6,433</b>	Row 30
National Income Securities	1,945	
<b>Directly issued Additional Tier 1 instruments subject to phase out</b>	<b>1,945</b>	
<i>which comprises:</i>		
Amount excluded from Additional Tier 1 due to cap (excess over cap after redemptions and maturities)	128	Row 83
Current cap on Additional Tier 1 instruments subject to phase out arrangements	1,817	Row 33, 82

### 3.3 Detailed Capital Disclosures (continued)

<b>Table E</b>	<b>As at 31 Mar 19 \$m</b>	<b>Disclosure template row</b>
Subordinated medium term notes	5,232	
<b>Directly issued qualifying Tier 2 instruments</b>	<b>5,232</b>	Row 46
Subordinated medium term notes	40	
Perpetual floating rate notes	73	
Global medium term notes	255	
Additional Tier 1 in excess of transitional cap transferred to Tier 2	128	Row 83
<b>Directly issued Tier 2 instruments subject to phase out</b>	<b>496</b>	Row 47

<b>Table F</b>	<b>As at 31 Mar 19 \$m</b>	<b>Disclosure template row</b>
Subordinated notes issued by BNZ	447	
<b>Tier 2 instruments issued by subsidiaries and held by third parties (amount allowed in Tier 2 capital)</b>	<b>447</b>	Row 48

#### Table 3.3D: Entities Excluded from the Level 2 Group Balance Sheet

The following table provides details of the main entities included in the accounting scope of consolidation and excluded from the regulatory scope of consolidation. Entities with minor amounts of assets and liabilities have been excluded.

<b>Entity name</b>	<b>Principal activity</b>	<b>As at 31 Mar 19</b>	
		<b>Total assets \$m</b>	<b>Total liabilities \$m</b>
Antares Capital Partners Ltd	Investment	29	6
BNZ Life Insurance Limited	Insurance	117	33
MLC Investments Limited	Investment	159	65
NAB Asset Management Services Limited	Investment	28	10
NAB Trust Services Limited	Trustee	11	1
nabInvest Capital Partners Pty Limited	Funds Manager	32	11
National RMBS Trust 2018-1	Securitisation	1,510	1,510
National RMBS Trust 2018-2	Securitisation	1,556	1,556
Navigator Australia Limited	Investment	34	11
NULIS Nominees (Australia) Limited	Superannuation	426	50

### 3.3 Detailed Capital Disclosures (continued)

**Table 3.3E: Countercyclical Capital Buffer**

The countercyclical capital buffer represents an extension to the capital conservation buffer and may require an ADI to hold additional CET1 capital of up to 2.5% of RWA. It is calculated in accordance with APS 110 *Capital Adequacy* (Attachment C). Its primary objective is to use a buffer of capital to achieve the broader macroprudential goal of protecting the banking sector from periods of excess aggregate credit growth that have often been associated with the build-up of system-wide risk. The Level 2 Group's capital ratios remain above buffer requirements as shown in Table 3.3A *Regulatory Capital Disclosure Template* rows 61 to 68.

The following table provides the geographic breakdown of private sector credit exposures (gross of eligible financial collateral) and associated RWA that are used to calculate the Level 2 Group's countercyclical capital buffer ratio. The geographic breakdown is at a country level based on the country of ultimate risk.

Country	As at 31 Mar 19			
	Countercyclical capital buffer	Private sector credit exposure	RWA	ADI-specific buffer
	%	\$m	\$m	%
Hong Kong	2.50	3,907	1,522	0.012
Norway	2.00	275	183	0.001
Sweden	2.00	378	203	0.001
United Kingdom	1.00	76,080	11,106	0.035
Other	-	820,153	309,405	0.000
<b>Total</b>	<b>n/a</b>	<b>900,793</b>	<b>322,419</b>	<b>0.049</b>

Country	As at 30 Sep 18			
	Countercyclical capital buffer	Private sector credit exposure	RWA	ADI-specific buffer
	%	\$m	\$m	%
Hong Kong	1.88	3,060	1,247	0.008
Norway	2.00	178	66	0.000
Sweden	2.00	157	78	0.000
United Kingdom	0.50	65,968	10,919	0.018
Other	-	805,414	300,056	0.000
<b>Total</b>	<b>n/a</b>	<b>874,777</b>	<b>312,366</b>	<b>0.026</b>



### 3.4 Leverage Ratio

The leverage ratio is a non-risk based measure that uses exposures to supplement the RWA based capital requirements. It is calculated in accordance with APS 110 (Attachment D). In summary, the leverage ratio is intended to:

- restrict the build-up of leverage in the banking sector to avoid destabilising deleveraging processes that can damage the broader financial system and the economy
- reinforce the risk-based requirements with a simple, transparent, non-risk based supplementary measure.

The leverage ratio calculation is presented in the following disclosure template. At 31 March 2019 leverage ratio of 5.48% is above the BCBS minimum requirement of 3.0% for banks that have not been identified as a global systemically important bank (G-SIB). The ratio exceeds the range of between 3% and 5% as recommended by the Financial System Inquiry. APRA has proposed a minimum leverage ratio requirement of 3.5% for IRB ADIs.

The leverage ratio at 31 March 2019 has increased by 10 basis points to 5.48% compared to 30 September 2018. The increase was primarily due to an increase in Tier 1 capital of \$1.9 billion and total exposures of \$19.0 billion. On-balance sheet exposures (excluding derivatives and securities financing transactions (SFT)) increased by \$16.5 billion due to volume growth and SFT exposures increased by \$3.7 billion.

**Table 3.4A: Leverage Ratio Disclosure Template**

		As at	
		31 Mar 19	30 Sep 18
		\$m	\$m
<b>On-balance sheet exposures</b>			
1	On-balance sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	734,898	718,343
2	(Asset amounts deducted in determining Tier 1 capital)	(9,905)	(9,855)
<b>3</b>	<b>Total on-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 and 2)</b>	<b>724,993</b>	<b>708,488</b>
<b>Derivative exposures</b>			
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	8,632	8,530
5	Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	18,167	19,364
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)	(1,233)	(2,196)
8	(Exempted central counterparty (CCP) leg of client-cleared trade exposures)	-	-
9	Adjusted effective notional amount of written credit derivatives	3,324	5,464
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(3,324)	(5,464)
<b>11</b>	<b>Total derivative exposures (sum of rows 4 to 10)</b>	<b>25,566</b>	<b>25,698</b>
<b>Securities financing transaction exposures</b>			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	76,196	71,899
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(15,129)	(14,374)
14	Counterparty Credit Risk (CCR) exposure for SFT assets	2,628	2,465
15	Agent transaction exposures	-	-
<b>16</b>	<b>Total securities financing transaction exposures (sum of rows 12 to 15)</b>	<b>63,695</b>	<b>59,990</b>
<b>Other off-balance sheet exposures</b>			
17	Off-balance sheet exposure at gross notional amount	187,785	188,341
18	(Adjustments for conversion to credit equivalent amounts)	(86,901)	(86,397)
<b>19</b>	<b>Other off-balance sheet exposures (sum of rows 17 and 18)</b>	<b>100,884</b>	<b>101,944</b>
<b>Capital and total exposures</b>			
<b>20</b>	<b>Tier 1 capital</b>	<b>50,185</b>	<b>48,254</b>
<b>21</b>	<b>Total exposures (sum of rows 3, 11, 16 and 19)</b>	<b>915,138</b>	<b>896,120</b>
<b>Leverage ratio</b>			
<b>22</b>	<b>Leverage ratio</b>	<b>5.48%</b>	<b>5.38%</b>

## 3.4 Leverage Ratio (continued)

Table 3.4B: Summary Comparison of Accounting Assets vs Leverage Ratio Exposure Measure

Items	As at	
	31 Mar 19 \$m	30 Sep 18 \$m
1 Total consolidated assets as per published financial statements	826,943	806,510
2 Adjustment for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(3,133)	(1,805)
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	(2,279)	(3,139)
5 Adjustment for SFTs (i.e. repos and similar secured lending)	2,628	2,465
6 Adjustment for off-balance sheet exposures (i.e. conversion to credit equivalent amounts of off-balance sheet exposures)	100,884	101,944
7 Other adjustments	(9,905)	(9,855)
<b>8 Leverage ratio exposure</b>	<b>915,138</b>	<b>896,120</b>

## Credit Risk

### Section 4

## Credit Risk

### 4.1 General Disclosures

Information presented in this section excludes credit risk information in respect of certain securitisation exposures and non-lending assets. In particular, it excludes information on third party securitisation exposures and own asset securitisations with capital relief which have separate disclosures in Section 5 *Securitisation*.

Exposure at default throughout this section represents credit risk exposures net of offsets for eligible financial collateral.

**Table 4.1A: Credit Risk Exposures Summary**

The following table provides information on credit exposures and asset quality by asset class.

Exposure type	As at 31 Mar 19					6 months ended
	Total exposure (EaD)	Risk-weighted assets (RWA)	Regulatory expected loss	Impaired facilities	Specific provision for credit impairment	31 Mar 19
	\$m	\$m	\$m	\$m	\$m	Net write-offs \$m
<b>Subject to IRB approach</b>						
Corporate (including SME)	252,716	124,352	1,674	1,008	511	40
Sovereign	59,900	1,351	1	-	-	-
Bank	38,861	10,444	12	-	-	-
Residential mortgage	388,444	105,979	1,048	306	85	48
Qualifying revolving retail	11,003	3,822	245	-	-	83
Retail SME	17,885	6,575	191	75	45	23
Other retail	4,297	3,334	155	5	4	56
<b>Total IRB approach</b>	<b>773,106</b>	<b>255,857</b>	<b>3,326</b>	<b>1,394</b>	<b>645</b>	<b>250</b>
<b>Specialised lending</b>	<b>67,780</b>	<b>59,506</b>	<b>1,009</b>	<b>161</b>	<b>63</b>	<b>5</b>
<b>Subject to standardised approach</b>						
Residential mortgage	2,190	1,645	-	8	3	1
Corporate	11,540	4,733	-	1	6	2
Other	1,116	483	-	-	-	-
<b>Total standardised approach</b>	<b>14,846</b>	<b>6,861</b>	<b>-</b>	<b>9</b>	<b>9</b>	<b>3</b>
<b>Total</b>	<b>855,732</b>	<b>322,224</b>	<b>4,335</b>	<b>1,564</b>	<b>717</b>	<b>258</b>

<sup>(1)</sup> Assets that are not subject to specific risk-weights incorporate a scaling factor of 1.06 in accordance with APS 113.

Exposure type	As at 30 Sep 18					6 months ended
	Total exposure (EaD)	Risk-weighted assets (RWA)	Regulatory expected loss	Impaired facilities	Specific provision for credit impairment	30 Sep 18
	\$m	\$m	\$m	\$m	\$m	Net write-offs \$m
<b>Subject to IRB approach</b>						
Corporate (including SME)	234,725	116,709	1,340	970	467	67
Sovereign	63,165	1,293	2	-	-	-
Bank	36,403	10,042	13	-	-	-
Residential mortgage	384,732	103,868	958	289	87	33
Qualifying revolving retail	11,339	3,993	246	-	-	104
Retail SME	17,934	6,531	161	77	45	20
Other retail	4,336	3,419	145	4	3	55
<b>Total IRB approach</b>	<b>752,634</b>	<b>245,855</b>	<b>2,865</b>	<b>1,340</b>	<b>602</b>	<b>279</b>
<b>Specialised lending</b>	<b>68,040</b>	<b>60,444</b>	<b>932</b>	<b>172</b>	<b>61</b>	<b>9</b>
<b>Subject to standardised approach</b>						
Residential mortgage	2,139	1,558	-	8	4	-
Corporate	13,260	4,670	-	1	8	1
Other	1,134	493	-	-	-	-
<b>Total standardised approach</b>	<b>16,533</b>	<b>6,721</b>	<b>-</b>	<b>9</b>	<b>12</b>	<b>1</b>
<b>Total</b>	<b>837,207</b>	<b>313,020</b>	<b>3,797</b>	<b>1,521</b>	<b>675</b>	<b>289</b>

## 4.1 General Disclosures (continued)

## Credit Risk Exposures

Table 4.1B: Total and Average Credit Risk Exposures

The following table provides a breakdown of credit risk exposures between on and off-balance sheet. The table also includes average credit risk exposure, which is the simple average of the credit risk exposure at the beginning and end of the reporting period.

Exposure type	As at 31 Mar 19				6 months ended
	On-balance sheet exposure	Non-market related off-balance sheet	Market related off-balance sheet	Total exposure	31 Mar 19
	\$m	\$m	\$m	\$m	Average total exposure \$m
<b>Subject to IRB approach</b>					
Corporate (including SME)	158,729	76,663	17,324	252,716	243,721
Sovereign	55,424	472	4,004	59,900	61,532
Bank	26,365	3,346	9,150	38,861	37,632
Residential mortgage	340,230	48,214	-	388,444	386,588
Qualifying revolving retail	5,512	5,491	-	11,003	11,171
Retail SME	13,534	4,351	-	17,885	17,910
Other retail	3,106	1,191	-	4,297	4,316
<b>Total IRB approach</b>	<b>602,900</b>	<b>139,728</b>	<b>30,478</b>	<b>773,106</b>	<b>762,870</b>
<b>Specialised lending</b>	<b>57,780</b>	<b>9,137</b>	<b>863</b>	<b>67,780</b>	<b>67,910</b>
<b>Subject to standardised approach</b>					
Residential mortgage	2,043	147	-	2,190	2,164
Corporate	7,374	597	3,569	11,540	12,400
Other	1,115	1	-	1,116	1,125
<b>Total standardised approach</b>	<b>10,532</b>	<b>745</b>	<b>3,569</b>	<b>14,846</b>	<b>15,689</b>
<b>Total exposure (EaD)</b>	<b>671,212</b>	<b>149,610</b>	<b>34,910</b>	<b>855,732</b>	<b>846,469</b>

<sup>(1)</sup> The increase in non-market related off-balance sheet exposure at default over the period is largely driven by a change in the exposure measurement of certain off-balance sheet facilities.

