Pillar 3 Report

2023

as at 31 March 2023

Incorporating the requirements of APS 330

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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*, which requires disclosure of information to the market to contribute to the transparency of financial markets and to enhance market discipline. APS 330 was established to implement the third pillar of the Basel Committee on Banking Supervision's (BCBS) framework for bank capital adequacy. 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, as well as the capital and liquidity adequacy 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

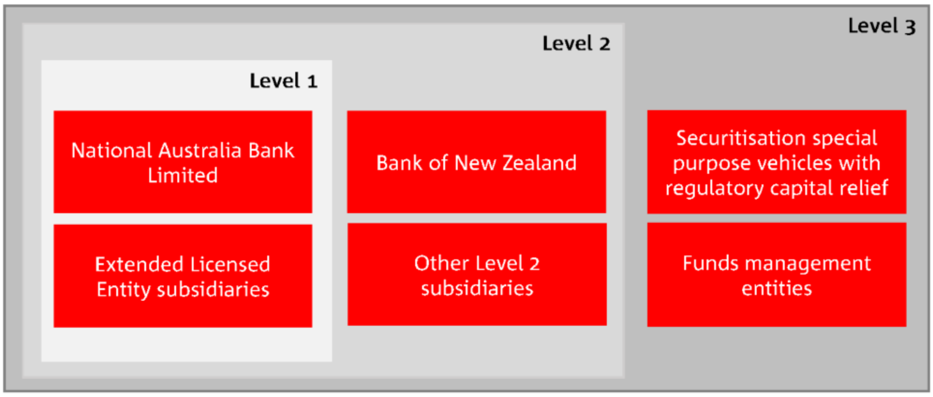
The Group uses the following approaches to measure capital adequacy as at 31 March 2023.

Credit risk	Operational risk	Non-traded market risk	Traded market risk
Internal Ratings-based Approach (IRB)[1]	Standardised Measurement Approach (SMA)	Internal Model Approach (IMA)	Internal Model Approach (IMA) and standard method

(1) The Group has received IRB approval from APRA and applies the advanced IRB, foundation IRB, supervisory slotting and standardised approach to different portfolios in accordance with its IRB approval. Risk-weighted assets (RWA) and expected loss for the Group's banking subsidiary regulated by the Reserve Bank of New Zealand (RBNZ) are calculated using RBNZ prudential rules, with the exception of scaling factors and the capital floor which are applied under APRA requirements.

Scope of Application

APRA measures the Group's capital adequacy by assessing financial strength at three levels as illustrated below.



Level 1 comprises NAB and its subsidiaries that have been approved by APRA as part of its Extended Licensed Entity.

Level 2 comprises NAB and the entities it controls, excluding securitisation special purpose vehicles (SPVs) to which assets have been transferred in accordance with the requirements for regulatory capital relief in APS 120 *Securitisation* and funds management entities. Level 2 controlled entities include the Group's banking subsidiary regulated by the RBNZ (Bank of New Zealand (BNZ)), National Australia Bank Europe S.A. (NAB Europe) 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.

Regulatory Reform

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

Revisions to the capital framework

- APRA's prudential standards for the revised capital framework came into effect on 1 January 2023, and the 31 March 2023 capital ratios presented in Table 3.1.C *Capital and Leverage Ratios* are in accordance with the revised framework. APRA's revisions to the framework include:
  - improving flexibility via increasing regulatory capital buffers
  - implementing more risk-sensitive risk-weights
  - introducing a capital floor for IRB ADIs
  - improving transparency and comparability through the disclosure of RWA under the standardised approach.
- The Group has applied APS 115 *Capital Adequacy: Standardised Measurement Approach to Operational* Risk from 1 January 2022.
- APRA's revised leverage ratio exposure measurement methodology came into effect on 1 January 2023, as did the minimum leverage ratio requirement of 3.5% for IRB ADIs. The 31 March 2023 leverage ratio of 5.10% is in accordance with the revised methodology.
- APRA has announced its intention to finalise APS 117 *Capital Adequacy: Interest Rate Risk in the Banking Book* by June 2023, taking effect from 1 January 2025.
- Following the APS 117 finalisation, APRA plans to consult on revisions to the market risk capital standards over 2024. The process will implement the BCBS's fundamental review of the trading book, effective from 2026.

Increased loss-absorbing capacity for ADIs

In December 2021, APRA released its finalised requirements for the Australian loss-absorbing capacity framework. The final requirements represent a further increase in the amount of Total capital required by domestic systemically important banks (D-SIBs) of 1.5% of RWA, with a total increase of 4.5% of RWA required by January 2026. The interim requirement of an increase in the Total capital requirement of 3% of RWA by 1 January 2024 remains in place.

Reserve Bank of New Zealand capital review

In December 2019, the RBNZ finalised its review of the capital adequacy framework. The RBNZ amendments to the amount of regulatory capital required of locally incorporated banks, applicable to BNZ, include:

- an increase in credit RWA for banks that use the RBNZ's internal ratings-based approach due to:
  - the use of the standardised approach for bank and sovereign exposures, and the introduction of an overall minimum standardised floor, implemented on 1 January 2022
  - an increase in the RWA scalar, implemented on 1 October 2022.
- an increase in the Tier 1 capital requirement to 16% of RWA, and an increase in the Total capital requirement to 18% of RWA, to be phased in by 2028.

Committed Liquidity Facility (CLF) reduction

The aggregate CLF was reduced to zero on 1 January 2023.

APRA post implementation review of liquidity requirements

APRA has undertaken a post implementation review (PIR) of the Basel III liquidity reform across the industry. APRA expects to apply the feedback obtained through the PIR via a consultation process to review APS 210 *Liquidity* in 2023.

Other regulatory changes

- The BCBS revised market risk and Credit Valuation Adjustment (CVA) frameworks came into effect on 1 January 2023. APRA has deferred the implementation date for Basel III reforms to APS 116 *Capital Adequacy: Market Risk* and APS 180 *Capital Adequacy: Counterparty Credit Risk* to 2026.
- In December 2022, APRA issued a revised APS 330 which aligns with the updated international standards for public disclosure set by the BCBS. The revised disclosure requirements are effective from 1 January 2025.

Capital

3.1 Capital Adequacy

Table 3.1.A Risk-weighted Assets

Impact of the revised capital framework on credit RWA

The revised capital framework which came into effect on 1 January 2023 resulted in a decrease in credit RWA of $17.8 billion compared to the previous prudential requirements as at 31 December 2022. Key drivers of the decrease are:

- a decrease in exposure at default (EaD) subject to risk-weighting of $35.8 billion from the change in credit conversion factors applied to undrawn commitments under the revised capital framework. More detail on the change in EaD is outlined in the commentary to Table 4.1.B *Total and Average Credit Risk Exposures*.
- a decrease in credit RWA for IRB residential mortgages from a lowering of the loss given default (LGD) floor set by APRA from 20% to 10%, and from a decrease in the correlation factor to 15%.
- specialised lending exposures other than project finance exposures (such as income-producing real estate exposures), previously subject to supervisory slotting, are subject to the advanced or foundation IRB approach under the revised capital framework. This resulted in lower average risk-weights, even after the application of a 1.5 multiplier.
- removal of overlay adjustments for regulatory prescribed methodology requirements that are no longer relevant under the revised capital framework.

These decreases were partially offset by:

- an increase in credit RWA for income-producing real estate exposures previously subject to the advanced IRB approach from the application of a 1.5 multiplier.
- an increase in credit RWA for IRB residential mortgages from the application of a 1.4 multiplier for owner occupier principal and interest exposures, a 1.7 multiplier for other mortgages and a 2.5 multiplier where a borrower has five or more investment properties.
- an increase in the scaling factor applied to IRB exposures (excluding specialised lending), including exposures of the RBNZ regulated banking subsidiary, from 1.06 to 1.1.

In addition to the impact on total credit RWA, the revised capital framework has resulted in exposures, and therefore credit RWA, being reflected under different or new asset classes. More detail on the changes to asset classes is outlined in the commentary to Table 4.1.B *Total and Average Credit Risk Exposures*.

Change in presentation of credit RWA by portfolio

In this report, credit RWA for the RBNZ regulated banking subsidiary (excluding credit valuation adjustment) has been separately disclosed in accordance with amendments to APS 330 effective from 1 January 2023. To assist with comparability between reporting periods, the 30 September 2022 comparatives have been restated by removing amounts for the RBNZ regulated banking subsidiary from assets classes under which they were previously disclosed and aggregating them in the RBNZ regulated banking subsidiary line. Further details of the restatement, which also includes some improvements in presentation, are outlined in Appendix 1.

All comparative amounts are under rules that applied as at 30 September 2022.

The following table provides RWA for each risk type for the Level 2 Group.

	As at	
	31 Mar 23	30 Sep 22
	$m	$m
Credit risk		
Subject to advanced IRB approach		
Corporate (including small and medium-sized enterprises (SME))	105,725	113,543
Sovereign	n/a	1,761
Bank	n/a	5,854
Retail SME	10,641	6,391
Residential mortgage(1)	97,178	96,542
Qualifying revolving retail	2,553	2,248
Other retail	1,729	1,370
Subject to foundation IRB approach		
Corporate	26,390	n/a
Sovereign	1,806	n/a
Financial institution	23,145	n/a
Total IRB approach	**269,167**	**227,709**
Specialised lending	**2,043**	**55,570**
Subject to standardised approach		
Corporate	4,929	5,136
Residential mortgage	6,656	5,305
Other retail	6,359	4,402
Other(2)	5,058	5,647
Total standardised approach	**23,002**	**20,490**
RBNZ regulated banking subsidiary	**52,104**	**47,682**
Other		
Securitisation exposures	5,490	5,788
Credit valuation adjustment	4,501	6,720
Other(3)	–	3,302
Total other	**9,991**	**15,810**
Total credit risk	**356,307**	**367,261**
Market risk	8,496	7,907
Operational risk	41,178	41,124
Interest rate risk in the banking book	30,192	33,626
Total RWA	**436,173**	**449,918**

(1) RWA for residential mortgages for the Group excluding BNZ measured under the IRB approach is $150,328 million when recomputed under the standardised approach for the purposes of the capital floor (30 September 2022: n/a).

(2) Other subject to the standardised approach consists of cash items in the process of collection, premises and other fixed assets, and all other exposures, and includes $107 million for equity exposures (30 September 2022: $84 million).

(3) Other RWA as at 30 September 2022 consists of overlay adjustments for regulatory prescribed methodology requirements. Overlay adjustments as at 31 March 2023 have been presented together with RWA for the relevant asset classes.

The following table provides total RWA for the Level 1 Group.

	As at	
	31 Mar 23	30 Sep 22
	$m	$m
Total RWA	**388,047**	**404,514**

3.1.B Capital Floor

Changes under the revised capital framework include the introduction of a capital floor to limit the capital benefit of modelled estimates under the IRB approach relative to the standardised approach. The capital floor applies at the aggregate RWA level and requires IRB ADIs to apply the higher of total RWA calculated under the IRB approach and 72.5% of total RWA calculated under the standardised approach.

There was no capital floor adjustment as at 31 March 2023 as shown below.

	As at 31 Mar 23 $m
Risk-weighted assets under the standardised approach	
Credit risk	526,010
Market risk	8,496
Operational risk	41,178
Interest rate risk in the banking book	n/a
Total	**575,684**
Risk-weighted assets prior to application of floor	
Credit risk	356,307
Market risk	8,496
Operational risk	41,178
Interest rate risk in the banking book	30,192
Total	**436,173**
Capital floor	**417,371**
Capital floor adjustment	**n/a**

Table 3.1.C Capital and Leverage Ratios

The following tables provide:

- the key capital ratios for the Level 1 and Level 2 Groups.
- the key capital ratios for the Group's banking subsidiary regulated by the RBNZ.
- the leverage ratio for the Level 2 Group as at 31 March 2023 and for the three previous quarters.

	As at	
	31 Mar 23	30 Sep 22
Capital ratios	%	%
Level 2 Common Equity Tier 1	12.21	11.51
Level 2 Tier 1	13.89	13.14
Level 2 Total	19.76	18.17
Level 1 Common Equity Tier 1	12.03	11.24
Level 1 Tier 1	13.92	13.05
Level 1 Total	20.43	18.57

	As at	
	31 Mar 23	30 Sep 22
RBNZ regulated banking subsidiary capital ratios(1)	%	%
BNZ Common Equity Tier 1	13.3	12.8
BNZ Tier 1	14.1	13.8
BNZ Total	15.7	15.4

(1) BNZ's capital ratios are derived under the RBNZ's capital adequacy framework.

	As at			
	31 Mar 23	31 Dec 22	30 Sep 22	30 Jun 22
Leverage ratio	$m	$m	$m	$m
Tier 1 capital	60,595	58,669	59,112	58,684
Total exposures	1,189,150	1,182,429	1,167,759	1,161,897
Leverage ratio (%)	**5.10%**	**4.96%**	**5.06%**	**5.05%**

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 capital	Tier 1 capital	Total capital
Common Equity Tier 1 (CET1) capital ranks behind the claims of depositors and other creditors in the event of winding-up of the issuer, absorbs losses as and when they occur, has full flexibility of dividend payments and has no maturity date. 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 Additional Tier 1 capital. Additional Tier 1 capital comprises high quality components of capital that satisfy the following characteristics: - provide a permanent and unrestricted commitment of funds - are freely available to absorb losses - rank behind the claims of depositors and other more senior creditors in the event of winding-up of the issuer - provide for fully discretionary capital distributions.	Tier 1 capital plus Tier 2 capital. Tier 2 capital comprises other components of capital that, to varying degrees, do not meet the requirements of Tier 1 capital but nonetheless contribute to the overall strength of an ADI and its capacity to absorb losses.

Further details of Additional Tier 1 and Tier 2 securities are available at capital.nab.com.au/disclaimer-area/capital-instruments.phps.

Restrictions and Major Impediments on the Transfer of Funds or Regulatory Capital within the Group

Thin capitalisation rules

The transfer of funds or regulatory capital within the Group will take into account tax legislation that imposes interest deduction limitations based on prescribed minimum capital levels.

Intragroup exposure limits

Exposures to related entities are managed in accordance with the Aggregate Risk Exposure Policy and prudential limits prescribed in APS 222 *Associations with Related Entities*.

Table 3.2.A Regulatory Capital Structure

The table below provides the structure of regulatory capital for the Level 2 Group. A detailed breakdown as at 31 March 2023 is shown in Table 3.3.A *Regulatory Capital Disclosure Template*.

	As at	
	31 Mar 23	30 Sep 22
	$m	$m
Common Equity Tier 1 capital before regulatory adjustments	61,416	59,019
Regulatory adjustments to Common Equity Tier 1 capital	(8,161)	(7,243)
Common Equity Tier 1 capital (CET1)	**53,255**	**51,776**
Additional Tier 1 capital before regulatory adjustments	7,360	7,360
Regulatory adjustments to Additional Tier 1 capital	(20)	(24)
Additional Tier 1 capital (AT1)	**7,340**	**7,336**
Tier 1 capital (T1 = CET1 + AT1)	**60,595**	**59,112**
Tier 2 capital before regulatory adjustments	25,674	22,719
Regulatory adjustments to Tier 2 capital	(101)	(96)
Tier 2 capital (T2)	**25,573**	**22,623**
Total capital (TC = T1 + T2)	**86,168**	**81,735**

3.3 Detailed Capital Disclosures

Table 3.3.A 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.