Exposure type	As at 30 Sep 18				6 months ended
	On-balance sheet exposure	Non-market related off-balance sheet	Market related off-balance sheet	Total exposure	30 Sep 18
	\$m	\$m	\$m	\$m	Average total exposure \$m
<b>Subject to IRB approach</b>					
Corporate (including SME)	150,239	68,358	16,128	234,725	229,882
Sovereign	58,584	485	4,096	63,165	66,207
Bank	24,936	3,055	8,412	36,403	37,026
Residential mortgage	334,880	49,852	-	384,732	381,325
Qualifying revolving retail	5,623	5,716	-	11,339	11,478
Retail SME	13,611	4,323	-	17,934	17,810
Other retail	3,160	1,176	-	4,336	4,406
<b>Total IRB approach</b>	<b>591,033</b>	<b>132,965</b>	<b>28,636</b>	<b>752,634</b>	<b>748,134</b>
<b>Specialised lending</b>	<b>57,145</b>	<b>10,295</b>	<b>600</b>	<b>68,040</b>	<b>68,161</b>
<b>Subject to standardised approach</b>					
Residential mortgage	2,012	127	-	2,139	2,199
Corporate	7,441	560	5,259	13,260	12,641
Other	1,133	1	-	1,134	1,125
<b>Total standardised approach</b>	<b>10,586</b>	<b>688</b>	<b>5,259</b>	<b>16,533</b>	<b>15,965</b>
<b>Total exposures (EaD)</b>	<b>658,764</b>	<b>143,948</b>	<b>34,495</b>	<b>837,207</b>	<b>832,260</b>

## 4.1 General Disclosures (continued)

Table 4.1C: Credit Risk Exposures by Geography

The following table provides credit risk exposures by major geographical area, derived from the booking office where the exposure was transacted.

Exposure type	As at 31 Mar 19				Total exposure \$m
	Australia \$m	New Zealand \$m	United Kingdom \$m	Other <sup>(1)</sup> \$m	
<b>Subject to IRB approach</b>					
Corporate (including SME)	168,060	43,017	20,885	20,754	252,716
Sovereign	47,507	3,699	3,901	4,793	59,900
Bank	21,504	5,457	5,836	6,064	38,861
Residential mortgage	345,834	42,610	-	-	388,444
Qualifying revolving retail	11,003	-	-	-	11,003
Retail SME	15,872	2,013	-	-	17,885
Other retail	2,111	2,186	-	-	4,297
<b>Total IRB approach</b>	<b>611,891</b>	<b>98,982</b>	<b>30,622</b>	<b>31,611</b>	<b>773,106</b>
<b>Specialised lending</b>	<b>57,626</b>	<b>8,326</b>	<b>650</b>	<b>1,178</b>	<b>67,780</b>
<b>Subject to standardised approach</b>					
Residential mortgage	2,063	21	-	106	2,190
Corporate	8,836	1,055	1,529	120	11,540
Other	1,113	-	-	3	1,116
<b>Total standardised approach</b>	<b>12,012</b>	<b>1,076</b>	<b>1,529</b>	<b>229</b>	<b>14,846</b>
<b>Total exposure (EaD)</b>	<b>681,529</b>	<b>108,384</b>	<b>32,801</b>	<b>33,018</b>	<b>855,732</b>

<sup>(1)</sup> Other comprises North America and Asia.

Exposure type	As at 30 Sep 18				Total exposure \$m
	Australia \$m	New Zealand \$m	United Kingdom \$m	Other \$m	
<b>Subject to IRB approach</b>					
Corporate (including SME)	159,902	40,237	16,647	17,939	234,725
Sovereign	43,942	4,263	5,076	9,884	63,165
Bank	19,895	4,975	5,763	5,770	36,403
Residential mortgage	345,068	39,664	-	-	384,732
Qualifying revolving retail	11,339	-	-	-	11,339
Retail SME	15,973	1,961	-	-	17,934
Other retail	2,235	2,101	-	-	4,336
<b>Total IRB approach</b>	<b>598,354</b>	<b>93,201</b>	<b>27,486</b>	<b>33,593</b>	<b>752,634</b>
<b>Specialised lending</b>	<b>58,456</b>	<b>7,785</b>	<b>776</b>	<b>1,023</b>	<b>68,040</b>
<b>Subject to standardised approach</b>					
Residential mortgage	2,007	21	-	111	2,139
Corporate	9,187	1,015	1,940	1,118	13,260
Other	1,130	-	-	4	1,134
<b>Total standardised approach</b>	<b>12,324</b>	<b>1,036</b>	<b>1,940</b>	<b>1,233</b>	<b>16,533</b>
<b>Total exposures (EaD)</b>	<b>669,134</b>	<b>102,022</b>	<b>30,202</b>	<b>35,849</b>	<b>837,207</b>



## Credit Risk

### 4.1 General Disclosures (continued)

#### Table 4.1D: Credit Risk Exposures by Industry

The following table provides credit risk exposures by major industry type. Industry classifications follow ANZSIC Level 1 classifications. Exposures are disclosed based on the counterparty to which the Group is exposed to credit risk, including guarantors and derivative counterparties.

Exposure type	As at 31 Mar 19												Total
	Accommodation cafes, pubs and restaurants	Agriculture, forestry, fishing and mining	Business services and property services	Commercial property	Construction	Finance and insurance	Manufacturing	Personal	Residential mortgages	Retail and wholesale trade	Transport and storage	Other <sup>(1)</sup>	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Subject to IRB approach</b>													
Corporate (including SME)	8,670	50,401	20,360	14,229	8,985	51,502	18,520	109	-	28,323	20,870	30,747	252,716
Sovereign	-	-	-	-	-	8,688	-	-	-	-	-	51,212	59,900
Bank	-	-	-	-	-	36,199	-	-	-	-	-	2,662	38,861
Residential mortgage	-	-	-	-	-	-	-	-	388,444	-	-	-	388,444
Qualifying revolving retail	-	-	-	-	-	-	-	11,003	-	-	-	-	11,003
Retail SME	899	4,066	2,417	424	2,142	1,202	1,098	89	-	2,793	940	1,815	17,885
Other retail	-	-	-	-	-	-	-	4,297	-	-	-	-	4,297
<b>Total IRB approach</b>	<b>9,569</b>	<b>54,467</b>	<b>22,777</b>	<b>14,653</b>	<b>11,127</b>	<b>97,591</b>	<b>19,618</b>	<b>15,498</b>	<b>388,444</b>	<b>31,116</b>	<b>21,810</b>	<b>86,436</b>	<b>773,106</b>
<b>Specialised lending</b>	<b>126</b>	<b>1,125</b>	<b>299</b>	<b>61,005</b>	<b>600</b>	<b>3</b>	<b>-</b>	<b>4</b>	<b>-</b>	<b>-</b>	<b>1,442</b>	<b>3,176</b>	<b>67,780</b>
<b>Subject to standardised approach</b>													
Residential mortgage	-	-	-	-	-	-	-	-	2,190	-	-	-	2,190
Corporate	6	94	454	24	61	6,922	364	43	205	805	143	2,419	11,540
Other	-	-	-	-	-	-	-	1,065	14	-	-	37	1,116
<b>Total standardised approach</b>	<b>6</b>	<b>94</b>	<b>454</b>	<b>24</b>	<b>61</b>	<b>6,922</b>	<b>364</b>	<b>1,108</b>	<b>2,409</b>	<b>805</b>	<b>143</b>	<b>2,456</b>	<b>14,846</b>
<b>Total exposure (EaD)</b>	<b>9,701</b>	<b>55,686</b>	<b>23,530</b>	<b>75,682</b>	<b>11,788</b>	<b>104,516</b>	<b>19,982</b>	<b>16,610</b>	<b>390,853</b>	<b>31,921</b>	<b>23,395</b>	<b>92,068</b>	<b>855,732</b>

<sup>(1)</sup> Other includes government, health services and electricity, gas and water supply.

## Credit Risk

### 4.1 General Disclosures (continued)

Exposure type	As at 30 Sep 18												Total
	Accommodation cafes, pubs and restaurants	Agriculture, forestry, fishing and mining	Business services and property services	Commercial property	Construction	Finance and insurance	Manufacturing	Personal	Residential mortgages	Retail and wholesale trade	Transport and storage	Other	
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Subject to IRB approach</b>													
Corporate (including SME)	8,354	46,552	18,433	13,349	7,868	46,702	17,674	111	-	27,167	19,900	28,615	234,725
Sovereign	-	-	-	-	-	16,136	-	-	-	-	-	47,029	63,165
Bank	-	-	-	-	-	34,139	-	-	-	-	-	2,264	36,403
Residential mortgage	-	-	-	-	-	-	-	-	384,732	-	-	-	384,732
Qualifying revolving retail	-	-	-	-	-	-	-	11,339	-	-	-	-	11,339
Retail SME	921	4,079	2,375	463	2,127	1,179	1,113	90	-	2,808	947	1,832	17,934
Other retail	-	-	-	-	-	-	-	4,336	-	-	-	-	4,336
<b>Total IRB approach</b>	<b>9,275</b>	<b>50,631</b>	<b>20,808</b>	<b>13,812</b>	<b>9,995</b>	<b>98,156</b>	<b>18,787</b>	<b>15,876</b>	<b>384,732</b>	<b>29,975</b>	<b>20,847</b>	<b>79,740</b>	<b>752,634</b>
<b>Specialised lending</b>	<b>156</b>	<b>1,082</b>	<b>105</b>	<b>61,294</b>	<b>604</b>	<b>3</b>	<b>-</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>1,371</b>	<b>3,419</b>	<b>68,040</b>
<b>Subject to standardised approach</b>													
Residential mortgage	-	-	-	-	-	-	-	-	2,139	-	-	-	2,139
Corporate	2	110	415	29	66	8,779	343	34	185	821	140	2,336	13,260
Other	-	-	-	-	-	-	-	1,081	17	-	-	36	1,134
<b>Total standardised approach</b>	<b>2</b>	<b>110</b>	<b>415</b>	<b>29</b>	<b>66</b>	<b>8,779</b>	<b>343</b>	<b>1,115</b>	<b>2,341</b>	<b>821</b>	<b>140</b>	<b>2,372</b>	<b>16,533</b>
<b>Total exposure (EaD)</b>	<b>9,433</b>	<b>51,823</b>	<b>21,328</b>	<b>75,135</b>	<b>10,665</b>	<b>106,938</b>	<b>19,130</b>	<b>16,997</b>	<b>387,073</b>	<b>30,796</b>	<b>22,358</b>	<b>85,531</b>	<b>837,207</b>

## 4.1 General Disclosures (continued)

Table 4.1E: Credit Risk Exposures by Maturity

The following table provides a breakdown of credit risk exposures by residual contractual maturity.

The allocation of credit risk exposures to maturity buckets is undertaken on the following basis:

- Overdraft and other similar revolving facilities are allocated to the maturity bucket that most appropriately captures the maturity characteristics of the product.
- Residual contractual maturity for net derivatives credit exposure subject to an ISDA netting agreement are allocated to the maturity bucket of the longest dated derivative within the netting group.
- No specified maturity includes exposures related to credit cards, on demand facilities and guarantees given by the Group with no fixed maturity date.

Exposure type	As at 31 Mar 19				Total exposure \$m
	<12 months \$m	1 – 5 years \$m	>5 years \$m	No specified maturity \$m	
<b>Subject to IRB approach</b>					
Corporate (including SME)	79,877	133,990	30,357	8,492	252,716
Sovereign	15,485	9,314	35,005	96	59,900
Bank	16,677	14,047	7,404	733	38,861
Residential mortgage	30,670	6,522	351,252	-	388,444
Qualifying revolving retail	-	-	-	11,003	11,003
Retail SME	6,553	7,856	2,827	649	17,885
Other retail	262	1,169	656	2,210	4,297
<b>Total IRB approach</b>	<b>149,524</b>	<b>172,898</b>	<b>427,501</b>	<b>23,183</b>	<b>773,106</b>
<b>Specialised lending</b>	<b>28,956</b>	<b>34,356</b>	<b>3,990</b>	<b>478</b>	<b>67,780</b>
<b>Subject to standardised approach</b>					
Residential mortgage	212	86	1,892	-	2,190
Corporate	5,505	1,834	3,918	283	11,540
Other	987	126	1	2	1,116
<b>Total standardised approach</b>	<b>6,704</b>	<b>2,046</b>	<b>5,811</b>	<b>285</b>	<b>14,846</b>
<b>Total exposure (EaD)</b>	<b>185,184</b>	<b>209,300</b>	<b>437,302</b>	<b>23,946</b>	<b>855,732</b>

Exposure type	As at 30 Sep 18				Total exposure \$m
	<12 months \$m	1 – 5 years \$m	>5 years \$m	No specified maturity \$m	
<b>Subject to IRB approach</b>					
Corporate (including SME)	74,015	125,710	27,899	7,101	234,725
Sovereign	22,809	10,813	29,462	81	63,165
Bank	16,711	12,582	6,807	303	36,403
Residential mortgage	31,221	6,711	346,346	454	384,732
Qualifying revolving retail	-	-	-	11,339	11,339
Retail SME	6,357	8,105	2,859	613	17,934
Other retail	255	1,178	777	2,126	4,336
<b>Total IRB approach</b>	<b>151,368</b>	<b>165,099</b>	<b>414,150</b>	<b>22,017</b>	<b>752,634</b>
<b>Specialised lending</b>	<b>28,391</b>	<b>35,320</b>	<b>3,942</b>	<b>387</b>	<b>68,040</b>
<b>Subject to standardised approach</b>					
Residential mortgage	166	112	1,851	10	2,139
Corporate	6,636	1,974	4,405	245	13,260
Other	988	142	4	-	1,134
<b>Total standardised approach</b>	<b>7,790</b>	<b>2,228</b>	<b>6,260</b>	<b>255</b>	<b>16,533</b>
<b>Total exposures (EaD)</b>	<b>187,549</b>	<b>202,647</b>	<b>424,352</b>	<b>22,659</b>	<b>837,207</b>

## 4.1 General Disclosures (continued)

## Credit Provisions and Losses

Table 4.1F: Provisions by Asset Class

The following table provides information on provisioning by asset class.

Exposure type	As at 31 Mar 19			6 months ended 31 Mar 19	
	Impaired facilities	Past due facilities ≥90 days	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	\$m	\$m	\$m	\$m	\$m
<b>Subject to IRB approach</b>					
Corporate (including SME)	1,008	173	511	86	40
Residential mortgage	306	2,656	85	36	48
Qualifying revolving retail	-	52	-	95	83
Retail SME	75	158	45	17	23
Other retail	5	60	4	55	56
<b>Total IRB approach</b>	<b>1,394</b>	<b>3,099</b>	<b>645</b>	<b>289</b>	<b>250</b>
<b>Specialised lending</b>	<b>161</b>	<b>79</b>	<b>63</b>	<b>8</b>	<b>5</b>
<b>Subject to standardised approach</b>					
Residential mortgage	8	27	3	-	1
Corporate	1	1	6	-	2
<b>Total standardised approach</b>	<b>9</b>	<b>28</b>	<b>9</b>	<b>-</b>	<b>3</b>
<b>Total</b>	<b>1,564</b>	<b>3,206</b>	<b>717</b>	<b>297</b>	<b>258</b>
<b>Additional regulatory specific provisions<sup>(1)</sup></b>			<b>1,212</b>		

<sup>(1)</sup> In line with APRA's July 2017 guidance "Provisions for regulatory purposes and AASB 9 Financial Instruments", additional regulatory specific provisions includes collective provisions for facilities in Stage 2 with identified deterioration (that do not meet the two exception clauses per the APRA guidance), and Stage 3 in default.

Exposure type	As at 30 Sep 18			6 months ended 30 Sep 18	
	Impaired facilities	Past due facilities ≥90 days	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	\$m	\$m	\$m	\$m	\$m
<b>Subject to IRB approach</b>					
Corporate (including SME)	970	143	467	40	67
Residential mortgage	289	2,166	87	39	33
Qualifying revolving retail	-	65	-	96	104
Retail SME	77	123	45	25	20
Other retail	4	56	3	50	55
<b>Total IRB approach</b>	<b>1,340</b>	<b>2,553</b>	<b>602</b>	<b>250</b>	<b>279</b>
<b>Specialised lending</b>	<b>172</b>	<b>69</b>	<b>61</b>	<b>6</b>	<b>9</b>
<b>Subject to standardised approach</b>					
Residential mortgage	8	22	4	-	-
Corporate	1	4	8	4	1
<b>Total standardised approach</b>	<b>9</b>	<b>26</b>	<b>12</b>	<b>4</b>	<b>1</b>
<b>Total</b>	<b>1,521</b>	<b>2,648</b>	<b>675</b>	<b>260</b>	<b>289</b>
<b>Additional regulatory specific provisions</b>			<b>363</b>		

## 4.1 General Disclosures (continued)

**Table 4.1G: Provisions by Industry**

The following table provides information on provisioning by industry. Industry classifications follow ANZSIC Level 1 classifications.

Industry sector	As at 31 Mar 19			6 months ended 31 Mar 19	
	Impaired facilities	Past due facilities ≥90 days	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	\$m	\$m	\$m	\$m	\$m
Accommodation, cafes, pubs and restaurants	90	25	28	3	6
Agriculture, forestry, fishing and mining	335	56	137	5	12
Business services and property services	130	41	61	16	8
Commercial property	169	90	65	8	7
Construction	54	42	36	10	11
Finance and insurance	38	9	53	27	-
Manufacturing	97	29	71	(27)	4
Personal	6	117	5	153	140
Residential mortgages	314	2,683	88	36	49
Retail and wholesale trade	269	72	122	61	16
Transport and storage	45	24	31	4	2
Other <sup>(1)</sup>	17	18	20	1	3
<b>Total</b>	<b>1,564</b>	<b>3,206</b>	<b>717</b>	<b>297</b>	<b>258</b>
<b>Additional regulatory specific provision<sup>(2)</sup></b>			<b>1,212</b>		

<sup>(1)</sup> Other includes government, health services and electricity, gas and water supply.

<sup>(2)</sup> In line with APRA's July 2017 guidance "Provisions for regulatory purposes and AASB 9 Financial Instruments", additional regulatory specific provisions includes collective provisions for facilities in Stage 2 with identified deterioration (that do not meet the two exception clauses per the APRA guidance), and Stage 3 in default.

Industry sector	As at 30 Sep 18			6 months ended 30 Sep 18	
	Impaired facilities	Past due facilities ≥90 days	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	\$m	\$m	\$m	\$m	\$m
Accommodation, cafes, pubs and restaurants	132	17	31	(2)	13
Agriculture, forestry, fishing and mining	325	38	142	31	22
Business services and property services	103	30	51	(1)	11
Commercial property	180	77	63	5	9
Construction	61	32	37	5	14
Finance and insurance	45	7	27	(9)	-
Manufacturing	152	34	102	2	16
Personal	5	126	4	147	159
Residential mortgages	297	2,187	91	39	33
Retail and wholesale trade	152	49	77	27	4
Transport and storage	47	34	28	8	4
Other	22	17	22	8	4
<b>Total</b>	<b>1,521</b>	<b>2,648</b>	<b>675</b>	<b>260</b>	<b>289</b>
<b>Additional regulatory specific provision</b>			<b>363</b>		



## 4.1 General Disclosures (continued)

Table 4.1H: Provisions by Geography

The following table provides information on provisioning by major geographical area, derived from the booking office where the exposure was transacted.

Geographic region	As at 31 Mar 19			
	Impaired facilities	Past due facilities $\geq 90$ days	Specific provision for credit impairment	General reserve for credit losses
	\$m	\$m	\$m	\$m
Australia	1,227	3,061	600	2,707
New Zealand	300	125	103	508
United Kingdom	31	14	11	7
Other <sup>(1)</sup>	6	6	3	27
<b>Total</b>	<b>1,564</b>	<b>3,206</b>	<b>717</b>	<b>3,249</b>
Additional regulatory specific provisions <sup>(2)</sup>			1,212	(1,212)
Plus reserve created through retained profits				-
<b>General reserve for credit losses (GRCL)<sup>(3)</sup></b>				<b>2,037</b>

<sup>(1)</sup> Other comprises North America and Asia.

<sup>(2)</sup> In line with APRA's July 2017 guidance "Provisions for regulatory purposes and AASB 9 Financial Instruments", additional regulatory specific provisions includes collective provisions for facilities in Stage 2 with identified deterioration (that do not meet the two exception clauses per the APRA guidance), and Stage 3 in default.

<sup>(3)</sup> The GRCL balance allocated across geographic regions of \$3,249 million (September 2018: \$3,054 million) includes \$3,015 million (September 2018: \$2,840 million) of provisions on loans at amortised cost and \$234 million (September 2018: \$214 million) provisions on loans and derivatives at fair value.

Geographic region	As at 30 Sep 18			
	Impaired facilities	Past due facilities $\geq 90$ days	Specific provision for credit impairment	General reserve for credit losses
	\$m	\$m	\$m	\$m
Australia	1,231	2,527	562	2,547
New Zealand	247	104	97	467
United Kingdom	37	12	13	10
Other	6	5	3	30
<b>Total</b>	<b>1,521</b>	<b>2,648</b>	<b>675</b>	<b>3,054</b>
Regulatory specific provisions			363	(363)
Plus reserve created through retained profits				-
<b>General reserve for credit losses (GRCL)</b>				<b>2,691</b>

## 4.1 General Disclosures (continued)

**Table 4.1I: Movement in Provisions**

The following table provides the movements in the balance of provisions over the reporting period for both specific provisions and the GRCL.

	6 months ended 31 Mar 19	6 months ended 30 Sep 18
	\$m	\$m
<b>General reserve for credit losses</b>		
Collective provision balance at beginning of period	2,840	2,699
Net transfer to specific provision	(142)	(103)
New and increased provision (net of releases)	296	254
Foreign currency translation and other adjustments	21	(10)
Collective provision on loans and advances at amortised cost	3,015	2,840
Plus provisions on loans and derivatives at fair value <sup>(1)</sup>	234	214
Less additional regulatory specific provisions	(1,212)	(363)
<b>General reserve for credit losses</b>	<b>2,037</b>	<b>2,691</b>
<b>Specific provisions</b>		
Balance at beginning of period	673	709
Net transfer from collective provision	142	103
New and increased provisions (net of releases)	270	282
Write-backs of specific provisions	(89)	(99)
Write-offs from specific provisions	(281)	(317)
Foreign currency translation and other adjustments	1	(5)
Specific provisions excluding provisions for assets at fair value	716	673
Specific provisions held on assets at fair value	1	2
Additional regulatory specific provisions	1,212	363
<b>Total regulatory specific provisions</b>	<b>1,929</b>	<b>1,038</b>
<b>Total provisions</b>	<b>3,966</b>	<b>3,729</b>

<sup>(1)</sup> Provisions on assets at fair value are presented gross of \$8 million regulatory specific provisions for assets at fair value (September 2018: \$6 million).

### Factors Impacting Loss Experience in the Period

#### 90+ days past due facilities

90+ days past due facilities at 31 March 2019 increased compared to 30 September 2018 due to the IRB residential mortgages portfolio in Australia with an increase in delinquencies across all states.

#### Impaired facilities

Impaired facilities at 31 March 2019 increased compared to 30 September 2018 within the IRB corporate (including corporate SME) portfolio mainly driven by the impairment of a small number of larger exposures partially offset by business turnarounds across the Australian business lending portfolio.

#### Specific provision for credit impairment

Specific provision for credit impairment at 31 March 2019 increased compared to 30 September 2018, driven by higher charges within the Australian IRB corporate (including corporate SME) portfolio mainly due to the impairment of a small number of larger exposures, partially offset by write-backs resulting from business turnarounds for a small number of larger exposures.

#### Charge for specific provisions

The specific provision charge for the six months ended 31 March 2019 was \$297 million, \$37 million higher than the six months ended 30 September 2018 due to higher charges in the Australian IRB corporate (including corporate SME) portfolio. This was driven by the impairment of a small number of larger exposures in Corporate and Institutional Banking, partially offset by lower charges in Business and Private Banking due to low levels of newly impaired exposures combined with write-backs resulting from business turnarounds for a small number of larger exposures.

#### Net write-offs

Net write-offs decreased from \$289 million to \$258 million for the six months ended 31 March 2019, mainly driven by a reduction in the level of write-offs within the Australian IRB corporate (including corporate SME) portfolio.

## 4.1 General Disclosures (continued)

**Table 4.1J (i): Loss Experience**

The following table provides the regulatory expected loss (which are through the cycle loss estimates) compared to the realised actual losses calculated as an exposure weighted average since 2010.

Actual losses (net write-offs) measured over the short-term will differ to regulatory expected loss estimates as actual losses are a lag indicator of the quality of the assets in prior periods. Other differences between these measures are:

- Actual losses do not take into account modelled economic costs such as internal workout costs factored into estimates of loss.
- Regulatory expected loss is based on the quality of exposures at a point in time using long run PDs and stressed LGDs. In most years actual losses would be below the regulatory expected loss estimate.
- Regulatory expected loss includes expected losses on non-defaulted assets which is a function of long-run PDs and downturn stressed LGDs. For defaulted exposures, regulatory expected loss is based on the Group's best estimate of expected loss.

Exposure type	As at 31 Mar 19	
	Exposure weighted average actual loss (net write-offs)	Exposure weighted average regulatory expected loss
	\$m	\$m
<b>Subject to IRB approach</b>		
Corporate (including SME)	442	2,316
Sovereign	-	2
Bank	2	45
Residential mortgage	91	914
Qualifying revolving retail	174	218
Retail SME	68	238
Other retail	98	151
<b>Total IRB approach</b>	<b>875</b>	<b>3,884</b>

<sup>(1)</sup> Average 12 monthly period since 31 March 2010.

Exposure type	As at 30 Sep 18	
	Exposure weighted average actual loss (net write-offs)	Exposure weighted average regulatory expected loss
	\$m	\$m
<b>Subject to IRB approach</b>		
Corporate (including SME)	476	2,301
Sovereign	-	5
Bank	5	45
Residential mortgage	83	877
Qualifying revolving retail	155	211
Retail SME	65	242
Other retail	86	145
<b>Total IRB approach</b>	<b>870</b>	<b>3,826</b>

<sup>(1)</sup> Average 12 monthly period since 30 September 2010.

## 4.1 General Disclosures (continued)

### Accuracy of Risk Estimates

The following tables have been provided to compare the estimates of credit risk factors used within the calculation of regulatory capital with actual outcomes across asset classes. Estimates for specialised lending have not been included as these exposures are subject to the supervisory slotting criteria approach, which relies upon the application of supervisory risk-weights.

A full explanation of the internal ratings process and the application of credit risk models to calculate PD, EaD and LGD is provided within Section 5.3 *Internal Ratings-Based Portfolios* of the September 2018 Pillar 3 Report.

#### Table 4.1J (ii): Accuracy of Risk Estimates for PD and EaD

The following table compares internal estimates of long-run PD with actual default rates. Averages of actual and estimated PD are calculated using the cohort that is not in default at the beginning of the financial year and averaged out over a nine year observation period. The EaD ratio compares the estimated downturn EaD at the beginning of the financial year against the actual default amount.