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

Detailed Capital Disclosures (cont.)

		As at 31 Mar 23
		$m
	Common Equity Tier 1 capital: instruments and reserves	
1	Directly issued qualifying ordinary shares (and equivalent for mutually-owned entities) capital	38,845
2	Retained earnings	22,959
3	Accumulated other comprehensive income (and other reserves)	(388)
5	Ordinary share capital issued by subsidiaries and held by third parties (amount allowed in group CET1)	–
6	**Common Equity Tier 1 capital before regulatory adjustments**	**61,416**
	Common Equity Tier 1 capital: regulatory adjustments	
7	Prudential valuation adjustments	1
8	Goodwill	2,091
9	Other intangibles other than mortgage-servicing rights (net of related deferred tax balance)	2,872
10	Deferred tax assets that rely on future profitability excluding those arising from temporary differences (net of related tax liability)	37
11	Cash flow hedge reserve	(827)
12	Shortfall of provisions to expected losses	–
13	Securitisation gain on sale (as set out in paragraph 562 of Basel II framework)	–
14	Gains/(losses) due to changes in own credit risk on fair valued liabilities	(42)
15	Defined benefit superannuation plan assets (net of related tax liability)	27
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	–
	APRA specific regulatory adjustments	
26	National specific regulatory adjustments (sum of rows 26a, 26b, 26c, 26d, 26e, 26f, 26g, 26h, 26i and 26j)	4,002
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 fee income	–
26d	of which: equity investments in financial institutions not reported in rows 18, 19 and 23 (adjusted for intangible component of investments)	680
26e	of which: deferred tax assets not reported in rows 10, 21 and 25	2,225
26f	of which: capitalised expenses(1)	1,013
26g	of which: investments in commercial (non-financial) entities that are deducted under APRA prudential requirements	53
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	31
27	Regulatory adjustments applied to Common Equity Tier 1 due to insufficient Additional Tier 1 and Tier 2 to cover deductions	–
28	**Total regulatory adjustments to Common Equity Tier 1**	**8,161**
29	**Common Equity Tier 1 capital (CET1)**	**53,255**

(1) Includes loan origination fees and commissions net of deferred income, and costs associated with the issuance of debt and capital instruments.

		As at 31 Mar 23 $m
Additional Tier 1 capital: instruments		
30	Directly issued qualifying Additional Tier 1 instruments	7,360
31	of which: classified as equity under applicable accounting standards	–
32	of which: classified as liabilities under applicable accounting standards	7,360
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)	–
36	**Additional Tier 1 capital before regulatory adjustments**	**7,360**
Additional Tier 1 capital: regulatory adjustments		
37	Investments in own Additional Tier 1 instruments and any unused trading limit	20
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	–
43	**Total regulatory adjustments to Additional Tier 1 capital**	**20**
44	**Additional Tier 1 capital (AT1)**	**7,340**
45	**Tier 1 capital (T1 = CET1 + AT1)**	**60,595**
Tier 2 capital: instruments and provisions		
46	Directly issued qualifying Tier 2 instruments	23,508
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)	–
50	Provisions(1)	2,166
51	**Tier 2 capital before regulatory adjustments**	**25,674**
Tier 2 capital: regulatory adjustments		
52	Investments in own Tier 2 instruments and any unused trading limit	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)	26
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	26
56c	of which: other national specific regulatory adjustments not reported in rows 56a and 56b	–
57	**Total regulatory adjustments to Tier 2 capital**	**101**
58	**Tier 2 capital (T2)**	**25,573**
59	**Total capital (TC = T1 + T2)**	**86,168**
60	**Total RWA based on APRA standards**	**436,173**

(1) Consists of eligible provisions held against non-defaulted exposures under the IRB approach ($1,922 million) and against exposures under the standardised approach ($244 million).

		As at 31 Mar 23
		$m
Capital ratios and buffers		
61	Common Equity Tier 1 (as a percentage of RWA)	12.21%
62	Tier 1 (as a percentage of RWA)	13.89%
63	Total capital (as a percentage of RWA)	19.76%
64	Buffer requirement (minimum CET1 requirement, plus capital conservation buffer, plus any countercyclical buffer requirements expressed as a percentage of RWA)(1)	10.04%
65	of which: capital conservation buffer requirement	3.75%
66	of which: ADI-specific countercyclical buffer requirements	0.79%
67	of which: Global Systemically Important Bank (G-SIB) buffer requirement	n/a
68	Common Equity Tier 1 available to meet buffers (as a percentage of RWA)	12.21%
National minima (if different from Basel III)		
69	National Common Equity Tier 1 minimum ratio (if different from Basel III minimum)	n/a
70	National Tier 1 minimum ratio (if different from Basel III minimum)	n/a
71	National Total capital minimum ratio (if different from Basel III minimum)	n/a
Amounts below the thresholds for deduction (not risk-weighted)(2)		
72	Non-significant investments in the capital of other financial entities	144
73	Significant investments in the ordinary shares of financial entities (adjusted for intangible component of investments)	536
74	Mortgage servicing rights (net of related tax liability)	–
75	Deferred tax assets arising from temporary differences (net of related tax liability)	2,225
Applicable caps on the inclusion of provisions in Tier 2		
76	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to standardised approach (prior to application of cap)	244
77	Cap on inclusion of provisions in Tier 2 under standardised approach	361
78	Provisions eligible for inclusion in Tier 2 in respect of exposures subject to internal ratings-based approach (prior to application of cap)	2,291
79	Cap for inclusion of provisions in Tier 2 under internal ratings-based approach	1,922

(1) Comprises a minimum CET1 ratio of 4.5% per APS 110 Capital Adequacy paragraph 24(a), a capital conservation buffer of 3.75% of RWA, an additional capital buffer applicable to D-SIBs of 1% of RWA and a countercyclical capital buffer (refer to Table 3.3.E *Countercyclical Capital Buffer*).

(2) Amounts below the thresholds for deduction under Basel requirements are an APRA specific regulatory adjustment.

Table 3.3.B Reconciliation between the Group and Level 2 Group Balance Sheet

The following table shows the Group's balance sheet and adjustments to derive the Level 2 Group balance sheet as at 31 March 2023.

	Group balance sheet $m	Adjustments(1) $m	Level 2 Group balance sheet $m	Reference(2)
Assets				
Cash and liquid assets	57,279	-	57,279	
Due from other banks	138,679	-	138,679	
Collateral placed	10,752	-	10,752	
Trading securities	47,019	-	47,019	
Debt instruments	45,555	-	45,555	
Other financial assets	1,473	-	1,473	
Derivative assets	32,133	-	32,133	
Loans and advances	695,053	(2,139)	692,914	
Current tax assets	6	-	6	
Due from controlled entities	-	14	14	
Deferred tax assets	2,940	-	2,940	Table C
Property, plant and equipment	2,930	-	2,930	
Investments in controlled entities	-	10	10	
Goodwill and other intangible assets	4,778	-	4,778	Table A
Other assets	9,691	-	9,691	
Total assets	**1,048,288**	**(2,115)**	**1,046,173**	
Liabilities				
Due to other banks	75,265	-	75,265	
Collateral received	9,015	-	9,015	
Other financial liabilities	26,430	-	26,430	
Derivative liabilities	32,033	3	32,036	
Deposits and other borrowings	689,020	-	689,020	
Current tax liabilities	557	1	558	
Provisions	1,595	-	1,595	
Due to controlled entities	-	78	78	
Bonds, notes and subordinated debt	131,469	(2,197)	129,272	
Other debt issues	7,322	-	7,322	
Other liabilities	14,167	(1)	14,166	
Total liabilities	**986,873**	**(2,116)**	**984,757**	
Net assets	**61,415**	**1**	**61,416**	
Equity				
Contributed equity	38,845	-	38,845	Row 1
Foreign currency translation reserve	162	-	162	
Asset revaluation reserve	21	-	21	
Cash flow hedge reserve	(827)	-	(827)	Row 11
Cost of hedging reserve	17	-	17	
Equity-based compensation reserve	189	-	189	
Debt instruments at fair value through other comprehensive income reserve	27	-	27	
Equity instruments at fair value through other comprehensive income reserve	23	-	23	
Total reserves	**(388)**	**-**	**(388)**	Row 3
Retained profits	22,958	1	22,959	Row 2
Total equity	**61,415**	**1**	**61,416**	

(1) The adjustments remove the assets, liabilities and equity balances of Level 3 entities deconsolidated for regulatory purposes, and reinstate any intragroup assets and liabilities, treating them as external to the Level 2 Group.

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

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

The following tables show how amounts in the Regulatory Capital Disclosure Template in Table 3.3.A have been derived based on the Level 2 Group Balance Sheet in Table 3.3.B.

Table A	As at 31 Mar 23 $m	Disclosure template row
Goodwill and other intangible assets	4,778	
Associated net deferred tax asset	185	
Total	**4,963**	
which comprises:		
Goodwill	2,091	Row 8
Other intangibles other than mortgage-servicing rights (net of related tax)	2,872	Row 9

Table B	As at 31 Mar 23 $m	Disclosure template row
Non-defaulted expected loss	1,989	
Less collective provision for credit impairment	(4,524)	
Add eligible provisions held against exposures under the standardised approach	244	Row 50, 76
Add eligible provisions held against non-defaulted exposures under the IRB approach	1,922	Row 50, 79
IRB approach surplus provisions above the cap	369	
Non-defaulted: shortfall of provisions to expected losses	-	
Defaulted expected loss	1,067	
Less individual provision for credit impairment subject to the IRB approach[1]	(511)	
Less partial write-offs	(93)	
Less collective provision for credit impairment for defaulted exposures subject to the IRB approach[2]	(483)	
Surplus in defaulted provisions not recognised	20	
Defaulted: shortfall of provisions to expected losses	-	
Gross deduction of shortfall of provisions to expected losses	-	Row 12

(1) Excludes individual provision for credit impairment subject to the standardised approach of $10 million.
(2) Excludes collective provision for credit impairment on defaulted exposures subject to the standardised approach of $49 million.

Table C	As at 31 Mar 23 $m	Disclosure template row
Deferred tax assets	2,940	
Less deferred tax assets that rely on future profitability	(37)	Row 10
Less unrealised revaluation on funding vehicles	(58)	
Less net deferred tax assets included in other regulatory adjustments or associated with reserves ineligible for inclusion in regulatory capital	(620)	
Deferred tax assets APRA specific regulatory adjustment	**2,225**	Row 26e, 75

Table D	As at 31 Mar 23 $m	Disclosure template row
Face value of NAB Capital Notes 3	1,874	
Face value of NAB Capital Notes 5	2,386	
Face value of NAB Capital Notes 6	2,000	
Face value of NAB Wholesale Capital Notes	500	
Face value of NAB Wholesale Capital Notes 2	600	
Directly issued qualifying Additional Tier 1 instruments classified as liabilities	**7,360**	Row 32

Table E	As at 31 Mar 23 $m	Disclosure template row
Subordinated medium term notes	23,508	
Directly issued qualifying Tier 2 instruments	**23,508**	Row 46

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

The following table provides details of entities included in the accounting scope of consolidation and excluded from the regulatory scope of consolidation.

		As at 31 Mar 23	
		Total assets	Total liabilities
Entity name	Principal activity	$m	$m
NAB Trust Services Limited	Trustee	11	-
National Australia Managers Limited	Funds Manager	3	1
National RMBS Trust 2018-1	Securitisation	509	510
National RMBS Trust 2018-2	Securitisation	538	541
National RMBS Trust 2022-1	Securitisation	1,161	1,162

Table 3.3.E 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 3.5% of RWA. It is calculated in accordance with APS 110 (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 following table provides a geographic breakdown of RWA associated with private sector credit exposures that are used to calculate the Level 2 Group's countercyclical capital buffer requirement.

	As at 31 Mar 23		
	Countercyclical capital buffer	RWA for private sector credit exposures	ADI-specific buffer
Country	%	$m	%
Australia	1.00	265,355	0.745
Denmark	2.50	184	0.001
Germany	0.75	888	0.002
Hong Kong	1.00	1,246	0.003
Luxembourg	0.50	709	0.001
Norway	2.50	259	0.002
Sweden	1.00	551	0.002
United Kingdom	1.00	10,822	0.031
Other	-	76,008	-
Total	**n/a**	**356,022**	**0.787**

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).

The leverage ratio calculation is presented in the disclosure template below. Comparative amounts are under the methodology that applied as at 30 September 2022. The main changes under the revised leverage ratio methodology introduced from 1 January 2023 are:

- derivative exposures (rows 4 and 5 in the disclosure template) for the Level 2 Group excluding BNZ are measured under the standardised approach for measuring counterparty credit risk (SA-CCR), with some modifications for the treatment of collateral. Derivative exposures for the RBNZ regulated banking subsidiary are measured under the current exposure method. Under the previous methodology, derivatives exposures for the Level 2 Group were all measured under the current exposure method.
- the calculation of non-market related off-balance sheet exposures (row 19 in the disclosure template) applies credit conversion factors that would be used in the calculation of EaD under the standardised approach under APS 112 *Capital Adequacy: Standardised Approach to Credit Risk* and RBNZ prudential rules. Under the previous methodology, APS 110 prescribed credit conversion factors for use in the leverage ratio calculation.

The leverage ratio increased from 5.06% at 30 September 2022 to 5.10% at 31 March 2023, due to a $1.5 billion increase in Tier 1 capital, which was partially offset by an increase in total exposures of $21.4 billion.

The increase in Tier 1 capital was mainly due to higher retained profits and reserves, partially offset by the reduction in contributed equity from the on-market buy-back of NAB ordinary shares.

The increase in total exposures was primarily driven by an increase in on-balance sheet exposures of $27.8 billion, mainly related to an increase in loans and advances and trading and debt securities of $14.9 billion and $9.9 billion respectively. This increase was partially offset by a decrease in securities financing transaction exposures of $6.3 billion.