Exposure type	As at 31 Mar 19		Ratio of estimated to actual EAD
	Average estimated PD <sup>(1)</sup>	Average actual PD <sup>(1)</sup>	
	%	%	
<b>Subject to IRB approach</b>			
Corporate (including SME)	1.70	1.67	1.1
Sovereign <sup>(2)</sup>	0.45	0.08	1.1
Bank <sup>(2)</sup>	0.39	0.17	1.0
Residential mortgage <sup>(3)</sup>	0.95	0.88	1.0
Qualifying revolving retail	1.56	1.51	1.1
Retail SME	2.18	2.07	1.1
Other retail	2.74	2.89	1.1

<sup>(1)</sup> These values provide a comparison of internal estimates of long-run PD with actual default rates averaged over a period of nine years to 31 March 2019.

<sup>(2)</sup> Average actual PDs for sovereign and bank exposures are based on a low number of observed defaults.

<sup>(3)</sup> Estimated PDs includes BNZ assets subject to RBNZ calibration overlay.

Exposure type	As at 30 Sep 18		Ratio of estimated to actual EAD
	Average estimated PD <sup>(1)</sup>	Average actual PD <sup>(1)</sup>	
	%	%	
<b>Subject to IRB approach</b>			
Corporate (including SME)	1.74	1.77	1.1
Sovereign	0.43	0.12	1.1
Bank	0.36	0.13	1.1
Residential mortgage	0.92	0.88	1.0
Qualifying revolving retail	1.49	1.52	1.1
Retail SME	2.14	2.15	1.1
Other retail	2.69	2.90	1.1

<sup>(1)</sup> These values provide a comparison of internal estimates of long-run PD with actual default rates averaged over a period of nine years to 30 September 2018.

Exposure type	As at 31 Mar 18		Ratio of estimated to actual EAD
	Average estimated PD <sup>(1)</sup>	Average actual PD <sup>(1)</sup>	
	%	%	
<b>Subject to IRB approach</b>			
Corporate (including SME)	1.72	1.75	1.1
Sovereign	0.46	0.09	1.2
Bank	0.39	0.19	1.0
Residential mortgage	0.94	0.87	1.0
Qualifying revolving retail	1.53	1.51	1.1
Retail SME	2.13	2.15	1.1
Other retail	2.72	2.91	1.1

<sup>(1)</sup> These values provide a comparison of internal estimates of long-run PD with actual default rates averaged over a period of eight years to 31 March 2018.

## 4.1 General Disclosures (continued)

Table 4.1J (iii): Accuracy of Risk Estimates for LGD

The following table compares internal estimates of downturn LGD with actual losses. Actual LGD was calculated using net write-offs from defaults during the observation period with the most recent defaults excluded to allow sufficient time for the workout of the asset and recognition of any losses. For defaults relating to qualifying revolving retail and other retail, this period is the most recent 12 months and for all other asset classes the period is the most recent two years. Estimates are calculated using the downturn LGD at the beginning of the financial year.

Exposure type	As at 31 Mar 19	
	Average estimated downturn LGD <sup>(1)</sup>	Average actual LGD <sup>(1)</sup>
	%	%
<b>Subject to IRB approach</b>		
Corporate (including SME) <sup>(2)</sup>	38.6	23.0
Sovereign <sup>(3)</sup>	45.0	-
Bank <sup>(3)</sup>	52.9	-
Residential mortgage <sup>(2)</sup>	20.5	4.7
Qualifying revolving retail	87.2	54.0
Retail SME	35.8	18.0
Other retail	76.8	45.7

<sup>(1)</sup> These values provide a comparison of internal estimates of downturn LGD with actual losses which were evidenced during the nine years to 31 March 2019.

<sup>(2)</sup> Estimated downturn LGD subject to APRA and RBNZ imposed regulatory floors.

<sup>(3)</sup> Average actual and estimated downturn LGDs for sovereign and bank exposures have historically been excluded from this table in the instances where a low number of defaults have been observed.

Exposure type	As at 30 Sep 18	
	Average estimated downturn LGD <sup>(1)</sup>	Average actual LGD <sup>(1)</sup>
	%	%
<b>Subject to IRB approach</b>		
Corporate (including SME)	38.4	24.1
Sovereign	45.0	-
Bank	51.1	-
Residential mortgage	20.6	5.1
Qualifying revolving retail	87.2	54.4
Retail SME	35.8	18.5
Other retail	76.7	44.5

<sup>(1)</sup> These values provide a comparison of internal estimates of downturn LGD with actual losses which were evidenced during the nine years to 30 September 2018.

Exposure type	As at 31 Mar 18	
	Average estimated downturn LGD <sup>(1)</sup>	Average actual LGD <sup>(1)</sup>
	%	%
<b>Subject to IRB approach</b>		
Corporate (including SME)	38.1	24.5
Sovereign	45.0	-
Bank	52.9	-
Residential mortgage	20.5	5.0
Qualifying revolving retail	87.2	54.0
Retail SME	35.9	18.1
Other retail	76.5	45.0

<sup>(1)</sup> These values provide a comparison of internal estimates of downturn LGD with actual losses which were evidenced during the eight years to 31 March 2018.

## 4.2 Standardised and Supervisory Slotting Portfolios

### Standardised Credit Risk Portfolios

There are several regulatory prescribed portfolios (such as qualifying central clearing counterparties, self-managed superannuation funds and margin lending), plus some other small portfolios where the standardised approach to credit risk is applied by the Group.

Fitch Ratings, Moody's Investor Services and Standard & Poor's credit ratings are used to determine the risk-weights within the APRA standardised approach, as presented in the table below. APRA's external rating grades table is used to map external ratings into an external rating grade or credit rating grade that defines the appropriate risk-weight as outlined in APS 112 *Capital Adequacy: Standardised Approach to Credit Risk*.

External rating grade classification			
External rating grade	Standard & Poor's	Moody's	Fitch
1	AAA, AA+, AA, AA-	Aaa, Aa1, Aa2, Aa3	AAA, AA+, AA, AA-
2	A+, A, A-	A1, A2, A3	A+, A, A-
3	BBB+, BBB, BBB-	Baa1, Baa2, Baa3	BBB+, BBB, BBB-
4	BB+, BB, BB-	Ba1, Ba2, Ba3	BB+, BB, BB-
5	B+, B, B-	B1, B2, B3	B+, B, B-
6	CCC+, CCC, CCC-, CC, C, D	Caa1, Caa2, Caa3, Ca, C	CCC+, CCC, CCC-, CC, C, D

### Table 4.2A: Standardised Exposures by Risk-weight

The following table provides credit risk exposures subject to the standardised approach by risk-weight.

Standardised approach – risk-weights	As at	
	31 Mar 19	30 Sep 18
	Total exposure	Total exposure
	\$m	\$m
2%	4,526	6,275
4%	1,524	1,467
20%	1,744	1,799
35%	174	206
50%	444	456
75%	824	878
100%	5,417	5,160
150%	17	27
Default Fund Contributions <sup>(1)</sup>	176	265
<b>Total exposure subject to the standardised approach</b>	<b>14,846</b>	<b>16,533</b>

<sup>(1)</sup> Default fund contributions to qualifying central clearing counterparties are shown separately as they do not align to the risk-weights above.

### Table 4.2B: Standardised Exposures by Risk Grade

Asset class by rating grade	As at	
	31 Mar 19	30 Sep 18
	Total exposure	Total exposure
	\$m	\$m
Residential mortgage		
Unrated	2,190	2,139
Corporate		
External rating grade 1	277	-
External rating grade 2	802	1,275
Unrated	10,461	11,985
Sub-total	11,540	13,260
Other		
Unrated	1,116	1,134
<b>Total exposure subject to the standardised approach</b>	<b>14,846</b>	<b>16,533</b>

## Credit Risk

### Portfolios Subject to Supervisory Risk-weights in the IRB Approach

**Table 4.2C: Supervisory Slotting by Risk-weight**

The following table provides credit exposures for specialised lending products subject to supervisory slotting by risk-weight.

	As at	
	31 Mar 19	30 Sep 18
	Total exposure	Total exposure
	\$m	\$m
<b>Unexpected loss risk-weights</b>		
70%	23,535	23,681
90%	33,843	32,924
115%	9,036	10,123
250%	695	871
Default	671	441
<b>Total specialised lending exposure subject to supervisory slotting</b>	<b>67,780</b>	<b>68,040</b>

## 4.3 Internal Ratings-based Portfolios

**Table 4.3A: Non-Retail Exposures by Risk Grade**

The following table provides a breakdown of non-retail credit exposures by PD risk grade, categorised into bands that broadly correspond to externally recognised risk grades. Moody's Investor Services risk grades have been included as a reference point. Exposures have been categorised into PD grades as assessed by the Group's own internal ratings system.

External credit rating equivalent	As at 31 Mar 19						
	PD risk grade mapping						
	Aa3 and above 0<0.03%	A1, A2, A3 0.03<0.11%	Baa1, Baa2, Baa3 0.11<0.55%	Ba1, Ba2 0.55<2.00%	Ba3, B1 2.00<5.01%	B2 and below 5.01<99.99%	Default 100%
Subject to IRB approach	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Total exposure</b>							
Corporate (including SME)	39	54,089	97,859	73,929	19,740	4,795	2,265
Sovereign	55,488	4,066	280	53	13	-	-
Bank	-	35,256	3,517	85	3	-	-
<b>Total exposure (EaD)</b>	<b>55,527</b>	<b>93,411</b>	<b>101,656</b>	<b>74,067</b>	<b>19,756</b>	<b>4,795</b>	<b>2,265</b>
<b>Undrawn commitments<sup>(1)</sup></b>							
Corporate (including SME)	19	20,182	27,969	12,556	2,341	366	49
Sovereign	170	237	8	23	7	-	-
Bank	-	898	241	12	-	-	-
<b>Total undrawn commitments</b>	<b>189</b>	<b>21,317</b>	<b>28,218</b>	<b>12,591</b>	<b>2,348</b>	<b>366</b>	<b>49</b>
<b>Subject to IRB approach</b>							
<b>Average EaD (\$m)<sup>(2)</sup></b>							
Corporate (including SME)	24.72	1.44	0.59	0.30	0.20	0.16	0.35
Sovereign	16.02	1.84	0.87	0.21	0.07	0.01	-
Bank	-	2.32	0.79	0.82	0.05	0.05	-
<b>Exposure-weighted average LGD (%)</b>							
Corporate (including SME)	59.0%	48.7%	37.2%	31.6%	30.7%	34.1%	42.5%
Sovereign	4.2%	32.9%	39.0%	46.2%	45.0%	45.0%	-
Bank	-	54.6%	58.4%	59.6%	59.6%	59.6%	-
<b>Exposure-weighted average risk-weight (%)</b>							
Corporate (including SME)	21.7%	25.8%	42.4%	58.7%	75.8%	129.3%	189.2%
Sovereign	1.2%	12.9%	40.7%	72.0%	108.7%	147.6%	-
Bank	-	22.7%	66.9%	96.2%	175.4%	200.2%	-

<sup>(1)</sup> Undrawn commitments are included in total exposure shown above.

<sup>(2)</sup> Simple average of exposure by number of arrangements.

## 4.3 Internal Ratings-based Portfolios (continued)

External credit rating equivalent	As at 30 Sep 18						
	PD risk grade mapping						
	Aa3 and above 0<0.03%	A1, A2, A3 0.03<0.11%	Baa1, Baa2, Baa3 0.11<0.55%	Ba1, Ba2 0.55<2.00%	Ba3, B1 2.00<5.01%	B2 and below 5.01<99.99%	Default 100%
Subject to IRB approach	\$m	\$m	\$m	\$m	\$m	\$m	\$m
<b>Total exposure</b>							
Corporate (including SME)	26	48,869	90,880	69,258	19,258	4,700	1,734
Sovereign	58,803	4,136	151	62	13	-	-
Bank	-	32,646	3,575	122	60	-	-
<b>Total exposure (EaD)</b>	<b>58,829</b>	<b>85,651</b>	<b>94,606</b>	<b>69,442</b>	<b>19,331</b>	<b>4,700</b>	<b>1,734</b>
<b>Undrawn commitments</b>							
Corporate (including SME)	26	18,868	25,936	11,865	2,189	372	73
Sovereign	239	183	13	21	7	-	-
Bank	-	857	149	26	-	-	-
<b>Total undrawn commitments</b>	<b>265</b>	<b>19,908</b>	<b>26,098</b>	<b>11,912</b>	<b>2,196</b>	<b>372</b>	<b>73</b>
<b>Subject to IRB approach</b>							
<b>Average EaD (\$m)</b>							
Corporate (including SME)	54.71	1.27	0.56	0.28	0.19	0.16	0.26
Sovereign	33.02	1.87	0.42	0.25	0.07	-	-
Bank	-	2.30	0.67	1.06	0.83	-	-
<b>Exposure-weighted average LGD (%)</b>							
Corporate (including SME)	59.0%	49.1%	37.3%	31.3%	30.3%	35.6%	42.3%
Sovereign	4.2%	33.4%	35.2%	45.4%	45.0%	-	-
Bank	-	53.8%	58.9%	59.6%	59.6%	-	-
<b>Exposure-weighted average risk-weight (%)</b>							
Corporate (including SME)	25.3%	26.4%	42.4%	58.5%	74.1%	136.9%	232.1%
Sovereign	1.0%	13.5%	40.5%	82.5%	109.0%	-	-
Bank	-	22.8%	65.8%	108.7%	172.2%	-	-



## 4.3 Internal Ratings-based Portfolios (continued)

**Table 4.3B: Retail Exposures by Risk Grade**

The following table provides a breakdown of the retail credit exposures (net of eligible financial collateral) by PD risk grade, categorised into bands that broadly correspond to externally recognised risk grades, ranging from super senior investment grade to defaulted exposures.

	As at 31 Mar 19					
	PD risk grade mapping					
<b>Subject to IRB approach</b>	<b>0&lt;0.1%</b>	<b>0.1&lt;0.5%</b>	<b>0.5&lt;2.0%</b>	<b>2.0&lt;5.0%</b>	<b>5.0&lt;99.9%</b>	<b>100%</b>
	<b>\$m</b>	<b>\$m</b>	<b>\$m</b>	<b>\$m</b>	<b>\$m</b>	<b>\$m</b>
<b>Total exposure</b>						
Residential mortgage	82,507	159,202	114,145	17,597	11,620	3,373
Qualifying revolving retail	2,537	3,515	2,580	1,532	782	57
Retail SME	1,624	5,409	6,491	2,836	1,107	418
Other retail	894	632	1,128	1,033	537	73
<b>Total exposure (EaD)</b>	<b>87,562</b>	<b>168,758</b>	<b>124,344</b>	<b>22,998</b>	<b>14,046</b>	<b>3,921</b>
<b>Undrawn commitments<sup>(1)</sup></b>						
Residential mortgage	28,605	13,650	5,351	509	79	20
Qualifying revolving retail	2,234	2,297	741	162	53	3
Retail SME	941	1,497	927	331	76	19
Other retail	606	268	216	79	21	1
<b>Total undrawn commitments</b>	<b>32,386</b>	<b>17,712</b>	<b>7,235</b>	<b>1,081</b>	<b>229</b>	<b>43</b>
<b>Subject to IRB approach</b>						
<b>Average EaD (\$m)<sup>(2)</sup></b>						
Residential mortgage	0.07	0.27	0.23	0.29	0.33	0.24
Qualifying revolving retail	0.01	0.01	0.01	0.01	0.01	0.01
Retail SME	0.02	0.03	0.03	0.03	0.02	0.02
Other retail	small	small	0.01	0.01	small	small
<b>Exposure-weighted average LGD (%)</b>						
Residential mortgage	20.0%	20.0%	20.1%	19.9%	20.0%	20.1%
Qualifying revolving retail	73.3%	74.5%	76.6%	77.6%	77.3%	76.4%
Retail SME	24.2%	25.2%	28.2%	29.6%	32.7%	34.7%
Other retail	83.9%	80.9%	76.2%	73.8%	71.2%	69.3%
<b>Exposure-weighted average risk-weight (%)</b>						
Residential mortgage	5.7%	17.1%	34.3%	77.6%	123.3%	205.1%
Qualifying revolving retail	3.4%	10.2%	33.7%	72.3%	169.9%	131.6%
Retail SME	6.0%	14.5%	33.4%	54.5%	93.0%	227.3%
Other retail	13.7%	43.4%	85.8%	109.0%	138.9%	132.7%

<sup>(1)</sup> Undrawn commitments are included in total exposures shown above.

<sup>(2)</sup> Simple average of exposure by number of arrangements.

## 4.3 Internal Ratings-based Portfolios (continued)

	As at 30 Sep 18					
	PD risk grade mapping					
Subject to IRB approach	0<0.1%	0.1<0.5%	0.5<2.0%	2.0<5.0%	5.0<99.9%	100%
	\$m	\$m	\$m	\$m	\$m	\$m
<b>Total exposure</b>						
Residential mortgage	82,393	159,096	112,439	17,333	10,618	2,853
Qualifying revolving retail	2,590	3,598	2,628	1,647	816	60
Retail SME	1,531	5,406	6,708	2,915	1,018	356
Other retail	869	629	1,162	1,064	546	66
<b>Total exposure (EaD)</b>	<b>87,383</b>	<b>168,729</b>	<b>122,937</b>	<b>22,959</b>	<b>12,998</b>	<b>3,335</b>
<b>Undrawn commitments</b>						
Residential mortgage	30,162	13,894	5,249	456	70	20
Qualifying revolving retail	2,282	2,380	787	193	70	3
Retail SME	855	1,515	953	360	76	22
Other retail	584	264	224	80	23	-
<b>Total undrawn commitments</b>	<b>33,883</b>	<b>18,053</b>	<b>7,213</b>	<b>1,089</b>	<b>239</b>	<b>45</b>
<b>Subject to IRB approach</b>						
<b>Average EaD (\$m)</b>						
Residential mortgage	0.07	0.27	0.22	0.28	0.33	0.23
Qualifying revolving retail	0.01	0.01	0.01	0.01	0.01	0.01
Retail SME	0.02	0.03	0.03	0.03	0.01	0.02
Other retail	small	small	0.01	0.01	small	small
<b>Exposure-weighted average LGD (%)</b>						
Residential mortgage	20.0%	20.0%	20.1%	19.9%	20.0%	20.1%
Qualifying revolving retail	73.4%	74.5%	76.6%	77.7%	77.3%	76.3%
Retail SME	24.1%	25.2%	28.1%	29.4%	30.3%	34.8%
Other retail	83.8%	80.6%	76.1%	73.7%	71.4%	69.4%
<b>Exposure-weighted average risk-weight (%)</b>						
Residential mortgage	5.8%	17.1%	34.8%	77.2%	122.6%	223.0%
Qualifying revolving retail	3.4%	10.2%	33.7%	72.7%	167.2%	157.8%
Retail SME	5.9%	14.5%	33.5%	54.1%	91.0%	254.5%
Other retail	13.8%	43.4%	85.8%	108.8%	137.8%	181.1%

## 4.4 Credit Risk Mitigation

**Table 4.4A: Mitigation by Eligible Financial Collateral**

The following table provides details of eligible financial collateral applied in determining the credit risk exposures. Eligible financial collateral, when used to reduce levels of exposure, refers to cash and cash equivalents as defined in APS 112. Exposures covered by eligible financial collateral are measured after the application of regulatory haircuts.

Exposure type	As at 31 Mar 19	
	Total exposure	Eligible financial collateral applied
	\$m	\$m
<b>Subject to IRB approach</b>		
Corporate (including SME)	252,716	76,307
Sovereign	59,900	10,834
Bank	38,861	23,222
Residential mortgage	388,444	-
Qualifying revolving retail	11,003	-
Retail SME	17,885	5
Other retail	4,297	-
<b>Total IRB approach</b>	<b>773,106</b>	<b>110,368</b>
<b>Specialised lending</b>	<b>67,780</b>	<b>490</b>
<b>Subject to standardised approach</b>		
Residential mortgage	2,190	2
Corporate	11,540	40,422
Other	1,116	25
<b>Total standardised approach</b>	<b>14,846</b>	<b>40,449</b>

Exposure type	As at 30 Sep 18	
	Total exposure	Eligible financial collateral applied
	\$m	\$m
<b>Subject to IRB approach</b>		
Corporate (including SME)	234,725	61,494
Sovereign	63,165	12,321
Bank	36,403	21,184
Residential mortgage	384,732	-
Qualifying revolving retail	11,339	-
Retail SME	17,934	4
Other retail	4,336	2
<b>Total IRB approach</b>	<b>752,634</b>	<b>95,005</b>
<b>Specialised lending</b>	<b>68,040</b>	<b>593</b>
<b>Subject to standardised approach</b>		
Residential mortgage	2,139	2
Corporate	13,260	51,859
Other	1,134	12
<b>Total standardised approach</b>	<b>16,533</b>	<b>51,873</b>

## 4.4 Credit Risk Mitigation (continued)

**Table 4.4B: Mitigation by Guarantees and Credit Derivatives**

The following table provides details of guarantees and credit derivatives relating to each portfolio.

Exposure type	As at 31 Mar 19		
	Total exposure	Covered by guarantees	Covered by credit derivatives
	\$m	\$m	\$m
<b>Subject to IRB approach</b>			
Corporate (including SME)	252,716	25,420	-
Sovereign	59,900	-	-
Bank	38,861	155	-
Residential mortgage	388,444	-	-
Qualifying revolving retail	11,003	-	-
Retail SME	17,885	-	-
Other retail	4,297	-	-
<b>Total IRB approach</b>	<b>773,106</b>	<b>25,575</b>	<b>-</b>
<b>Specialised lending</b>	<b>67,780</b>	<b>-</b>	<b>-</b>
<b>Subject to standardised approach</b>			
Residential mortgage	2,190	-	-
Corporate	11,540	-	-
Other	1,116	-	-
<b>Total standardised approach</b>	<b>14,846</b>	<b>-</b>	<b>-</b>

Exposure type	As at 30 Sep 18		
	Total exposure	Covered by guarantees	Covered by credit derivatives
	\$m	\$m	\$m
<b>Subject to IRB approach</b>			
Corporate (including SME)	234,725	24,812	177
Sovereign	63,165	-	-
Bank	36,403	136	-
Residential mortgage	384,732	-	-
Qualifying revolving retail	11,339	-	-
Retail SME	17,934	-	-
Other retail	4,336	-	-
<b>Total IRB approach</b>	<b>752,634</b>	<b>24,948</b>	<b>177</b>
<b>Specialised lending</b>	<b>68,040</b>	<b>-</b>	<b>-</b>
<b>Subject to standardised approach</b>			
Residential mortgage	2,139	-	-
Corporate	13,260	-	-
Other	1,134	-	-
<b>Total standardised approach</b>	<b>16,533</b>	<b>-</b>	<b>-</b>

## 4.5 Counterparty Credit Risk

### Table 4.5A (i): Net Derivatives Credit Exposure

The following table provides the gross positive fair value of derivative contracts, netting benefits, netted current credit exposure and collateral held. Net derivatives credit exposure represents net EaD, or exposure amount, under the current exposure method.

	As at	
	31 Mar 19	30 Sep 18
	\$m	\$m
Gross positive fair value of derivative contracts	71,356	51,778
Netting benefits	(57,985)	(37,721)
<b>Netted current credit exposure (NCCE)</b>	<b>13,371</b>	<b>14,057</b>
Potential future credit exposure	18,586	19,522
Collateral held:		
Cash	(4,782)	(5,602)
Government securities	(397)	(508)
<b>Net derivatives credit exposure</b>	<b>26,778</b>	<b>27,469</b>

### Table 4.5A (ii): Distribution of Current Credit Exposure

The following table provides details of the net derivative credit exposure by type of derivative.

Exposure type	As at	
	31 Mar 19	30 Sep 18
	Exposure at default	Exposure at default
	\$m	\$m
Interest rate contracts	7,832	6,813
Foreign exchange and gold contracts	14,662	15,925
Equity contracts	538	126
Other commodity contracts (other than precious metals)	193	306
Other market related contracts	81	115
Central counterparty <sup>(1)</sup>	3,472	4,184
<b>Total</b>	<b>26,778</b>	<b>27,469</b>

<sup>(1)</sup> Derivative contracts with qualifying central clearing counterparties have not been broken down by type of derivative.

### Table 4.5B: Credit Derivative Transactions

The following table provides the notional value of credit derivative transactions that create exposures to CCR (notional value), segregated between use for the ADI's own credit portfolio, as well as in its intermediation activities (including the distribution of the credit derivatives products used). This is broken down further by protection bought and sold within each product group.

	As at 31 Mar 19			As at 30 Sep 18		
	Protection bought notional	Protection sold notional	Total notional	Protection bought notional	Protection sold notional	Total notional
	\$m	\$m	\$m	\$m	\$m	\$m
<b>Credit derivatives products used for own credit portfolio</b>						
Credit default swaps	-	-	-	69	-	69
<b>Credit derivatives products used for intermediation</b>						
Credit default swaps	3,589	1,653	5,242	5,153	2,757	7,910
Total return swaps	120	-	120	120	-	120
<b>Total credit derivative notional value</b>	<b>3,709</b>	<b>1,653</b>	<b>5,362</b>	<b>5,342</b>	<b>2,757</b>	<b>8,099</b>

## Section 5

## Securitisation

The Group engages in securitisation activities in relation to third parties, as well as its own assets.

The Group had no trading book exposures subject to APS 120 which were either risk-weighted or deducted from capital at 31 March 2019 or 30 September 2018.

The Group had no exposures subject to early amortisation in either banking or trading book at 31 March 2019 or 30 September 2018.

## Table 5.1A: Exposures Securitised

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

- capital relief – significant risk transfer of the underlying exposure is achieved for regulatory purposes
- funding only – significant risk transfer is not achieved
- internal residential mortgage-backed securities (RMBS) – securities are issued and held internally for contingent liquidity purposes (also known as self-securitisation).

Underlying asset	As at 31 Mar 19			
	Group originated capital relief	Group originated funding only	Group originated internal RMBS <sup>(1)</sup>	Third party originated assets
	\$m	\$m	\$m	\$m
Residential mortgage	3,056	2,103	79,991	-

<sup>(1)</sup> Includes internal securitisation pools of RMBS that have been developed as a source of contingent liquidity to support the Group's liquid asset holdings. The amount of these securitised assets is \$69,633 million (September 2018: \$60,350 million).

Underlying asset	As at 30 Sep 18			
	Group originated capital relief	Group originated funding only	Group originated internal RMBS	Third party originated assets
	\$m	\$m	\$m	\$m
Residential mortgage	1,690	2,332	69,750	-

## Table 5.1B: Past Due and Impaired Banking Book Exposures Securitised

The following table provides banking book exposures originated and securitised by the Group that are past due or impaired, and any losses that have been recognised on these securitised exposures.

Underlying asset	As at 31 Mar 19			
	Outstanding exposure	Impaired facilities	Past due facilities ≥90 days	Losses recognised
	\$m	\$m	\$m	\$m
Residential mortgage	85,150	81	536	-

Underlying asset	As at 30 Sep 18			
	Outstanding exposure	Impaired facilities	Past due facilities ≥90 days	Losses recognised
	\$m	\$m	\$m	\$m
Residential mortgage	73,772	56	452	-

Securitisation (continued)

**Table 5.1C: Recent Securitisation Activity**

The following table provides the amount of assets sold by the Group to securitisation SPVs and any gain or loss on sale. There was no such activity in the six months ended 30 September 2018.