Table 3.4.A Leverage Ratio Disclosure Template

		As at	
		31 Mar 23	30 Sep 22
		$m	$m
On-balance sheet exposures			
1	On-balance sheet items (excluding derivatives and securities financing transactions (SFTs), but including collateral)	940,177	912,330
2	(Asset amounts deducted in determining Tier 1 capital)	(8,889)	(8,793)
3	**On-balance sheet exposures (excluding derivatives and SFTs) (sum of rows 1 and 2)**	**931,288**	**903,537**
Derivative exposures			
4	Replacement cost associated with all derivatives transactions (i.e. net of eligible cash variation margin)	12,364	15,764
5	Add-on amounts for potential future credit exposure (PFCE) associated with all derivatives transactions	23,872	22,864
6	Gross-up for derivatives collateral provided where not included in on-balance sheet exposures	6,402	7,272
7	(Deductions of receivables assets for cash variation margin provided in derivatives transactions)	(6,578)	(11,391)
8	(Exempted central counterparty (CCP) leg of client-cleared trade exposures)	-	-
9	Adjusted effective notional amount of written credit derivatives	11,034	8,100
10	(Adjusted effective notional offsets and add-on deductions for written credit derivatives)	(9,971)	(7,054)
11	**Derivative exposures (sum of rows 4 to 10)**	**37,123**	**35,555**
Securities financing transaction exposures			
12	Gross SFT assets (with no recognition of netting), after adjusting for sales accounting transactions	89,102	96,927
13	(Netted amounts of cash payables and cash receivables of gross SFT assets)	(14,841)	(17,558)
14	Counterparty Credit Risk (CCR) exposure for SFT assets	22,039	23,280
15	Agent transaction exposures	-	-
16	**Securities financing transaction exposures (sum of rows 12 to 15)**	**96,300**	**102,649**
Non-market related off-balance sheet exposures			
17	Off-balance sheet exposure at gross notional amount	240,947	237,144
18	(Adjustments for conversion to credit equivalent amounts)	(116,508)	(111,126)
19	**Non-market related off-balance sheet exposures (sum of rows 17 and 18)**	**124,439**	**126,018**
Capital and total exposures			
20	**Tier 1 capital**	**60,595**	**59,112**
21	**Total exposures (sum of rows 3, 11, 16 and 19)**	**1,189,150**	**1,167,759**
Leverage ratio			
22	**Leverage ratio**	**5.10%**	**5.06%**

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

		As at	
		31 Mar 23	30 Sep 22
		$m	$m
Items			
1	Total consolidated assets as per published financial statements	1,048,288	1,055,126
2	Adjustment for investments in entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation	(2,115)	(2,411)
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	4,990	(25,461)
5	Adjustment for securities financing transactions	22,437	23,280
6	Adjustment for off-balance sheet exposures (credit equivalent amount)	124,439	126,018
7	Other adjustments	(8,889)	(8,793)
8	**Leverage ratio exposure**	**1,189,150**	**1,167,759**

Credit Risk

4.1 General Disclosures

EaD throughout this section represents credit risk exposures net of offsets for eligible financial collateral, except where indicated.

This section excludes credit risk information in respect of securitisation exposures within the scope of APS 120 (which have separate disclosures in Section 5 *Securitisation*), with the exception of comparative securitisation exposures of the RBNZ regulated banking subsidiary as part of the change in presentation described below. RWA in this section excludes credit valuation adjustment.

Impact of the revised capital framework on exposure at default

The impact of the revised capital framework on EaD is described in the commentary to Table 4.1.B *Total and Average Credit Risk Exposures*.

Change in presentation

In this report, amounts for the RBNZ regulated banking subsidiary have been separately disclosed in accordance with amendments to APS 330 effective from 1 January 2023. To assist with comparability between reporting periods, the 30 September 2022 comparatives have been restated throughout this section by removing amounts for the RBNZ regulated banking subsidiary from asset classes under which amounts were previously disclosed and aggregating them in the RBNZ regulated banking subsidiary line. This includes removing securitisation exposures of the RBNZ regulated banking subsidiary from Section 5 *Securitisation*, and including them in Section 4 *Credit Risk*, in line with where the equivalent current period amounts are reported. Further details of the restatement of EaD and RWA, which also includes some improvements in presentation, are outlined in Appendix 1.

All comparatives in this section, including expected loss and asset quality metrics, have been restated in a similar manner. All comparative amounts are under rules that applied as at 30 September 2022.

Table 4.1.A Credit Risk Summary

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

	As at 31 Mar 23					6 months ended 31 Mar 23
	Exposure at default	Risk-weighted assets	Expected loss	Non-performing exposures	Specific provision for credit impairment	Net write-offs
Exposure type	$m	$m	$m	$m	$m	$m
Subject to advanced IRB approach						
Corporate (including SME)	188,491	105,725	1,088	1,686	248	34
Retail SME	23,936	10,641	318	831	87	16
Residential mortgage	386,453	97,178	810	2,879	59	10
Qualifying revolving retail	9,105	2,553	107	57	–	27
Other retail	1,552	1,729	83	43	3	17
Subject to foundation IRB approach						
Corporate	45,772	26,390	88	14	12	–
Sovereign	193,146	1,806	2	–	–	–
Financial institution	73,463	23,145	52	23	10	–
Total IRB approach	**921,918**	**269,167**	**2,548**	**5,533**	**419**	**104**
Specialised lending	**2,532**	**2,043**	**34**	**27**	**23**	**7**
Subject to standardised approach						
Corporate	13,074	4,929	–	28	4	–
Residential mortgage	16,563	6,656	–	143	6	–
Other retail	8,786	6,359	–	70	–	15
Other	7,533	5,058	–	–	–	–
Total standardised approach	**45,956**	**23,002**	**–**	**241**	**10**	**15**
RBNZ regulated banking subsidiary	**133,010**	**52,104**	**474**	**927**	**69**	**14**
Total	**1,103,416**	**346,316**	**3,056**	**6,728**	**521**	**140**

	As at 30 Sep 22					6 months ended 30 Sep 22
	Exposure at default	Risk-weighted assets	Expected loss	Non-performing exposures	Specific provision for credit impairment	Net write-offs
Exposure type	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach						
Corporate (including SME)	270,488	113,543	986	1,355	249	51
Sovereign	188,222	1,761	4	-	-	-
Bank	26,030	5,854	8	-	-	-
Retail SME	15,489	6,391	183	686	60	20
Residential mortgage	380,784	96,542	833	3,070	66	14
Qualifying revolving retail	8,989	2,248	93	54	-	21
Other retail	1,339	1,371	63	39	3	10
Total advanced IRB approach	**891,341**	**227,710**	**2,170**	**5,204**	**378**	**116**
Specialised lending	**64,887**	**55,570**	**777**	**362**	**48**	**6**
Subject to standardised approach						
Corporate	11,381	5,136	-	62	22	-
Residential mortgage	13,978	5,305	-	136	5	-
Other retail	5,136	4,402	-	57	-	16
Other	7,766	5,647	-	-	-	-
Total standardised approach	**38,261**	**20,490**	**-**	**255**	**27**	**16**
RBNZ regulated banking subsidiary	**123,929**	**47,682**	**466**	**682**	**78**	**34**
Total	**1,118,418**	**351,451**	**3,413**	**6,503**	**531**	**172**

Table 4.1.B Total and Average Credit Risk Exposures

The following table provides a breakdown of credit risk exposures between on and off-balance sheet.

The comparative table also provides average credit risk exposure, being the simple average of the exposure at the beginning and end of the reporting period. Average credit risk exposure has not been reported for the six months ended 31 March 2023, as exposures are measured differently and reflected under different asset classes at the beginning and end of the reporting period due to adoption of the revised capital framework.

Impact of the revised capital framework

The revised capital framework which came into effect on 1 January 2023 resulted in a decrease in EaD of $35.8 billion compared to the previous prudential requirements as at 31 December 2022. Key drivers of the decrease are:

- a decrease in the credit conversion factor applied in the calculation of off-balance sheet EaD for certain non-retail undrawn commitments from 100% to 40%.
- a decrease in the EaD of the RBNZ regulated banking subsidiary. Under RBNZ prudential rules, bank and sovereign exposures are no longer modelled exposure classes and these exposures have lower credit conversion factors under the standardised approach. In addition, the measurement of net derivative credit exposure changed from SA-CCR to current exposure method.

These decreases were partially offset by the impact of an increase in the credit conversion factor applied in the calculation of off-balance sheet EaD for margin lending and Citi consumer business credit card exposures under the standardised approach from 0% to 40%.

In addition to the impact on total EaD, the revised capital framework has resulted in exposures being reflected under different or new asset classes on 1 January 2023 compared to the previous prudential requirements as at 31 December 2022:

- With the exception of project finance exposures, specialised lending exposures previously subject to supervisory slotting, such as income-producing real estate exposures, are now subject to the advanced or foundation IRB approach. This change resulted in an increase in corporate exposures subject to the advanced and foundation IRB approaches of $59.3 billion and $2.8 billion respectively.
- The revised capital framework definition of financial institution resulted in $61.6 billion of exposures that were previously IRB corporate and the previous bank asset class being measured under the foundation IRB asset class.
- Large corporates with annual revenue greater than $750 million are now subject to the foundation IRB approach. This change resulted in a decrease of $57.1 billion in IRB corporate exposures.
- Changes in the definition of retail SME under the revised capital framework, including that exposure to the borrower is less than $1.5 million and the borrower's annual revenue is less than $75 million, resulted in $8.1 billion of exposures falling within the definition of retail SME, rather than corporate under the IRB approach.
- $800 million of non-standard mortgages previously measured under the IRB approach, are now measured under the standardised approach.

	As at 31 Mar 23			
	On-balance sheet	Non-market related off-balance sheet	Market related off-balance sheet	Total exposure at default
Exposure type	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach				
Corporate (including SME)	161,530	24,162	2,799	**188,491**
Retail SME	16,271	7,665	–	**23,936**
Residential mortgage	329,307	57,146	–	**386,453**
Qualifying revolving retail	3,935	5,170	–	**9,105**
Other retail	1,260	292	–	**1,552**
Subject to foundation IRB approach				
Corporate	25,516	13,397	6,859	**45,772**
Sovereign	168,570	890	23,686	**193,146**
Financial institution	31,889	17,694	23,880	**73,463**
Total IRB approach	**738,278**	**126,416**	**57,224**	**921,918**
Specialised lending	**1,864**	**547**	**121**	**2,532**
Subject to standardised approach				
Corporate	5,441	1,791	5,842	**13,074**
Residential mortgage	14,837	1,726	–	**16,563**
Other retail	5,167	3,619	–	**8,786**
Other	7,533	–	–	**7,533**
Total standardised approach	**32,978**	**7,136**	**5,842**	**45,956**
RBNZ regulated banking subsidiary	**112,216**	**16,683**	**4,111**	**133,010**
Total exposure at default	**885,336**	**150,782**	**67,298**	**1,103,416**

	As at 30 Sep 22				6 months ended 30 Sep 22
	On-balance sheet	Non-market related off-balance sheet	Market related off-balance sheet	Total exposure at default	Average exposure at default
Exposure type	**$m**	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach					
Corporate (including SME)	155,849	85,398	29,241	**270,488**	262,583
Sovereign	159,222	2,687	26,313	**188,222**	182,188
Bank	14,030	961	11,039	**26,030**	26,170
Retail SME	11,367	4,122	-	**15,489**	15,444
Residential mortgage	325,583	55,201	-	**380,784**	376,810
Qualifying revolving retail	3,804	5,185	-	**8,989**	8,970
Other retail	1,078	261	-	**1,339**	1,316
Total advanced IRB approach	**670,933**	**153,815**	**66,593**	**891,341**	**873,481**
Specialised lending	**54,986**	**9,680**	**221**	**64,887**	**64,222**
Subject to standardised approach					
Corporate	5,721	704	4,956	**11,381**	10,686
Residential mortgage	12,710	1,268	-	**13,978**	8,303
Other retail	5,028	108	-	**5,136**	3,171
Other	7,766	-	-	**7,766**	6,925
Total standardised approach	**31,225**	**2,080**	**4,956**	**38,261**	**29,085**
RBNZ regulated banking subsidiary	**102,051**	**15,880**	**5,998**	**123,929**	**126,581**
Total exposure at default	**859,195**	**181,455**	**77,768**	**1,118,418**	**1,093,369**

Table 4.1.C Credit Risk Exposures by Geography

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

	As at 31 Mar 23			
	Australia	New Zealand	Asia, Europe and Americas	Total exposure at default
Exposure type	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach				
Corporate (including SME)	177,085	–	11,406	**188,491**
Retail SME	23,936	–	–	**23,936**
Residential mortgage	386,453	–	–	**386,453**
Qualifying revolving retail	9,105	–	–	**9,105**
Other retail	1,552	–	–	**1,552**
Subject to foundation IRB approach				
Corporate	26,322	–	19,450	**45,772**
Sovereign	171,339	–	21,807	**193,146**
Financial institution	33,018	–	40,445	**73,463**
Total IRB approach	**828,810**	**–**	**93,108**	**921,918**
Specialised lending	**1,324**	**–**	**1,208**	**2,532**
Subject to standardised approach				
Corporate	11,198	–	1,876	**13,074**
Residential mortgage	16,563	–	–	**16,563**
Other retail	8,786	–	–	**8,786**
Other	7,533	–	–	**7,533**
Total standardised approach	**44,080**	**–**	**1,876**	**45,956**
RBNZ regulated banking subsidiary	**–**	**133,010**	**–**	**133,010**
Total exposure at default	**874,214**	**133,010**	**96,192**	**1,103,416**

	As at 30 Sep 22			
	Australia	New Zealand	Asia, Europe and Americas	Total exposure at default
Exposure type	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach				
Corporate (including SME)	207,999	–	62,489	**270,488**
Sovereign	175,496	–	12,726	**188,222**
Bank	15,508	–	10,522	**26,030**
Retail SME	15,489	–	–	**15,489**
Residential mortgage	380,784	–	–	**380,784**
Qualifying revolving retail	8,989	–	–	**8,989**
Other retail	1,339	–	–	**1,339**
Total advanced IRB approach	**805,604**	**–**	**85,737**	**891,341**
Specialised lending	**63,375**	**–**	**1,512**	**64,887**
Subject to standardised approach				
Corporate	10,527	–	854	**11,381**
Residential mortgage	13,957	–	21	**13,978**
Other retail	5,136	–	–	**5,136**
Other	7,766	–	–	**7,766**
Total standardised approach	**37,386**	**–**	**875**	**38,261**
RBNZ regulated banking subsidiary	**–**	**123,929**	**–**	**123,929**
Total exposure at default	**906,365**	**123,929**	**88,124**	**1,118,418**

Table 4.1.D Credit Risk Exposures by Industry

The following table provides credit risk exposures by 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.