Underlying asset	6 months ended 31 Mar 19			
	Group originated capital relief	Group originated funding only	Group originated internal RMBS	Recognised gain or loss on sale
	\$m	\$m	\$m	\$m
Residential mortgage	1,630	-	16,250	-

The Group did not securitise any exposures either in the trading book or synthetically in the six months ended 31 March 2019 or 30 September 2018.

The Group did not have any outstanding banking or trading book exposures that are intended to be securitised as at 31 March 2019 or 30 September 2018.

**Table 5.1D: Securitisation Exposures Retained or Purchased**

The following table provides the amount of securitisation exposures held in the banking book, broken down between on and off-balance sheet exposures.

Securitisation exposures include the following exposure types:

- liquidity facilities - facilities provided to securitisation vehicles for the primary purpose of funding any timing mismatches between receipts of funds on underlying exposures and payments on securities issued by the SPV or to cover the inability of the SPV to roll-over securities due to market disruption
- warehouse facilities - lending facilities provided to securitisation vehicles for the financing of exposures in a pool. These may be on a temporary basis pending the issue of securities or on an on-going basis
- credit enhancements - protection provided against credit losses to parties holding a securitisation exposure
- securities - holding of debt securities issued by securitisation vehicles
- derivatives - derivatives provided to securitisation vehicles, other than credit derivatives.

Securitisation exposure type	As at 31 Mar 19			As at 30 Sep 18		
	On-balance sheet	Off-balance sheet	Total	On-balance sheet	Off-balance sheet	Total
	\$m	\$m	\$m	\$m	\$m	\$m
Liquidity facilities	72	2,236	2,308	43	2,210	2,253
Warehouse facilities	8,831	2,828	11,659	8,036	3,627	11,663
Credit enhancements	-	-	-	-	-	-
Securities	9,685	-	9,685	9,433	-	9,433
Derivatives	51	46	97	26	25	51
<b>Total</b>	<b>18,639</b>	<b>5,110</b>	<b>23,749</b>	<b>17,538</b>	<b>5,862</b>	<b>23,400</b>

The Group had \$417 million of derivative exposures held in the trading book subject to IMA (default risk) under APS 116 *Capital Adequacy: Market Risk* as at 31 March 2019 (30 September 2018: \$265 million).

## Securitisation (continued)

**Table 5.1E: Securitisation Exposures by Risk-weight**

The following table provides banking book securitisation exposures and associated RWA by risk-weight bands.

Risk-weight bands	As at 31 Mar 19		As at 30 Sep 18	
	Exposure	RWA	Exposure	RWA
	\$m	\$m	\$m	\$m
15% ≤ 25%	22,429	4,022	22,212	3,947
> 25% ≤ 35%	576	153	390	104
> 35% ≤ 50%	447	167	422	155
> 50% ≤ 75%	224	141	298	180
> 75% ≤ 100%	10	9	21	19
> 100% ≤ 650%	42	90	38	72
> 650% ≤ 850%	12	91	9	69
>850% < 1250%	6	66	5	52
Deductions from CET1 capital <sup>(1)</sup>	3	-	5	-
<b>Total</b>	<b>23,749</b>	<b>4,739</b>	<b>23,400</b>	<b>4,598</b>

<sup>(1)</sup> Deductions relate to subordinated exposure to residential mortgages of \$3 million at 31 March 2019 (September 2018: \$3 million subordinated exposure to residential mortgages and \$2 million trade receivables).



## Market Risk

### Section 6

## Market Risk

**Table 6.1A: Market Risk Risk-weighted Assets**

	As at	
	31 Mar 19	30 Sep 18
	\$m	\$m
Standard method	494	474
Internal model approach	8,696	8,986
<b>Market risk RWA</b>	<b>9,190</b>	<b>9,460</b>

**Table 6.1B: Standard Method Risk-weighted Assets**

	As at	
	31 Mar 19	30 Sep 18
	\$m	\$m
Interest rate risk	487	470
Equity position risk	7	4
Foreign exchange risk	-	-
Commodity risk	-	-
<b>Standard method RWA</b>	<b>494</b>	<b>474</b>

**Table 6.1C: Internal Model Approach VaR**

The following table provides information on the maximum, mean and minimum VaR over the reporting period and at period end.

	6 months ended 31 Mar 19			As at
	Mean value	Minimum value	Maximum value	31 Mar 19
	\$m	\$m	\$m	\$m
<b>VaR at a 99% confidence level<sup>(1)</sup></b>				
Foreign exchange risk	7	5	12	6
Interest rate risk	9	6	13	8
Volatility risk	3	2	5	2
Commodities risk	1	-	2	1
Credit risk	1	1	2	1
Inflation risk	2	1	3	3
Diversification benefit	(11)	n/a	n/a	(9)
<b>Total diversified VaR at a 99% confidence level</b>	<b>12</b>	<b>9</b>	<b>17</b>	<b>12</b>
Other market risks <sup>(2)</sup>	1	-	1	-
<b>Total VaR for physical and derivative positions<sup>(3)</sup></b>	<b>13</b>	<b>9</b>	<b>18</b>	<b>12</b>

<sup>(1)</sup> The maxima / minima by risk type is likely to occur during different days in the period. As such, the sum of these figures will not equal the total maxima / minima VaR which is the maxima / minima aggregate VaR position during the period.

<sup>(2)</sup> Other market risks include exposures to various basis risks measured individually at a portfolio level.

<sup>(3)</sup> VaR is measured individually for foreign exchange risk, interest rate risk, volatility risk, commodities risk, credit risk, and inflation risk. Risk limits are applied in these categories separately, and against the total risk position.

	6 months ended 30 Sep 18			As at
	Mean value	Minimum value	Maximum value	30 Sep 18
	\$m	\$m	\$m	\$m
<b>VaR at a 99% confidence level</b>				
Foreign exchange risk	8	5	12	8
Interest rate risk	10	9	12	9
Volatility risk	6	5	6	5
Commodities risk	-	-	1	-
Credit risk	1	1	2	1
Inflation risk	2	1	2	2
Diversification benefit	(14)	n/a	n/a	(11)
<b>Total diversified VaR at a 99% confidence level</b>	<b>13</b>	<b>11</b>	<b>17</b>	<b>14</b>
Other market risks	1	-	1	1
<b>Total VaR for physical and derivative positions</b>	<b>14</b>	<b>11</b>	<b>18</b>	<b>15</b>

## Market Risk (continued)

**Table 6.1D: Internal Model Approach Stressed VaR**

The following table provides information on the maximum, mean and minimum stressed VaR over the reporting period and at period end.

	6 months ended 31 Mar 19			As at
	Mean value	Minimum value	Maximum value	31 Mar 19
	\$m	\$m	\$m	\$m
<b>Stressed VaR at risk at a 99% confidence level<sup>(1)</sup></b>				
Foreign exchange risk	20	10	39	21
Interest rate risk	36	29	44	37
Volatility risk	8	5	15	10
Commodities risk	2	-	5	2
Credit risk	13	10	16	11
Inflation risk	4	4	8	8
Diversification benefit	(38)	n/a	n/a	(44)
<b>Total diversified stressed VaR at a 99% confidence level</b>	<b>45</b>	<b>38</b>	<b>56</b>	<b>45</b>
Other market risks <sup>(2)</sup>	3	2	5	4
<b>Total stressed VaR for physical and derivative positions<sup>(3)</sup></b>	<b>48</b>	<b>40</b>	<b>61</b>	<b>49</b>

<sup>(1)</sup> The maxima / minima by risk type is likely to occur during different days in the period. As such, the sum of these figures will not equal the total maxima / minima stressed VaR which is the maxima / minima aggregate stressed VaR position during the period.

<sup>(2)</sup> Other market risks include exposures to various basis risks measured individually at a portfolio level.

<sup>(3)</sup> VaR is measured individually for foreign exchange risk, interest rate risk, volatility risk, commodities risk, credit risk, and inflation risk. Risk limits are applied in these categories separately, and against the total risk position.

	6 months ended 30 Sep 18			As at
	Mean value	Minimum value	Maximum value	30 Sep 18
	\$m	\$m	\$m	\$m
<b>Stressed VaR at a 99% confidence level</b>				
Foreign exchange risk	20	10	33	23
Interest rate risk	38	33	46	36
Volatility risk	12	9	13	10
Commodities risk	1	-	3	2
Credit risk	13	11	16	11
Inflation risk	5	1	5	4
Diversification benefit	(46)	n/a	n/a	(44)
<b>Total diversified stressed VaR at a 99% confidence level</b>	<b>43</b>	<b>36</b>	<b>55</b>	<b>42</b>
Other market risks	3	2	4	3
<b>Total stressed VaR for physical and derivative positions</b>	<b>46</b>	<b>38</b>	<b>59</b>	<b>45</b>

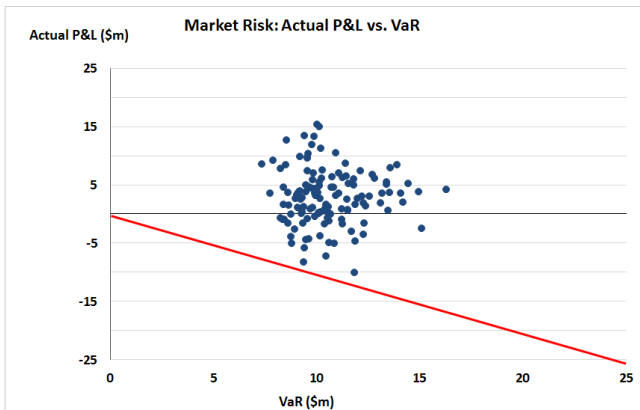
## Market Risk

### Market Risk (continued)

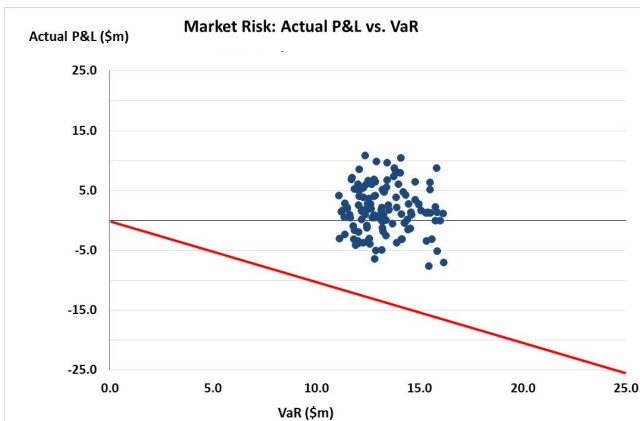
#### Back-testing Results

The following graphs compare the Group's daily VaR estimates against actual gains and losses in the profit or loss (P&L). The red line represents a one-to-one relationship between negative actual P&L and VaR, which is an indicator of the VaR model's performance.

##### Results for the six months ended 31 March 2019



##### Results for the six months ended 30 September 2018



Back-testing, carried out by comparing the Group's daily VaR estimate against actual P&L, identified no exceptions during the six months ended 31 March 2019 or the six months ended 30 September 2018. This remains within the model parameters and indicates acceptable operation of the VaR model within APRA's guidelines.

## Section 7

## Balance Sheet and Liquidity Risk

## 7.1 Interest Rate Risk in the Banking Book

Table 7.1A: Impact on Economic Value from Rate Shocks

The following table provides the increase or decrease in economic value for upward and downward rate shocks broken down by currency. The Level 2 Group's major currencies are modelled on an individual basis. The remaining minor currencies are aggregated and modelled using a single yield curve. The 200 basis point (bp) interest rate shock results include earnings offset.

	As at 31 Mar 19		As at 30 Sep 18	
	200 bp parallel increase	200 bp parallel decrease	200 bp parallel increase	200 bp parallel decrease
	\$m	\$m	\$m	\$m
<b>Change in economic value</b>				
AUD	(57)	169	(70)	185
CAD	-	-	-	-
CHF	-	-	-	-
EUR	(4)	5	(7)	8
GBP	(10)	10	4	(4)
HKD	2	(2)	1	(1)
JPY	7	(7)	4	(4)
NZD	(214)	221	(227)	235
USD	(36)	43	(67)	75
Other	3	(3)	1	(1)
<b>Total change in economic value</b>	<b>(309)</b>	<b>436</b>	<b>(361)</b>	<b>493</b>

## 7.2 Equity Holdings in the Banking Book

Table 7.2A: Equity Holdings in the Banking Book

The following table provides the carrying value of equity investments as reported on the Level 2 Group's balance sheet, as well as the estimated fair value of those investments.

	As at 31 Mar 19		As at 30 Sep 18	
	Carrying value	Fair value	Carrying value	Fair value
	\$m	\$m	\$m	\$m
<b>Unlisted equities</b>	765	765	988	1,024

Table 7.2B: Gains and Losses from Equity Holdings

The following table provides realised and unrealised gains or losses gross of any tax effect from investments in equity instruments, where:

- Realised gains or losses represent the difference between the cost of investments in equity instruments and proceeds where there has been a sale and/or liquidation in the six months to the end of the reporting period.
- Cumulative unrealised gains or losses represent the difference between the cost of investments in equity instruments and the carrying value.

	31 Mar 19	30 Sep 18
	\$m	\$m
<b>Gains/(losses) on equity investments</b>		
Realised gains	129	21
Cumulative unrealised gains/(losses) <sup>(1)</sup>	(3)	98

<sup>(1)</sup> As investments in equity instruments are a deduction for capital purposes, cumulative unrealised gains are not included in CET1 capital, Tier 1 capital or Tier 2 capital.

## 7.3 Liquidity Disclosures

### Liquidity Coverage Ratio

The Liquidity Coverage Ratio (LCR) measures the adequacy of High-quality Liquid Assets (HQLA) available to meet net cash outflows over a 30-day period during a severe liquidity stress scenario.