	As at 31 Mar 23														
	Accommodation and hospitality	Agriculture, forestry, fishing and mining	Business services and property services	Commercial property	Construction	Finance and insurance	Government and public authorities	Manufacturing	Personal	Residential mortgages	Retail and wholesale trade	Transport and storage	Utilities	Other[1]	Total exposure at default
Exposure type	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach															
Corporate (including SME)	8,131	38,137	11,314	66,910	6,578	559	499	9,765	28	–	16,835	11,585	4,716	13,434	**188,491**
Retail SME	1,061	5,780	3,540	317	2,934	1,166	–	1,672	–	–	3,582	1,435	56	2,393	**23,936**
Residential mortgage	–	–	–	–	–	–	–	–	–	386,453	–	–	–	–	**386,453**
Qualifying revolving retail	–	–	–	–	–	–	–	–	9,105	–	–	–	–	–	**9,105**
Other retail	–	–	–	–	–	–	–	–	1,552	–	–	–	–	–	**1,552**
Subject to foundation IRB approach															
Corporate	133	5,808	4,558	4,366	1,100	332	–	4,132	–	–	6,971	7,968	6,838	3,566	**45,772**
Sovereign	–	–	–	–	–	130,713	62,433	–	–	–	–	–	–	–	**193,146**
Financial institution	–	–	–	–	–	73,463	–	–	–	–	–	–	–	–	**73,463**
Total IRB approach	**9,325**	**49,725**	**19,412**	**71,593**	**10,612**	**206,233**	**62,932**	**15,569**	**10,685**	**386,453**	**27,388**	**20,988**	**11,610**	**19,393**	**921,918**
Specialised lending	**52**	**273**	**-**	**-**	**63**	**-**	**-**	**-**	**-**	**-**	**-**	**777**	**1,172**	**195**	**2,532**
Subject to standardised approach															
Corporate	26	25	478	50	29	9,024	36	15	15	–	116	12	10	3,238	**13,074**
Residential mortgage	–	–	–	–	–	–	–	–	–	16,563	–	–	–	–	**16,563**
Other retail	–	–	–	–	–	–	–	–	8,668	–	–	–	–	118	**8,786**
Other	–	–	–	–	–	–	–	–	–	–	–	–	–	7,533	**7,533**
Total standardised approach	**26**	**25**	**478**	**50**	**29**	**9,024**	**36**	**15**	**8,683**	**16,563**	**116**	**12**	**10**	**10,889**	**45,956**
RBNZ regulated banking subsidiary	**1,344**	**16,707**	**2,895**	**8,641**	**2,040**	**19,017**	**4,834**	**5,078**	**1,492**	**55,777**	**5,748**	**3,027**	**1,306**	**5,104**	**133,010**
Total exposure at default	**10,747**	**66,730**	**22,785**	**80,284**	**12,744**	**234,274**	**67,802**	**20,662**	**20,860**	**458,793**	**33,252**	**24,804**	**14,098**	**35,581**	**1,103,416**

(1) Other includes health and community services, and education.

As at 30 Sep 22

Exposure type	Accommodation and hospitality	Agriculture, forestry, fishing and mining	Business services and property services	Commercial property	Construction	Finance and insurance	Government and public authorities	Manufacturing	Personal	Residential mortgages	Retail and wholesale trade	Transport and storage	Utilities	Other[1]	Total exposure at default
	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m	$m
Subject to advanced IRB approach															
Corporate (including SME)	8,661	48,184	18,356	14,162	8,719	77,116	–	16,010	36	–	26,799	22,104	12,085	18,256	**270,488**
Sovereign	–	–	–	–	–	130,180	58,038	–	–	–	–	–	–	4	**188,222**
Bank	–	–	–	–	–	26,030	–	–	–	–	–	–	–	–	**26,030**
Retail SME	686	3,447	2,353	190	1,936	917	–	1,024	–	–	2,458	848	35	1,595	**15,489**
Residential mortgage	–	–	–	–	–	–	–	–	–	380,784	–	–	–	–	**380,784**
Qualifying revolving retail	–	–	–	–	–	–	–	–	8,989	–	–	–	–	–	**8,989**
Other retail	–	–	–	–	–	–	–	–	1,339	–	–	–	–	–	**1,339**
Total advanced IRB approach	**9,347**	**51,631**	**20,709**	**14,352**	**10,655**	**234,243**	**58,038**	**17,034**	**10,364**	**380,784**	**29,257**	**22,952**	**12,120**	**19,855**	**891,341**
Specialised lending	**52**	**937**	**–**	**61,358**	**64**	**–**	**–**	**–**	**4**	**–**	**–**	**599**	**1,522**	**351**	**64,887**
Subject to standardised approach															
Corporate	20	90	497	35	117	6,506	8	247	5	68	640	156	9	2,983	**11,381**
Residential mortgage	–	–	–	–	–	–	–	–	–	13,978	–	–	–	–	**13,978**
Other retail	–	–	–	–	–	–	–	–	5,070	–	–	–	–	66	**5,136**
Other	–	–	–	–	–	–	–	–	–	–	–	–	–	7,766	**7,766**
Total standardised approach	**20**	**90**	**497**	**35**	**117**	**6,506**	**8**	**247**	**5,075**	**14,046**	**640**	**156**	**9**	**10,815**	**38,261**
RBNZ regulated banking subsidiary	**1,303**	**15,819**	**2,698**	**8,624**	**1,775**	**17,014**	**4,614**	**5,455**	**1,425**	**50,910**	**5,199**	**2,983**	**1,109**	**5,001**	**123,929**
Total exposure at default	**10,722**	**68,477**	**23,904**	**84,369**	**12,611**	**257,763**	**62,660**	**22,736**	**16,868**	**445,740**	**35,096**	**26,690**	**14,760**	**36,022**	**1,118,418**

(1) Other includes health and community services, and education.

Table 4.1.E Credit Risk Exposures by Maturity

The following table provides a breakdown of credit risk exposures by residual contractual maturity, where:

- overdraft and other similar revolving facilities are allocated to the maturity bucket that most appropriately captures the maturity characteristics of the product.
- the maturity of derivatives subject to an International Swaps and Derivatives Association (ISDA) netting agreement is based on individual contract maturity.
- the no specified maturity category includes exposures related to credit cards, on demand facilities and guarantees with no fixed maturity date.

	As at 31 Mar 23				
	≤12 months	1 - 5 years	>5 years	No specified maturity	Total exposure at default
Exposure type	**\$m**	**\$m**	**\$m**	**\$m**	**\$m**
Subject to advanced IRB approach					
Corporate (including SME)	68,171	109,813	10,214	293	**188,491**
Retail SME	9,252	9,714	4,858	112	**23,936**
Residential mortgage	20,588	4,476	361,389	-	**386,453**
Qualifying revolving retail	-	-	-	9,105	**9,105**
Other retail	144	729	516	163	**1,552**
Subject to foundation IRB approach					
Corporate	12,045	26,384	7,258	85	**45,772**
Sovereign	125,573	28,215	39,293	65	**193,146**
Financial institution	44,298	27,160	1,861	144	**73,463**
Total IRB approach	**280,071**	**206,491**	**425,389**	**9,967**	**921,918**
Specialised lending	**266**	**1,555**	**711**	**-**	**2,532**
Subject to standardised approach					
Corporate	6,494	3,129	3,203	248	**13,074**
Residential mortgage	582	15	15,966	-	**16,563**
Other retail	1,675	176	-	6,935	**8,786**
Other	4,997	-	-	2,536	**7,533**
Total standardised approach	**13,748**	**3,320**	**19,169**	**9,719**	**45,956**
RBNZ regulated banking subsidiary	**27,911**	**37,827**	**58,142**	**9,130**	**133,010**
Total exposure at default	**321,996**	**249,193**	**503,411**	**28,816**	**1,103,416**

	As at 30 Sep 22				
	≤12 months	1 - 5 years	>5 years	No specified maturity	Total exposure at default
Exposure type	**\$m**	**\$m**	**\$m**	**\$m**	**\$m**
Subject to advanced IRB approach					
Corporate (including SME)	101,595	148,105	20,139	649	270,488
Sovereign	127,222	24,479	36,472	49	188,222
Bank	18,803	6,353	874	-	26,030
Retail SME	5,482	6,458	3,466	83	15,489
Residential mortgage	21,603	4,566	354,615	-	380,784
Qualifying revolving retail	-	-	-	8,989	8,989
Other retail	217	680	401	41	1,339
Total advanced IRB approach	**274,922**	**190,641**	**415,967**	**9,811**	**891,341**
Specialised lending	**25,191**	**37,536**	**1,978**	**182**	**64,887**
Subject to standardised approach					
Corporate	5,437	2,852	2,903	189	11,381
Residential mortgage	96	14	13,868	-	13,978
Other retail	1,014	153	1	3,968	5,136
Other	4,964	135	-	2,667	7,766
Total standardised approach	**11,511**	**3,154**	**16,772**	**6,824**	**38,261**
RBNZ regulated banking subsidiary	**27,984**	**35,764**	**52,843**	**7,338**	**123,929**
Total exposure at default	**339,608**	**267,095**	**487,560**	**24,155**	**1,118,418**

Credit Provisions and Losses

Table 4.1.F Provisions by Asset Class

The following table provides information on asset quality.

	As at 31 Mar 23		6 months ended 31 Mar 23	
Exposure type	Non-performing exposures $m	Specific provision for credit impairment $m	Specific credit impairment charge $m	Net write-offs $m
Subject to advanced IRB approach				
Corporate (including SME)	1,686	248	27	34
Retail SME	831	87	21	16
Residential mortgage	2,879	59	3	10
Qualifying revolving retail	57	–	27	27
Other retail	43	3	13	17
Subject to foundation IRB approach				
Corporate	14	12	–	–
Financial institution	23	10	–	–
Total IRB approach	**5,533**	**419**	**91**	**104**
Specialised lending	**27**	**23**	**22**	**7**
Subject to standardised approach				
Corporate	28	4	1	–
Residential mortgage	143	6	–	–
Other retail	70	–	15	15
Total standardised approach	**241**	**10**	**16**	**15**
RBNZ regulated banking subsidiary	**927**	**69**	**(3)**	**14**
Total	**6,728**	**521**	**126**	**140**

	As at 30 Sep 22		6 months ended 30 Sep 22	
Exposure type	Non-performing exposures $m	Specific provision for credit impairment $m	Specific credit impairment charge[(1)] $m	Net write-offs $m
Subject to advanced IRB approach				
Corporate (including SME)	1,355	249	9	51
Retail SME	686	60	15	20
Residential mortgage	3,070	66	(5)	14
Qualifying revolving retail	54	–	27	21
Other retail	39	3	13	10
Total advanced IRB approach	**5,204**	**378**	**59**	**116**
Specialised lending	**362**	**48**	**4**	**6**
Subject to standardised approach				
Corporate	62	22	1	–
Residential mortgage	136	5	–	–
Other retail	57	–	14	16
Total standardised approach	**255**	**27**	**15**	**16**
RBNZ regulated banking subsidiary	**682**	**78**	**10**	**34**
Total	**6,503**	**531**	**88**	**172**

(1) The breakdown of specific credit impairment charge by asset class for the six months ended 30 September 2022 has been restated from that previously disclosed.

Table 4.1.G Provisions by Industry

The following table provides asset quality information by industry. Industry classifications follow ANZSIC Level 1 classifications.

	As at 31 Mar 23		6 months ended 31 Mar 23	
	Non-performing exposures	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	$m	$m	$m	$m
Industry sector				
Accommodation and hospitality	127	24	3	5
Agriculture, forestry, fishing and mining	840	35	4	-
Business services and property services	307	93	8	2
Commercial property	475	21	(3)	31
Construction	262	51	7	11
Finance and insurance	68	13	(1)	-
Manufacturing	267	21	5	6
Personal	178	4	58	62
Residential mortgages	3,335	65	5	10
Retail and wholesale trade	402	72	22	8
Transport and storage	157	39	(14)	3
Utilities	30	24	24	-
Other[(1)]	280	59	8	2
Total	**6,728**	**521**	**126**	**140**

(1) Other includes health and community services, and education.

	As at 30 Sep 22		6 months ended 30 Sep 22	
	Non-performing exposures	Specific provision for credit impairment	Specific credit impairment charge	Net write-offs
	$m	$m	$m	$m
Industry sector				
Accommodation and hospitality	162	26	(5)	5
Agriculture, forestry, fishing and mining	597	35	15	5
Business services and property services	292	84	2	6
Commercial property	447	55	6	25
Construction	243	54	9	5
Finance and insurance	62	15	-	-
Manufacturing	305	22	(3)	20
Personal	174	3	57	53
Residential mortgages	3,453	70	(4)	19
Retail and wholesale trade	362	57	9	27
Transport and storage	189	56	1	3
Utilities	3	2	-	(1)
Other[(1)]	214	52	1	5
Total	**6,503**	**531**	**88**	**172**

(1) Other includes health and community services, and education.

Table 4.1.H Provisions by Geography

The following table provides asset quality information by geographical area, based on the booking office where the exposure was transacted.

	As at 31 Mar 23		
	Non-performing exposures $m	Specific provision for credit impairment $m	Collective provision for credit impairment $m
Geographic region			
Australia	5,744	424	4,267
New Zealand	926	69	743
Asia, Europe and Americas	58	28	46
Total	**6,728**	**521**	**5,056**

	As at 30 Sep 22		
	Non-performing exposures $m	Specific provision for credit impairment $m	Collective provision for credit impairment $m
Geographic region			
Australia	5,783	443	4,137
New Zealand	682	80	649
Asia, Europe and Americas	38	8	40
Total	**6,503**	**531**	**4,826**

Table 4.1.I Movement in Provisions

The following table provides details of the movement in provisions over the reporting period for both the collective and specific provision.

	6 months ended 31 Mar 23 $m	6 months ended 30 Sep 22 $m
Collective provision		
Collective provision on loans and advances at amortised cost at beginning of period	4,541	4,423
Net transfer to specific provision	(35)	(38)
New and increased provisions (net of collective provision releases)	301	75
Foreign currency translation and other adjustments(1)	42	81
Collective provision on loans and advances at amortised cost	**4,849**	**4,541**
Collective provision on loans and derivatives at fair value	207	285
Collective provision for credit impairment	**5,056**	**4,826**
Specific provision		
Specific provision on loans and advances at amortised cost at beginning of period	515	604
Net transfer from collective provision	35	38
New and increased provision (net of collective provision releases)	264	172
Write-back of specific provisions	(110)	(78)
Write-off from specific provisions	(186)	(215)
Foreign currency translation and other adjustments(1)	3	(6)
Specific provision on loans and advances at amortised cost	**521**	**515**
Specific provision on loans at fair value	-	16
Specific provision for credit impairment	**521**	**531**
Total provisions	**5,577**	**5,357**

(1) The amount for the six months ended 30 September 2022 includes the impact on provisions from the acquisition of the Citi consumer business.

Factors Impacting Loss Experience in the Period

Non-performing exposures

Non-performing exposures as at 31 March 2023 increased compared to 30 September 2022 predominantly driven by increased gross impaired assets in New Zealand Banking due to the restructure of a number of customers affected by recent severe weather events in New Zealand, and a modest increase in default <90 days past due but not impaired assets, driven by an increase across the Business & Private Banking business lending portfolio. This was partially offset by a decrease in 90+ days past due facilities, primarily due to improved delinquencies across the Australian mortgage portfolio.

Specific provision for credit impairment

Specific provisions for credit impairment as at 31 March 2023 decreased compared to 30 September 2022 primarily due to work-outs for a small number of exposures in the business lending portfolio in Australia and New Zealand, partially offset by new and increased specific provisions raised.

Specific credit impairment charge

The specific credit impairment charge for the six months ended 31 March 2023 is $126 million, $38 million higher than the six months ended 30 September 2022. This increase was mainly driven by a modest increase in Business & Private Banking off a low base, due to a small number of individual impairments.

Net write-offs

Net write-offs for the six months ended 31 March 2023 is $140 million, $32 million lower than the six months ended 30 September 2022. This decrease is due to a lower level of write-off activity in the Group's business lending portfolio compared to the prior period.

Loss Experience and Risk Estimates

As outlined in Table 4.1.B *Total and Average Credit Risk Exposures*, the revised capital framework has resulted in exposures being reflected under different or new asset classes. The following loss experience and risk estimate disclosures are based on prudential requirements prior to the revised capital framework. Loss experience and risk estimate information based on revised capital framework asset classes will be captured from 1 April 2023. However, as a significant portion of specialised lending exposures previously subject to supervisory slotting are now subject to the advanced or foundation IRB approach under APRA requirements, loss experience and risk estimate information for this non-IRB asset class has been included in Table 4.1.J (i) *Loss Experience*, Table 4.1.J (ii) *Accuracy of Risk Estimates for Probability of Default and Exposure at Default* and Table 4.1.J (iii) *Accuracy of Risk Estimates for Loss Given Default* for the current period for the Level 2 Group excluding BNZ.

Change in presentation

The comparatives in the following disclosures have been restated to:

- limit the loss experience and risk estimate information to a 10-year observation period. In the past, this disclosure included information for the 13 years to 30 September 2022 and the 12 years to March 2022.
- remove amounts for the RBNZ regulated banking subsidiary from asset classes under which they were previously disclosed. For the loss experience disclosure in Table 4.1.J (i), amounts for the RBNZ banking subsidiary have been aggregated into two lines for retail and non-retail. For the risk estimates disclosure in Tables 4.1.J (ii) and (iii), information has been disclosed for the RBNZ regulated banking subsidiary's significant asset classes, being corporate (including SME) and residential mortgages.

Table 4.1.J (i) Loss Experience

The following table provides annual actual losses (i.e. net write-offs) and expected loss (EL), both calculated as an exposure-weighted average (before credit risk mitigation). Actual losses are historical based on a 10-year observation period, except where indicated, whereas EL is a forward-looking measure of estimated loss that may be experienced over the next 12 months at a point in time.

Actual losses will differ from EL 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.
- EL is based on the quality of exposures at a point in time using long-run probability of default (PD) and stressed LGD. In most periods actual losses would be below the EL estimate.
- EL includes expected losses on non-defaulted assets which is a function of long-run PDs and downturn stressed LGDs. For defaulted exposures, EL is based on the Group's best estimate of expected loss.

	31 Mar 23	
	Exposure-weighted average actual loss	Exposure-weighted average EL
Exposure type subject to IRB approach	**$m**	**$m**
Corporate (including SME)	195	1,330
Specialised lending	47	1,002
Sovereign	-	3
Bank	-	14
Retail SME	40	160
Residential mortgage	56	890
Qualifying revolving retail	131	193
Other retail	74	110
RBNZ regulated banking subsidiary(1)		
Non-retail	39	327
Retail	16	130

(1) Actual losses and EL averaged over a period of nine years to 31 March 2023.

	30 Sep 22	
	Exposure-weighted average actual loss	Exposure-weighted average EL
Exposure type subject to advanced IRB approach	$m	$m
Corporate (including SME)	210	1,293
Sovereign	–	3
Bank	–	14
Retail SME	42	161
Residential mortgage	60	872
Qualifying revolving retail	139	193
Other retail	77	106
RBNZ regulated banking subsidiary(1)		
Non-retail	39	354
Retail	17	127

(1) Actual losses and EL averaged over a period of nine years to 30 September 2022.

	31 Mar 22	
	Exposure-weighted average actual loss	Exposure-weighted average EL
Exposure type subject to advanced IRB approach	$m	$m
Corporate (including SME)	214	1,386
Sovereign	–	2
Bank	–	15
Retail SME	41	157
Residential mortgage	60	889
Qualifying revolving retail	139	202
Other retail	78	113
RBNZ regulated banking subsidiary(1)		
Non-retail	41	334
Retail	17	132

(1) Actual losses and EL averaged over a period of eight years to 31 March 2022.

Accuracy of Risk Estimates

The following tables compare the estimates of credit risk factors used within the calculation of regulatory capital with actual outcomes across asset classes.

An 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 2022 Pillar 3 Report.

Table 4.1.J (ii) Accuracy of Risk Estimates for Probability of Default and Exposure at Default

Accuracy of risk estimates for Probability of Default

The following table provides internal estimates of long-run PD and actual default rates by asset class. Averages of actual and estimated PD are calculated using the cohort that is not in default at the beginning of the reporting period and averaged out over a 10-year observation period.

Accuracy of risk estimates for Exposure at Default

The ratio of estimated to actual EaD in the following table provides a comparison of EaD for customers that are not in default at the beginning of the reporting period, with EaD at the point of default. A ratio greater than 1.0 signifies that on average, EaD is lower at the point of default than at the beginning of the reporting period.

Exposure type subject to IRB approach	As at 31 Mar 23 Average estimated PD %	Average actual PD %	Ratio of estimated to actual EaD
Corporate (including SME)	1.63	1.41	1.1
Specialised lending	1.60	1.41	1.1
Sovereign[1]	0.38	0.12	1.0
Bank[1]	0.40	0.12	1.0
Retail SME	2.46	1.96	1.1
Residential mortgage	0.90	0.91	1.0
Qualifying revolving retail	1.44	1.35	1.1
Other retail	5.07	5.06	1.1
RBNZ regulated banking subsidiary			
Corporate (including SME)	1.46	1.33	1.0
Residential mortgage	1.01	0.69	1.0

(1) Average actual PDs for sovereign and bank exposures are based on a low number of observed defaults.

Exposure type subject to advanced IRB approach	As at 30 Sep 22 Average estimated PD %	Average actual PD %	Ratio of estimated to actual EaD
Corporate (including SME)	1.65	1.48	1.1
Sovereign[1]	0.36	0.13	1.0
Bank[1]	0.42	0.15	1.4
Retail SME	2.50	1.95	1.1
Residential mortgage	0.88	0.93	1.0
Qualifying revolving retail	1.38	1.38	1.1
Other retail	4.89	4.94	1.1
RBNZ regulated banking subsidiary			
Corporate (including SME)	1.47	1.23	1.0
Residential mortgage	1.02	0.71	1.0

(1) Average actual PDs for sovereign and bank exposures are based on a low number of observed defaults.

Exposure type subject to advanced IRB approach	As at 31 Mar 22 Average estimated PD %	Average actual PD %	Ratio of estimated to actual EaD
Corporate (including SME)	1.67	1.56	1.1
Sovereign[1]	0.39	0.10	1.0
Bank[1]	0.40	0.11	1.4
Retail SME	2.48	1.94	1.1
Residential mortgage	0.92	0.93	1.0
Qualifying revolving retail	1.49	1.39	1.1
Other retail	4.97	4.92	1.1
RBNZ regulated banking subsidiary			
Corporate (including SME)	1.49	1.25	1.0
Residential mortgage	1.03	0.74	1.0

(1) Average actual PDs for sovereign and bank exposures are based on a low number of observed defaults.

Table 4.1.J (iii) Accuracy of Risk Estimates for Loss Given Default

The following table compares internal estimates of downturn LGD at the beginning of the year with actual losses.

Actual LGD has been calculated using net write-offs from defaults over a 10-year observation period to the reporting date, excluding recent defaults to allow sufficient time to complete 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 this period is the most recent two years.

	As at 31 Mar 23	
	Average estimated downturn LGD	Average actual LGD
Exposure type subject to IRB approach	%	%
Corporate (including SME)(1)	33.2	16.2
Specialised lending	29.6	7.4
Sovereign	45.0	-
Bank	59.6	-
Retail SME	32.1	13.7
Residential mortgage(1)	20.0	2.2
Qualifying revolving retail	83.6	50.7
Other retail	75.2	45.4
RBNZ regulated banking subsidiary		
Corporate (including SME)	40.7	8.2
Residential mortgage(2)	23.9	2.3

(1) Estimated downturn LGD subject to APRA imposed regulatory floors.
(2) Estimated downturn LGD subject to RBNZ imposed regulatory floors.

	As at 30 Sep 22	
	Average estimated downturn LGD	Average actual LGD
Exposure type subject to advanced IRB approach	%	%
Corporate (including SME)(1)	33.3	20.9
Sovereign	45.0	-
Bank	21.0	-
Retail SME	32.4	14.7
Residential mortgage(1)	20.0	2.7
Qualifying revolving retail	83.5	51.4
Other retail	74.3	46.2
RBNZ regulated banking subsidiary		
Corporate (including SME)	40.9	8.1
Residential mortgage(2)	24.1	2.6

(1) Estimated downturn LGD subject to APRA imposed regulatory floors.
(2) Estimated downturn LGD subject to RBNZ imposed regulatory floors.

Exposure type subject to advanced IRB approach	As at 31 Mar 22 Average estimated downturn LGD %	As at 31 Mar 22 Average actual LGD %
Corporate (including SME)(1)	34.5	22.9
Sovereign	45.0	–
Bank	21.1	–
Retail SME	33.1	15.6
Residential mortgage(1)	20.0	3.1
Qualifying revolving retail	84.4	52.1
Other retail	75.2	46.4
RBNZ regulated banking subsidiary		
Corporate (including SME)	40.8	8.9
Residential mortgage(2)	24.2	3.0

(1) Estimated downturn LGD subject to APRA imposed regulatory floors.
(2) Estimated downturn LGD subject to RBNZ imposed regulatory floors.

4.2 Standardised and Supervisory Slotting Portfolios

Standardised Credit Risk Portfolios

Adoption of the revised capital framework on 1 January 2023 resulted in:

- bank and sovereign exposures of the RBNZ regulated banking subsidiary ceasing to be modelled exposure classes under RBNZ prudential rules, and
- non-standard mortgages of the Level 2 Group excluding BNZ previously measured under the advanced IRB approach, being measured under the standardised approach.

The standardised approach continues to be applied to:

- several regulatory prescribed portfolios, such as qualifying central clearing counterparties, self-managed superannuation funds and margin lending, and
- other portfolios where the standardised approach to credit risk is applied by the Group, including the Citi consumer business.

Fitch Ratings, Moody's Investor Services and S&P Global Ratings credit ratings are used to determine the risk-weights within the 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.

External rating grade classification

External rating grade	S&P	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 4.2.A Standardised Exposures by Risk-weight

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

	As at 31 Mar 23			As at 30 Sep 22		
	Level 2 Group excluding BNZ	RBNZ regulated banking subsidiary	Total exposure at default	Level 2 Group excluding BNZ	RBNZ regulated banking subsidiary	Total exposure at default
Risk-weights		$m				$m
0%	1,204	14,641	15,845	1,021	127	1,148
2%	6,223	806	7,029	4,897	433	5,330
20%	6,678	1,765	8,443	3,724	-	3,724
25%	2,401	-	2,401	-	-	-
30%	2,912	-	2,912	-	-	-
35%	3,423	-	3,423	12,196	6	12,202
40%	1,189	-	1,189	-	-	-
45%	1,924	-	1,924	-	-	-
50%	1,097	2,221	3,318	1,315	1	1,316
75%	6,233	-	6,233	367	1	368
100%	11,318	997	12,315	14,111	913	15,024
Other risk-weights	1,042	-	1,042	378	-	378
Central counterparty default fund contribution guarantee(1)	312	26	338	252	12	264
Total exposure at default subject to the standardised approach	**45,956**	**20,456**	**66,412**	**38,261**	**1,493**	**39,754**

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

Table 4.2.B Standardised Exposures by Risk Grade

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

	As at	
	31 Mar 23	30 Sep 22
Asset class by rating grade	Exposure at default $m	Exposure at default $m
Corporate		
External rating grade 1	5,069	4,340
External rating grade 2	1,695	1,391
Unrated	6,310	5,650
Sub-total	13,074	11,381
Residential mortgage		
Unrated	16,563	13,978
Other retail		
Unrated	8,786	5,136
Other		
Unrated	7,533	7,766
RBNZ regulated banking subsidiary		
External rating grade 1	16,813	446
External rating grade 2	2,324	-
External rating grade 3	34	-
External rating grade 4 and 5	8	-
Unrated	1,277	1,047
Sub-total	20,456	1,493
Total exposure at default subject to the standardised approach	**66,412**	**39,754**

Portfolios Subject to Supervisory Risk-weights in the IRB Approach

Table 4.2.C Supervisory Slotting Exposures by Risk-weight

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

	As at 31 Mar 23			As at 30 Sep 22		
Risk-weights	Level 2 Group excluding BNZ $m	RBNZ regulated banking subsidiary	Total exposure at default	Level 2 Group excluding BNZ	RBNZ regulated banking subsidiary	Total exposure at default $m
70%	1,529	1,280	**2,809**	23,663	1,511	25,174
90%	636	4,863	**5,499**	34,419	4,750	39,169
115%	333	647	**980**	5,914	621	6,535
250%	7	104	**111**	487	9	496
Default	27	33	**60**	404	40	444
Total specialised lending exposure subject to supervisory slotting	**2,532**	**6,927**	**9,459**	**64,887**	**6,931**	**71,818**

4.3 Internal Ratings-based Portfolios

Table 4.3.A Non-retail Exposures by Risk Grade

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

	As at 31 Mar 23						
	PD risk grade mapping						
External credit rating equivalent	**Aa3 and above**	**A1, A2, A3**	**Baa1, Baa2, Baa3**	**Ba1, Ba2**	**Ba3, B1**	**B2 and below**	**Default**
	0<0.03%	**0.03<0.11%**	**0.11<0.55%**	**0.55<2.00%**	**2.00<5.01%**	**5.01<99.99%**	**100%**
	$m	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Exposure at default							
Subject to advanced IRB approach							
Corporate (including SME)	-	6,323	50,139	106,568	20,884	2,981	1,596
Retail SME	-	640	6,565	10,934	4,077	903	817
Subject to foundation IRB approach							
Corporate	-	8,310	29,588	6,799	700	358	17
Sovereign	186,770	6,285	89	2	-	-	-
Financial institution	-	55,554	15,649	1,925	272	41	22
Total IRB approach	186,770	77,112	102,030	126,228	25,933	4,283	2,452
RBNZ regulated banking subsidiary	2,792	2,395	20,136	18,836	2,890	682	639
Total exposure at default	**189,562**	**79,507**	**122,166**	**145,064**	**28,823**	**4,965**	**3,091**
Undrawn commitments(1)							
Subject to advanced IRB approach							
Corporate (including SME)	-	2,563	8,112	10,185	2,319	155	52
Retail SME	-	347	2,843	2,917	620	117	54
Subject to foundation IRB approach							
Corporate	-	4,029	9,897	1,535	275	80	-
Sovereign	24,252	289	-	1	-	-	-
Financial institution	-	25,535	8,478	371	31	2	-
Total IRB approach	24,252	32,763	29,330	15,009	3,245	354	106
RBNZ regulated banking subsidiary	811	1,440	6,436	3,157	421	80	34
Total undrawn commitments	**25,063**	**34,203**	**35,766**	**18,166**	**3,666**	**434**	**140**
Average exposure at default ($m)(2)							
Subject to advanced IRB approach							
Corporate (including SME)	-	0.86	0.57	0.57	0.41	0.28	0.46
Retail SME	-	0.13	0.06	0.05	0.06	0.03	0.06
Subject to foundation IRB approach							
Corporate	-	4.45	1.77	1.47	2.32	2.28	1.13
Sovereign	52.35	4.56	2.48	0.04	small	0.04	-
Financial institution	-	0.54	0.92	0.47	0.38	0.21	0.42
RBNZ regulated banking subsidiary	10.27	0.14	0.53	0.45	0.19	0.22	0.36
Exposure-weighted average LGD (%)							
Subject to advanced IRB approach							
Corporate (including SME)	-	39.6%	27.1%	27.0%	28.6%	29.3%	36.3%
Retail SME	-	25.5%	27.5%	30.2%	31.1%	31.6%	32.7%
Subject to foundation IRB approach							
Corporate	-	41.1%	42.5%	41.0%	38.6%	16.2%	45.1%
Sovereign	5.0%	25.0%	24.9%	29.4%	25.0%	25.0%	n/a
Financial institution	-	49.5%	48.0%	39.8%	29.5%	36.1%	43.0%
RBNZ regulated banking subsidiary	48.5%	39.1%	34.3%	31.7%	34.7%	41.4%	36.3%

	As at 31 Mar 23						
	PD risk grade mapping						
External credit rating equivalent	**Aa3 and above**	**A1, A2, A3**	**Baa1, Baa2, Baa3**	**Ba1, Ba2**	**Ba3, B1**	**B2 and below**	**Default**
	0<0.03%	**0.03<0.11%**	**0.11<0.55%**	**0.55<2.00%**	**2.00<5.01%**	**5.01<99.99%**	**100%**
	$m	**$m**	**$m**	**$m**	**$m**	**$m**	**$m**
Exposure-weighted average risk-weight (%)							
Subject to advanced IRB approach							
Corporate (including SME)	–	21.1%	34.5%	57.8%	78.9%	119.1%	152.7%
Retail SME	–	6.8%	16.9%	36.6%	57.6%	86.6%	167.4%
Subject to foundation IRB approach							
Corporate	–	27.2%	55.3%	92.5%	138.0%	143.3%	–
Sovereign	0.6%	8.9%	50.8%	48.0%	68.3%	46.9%	–
Financial institution	–	24.2%	47.6%	99.7%	106.6%	194.0%	–
RBNZ regulated banking subsidiary	4.3%	32.9%	39.5%	61.2%	89.8%	164.1%	294.1%

(1) Undrawn commitments are included in total exposure shown above.
(2) Simple average of exposure by number of arrangements.