The Group manages its LCR position daily within a target range that reflects management risk appetite across the legal entity structure, major currencies and jurisdictions in which business activities are undertaken. The APRA minimum LCR is 100%.

The LCR for the three months ended 31 March 2019 and 31 December 2018 is presented in Table 7.3A *Liquidity Coverage Ratio Disclosure Template*, and is based on a simple average of daily LCR outcomes excluding weekends.

The Group maintains a diversified liquid asset portfolio to support regulatory and internal requirements in the various countries in which it operates. Average liquid assets for the three months ended 31 March 2019 were \$140 billion, of which HQLA were \$86 billion. From 31 December 2018 to 31 March 2019 average LCR remained flat at 130% with both liquid asset holdings and net cash outflows declining.

Alternative Liquid Assets (ALA) relate to the Committed Liquidity Facility (CLF) provided by the RBA. New Zealand dollar (NZD) liquid asset holdings in excess of meeting an NZD LCR of 100%, are excluded reflecting liquidity transferability considerations. The amount excluded was on average \$3 billion during the three months to 31 March 2019.

The CLF value used in the LCR calculation is the lesser of the undrawn portion of the facility granted to NAB and the value of the collateral held at any given time to support the facility and its liquidity requirements. This collateral is a combination of internal RMBS and other marketable securities eligible for repurchase by the RBA. The drawn portion of the CLF relates to accounts held with the RBA for the settlement of daily payment obligations. The available CLF was on average \$52 billion during the three months to 31 March 2019.

LCR net cash outflows represents the net cash flows that could potentially occur from on and off-balance sheet activities within a 30-day severe liquidity stress scenario. The cash flows are calculated by applying APRA prescribed run-off factors to maturing funding and deposits and inflow factors to assets. High run-off factors are applied to sophisticated investors and depositors including long term and short term debt holders, financial institution and corporate depositors. Lower run-off factors are applied to deposits less likely to be withdrawn in a period of severe stress. These include deposits from individuals and from small and medium enterprises. Deposits from corporate and financial institutions which are considered to be operational in nature also attract a lower run-off, such as deposits from the Group's custody business.

Cash outflows arising from business activities that create contingent funding and collateral requirements such as repurchase agreements and derivatives and the extension of credit and liquidity facilities to customers are also captured within the LCR calculation, along with an allowance for debt buyback requests.

## 7.3 Liquidity Disclosures (continued)

Table 7.3A: Liquidity Coverage Ratio Disclosure Template

		3 months ended			
		31 Mar 19		31 Dec 18	
		62 data points		64 data points	
		Total unweighted value (average)	Total weighted value (average)	Total unweighted value (average)	Total weighted value (average)
		\$m <sup>(1)</sup>	\$m	\$m <sup>(1)</sup>	\$m
<b>Liquid assets, of which:</b>			<b>140,436</b>		<b>143,665</b>
1	High-quality liquid assets (HQLA) <sup>(2)</sup>	n/a	85,872	n/a	85,675
2	Alternative liquid assets (ALA)	n/a	51,805	n/a	55,342
3	Reserve Bank of New Zealand (RBNZ) securities <sup>(2)</sup>	n/a	2,759	n/a	2,648
<b>Cash outflows</b>					
4	Retail deposits and deposits from small business customers	191,876	22,449	187,522	21,784
5	of which: stable deposits	58,424	2,921	57,940	2,897
6	of which: less stable deposits	133,452	19,528	129,582	18,887
7	Unsecured wholesale funding	128,300	64,314	128,002	62,172
8	of which: operational deposits (all counterparties) and deposits in networks for cooperative banks	53,733	14,416	55,664	15,053
9	of which: non-operational deposits (all counterparties)	59,870	35,201	60,185	34,966
10	of which: unsecured debt	14,697	14,697	12,153	12,153
11	Secured wholesale funding	n/a	231	n/a	1,014
12	Additional requirements	170,156	32,382	173,269	33,905
13	of which: outflows related to derivatives exposures and other collateral requirements	17,046	17,046	17,558	17,558
14	of which: outflows related to loss of funding on debt products	-	-	-	-
15	of which: credit and liquidity facilities	153,110	15,336	155,711	16,347
16	Other contractual funding obligations	1,003	591	2,555	426
17	Other contingent funding obligations	71,936	5,059	74,122	5,313
18	<b>Total cash outflows</b>	<b>n/a</b>	<b>125,026</b>	<b>n/a</b>	<b>124,614</b>
<b>Cash inflows</b>					
19	Secured lending (e.g. reverse repos)	61,354	1,402	61,531	1,653
20	Inflows from fully performing exposures	23,302	13,220	21,177	12,057
21	Other cash inflows	2,220	2,220	263	263
22	<b>Total cash inflows</b>	<b>86,876</b>	<b>16,842</b>	<b>82,971</b>	<b>13,973</b>
23	<b>Total liquid assets</b>		<b>140,436</b>		<b>143,665</b>
24	<b>Total net cash outflows</b>		<b>108,184</b>		<b>110,641</b>
25	<b>Liquidity Coverage Ratio (%)</b>		<b>130%</b>		<b>130%</b>

<sup>(1)</sup> Unweighted inflow and outflow values are outstanding balances maturing or callable within 30 days.<sup>(2)</sup> Weighted values are calculated after applying caps to the amount of NZD liquid asset holdings.

## 7.3 Liquidity Disclosures (continued)

### Net Stable Funding Ratio

The Net Stable Funding Ratio (NSFR) measures the extent to which assets are funded with stable sources of funding in order to mitigate the risk of future funding stress. The APRA minimum NSFR is 100%.

The NSFR as at 31 March 2019 and 31 December 2018 is presented in Table 7.3B *Net Stable Funding Ratio Disclosure Template*, and is based on spot balances. The NSFR was 112% as at 31 March 2019 with \$515 billion of Available Stable Funding (ASF) available to meet \$460 billion of Required Stable Funding (RSF). The 31 March 2019 NSFR remained in line with 31 December 2018 with higher RSF driven by new lending offset by increased stable funding in the form of term wholesale funding and deposits.

ASF is calculated by applying weightings to capital and liabilities to reflect the portion that is expected to be available over a one year time horizon. The maturity of funding is taken as being the earliest date at which the funding can be withdrawn. RSF reflects the liquidity characteristics of the assets and the expectation that these assets and off-balance sheet exposures will require funding over the next year. The maturity of assets is taken as being the latest possible date at which the asset may mature.

## 7.3 Liquidity Disclosures (continued)

Table 7.3B: Net Stable Funding Ratio Disclosure Template

		As at 31 Mar 2019				Weighted value
		Unweighted value by residual maturity				
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available Stable Funding (ASF) Item</b>						
1	Capital	51,896	-	1,343	10,718	63,957
2	of which: regulatory capital	51,896	-	1,343	10,718	63,957
3	of which: other capital instruments	-	-	-	-	-
4	Retail deposits and deposits from small business customers	165,881	85,133	463	195	229,934
5	of which: stable deposits	61,116	7,086	-	-	64,792
6	of which: less stable deposits	104,765	78,047	463	195	165,142
7	Wholesale funding	73,724	227,535	31,287	133,675	220,803
8	of which: operational deposits	51,076	-	-	-	25,539
9	of which: other wholesale funding	22,648	227,535	31,287	133,675	195,264
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities	-	22,159	-	-	-
12	of which: NSFR derivative liabilities <sup>(1)</sup>			3,735		
13	of which: all other liabilities and equity not included in the above categories	-	18,424	-	-	-
<b>14</b>	<b>Total ASF</b>					<b>514,694</b>
<b>Required Stable Funding (RSF) Item</b>						
15a	High-quality liquid assets (HQLA) for NSFR purposes					3,966
15b	Alternative liquid assets (ALA)					5,590
15c	BNZ securities					294
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	14,998	123,104	38,393	454,740	411,173
18	of which: performing loans to financial institutions secured by Level 1 HQLA	-	49,280	145	163	5,164
19	of which: performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	40	23,025	5,382	18,158	24,341
20	of which: performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs):	14,074	39,789	23,047	140,266	159,701
21	of which: with a risk-weight of less than or equal to 35% under APS 112	-	-	-	13,248	8,611
22	of which: performing residential mortgages:	-	6,354	5,713	294,942	216,164
23	of which: with a risk-weight equal to 35% under APS 112	-	6,354	5,713	251,663	179,377
24	of which: securities that are not in default and do not qualify as HQLA, including exchange-traded equities	884	4,656	4,106	1,211	5,803
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets	18,872	3,016	92	10,349	30,439
27	of which: physical traded commodities, including gold	-				-
28	of which: assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs) <sup>(1)</sup>			1,493		1,269
29	of which: NSFR derivative assets <sup>(1)</sup>			4,500		4,500
30	of which: NSFR derivative liabilities before deduction of variation margin posted <sup>(1)</sup>			2,491		2,491
31	of which: all other assets not included in the above categories	18,872	3,016	92	1,865	22,179
32	Off-balance sheet items	-	-	-	155,944	8,235
33	Total RSF					<b>459,697</b>
34	Net Stable Funding Ratio (%)					<b>112%</b>

<sup>(1)</sup> These amounts are not required by APS 330 to be allocated to a maturity bucket.



7.3 Liquidity Disclosures (continued)

		As at 31 Dec 2018				Weighted value
		Unweighted value by residual maturity				
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
<b>Available Stable Funding (ASF) Item</b>						
1	Capital	50,125	1,514	-	11,434	63,073
2	of which: regulatory capital	50,125	1,514	-	11,434	63,073
3	of which: other capital instruments	-	-	-	-	-
4	Retail deposits and deposits from small business customers	163,342	80,765	769	274	224,012
5	of which: stable deposits	60,288	6,694	-	-	63,633
6	of which: less stable deposits	103,054	74,071	769	274	160,379
7	Wholesale funding	74,272	254,185	29,371	130,394	220,745
8	of which: operational deposits	54,803	-	-	-	27,401
9	of which: other wholesale funding	19,469	254,185	29,371	130,394	193,344
10	Liabilities with matching interdependent assets	-	-	-	-	-
11	Other liabilities	-	20,638	-	-	-
12	of which: NSFR derivative liabilities			5,555		
13	of which: all other liabilities and equity not included in the above categories	-	15,083	-	-	-
14	<b>Total ASF</b>					<b>507,830</b>
<b>Required Stable Funding (RSF) Item</b>						
15a	High-quality liquid assets (HQLA) for NSFR purposes					3,783
15b	Alternative liquid assets (ALA)					5,930
15c	BNZ securities					284
16	Deposits held at other financial institutions for operational purposes	-	-	-	-	-
17	Performing loans and securities	15,222	136,621	34,206	450,374	406,324
18	of which: performing loans to financial institutions secured by Level 1 HQLA	-	61,809	62	-	6,212
19	of which: performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	13	22,943	4,586	16,972	22,719
20	of which: performing loans to non-financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and public sector entities (PSEs):	14,209	42,163	22,280	137,875	158,847
21	of which: with a risk-weight of less than or equal to 35% under APS 112	-	-	-	9,635	6,263
22	of which: performing residential mortgages:	-	6,309	6,164	295,010	215,363
23	of which: with a risk-weight equal to 35% under APS 112	-	6,309	6,164	253,390	179,985
24	of which: securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,000	3,397	1,114	517	3,183
25	Assets with matching interdependent liabilities	-	-	-	-	-
26	Other assets	18,500	1,858	39	9,868	29,830
27	of which: physical traded commodities, including gold	-				-
28	of which: assets posted as initial margin for derivative contracts and contributions to default funds of central counterparties (CCPs)			1,440		1,224
29	of which: NSFR derivative assets			3,628		3,628
30	of which: NSFR derivative liabilities before deduction of variation margin posted			3,003		3,003
31	of which: all other assets not included in the above categories	18,500	1,858	39	1,797	21,975
32	Off-balance sheet items	-	-	-	156,784	8,297
33	<b>Total RSF</b>					<b>454,448</b>
34	<b>Net Stable Funding Ratio (%)</b>					<b>112%</b>

## Section 8

## Glossary

Term	Description
Additional regulatory specific provisions	In line with APRA's July 2017 guidance "Provisions for regulatory purposes and AASB 9 Financial Instruments", regulatory specific provisions include collective provisions for facilities in Stage 2 with identified deterioration (that do not meet the two exception clauses per the APRA guidance), and Stage 3 in default. All other facilities are classified as GRCL.
Additional Tier 1 capital	Additional Tier 1 capital comprises high quality components of capital that satisfy the following essential characteristics: <ul style="list-style-type: none"> <li>- provide a permanent and unrestricted commitment of funds</li> <li>- are freely available to absorb losses</li> <li>- rank behind the claims of depositors and other more senior creditors in the event of winding up of the issuer</li> <li>- provide for fully discretionary capital distributions.</li> </ul>
ADI	Authorised Deposit-taking Institution.
Advanced Internal Ratings-Based approach (IRB)	The process used to estimate credit risk through the use of internally developed models to assess potential credit losses using the outputs from the PD, LGD and EaD models.
Advanced Measurement Approach (AMA)	The risk estimation process used for operational risk, combining internally developed risk estimation processes with an integrated risk management process, embedded within the business with loss event management.
Alternative Liquid Assets (ALA)	Assets that qualify for inclusion in the numerator of the LCR in jurisdictions where there is insufficient supply of HQLA in the domestic currency to meet the aggregate demand of banks with significant exposure in the domestic currency in the LCR framework. The CLF provided by the RBA to ADIs is treated as an ALA in the LCR.
ANZSIC	Australian and New Zealand Standard Industrial Classification.
APRA	Australian Prudential Regulation Authority.
APS	Prudential Standards issued by APRA applicable to ADIs.
Available Stable Funding (ASF)	The portion of an ADI's capital and liabilities expected to be a reliable source of funds over a one year time horizon.
Back-testing	Back-testing refers to the process undertaken to monitor performance of the Group's risk models. Historical data is used to compare the actual outcomes to the expected outcomes. Theoretical (or hypothetical) back-testing refers to the process whereby the trading positions at the end of the preceding day are revalued using the end-of-day rates for that day and then again at the succeeding day's closing rates. The difference between the two mark-to-market values of the portfolio which represents the profit and loss that would have occurred had there been no transactions on the day, is compared with the VaR. VaR is also compared with the actual daily traded profit and loss as a cross-check of the reasonableness of the theoretical portfolio movement.
Basel Accord	The Basel regulatory framework (which includes Basel II, Basel 2.5 and Basel III) is the global benchmark for assessing banks' capital adequacy. The guidelines are aimed at promoting a more resilient banking system through the development of capital adequacy standards that are more accurately aligned with the individual risk profile of institutions, by offering greater flexibility for supervisors to recognise and encourage the use of more sophisticated risk management techniques.
BCBS	Basel Committee on Banking Supervision.
BNZ	Bank of New Zealand.
Central Counterparty (CCP)	A clearing house which interposes itself, directly or indirectly, between counterparties to contracts traded in one or more financial markets, thereby insuring the future performance of open contracts.
CET1 capital ratio	CET1 capital divided by RWA.
Committed Liquidity Facility (CLF)	A facility provided by the RBA to certain ADIs to assist them in meeting the Basel III liquidity requirements.
Common Equity Tier 1 (CET1) capital	The highest quality component of capital. It is subordinated to all other elements of funding, absorbs losses as and when they occur, has full flexibility of dividend payments and has no maturity date. It is predominately comprised of paid-up ordinary share capital, retained profits plus certain other items as defined in APS 111 <i>Capital Adequacy: Measurement of Capital</i> .
Corporate (including SME)	Corporate (including SME) consists of corporations, partnerships or proprietorships not elsewhere classified and includes non-banking entities held by banks.
Credit derivatives	Credit derivatives include single-name credit default and certain total rate of return swaps, cash funded credit linked notes and first-to-default and second-to-default credit derivative basket products. ADIs may also recognise many more complex credit derivatives that do not fall into the list above, that have been approved by APRA.
Credit Value Adjustment (CVA)	A capital charge to reflect potential mark-to-market losses due to counterparty migration risk for bilateral over-the-counter derivative contracts.
Default fund	Clearing members' funded or unfunded contributions towards, or underwriting of, a CCP's mutualised loss sharing arrangements.
D-SIB	Domestic Systemically Important Bank.
Economic capital	Economic capital represents the Group's internal assessment of the amount of capital required to protect against potential unexpected future losses arising from its business activities, in line with its target credit rating.
Eligible Financial Collateral (EFC)	Under the standardised approach, EFC is the amount of cash collateral, netting and eligible bonds and equities. Under the IRB approach, EFC is limited to the collateral items detailed in APS 112 <i>Capital Adequacy: Standardised Approach to Credit Risk</i> . Recognition of EFC is subject to the minimum conditions detailed in APS 112.
Exposure at Default (EaD)	An estimate of the credit exposure amount an ADI may be exposed consequent to default of an obligor. EaD is presented net of EFC.
Extended Licensed Entity	The ADI and any APRA approved subsidiary entities assessed as effectively part of a single 'stand-alone' entity, as defined in APS 222 <i>Associations with Related Entities</i> .
Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at measurement date.
General Reserve for Credit Losses (GRCL)	An estimate of the reasonable and prudent expected credit losses over the remaining life of the portfolio of non-defaulted assets, as set out under APS 220 <i>Credit Quality</i> . The GRCL is calculated as a collective provision for credit impairment, excluding securitisation exposures and provision on default no loss assets. Where the GRCL (regulatory reserve) is greater than the accounting provision, the difference is covered with an additional top-up, created through an appropriation of retained profits to a non-distributable reserve.
Group	NAB and its controlled entities.
G-SIB	Global Systemically Important Bank.
High-quality Liquid Assets (HQLA)	Consists primarily of cash, deposits with central banks, Australian semi-government and Commonwealth government securities and securities issued by foreign sovereigns as defined in APS 210 <i>Liquidity</i> .

## Glossary

Term	Description
Impaired facilities	Impaired facilities consist of: - Retail loans (excluding unsecured portfolio managed facilities) which are contractually past due 90 days with security insufficient to cover principal and interest - Non-retail loans which are contractually past due and / or there is sufficient doubt about the ultimate collectability of principal and interest - Impaired off-balance sheet credit exposures where current circumstances indicate that losses may be incurred - Unsecured portfolio managed facilities that are 180 days past due (if not written off).
Internal Model Approach (IMA) - Non-traded Market Risk	The approach used in the assessment of non-traded market risk. The Group uses, under approval from APRA, the IMA to calculate interest rate risk in the banking book for all transactions in the banking book.
Internal Model Approach (IMA) - Traded Market Risk	The approach used in the assessment of traded market risk. The Group uses, under approval from APRA, the IMA to calculate general market risk for all transactions in the trading book other than those covered by the standardised approach.
IRRBB	Interest rate risk in the banking book.
Level 2 Group	NAB and the entities it controls excluding superannuation and funds management entities, insurance entities and securitisation SPVs to which assets have been transferred in accordance with the requirements for regulatory capital relief in APS 120 <i>Securitisation</i> .
Leverage ratio	Tier 1 capital divided by exposures as defined by APS 110 <i>Capital Adequacy</i> . It is a simple, non-risk based supplementary measure to supplement the RWA based capital requirements. Exposures include on-balance sheet exposures, derivative exposures, securities financing transaction exposures and other off-balance sheet exposures.
Liquidity Coverage Ratio (LCR)	A metric that measures the adequacy of HQLA available to meet net cash outflows over a 30-day period during a severe liquidity stress scenario.
Loss Given Default (LGD)	An estimate of the expected severity of loss for a credit exposure following a default event. Regulatory LGDs reflect a stressed economic condition at the time of default.
NAB	National Australia Bank Limited ABN 12 004 044 937.
Net Stable Funding Ratio (NSFR)	A ratio of the amount of ASF to the amount of RSF.
Net write-offs	Write-offs, net of recoveries.
Non-retail credit	Non-retail credit broadly refers to credit exposure to business customers. It excludes retail credit defined below.
Non-traded book	The investment in securities held by the Group through to maturity.
Past due facilities ≥ 90 days	Well-secured assets that are more than 90 days past due and portfolio managed facilities that are not well secured and between 90 and 180 days past due.
Probability of Default (PD)	An estimate of the likelihood of a customer defaulting or not repaying their borrowings and other obligations in the next 12 months.
Qualifying revolving retail	Revolving exposures to individuals less than \$100,000, unsecured and unconditionally cancellable by the Group. Only Australian retail credit cards qualify for this asset class.
RBA	Reserve Bank of Australia.
RBNZ	Reserve Bank of New Zealand.
Regulatory capital	The total capital held by the Group as a buffer against potential losses arising from the business the Group operates in. Unlike economic capital, it is calculated based on guidance and standards provided by the Group's regulators, including APRA. It is designed to support stability in the banking system and protect depositors.
Regulatory expected loss (EL)	A calculation of the estimated loss that may be experienced by the Group over the next 12 months. Regulatory EL calculations are based on the PD, LGD and EaD values of the portfolio at the time of the estimate which includes stressed LGDs for economic conditions. As such, regulatory EL is not an estimate of long-run average expected loss.
Required Stable Funding (RSF)	A function of the liquidity characteristics and residual maturities of an ADI's assets and off-balance sheet activities.
Retail credit	For the purposes of managing credit, two broad categories are used: retail credit and non-retail credit. This reflects the different approaches to the sales and ongoing management of credit and is consistent with the approach required under the Basel Accord. Retail credit refers to the credit provided to retail or personal customers. For the purposes of regulatory capital, retail credit is categorised into four groups: residential mortgages, credit cards (or qualifying revolving credit), retail SME and other.
Risk-weighted Assets (RWA)	A quantitative measure of risk required by the APRA risk-based capital adequacy framework, covering credit risk for on and off-balance sheet exposures, market risk, operational risk and interest rate risk in the banking book.
RMBS	Residential mortgage-backed securities.
SME	Small and medium sized enterprises.
Specific provision for credit impairment	The provision assessed on an individual basis in accordance with Australian Accounting Standard AASB 9 <i>Financial Instruments</i> .
SPV	Special purpose vehicle.
Standardised approach	An alternative approach to the assessment of credit, operational and traded market risk whereby an ADI uses external rating agencies to assist in assessing credit risk and/or the application of specific values provided by regulators to determine RWA.
Through the cycle (TTC)	TTC within this document refers to risk models that estimate the likelihood of default and resulting loss over a 12-month period having regard to the impact of an economic downturn.
Tier 1 capital	Tier 1 capital comprises CET1 capital and instruments that meet the criteria for inclusion as Additional Tier 1 capital set out in APS 111 <i>Capital Adequacy: Measurement of Capital</i> .
Tier 1 capital ratio	Tier 1 capital divided by RWA.
Tier 2 capital	Tier 2 capital includes other components of capital that, to varying degrees, fall short of the quality of Tier 1 capital but nonetheless contribute to the overall strength of an ADI and its capacity to absorb losses.
Total capital	The sum of Tier 1 capital and Tier 2 capital.
Total capital ratio	Total capital divided by RWA.
Value at Risk (VaR)	A mathematical technique that uses statistical analysis of historical data to estimate the likelihood that a given portfolio's losses will exceed a certain amount.
Write-offs	A reduction in the carrying amount of loans and advances at amortised cost and fair value where there is no reasonable expectation of recovery of a portion or the entire exposure.

## Section 9

## Reference to APS 330

Table number	Table title	APS 330 reference
Table 3.1A	Risk-weighted Assets	APS 330 Table 6b-f
Table 3.1B	Capital and Leverage Ratios	APS 330 Table 6g
Table 3.2A	Regulatory Capital Structure	n/a
Table 3.3A	Regulatory Capital Disclosure Template	APS 330 Table 1
Table 3.3B	Reconciliation between the Group and Level 2 Group Balance Sheets	APS 330 paragraph 12a, 12c, 12d
Table 3.3C	Reconciliation between the Level 2 Group Balance Sheet and Regulatory Capital Disclosure Template	APS 330 paragraph 12d
Table 3.3D	Entities Excluded from the Level 2 Group Balance Sheet	APS 330 paragraph 12b
Table 3.3E	Countercyclical Capital Buffer	APS 330 Attachment A, paragraph 2
Table 3.3A	Leverage Ratio Disclosure Template	APS 330 Table 18
Table 3.3B	Summary Comparison of Accounting Assets vs Leverage Ratio Exposure Measure	APS 330 Table 19
Table 4.1A	Credit Risk Exposures Summary	APS 330 Table 7i
Table 4.1B	Total and Average Credit Risk Exposures	APS 330 Table 7b
Table 4.1C	Credit Risk Exposures by Geography	APS 330 Table 7c
Table 4.1D	Credit Risk Exposures by Industry	APS 330 Table 7d
Table 4.1E	Credit Risk Exposures by Maturity	APS 330 Table 7e
Table 4.1F	Provisions by Asset Class	APS 330 Table 9e
Table 4.1G	Provisions by Industry	APS 330 Table 7f
Table 4.1H	Provisions by Geography	APS 330 Table 7g
Table 4.1I	Movement in Provisions	APS 330 Table 7h
Table 4.1J (i)	Loss Experience	APS 330 Table 9f
Table 4.1J (ii)	Accuracy of Risk Estimates for PD and EaD	APS 330 Table 9f
Table 4.1J (iii)	Accuracy of Risk Estimates for LGD	APS 330 Table 9f
Table 4.2A	Standardised Exposures by Risk-weight	APS 330 Table 8b
Table 4.2B	Standardised Exposures by Risk Grade	APS 330 Table 8b
Table 4.2C	Supervisory Slotting by Risk-weight	APS 330 Table 8b
Table 4.3A	Non-Retail Exposure by Risk Grade	APS 330 Table 9d
Table 4.3B	Retail Exposure by Risk Grade	APS 330 Table 9d
Table 4.4A	Mitigation by Eligible Financial Collateral	APS 330 Table 10b
Table 4.4B	Mitigation by Guarantees and Credit Derivatives	APS 330 Table 10c
Table 4.4A (i)	Net Derivatives Credit Exposure	APS 330 Table 11b
Table 4.4A (ii)	Distribution of Current Credit Exposure	APS 330 Table 11b
Table 4.4B	Credit Derivative Transactions	APS 330 Table 11c
Table 5.1A	Exposures Securitised	APS 330 Table 12g and 12o
Table 5.1B	Past Due and Impaired Banking Book Exposures Securitised	APS 330 Table 12h
Table 5.1C	Recent Securitisation Activity	APS 330 Table 12i, 12j and 12p
Table 5.1D	Securitisation Exposures Retained or Purchased	APS 330 Table 12k and 12r
Table 5.1E	Securitisation Exposures by Risk-weight	APS 330 Table 12l
Table 6.1A	Market Risk Risk-weighted Assets	APS 330 Table 13b
Table 6.1B	Standard Method Risk-weighted Assets	APS 330 Table 13b
Table 6.1C	Internal Model Approach VaR	APS 330 Table 14f
Table 6.1D	Internal Model Approach Stressed VaR	APS 330 Table 14f
Table 7.1A	Impact on Economic Value from Rate Shocks	APS 330 Table 17b
Table 7.2A	Equity Holdings in the Banking Book	APS 330 Table 16b-c
Table 7.2B	Gains and Losses from Equity Holdings	APS 330 Table 16d-e
Table 7.3A	Liquidity Coverage Ratio Disclosure Template	APS 330 Table 20
Table 7.3B	Net Stable Funding Ratio Disclosure Template	APS 330 Table 21