	As at 30 Sep 22						
	PD risk grade mapping						
External credit rating equivalent	Aa3 and above	A1, A2, A3	Baa1, Baa2, Baa3	Ba1, Ba2	Ba3, B1	B2 and below	Default
	0<0.03%	0.03<0.11%	0.11<0.55%	0.55<2.00%	2.00<5.01%	5.01<99.99%	100%
	$m	$m	$m	$m	$m	$m	$m
Exposure at default							
Subject to advanced IRB approach							
Corporate (including SME)	–	75,785	96,247	77,532	16,750	2,751	1,423
Sovereign	181,586	5,290	1,251	3	92	–	–
Bank	–	23,087	2,938	5	–	–	–
Retail SME	–	1,664	4,650	5,636	2,265	600	674
Total advanced IRB approach	181,586	105,826	105,086	83,176	19,107	3,351	2,097
RBNZ regulated banking subsidiary	12,166	7,233	20,336	17,288	2,740	948	434
Total exposure at default	**193,752**	**113,059**	**125,422**	**100,464**	**21,847**	**4,299**	**2,531**
Undrawn commitments(1)							
Subject to advanced IRB approach							
Corporate (including SME)	–	27,336	29,071	12,570	2,387	440	85
Sovereign	2,426	227	1	1	1	–	–
Bank	–	152	22	–	–	–	–
Retail SME	–	932	1,385	873	227	54	45
Total advanced IRB approach	2,426	28,647	30,479	13,444	2,615	494	130
RBNZ regulated banking subsidiary	150	1,825	5,785	2,737	430	97	15
Total undrawn commitments	**2,576**	**30,472**	**36,264**	**16,181**	**3,045**	**591**	**145**

Average exposure at default ($m)(2)							
Subject to advanced IRB approach							
Corporate (including SME)	–	2.55	0.94	0.59	0.38	0.31	0.40
Sovereign	54.48	4.60	14.54	0.04	3.85	–	–
Bank	–	0.22	0.60	0.25	0.01	–	–
Retail SME	–	0.05	0.05	0.05	0.05	0.02	0.04
RBNZ regulated banking subsidiary	30.26	0.42	0.50	0.42	0.19	0.32	0.40
Exposure-weighted average LGD (%)							
Subject to advanced IRB approach							
Corporate (including SME)	–	51.5%	35.5%	27.4%	27.1%	27.0%	36.0%
Sovereign	4.1%	37.1%	45.0%	44.9%	15.2%	45.0%	n/a
Bank	–	53.8%	59.5%	59.6%	59.6%	59.6%	59.6%
Retail SME	–	21.9%	23.3%	26.1%	27.6%	27.8%	30.2%
RBNZ regulated banking subsidiary	5.5%	41.3%	36.1%	32.5%	33.8%	42.4%	40.4%
Exposure-weighted average risk-weight (%)							
Subject to advanced IRB approach							
Corporate (including SME)	–	23.9%	39.7%	51.0%	65.5%	102.4%	192.3%
Sovereign	0.4%	11.8%	23.8%	98.5%	55.4%	176.2%	–
Bank	–	18.4%	54.3%	130.3%	155.2%	280.7%	–
Retail SME	–	5.6%	13.3%	30.5%	49.5%	76.0%	207.6%
RBNZ regulated banking subsidiary	0.7%	15.9%	40.0%	60.9%	85.4%	156.1%	227.9%

(1) Undrawn commitments are included in total exposure shown above.
(2) Simple average of exposure by number of arrangements.

Table 4.3.B Retail Exposures by Risk Grade

The following table provides a breakdown of the retail credit exposures 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 23					
	PD risk grade					
	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	$m
Exposure at default						
Subject to advanced IRB approach						
Residential mortgage	65,254	202,607	90,738	14,092	10,936	2,826
Qualifying revolving retail	–	5,730	2,006	922	381	66
Other retail	63	116	479	569	286	39
Total IRB approach	**65,317**	**208,453**	**93,223**	**15,583**	**11,603**	**2,931**
RBNZ regulated banking subsidiary	773	1,700	52,577	1,875	92	240
Total exposure at default	**66,090**	**210,153**	**145,800**	**17,458**	**11,695**	**3,171**
Undrawn commitments[1]						
Subject to advanced IRB approach						
Residential mortgage	25,400	27,253	3,606	679	174	34
Qualifying revolving retail	–	4,271	669	163	52	15
Other retail	59	71	67	36	58	1
Total IRB approach	**25,459**	**31,595**	**4,342**	**878**	**284**	**50**
RBNZ regulated banking subsidiary	482	988	2,105	79	5	–
Total undrawn commitments	**25,941**	**32,583**	**6,447**	**957**	**289**	**50**
Average exposure at default ($m)[2]						
Subject to advanced IRB approach						
Residential mortgage	0.06	0.34	0.44	0.48	0.42	0.30
Qualifying revolving retail	–	0.01	0.01	0.01	0.01	0.01
Other retail	small	0.01	0.01	0.01	small	small
RBNZ regulated banking subsidiary	small	0.02	0.17	0.05	small	0.03
Exposure-weighted average LGD (%)						
Subject to advanced IRB approach						
Residential mortgage	13.8%	15.1%	17.1%	18.5%	17.5%	24.3%
Qualifying revolving retail	–	74.0%	74.7%	76.0%	76.2%	75.3%
Other retail	71.8%	72.5%	72.5%	72.8%	75.4%	83.5%
RBNZ regulated banking subsidiary	86.6%	31.5%	18.6%	20.6%	47.3%	20.2%
Exposure-weighted average risk-weight (%)						
Subject to advanced IRB approach						
Residential mortgage	6.1%	12.9%	34.4%	85.3%	137.6%	237.1%
Qualifying revolving retail	–	7.9%	33.4%	73.4%	163.4%	199.0%
Other retail	13.7%	40.9%	88.2%	111.1%	164.2%	328.1%
RBNZ regulated banking subsidiary	13.7%	19.2%	25.2%	67.3%	194.0%	251.7%

(1) Undrawn commitments are included in total exposures shown above.
(2) Simple average of exposure by number of arrangements.

	As at 30 Sep 22					
	PD risk grade					
	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
Exposure at default						
Subject to advanced IRB approach						
Residential mortgage	64,384	204,843	87,057	11,989	9,470	3,041
Qualifying revolving retail	1,768	4,107	1,932	828	330	24
Other retail	64	119	438	479	203	36
RBNZ regulated banking subsidiary	656	1,589	47,973	1,786	45	249
Total exposure at default	**66,872**	**210,658**	**137,400**	**15,082**	**10,048**	**3,350**
Undrawn commitments(1)						
Subject to advanced IRB approach						
Residential mortgage	27,904	23,207	3,444	475	161	10
Qualifying revolving retail	1,600	2,777	619	139	51	-
Other retail	61	72	65	34	28	-
RBNZ regulated banking subsidiary	427	805	1,960	82	7	1
Total undrawn commitments	**29,992**	**26,861**	**6,088**	**730**	**247**	**11**

Average exposure at default ($m)(2)						
Subject to advanced IRB approach						
Residential mortgage	0.17	0.36	0.43	0.52	0.44	0.38
Qualifying revolving retail	0.01	0.01	0.01	0.01	0.01	0.01
Other retail	small	0.01	0.01	0.01	small	small
RBNZ regulated banking subsidiary	small	0.01	0.15	0.05	small	0.05
Exposure-weighted average LGD (%)						
Subject to advanced IRB approach						
Residential mortgage	20.0%	20.0%	20.0%	20.0%	20.0%	20.0%
Qualifying revolving retail	74.0%	74.1%	74.7%	75.8%	75.9%	76.5%
Other retail	71.8%	72.7%	72.5%	72.8%	75.3%	84.2%
RBNZ regulated banking subsidiary	86.5%	34.6%	18.9%	20.6%	78.9%	19.8%
Exposure-weighted average risk-weight (%)						
Subject to advanced IRB approach						
Residential mortgage	4.9%	16.4%	37.1%	76.9%	123.8%	201.1%
Qualifying revolving retail	2.6%	8.8%	32.0%	69.9%	155.8%	543.5%
Other retail	10.7%	40.1%	84.6%	107.0%	149.7%	355.4%
RBNZ regulated banking subsidiary	13.0%	19.9%	25.7%	69.0%	149.8%	236.6%

(1) Undrawn commitments are included in total exposures shown above.
(2) Simple average of exposure by number of arrangements.

4.4 Credit Risk Mitigation

Table 4.4.A Mitigation by Eligible Financial Collateral

The following table provides credit risk exposures, in the form of gross exposures, covered by eligible financial collateral. The gross exposure amount is before the application of eligible financial collateral, and excludes positive haircut adjustments made in the calculation of exposure at default for repurchase agreements.

	As at 31 Mar 23	
Exposure type	Gross exposure $m	Covered by eligible financial collateral $m
Subject to advanced IRB approach		
Corporate (including SME)	188,674	186
Retail SME	23,936	–
Residential mortgage	386,453	–
Qualifying revolving retail	9,105	–
Other retail	1,552	–
Subject to foundation IRB approach		
Corporate	47,612	1,895
Sovereign	230,495	45,115
Financial institution	175,167	103,324
Total IRB approach	**1,062,994**	**150,520**
Specialised lending	**2,532**	**–**
Subject to standardised approach		
Corporate	47,925	34,858
Residential mortgage	16,570	6
Other retail	8,835	50
Other	7,533	–
Total standardised approach	**80,863**	**34,914**
RBNZ regulated banking subsidiary	**139,243**	**7,429**
Total exposure at default	**1,285,632**	**192,863**

	As at 30 Sep 22	
Exposure type	Gross exposure $m	Covered by eligible financial collateral $m
Subject to advanced IRB approach		
Corporate (including SME)	339,319	69,716
Sovereign	219,713	39,259
Bank	81,837	56,143
Retail SME	15,490	–
Residential mortgage	380,784	–
Qualifying revolving retail	8,989	–
Other retail	1,339	–
Total advanced IRB approach	**1,047,471**	**165,118**
Specialised lending	**65,106**	**219**
Subject to standardised approach		
Corporate	55,047	43,666
Residential mortgage	13,978	–
Other retail	5,166	30
Other	7,766	–
Total standardised approach	**81,957**	**43,696**
RBNZ regulated banking subsidiary	**126,523**	**6,272**
Total exposure at default	**1,321,057**	**215,305**

Table 4.4.B Mitigation by Guarantees and Credit Derivatives

The following table provides credit risk exposures covered by guarantees and credit derivatives.

	As at 31 Mar 23		
	Exposure at default	Covered by guarantees	Covered by credit derivatives
Exposure type	**$m**	**$m**	**$m**
Subject to advanced IRB approach			
Corporate (including SME)	188,491	8,474	-
Retail SME	23,936	179	-
Residential mortgage	386,453	137	-
Qualifying revolving retail	9,105	-	-
Other retail	1,552	-	-
Subject to foundation IRB approach			
Corporate	45,772	13,558	-
Sovereign	193,146	-	-
Financial institution	73,463	2,495	-
Total IRB approach	**921,918**	**24,843**	**-**
Specialised lending	**2,532**	**45**	**-**
Subject to standardised approach			
Corporate	13,074	136	-
Residential mortgage	16,563	2	-
Other retail	8,786	-	-
Other	7,533	-	-
Total standardised approach	**45,956**	**138**	**-**
RBNZ regulated banking subsidiary	**133,010**	**3,960**	**-**
Total exposure at default	**1,103,416**	**28,986**	**-**

	As at 30 Sep 22		
	Exposure at default	Covered by guarantees	Covered by credit derivatives
Exposure type	**$m**	**$m**	**$m**
Subject to advanced IRB approach			
Corporate (including SME)	270,488	27,706	-
Sovereign	188,222	1	-
Bank	26,030	-	-
Retail SME	15,489	-	-
Residential mortgage	380,784	-	-
Qualifying revolving retail	8,989	-	-
Other retail	1,339	-	-
Total advanced IRB approach	**891,341**	**27,707**	**-**
Specialised lending	**64,887**	-	-
Subject to standardised approach			
Corporate	11,381	-	-
Residential mortgage	13,978	-	-
Other retail	5,136	-	-
Other	7,766	-	-
Total standardised approach	**38,261**	-	**-**
RBNZ regulated banking subsidiary	**123,929**	2,809	-
Total exposure at default	**1,118,418**	**30,516**	**-**

4.5 Counterparty Credit Risk

Impact of the revised capital framework

The revised capital framework which came into effect on 1 January 2023 resulted in a decrease in the net derivative credit exposure of the RBNZ regulated banking subsidiary of $500 million compared to the previous prudential rules as at 31 December 2022. Measurement of net derivative credit exposures of the RBNZ regulated banking subsidiary changed from SA-CCR to current exposure method.

Table 4.5.A (i) Net Derivatives Credit Exposure

The following table provides the calculation of net derivatives credit exposure.

	As at	
	31 Mar 23	30 Sep 22
	$m	$m
Gross positive fair value of derivative contracts	118,932	162,901
Netting and collateral benefits	(108,158)	(147,275)
Replacement cost (RC)	**10,774**	**15,626**
Potential future credit exposure	13,885	12,278
Effective expected positive exposure	**24,659**	**27,904**
Impact of 1.4 multiplier and incurred credit valuation adjustment(1)	9,731	10,978
Level 2 Group excluding BNZ net derivatives credit exposure	**34,390**	**38,882**
RBNZ regulated banking subsidiary net derivatives credit exposure	**1,840**	**4,626**
Total net derivatives credit exposure	**36,230**	**43,508**

(1) Incurred credit valuation adjustment is the loss expensed for accounting purposes.

Table 4.5.A (ii) Distribution of Current Credit Exposure

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

	As at	
	31 Mar 23	30 Sep 22
Exposure type	$m	$m
Interest rate contracts	6,537	5,435
Foreign exchange and gold contracts	19,333	25,948
Equity contracts	11	55
Commodity contracts other than precious metals	2,738	1,828
Other market related contracts	29	35
Central counterparty(1)	5,742	5,581
Level 2 Group excluding BNZ net derivatives credit exposure	**34,390**	**38,882**
RBNZ regulated banking subsidiary net derivatives credit exposure	**1,840**	**4,626**
Total net derivatives credit exposure	**36,230**	**43,508**

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

Table 4.5.B Credit Derivative Transactions

The following table provides the notional value of credit derivative transactions, segregated between use for the Group's own credit portfolio, as well as in its intermediation activities. This is broken down further by protection bought and sold.

	As at 31 Mar 23			As at 30 Sep 22		
	Protection bought notional	Protection sold notional	Total notional	Protection bought notional	Protection sold notional	Total notional
Credit derivative products	$m	$m	$m	$m	$m	$m
Credit default swaps used for own credit portfolio	2,046	–	2,046	2,197	–	2,197
Credit default swaps used for intermediation	388	1,352	1,740	85	1,130	1,215
Total credit derivative notional value	**2,434**	**1,352**	**3,786**	**2,282**	**1,130**	**3,412**

Securitisation

Own Asset Securitisation

Own asset securitisation activities may be used for funding, capital and liquidity management purposes. This involves the sale of assets originated by the Group to an SPV, which then issues notes to third party investors. Where significant credit risk transfer is achieved, regulatory capital relief may be achieved. The Group has also established internal securitisation SPVs and holds the issued residential mortgage-backed securities (RMBS) as collateral for contingent liquidity purposes.

Table 5.1.A 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 credit risk transfer of the underlying exposure is achieved for regulatory purposes.
- funding only – significant credit risk transfer is not achieved.
- internal RMBS – securities are issued and held internally for contingent liquidity purposes (also known as self-securitisation).

	As at 31 Mar 23			
	Group originated capital relief	Group originated funding only	Group originated internal RMBS[1]	Third party originated assets
Underlying asset	$m	$m	$m	$m
Residential mortgages	2,197	1,189	144,522	-

(1) 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 $130,807 million.

	As at 30 Sep 22			
	Group originated capital relief	Group originated funding only	Group originated internal RMBS[1]	Third party originated assets
Underlying asset	$m	$m	$m	$m
Residential mortgages	2,487	1,359	146,537	-

(1) 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 $132,868 million.

There were no exposures securitised either in the trading book or synthetically by the Group as at 31 March 2023 or 30 September 2022.

Table 5.1.B Non-performing Banking Book Exposures Securitised

The following table provides non-performing exposures that have been originated and securitised by the Group in the banking book and any losses that have been recognised on these securitised exposures.

	As at 31 Mar 23			As at 30 Sep 22		
	Outstanding exposure	Non-performing exposures	Losses recognised	Outstanding exposure	Non-performing exposures	Losses recognised
Underlying asset	$m	$m	$m	$m	$m	$m
Residential mortgages	147,908	793	-	150,383	788	-

Table 5.1.C Recent Securitisation Activity

The following table provides the net movement in exposures securitised by the Group, and any gain or loss recognised on the sale of assets by the Group to securitisation SPVs.

	6 months ended 31 Mar 23			
Underlying asset	Group originated capital relief $m	Group originated funding only $m	Group originated internal RMBS $m	Gain or loss on sale $m
Residential mortgages	(289)	(171)	(2,015)	–

	6 months ended 30 Sep 22			
Underlying asset	Group originated capital relief $m	Group originated funding only $m	Group originated internal RMBS $m	Gain or loss on sale $m
Residential mortgages	1,138	605	108	–

The Group had no outstanding exposures in either the banking or trading book that were intended to be securitised as at 31 March 2023 or 30 September 2022.

Third Party Securitisation

Third party securitisation activities include arranging securitisation transactions and providing facilities and funding to securitisation SPVs. They also include investing in securities issued by third party securitisation SPVs through primary and secondary market transactions.

Impact of the revised capital framework and change in presentation

Under the revised capital framework which came into effect on 1 January 2023, securitisation exposures of the RBNZ regulated banking subsidiary are no longer within the scope of APS 120, and are now subject to the RBNZ's internal ratings-based approach. To assist with comparability between reporting periods, the 30 September 2022 comparatives in relation to third party securitisation have been restated to remove amounts for the RBNZ regulated banking subsidiary from Table 5.1.D *Securitisation Exposures Retained or Purchased* and Table 5.1.E *Securitisation Exposures by Risk-weight*, and include them (based on APS 120 rules that applied as at 30 September 2022) in Section 4 *Credit Risk*. Further details of the restatement are outlined in Appendix 1.

Table 5.1.D Securitisation Exposures Retained or Purchased

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

	As at 31 Mar 23			As at 30 Sep 22		
Securitisation exposure type	On-balance sheet $m	Off-balance sheet $m	Total $m	On-balance sheet $m	Off-balance sheet $m	Total $m
Liquidity facilities	429	918	**1,347**	394	1,045	**1,439**
Warehouse facilities	17,162	6,781	**23,943**	18,264	6,814	**25,078**
Securities	7,006	–	**7,006**	7,753	–	**7,753**
Derivatives	–	42	**42**	–	43	**43**
Total	**24,597**	**7,741**	**32,338**	**26,411**	**7,902**	**34,313**

The Group had $335 million of derivative exposures held in the trading book subject to the IMA under APS 116 as at 31 March 2023 (30 September 2022: $306 million). The Group had no trading book exposures subject to APS 120 which were either risk-weighted or deducted from capital at 31 March 2023 or 30 September 2022.

The Group had no exposures subject to early amortisation in the banking or trading book at 31 March 2023 or 30 September 2022.

Table 5.1.E Securitisation Exposures by Risk-weight

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

	As at 31 Mar 23		As at 30 Sep 22	
	Exposure	RWA	Exposure	RWA
Risk-weight bands	**$m**	**$m**	**$m**	**$m**
15% ≤ 25%	31,407	5,150	33,272	5,428
> 25% ≤ 35%	636	183	827	232
> 35% ≤ 50%	115	43	30	12
> 50% ≤ 75%	180	114	184	116
Total	**32,338**	**5,490**	**34,313**	**5,788**

The Group deducted $4 million of in-the-money derivatives provided to capital relief securitisation vehicles from CET1 capital as at 31 March 2023 (30 September 2022: nil).

Market Risk

Table 6.1.A Market Risk Risk-weighted Assets

The following table provides a breakdown of market risk RWA.

	As at	
	31 Mar 23	30 Sep 22
Market risk RWA	**$m**	**$m**
Internal model approach	8,163	7,534
Standard method	333	373
Total	**8,496**	**7,907**

The following table provides a breakdown of market risk RWA under the standard method.

	As at	
	31 Mar 23	30 Sep 22
Standard method RWA	**$m**	**$m**
Interest rate risk	328	370
Equity position risk	5	3
Total	**333**	**373**

Table 6.1.B Internal Model Approach Value at Risk and Stressed Value at Risk

The following table provides information on the mean, minimum and maximum Value at Risk (VaR) and stressed VaR over the reporting period and at period end. VaR and stressed VaR provided are based on a 10-day holding period.

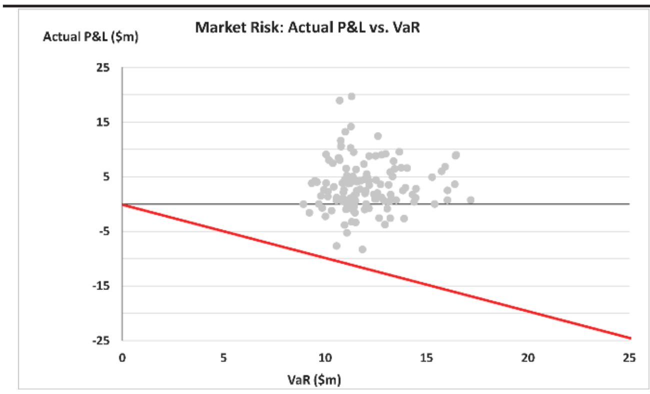
	6 months ended 31 Mar 23			As at
	Mean value	Minimum value	Maximum value	31 Mar 23
	$m	$m	$m	$m
At a 99% confidence level				
VaR	41.2	27.3	69.3	34.1
Stressed VaR	99.0	36.7	194.2	83.3

	6 months ended 30 Sep 22			As at
	Mean value	Minimum value	Maximum value	30 Sep 22
	$m	$m	$m	$m
At a 99% confidence level				
VaR	50.3	25.8	89.5	36.3
Stressed VaR	91.9	51.4	206.8	101.1

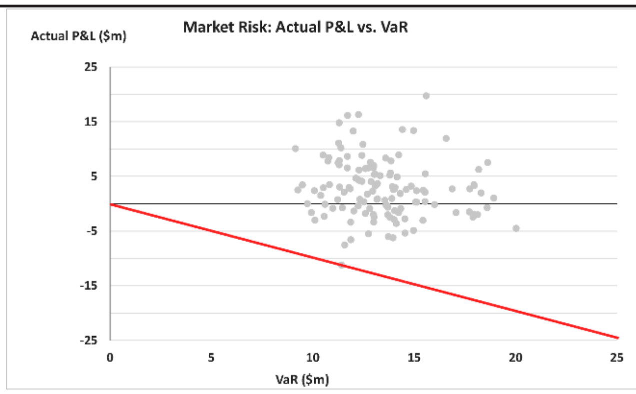
Back-testing Results

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

Results for the six months ended 31 March 2023



Results for the six months ended 30 September 2022



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 2023 or the six months ended 30 September 2022. This remains within the model parameters and indicates acceptable operation of the VaR model within APRA's guidelines.

Balance Sheet and Liquidity Risk

7.1 Interest Rate Risk in the Banking Book

Table 7.1.A 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 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 23		As at 30 Sep 22	
	200 bp parallel increase	200 bp parallel decrease	200 bp parallel increase	200 bp parallel decrease
	$m	$m	$m	$m
Change in economic value				
AUD	(507)	524	(495)	530
CAD	-	-	-	-
EUR	(8)	9	(8)	9
GBP	4	(3)	(1)	1
HKD	-	1	-	-
JPY	10	(10)	5	(5)
NZD	(285)	292	(304)	318
USD	(29)	31	(34)	36
Other	1	(1)	4	(4)
Total change in economic value	**(814)**	**843**	**(833)**	**885**

7.2 Equity Holdings in the Banking Book

Table 7.2.A 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 23		As at 30 Sep 22	
	Carrying value	Fair value	Carrying value	Fair value
	$m	$m	$m	$m
Unlisted equities	752	752	702	702

Table 7.2.B Gains and Losses from Equity Holdings

The following table provides realised and unrealised gains or losses before tax effect from equity instruments, where:

- realised gains or losses represent the difference between the cost of equity instruments and proceeds where there has been a sale in the six months to the end of the reporting period
- cumulative unrealised gains or losses represent the difference between the cost of equity instruments and their carrying value.

	31 Mar 23	30 Sep 22
	$m	$m
Gains/(losses) on equity investments		
Realised gains/(losses)	(5)	2
Cumulative unrealised losses	(285)	(296)

7.3 Liquidity Disclosures

Liquidity Coverage Ratio

The Group Liquidity Risk Policy requires that the Group maintains a liquid asset portfolio, comprising high-quality liquid assets (HQLA) that can be readily converted to cash and used to support intraday payments. The Group's liquid asset portfolio is maintained by geography, currency and legal entity across NAB, BNZ, NAB Europe and branches in London, New York and Asia. The liquidity portfolio comprises a mix of:

- cash
- Australian government and semi-government securities, and foreign sovereign securities
- central bank reserves, and
- other securities that are eligible for repurchase with the Reserve Bank of Australia (RBA) to support the Committed Liquidity Facility (CLF) (which was reduced to zero on 1 January 2023), and the Term Funding Facility (TFF).

The Liquidity Coverage Ratio (LCR) measures the adequacy of 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's 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 2023 and 31 December 2022 are presented in Table 7.3.A *Liquidity Coverage Ratio Disclosure Template*, and are based on a simple average of daily LCR outcomes excluding non-business days. There were 63 daily LCR observations or data points used in calculating the average for the current quarter and 62 observations in the previous quarter.

Average LCR for the three months ended 31 March 2023 decreased to 130% with a decrease in average liquid assets of $10.4 billion, compared to a lower decrease in average net cash outflows of $4.2 billion.

The decrease in average liquid assets was mainly as a result of lower alternative liquid assets due to the full quarter impact of the final CLF reduction from $7.8 billion to zero on 1 January 2023. Additionally, HQLA decreased by $3.8 billion due to lower central bank deposits, partially offset by increased holdings of government and semi-government securities.

The decrease in average net cash outflows was largely due to a reduction in wholesale deposit outflows and higher inflows from reverse repurchase agreements, partially offset by an increase in derivative exposure outflows.

Table 7.3.A Liquidity Coverage Ratio Disclosure Template

	3 months ended			
	31 Mar 23		31 Dec 22	
	Unweighted value (average)(1)	Weighted value (average)	Unweighted value (average)(1)	Weighted value (average)
	$m	$m	$m	$m
Liquid assets, of which:		**201,683**		**212,038**
1 High-quality liquid assets (HQLA)(2)(3)		199,500		203,343
2 Alternative liquid assets (ALA)(3)		–		7,644
3 Reserve Bank of New Zealand (RBNZ) securities(2)(3)		2,183		1,051
Cash outflows				
4 Retail deposits and deposits from small business customers	276,517	30,775	279,301	30,288
5 of which: stable deposits	114,277	5,714	119,055	5,953
6 of which: less stable deposits	162,240	25,061	160,246	24,335
7 Unsecured wholesale funding	179,973	89,816	188,511	94,072
8 of which: operational deposits (all counterparties) and deposits in networks for cooperative banks	92,330	23,082	97,053	24,263
9 of which: non-operational deposits (all counterparties)	71,429	50,520	75,000	53,351
10 of which: unsecured debt	16,214	16,214	16,458	16,458
11 Secured wholesale funding(3)		8,164		6,704
12 Additional requirements	201,083	38,031	195,838	35,697
13 of which: outflows related to derivatives exposures and other collateral requirements	8,835	8,834	6,155	6,150
14 of which: outflows related to loss of funding on debt products	–	–	–	–
15 of which: credit and liquidity facilities	192,248	29,197	189,683	29,547
16 Other contractual funding obligations	–	–	858	858
17 Other contingent funding obligations	68,103	4,857	64,668	4,578
18 Total cash outflows		**171,643**		**172,197**
Cash inflows				
19 Secured lending	41,669	4,177	41,258	1,560
20 Inflows from fully performing exposures	19,782	11,130	18,673	10,241
21 Other cash inflows	1,783	1,781	1,643	1,639
22 Total cash inflows	**63,234**	**17,088**	**61,574**	**13,440**
23 Total liquid assets		**201,683**		**212,038**
24 Total net cash outflows		**154,555**		**158,757**
25 Liquidity Coverage Ratio (%)		**130%**		**134%**

(1) Unweighted inflow and outflow values are outstanding balances maturing or callable within 30 days.
(2) Weighted values exclude New Zealand dollar (NZD) liquid asset holdings in excess of NZD LCR of 100%, reflecting liquidity transferability considerations. The amount excluded during the three months to 31 March 2023 and 31 December 2022 was on average $7.2 billion and $8.2 billion respectively.
(3) Disclosed on a weighted basis only, consistent with the disclosure template prescribed by APS 330.

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. Available Stable Funding (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. Required Stable Funding (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. The APRA minimum NSFR is 100%.

The NSFR as at 31 March 2023 and 31 December 2022 are presented in Table 7.3.B *Net Stable Funding Ratio Disclosure Template*, and are based on spot balances.

The NSFR decreased to 117% as at 31 March 2023 with a $11.8 billion increase to $541.0 billion of RSF, compared to a $7.1 billion increase to $630.7 billion of ASF.

The increase in RSF was mainly a result of lending growth, combined with the impacts of the CLF reduction to zero and an amendment to APS 210 *Liquidity* effective from 1 January 2023 which included changing the method for calculating the RSF for residential mortgages from using risk-weights under the standardised approach to loan-to-valuation ratio (LVR) information. The increase in ASF was primarily driven by an increase in wholesale funding and higher regulatory capital, partially offset by the impact of lower weighting applied to the TFF as the facility approaches maturity.

Table 7.3.B Net Stable Funding Ratio Disclosure Template

		As at 31 Mar 23				
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
		$m	$m	$m	$m	$m
Available Stable Funding (ASF) Item						
1	Capital	63,582	–	–	29,420	93,002
2	of which: regulatory capital	63,582	–	–	29,420	93,002
3	of which: other capital instruments	–	–	–	–	–
4	Retail deposits and deposits from small business customers	255,666	74,518	–	–	303,225
5	of which: stable deposits	106,545	14,633	–	–	115,119
6	of which: less stable deposits	149,121	59,885	–	–	188,106
7	Wholesale funding	122,253	282,684	53,325	112,118	232,262
8	of which: operational deposits	82,140	–	–	–	41,070
9	of which: other wholesale funding	40,113	282,684	53,325	112,118	191,192
10	Liabilities with matching interdependent assets	–	–	–	–	–
11	Other liabilities	–	13,015	–	2,175	2,175
12	of which: NSFR derivative liabilities[1]			4,124		
13	of which: all other liabilities and equity not included in the above categories	–	8,891	–	2,175	2,175
14	**Total ASF**					**630,664**
Required Stable Funding (RSF) Item						
15a	High-quality liquid assets (HQLA) for NSFR purposes					4,796
15b	Alternative liquid assets (ALA)					3,227
15c	RBNZ securities					372
16	Deposits held at other financial institutions for operational purposes	–	–	–	–	–
17	Performing loans and securities	18,677	146,772	45,429	533,166	494,470
18	of which: performing loans to financial institutions secured by Level 1 HQLA	–	53,237	1,428	–	6,038
19	of which: performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	94	25,124	5,852	21,421	28,210
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):	18,582	59,258	32,687	149,057	185,530
21	of which: with a risk-weight of less than or equal to 35% under APS 112	–	–	–	8,171	5,311
22	of which: performing residential property loans	–	5,348	4,636	355,530	264,942
23	of which: standard loans to individuals with an LVR of 80% or below[2]	–	–	–	199,720	129,818
24	of which: securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1	3,805	826	7,158	9,750
25	Assets with matching interdependent liabilities	–	–	–	–	–
26	Other assets	19,344	6,329	4	25,616	27,899
27	of which: physical traded commodities, including gold	473				402
28	of which: assets posted as initial margin for derivative contracts and contributions to default funds of CCPs[1]			3,504		2,978
29	of which: NSFR derivative assets[1]			4,545		421
30	of which: NSFR derivative liabilities before deduction of variation margin posted[1]			17,128		3,426
31	of which: all other assets not included in the above categories	18,871	6,329	4	439	20,672
32	Off-balance sheet items[1]			198,025		10,268
33	**Total RSF**					**541,032**
34	**Net Stable Funding Ratio (%)**					**117%**

(1) Disclosed in total and not by maturity bucket, consistent with the disclosure template prescribed by APS 330.
(2) Comprises performing, unencumbered standard residential property loans to individual(s) with a maturity of one year or more and a LVR of 80% or below, as defined under APS 112.

		As at 31 Dec 2022				
		Unweighted value by residual maturity				Weighted value
		No maturity	< 6 months	6 months to < 1 year	≥ 1 year	
		$m	$m	$m	$m	$m
Available Stable Funding (ASF) Item						
1	Capital	60,993	–	–	26,163	87,156
2	of which: regulatory capital	60,993	–	–	26,163	87,156
3	of which: other capital instruments	–	–	–	–	–
4	Retail deposits and deposits from small business customers	264,585	71,088	421	5	307,751
5	of which: stable deposits	113,207	13,746	–	–	120,605
6	of which: less stable deposits	151,378	57,342	421	5	187,146
7	Wholesale funding	121,938	277,813	50,469	112,375	226,487
8	of which: operational deposits	83,559	–	–	–	41,779
9	of which: other wholesale funding	38,379	277,813	50,469	112,375	184,708
10	Liabilities with matching interdependent assets	–	–	–	–	–
11	Other liabilities	–	14,479	–	2,196	2,196
12	of which: NSFR derivative liabilities[1]			6,058		
13	of which: all other liabilities and equity not included in the above categories	–	8,421	–	2,196	2,196
14	**Total ASF**					**623,590**
Required Stable Funding (RSF) Item						
15a	High-quality liquid assets (HQLA) for NSFR purposes					4,522
15b	Alternative liquid assets (ALA)					4,002
15c	RBNZ securities					422
16	Deposits held at other financial institutions for operational purposes	–	–	–	–	–
17	Performing loans and securities	17,380	149,096	51,947	526,710	481,836
18	of which: performing loans to financial institutions secured by Level 1 HQLA	–	52,643	1,643	–	6,086
19	of which: performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions	65	25,062	6,291	21,643	28,612
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):	15,657	58,281	38,198	154,189	185,177
21	of which: with a risk-weight of less than or equal to 35% under APS 112	–	–	–	11,192	7,275
22	of which: performing residential mortgages	–	5,528	4,807	343,998	249,337
23	of which: with a risk-weight equal to 35% under APS 112	–	5,528	4,807	286,884	200,790
24	of which: securities that are not in default and do not qualify as HQLA, including exchange-traded equities	1,658	7,582	1,008	6,880	12,624
25	Assets with matching interdependent liabilities	–	–	–	–	–
26	Other assets	18,895	1,656	8	33,495	28,359
27	of which: physical traded commodities, including gold	201				171
28	of which: assets posted as initial margin for derivative contracts and contributions to default funds of CCPs[1]			3,337		2,837
29	of which: NSFR derivative assets[1]			6,058		–
30	of which: NSFR derivative liabilities before deduction of variation margin posted[1]			23,613		4,723
31	of which: all other assets not included in the above categories	18,694	1,656	8	487	20,628
32	Off-balance sheet items[1]			194,952		10,133
33	**Total RSF**					**529,274**
34	**Net Stable Funding Ratio (%)**					**118%**

(1) Disclosed in total and not by maturity bucket, consistent with the disclosure template prescribed by APS 330.

Appendix 1 – Credit Risk Restatements for Comparability

In this report, amounts for the RBNZ regulated banking subsidiary have been separately disclosed in accordance with amendments to APS 330 effective from 1 January 2023. Comparative EaD and RWA amounts in the Pillar 3 report are under rules that applied as at 30 September 2022. To assist with comparability between reporting periods, the 30 September 2022 comparatives have been restated as shown in the tables below to:

- remove amounts for the RBNZ regulated banking subsidiary from asset classes under which they were previously disclosed and aggregate them in the RBNZ regulated banking subsidiary line (excluding credit valuation adjustment RWA). This includes removing $2,061 million in securitisation exposures of the RBNZ regulated banking subsidiary as at 30 September 2022 from Section 5 *Securitisation*, and including them in Section 4 *Credit Risk*, in line with where the equivalent current period amounts are reported.
- report other retail under the standardised approach as a separate asset class given the increase in EaD and RWA under the revised capital framework due to an increase in credit conversion factors.
- report the exposure at default for cash items in the process of collection, premises and other fixed assets, and all other exposures of $8,727 million as at 30 September 2022 in Section 4 *Credit Risk* for which only the RWA was previously reported in the Pillar 3 report, and to present the RWA as subject to the standardised approach.
- aggregate small RWA amounts into other lines.

As a result of the changes described above, 30 September 2022 EaD in Section 4 *Credit Risk* has increased by $10,788 million compared that previously disclosed, and EaD in Section 5 *Securitisation* has decreased by $2,061 million compared to that previously disclosed.

Exposure at default restatement

	As at 30 Sep 22				
	Previously reported in Table 4.1.A	**RBNZ regulated banking subsidiary reallocation**	**Other retail reallocation**	**Inclusion of other exposures**	**Restated comparatives in Table 4.1.A**
Exposure type	**$m**	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach					
Corporate (including SME)	313,877	(43,389)	–	–	270,488
Sovereign	200,469	(12,247)	–	–	188,222
Bank	30,017	(3,987)	–	–	26,030
Retail SME	17,012	(1,523)	–	–	15,489
Residential mortgage	431,676	(50,892)	–	–	380,784
Qualifying revolving retail	8,989	–	–	–	8,989
Other retail	2,745	(1,406)	–	–	1,339
Total advanced IRB approach	**1,004,785**	**(113,444)**	**-**	**-**	**891,341**
Specialised lending	**71,818**	**(6,931)**	**-**	**-**	**64,887**
Subject to standardised approach					
Corporate	11,905	(524)	–	–	11,381
Residential mortgage	13,986	(8)	–	–	13,978
Other retail	–	–	5,136	–	5,136
Other	5,136	–	(5,136)	7,766	7,766
Total standardised approach	**31,027**	**(532)**	**-**	**7,766**	**38,261**
RBNZ regulated banking subsidiary	**-**	**122,968**	**-**	**961**	**123,929**
Total exposure at default	**1,107,630**	**2,061**	**-**	**8,727**	**1,118,418**

Credit risk-weighted asset restatement

	As at 30 Sep 22				
	Previously reported in Table 3.1.A	RBNZ regulated banking subsidiary reallocation	Other retail reallocation	Other exposures and other reallocations	Restated comparatives in Table 3.1.A
Exposure type	**$m**	**$m**	**$m**	**$m**	**$m**
Subject to advanced IRB approach					
Corporate (including SME)	137,118	(23,575)	-	-	113,543
Sovereign	1,870	(109)	-	-	1,761
Bank	6,447	(593)	-	-	5,854
Retail SME	6,961	(570)	-	-	6,391
Residential mortgage	110,551	(14,009)	-	-	96,542
Qualifying revolving retail	2,248	-	-	-	2,248
Other retail	2,004	(634)	-	-	1,370
Total advanced IRB approach	**267,199**	**(39,490)**	**-**	**-**	**227,709**
Specialised lending	**62,003**	**(6,433)**	**-**	**-**	**55,570**
Subject to standardised approach					
Corporate	5,144	(92)	-	84	5,136
Residential mortgage	5,308	(3)	-	-	5,305
Other retail	-	-	4,402	-	4,402
Other	4,402	-	(4,402)	5,647	5,647
Total standardised approach	**14,854**	**(95)**	**-**	**5,731**	**20,490**
RBNZ regulated banking subsidiary	**-**	**46,717**	**-**	**965**	**47,682**
Other					
Securitisation exposures	6,472	(684)	-	-	5,788
Credit valuation adjustment	6,720	-	-	-	6,720
Central counterparty default fund contribution guarantee	99	(15)	-	(84)	-
Other	9,914	-	-	(6,612)	3,302
Total other	**23,205**	**(699)**	**-**	**(6,696)**	**15,810**
Total credit risk-weighted assets	**367,261**	**-**	**-**	**-**	**367,261**

Appendix 2 - Reference to APS 330 Tables

Table number	Table title	APS 330 reference
Table 3.1.A	Risk-weighted Assets	APS 330 Table 6b-f and 6h
Table 3.1.B	Capital Floor	APS 330 Table 6i
Table 3.1.C	Capital and Leverage Ratios	APS 330 Table 6g
Table 3.2.A	Regulatory Capital Structure	n/a
Table 3.3.A	Regulatory Capital Disclosure Template	APS 330 Table 1
Table 3.3.B	Reconciliation between the Group and Level 2 Group Balance Sheet	APS 330 paragraph 12a, 12c and 12d
Table 3.3.C	Reconciliation between the Level 2 Group Balance Sheet and Regulatory Capital Disclosure Template	APS 330 paragraph 12d
Table 3.3.D	Entities Excluded from the Level 2 Group Balance Sheet	APS 330 paragraph 12b
Table 3.3.E	Countercyclical Capital Buffer	APS 330 Attachment A, paragraph 2
Table 3.4.A	Leverage Ratio Disclosure Template	APS 330 Table 18
Table 3.4.B	Summary Comparison of Accounting Assets vs Leverage Ratio Exposure Measure	APS 330 Table 19
Table 4.1.A	Credit Risk Summary	APS 330 Table 7b
Table 4.1.B	Total and Average Credit Risk Exposures	APS 330 Table 7b and 7i
Table 4.1.C	Credit Risk Exposures by Geography	APS 330 Table 7c
Table 4.1.D	Credit Risk Exposures by Industry	APS 330 Table 7d
Table 4.1.E	Credit Risk Exposures by Maturity	APS 330 Table 7e
Table 4.1.F	Provisions by Asset Class	APS 330 Table 9e
Table 4.1.G	Provisions by Industry	APS 330 Table 7f
Table 4.1.H	Provisions by Geography	APS 330 Table 7g
Table 4.1.I	Movement in Provisions	APS 330 Table 7h and 7j
Table 4.1.J (i)	Loss Experience	APS 330 Table 9f
Table 4.1.J (ii)	Accuracy of Risk Estimates for Probability of Default and Exposure at Default	APS 330 Table 9f
Table 4.1.J (iii)	Accuracy of Risk Estimates for Loss Given Default	APS 330 Table 9f
Table 4.2.A	Standardised Exposures by Risk-weight	APS 330 Table 8b
Table 4.2.B	Standardised Exposures by Risk Grade	APS 330 Table 8b
Table 4.2.C	Supervisory Slotting Exposures by Risk-weight	APS 330 Table 8b
Table 4.3.A	Non-retail Exposures by Risk Grade	APS 330 Table 9d
Table 4.3.B	Retail Exposures by Risk Grade	APS 330 Table 9d
Table 4.4.A	Mitigation by Eligible Financial Collateral	APS 330 Table 10b
Table 4.4.B	Mitigation by Guarantees and Credit Derivatives	APS 330 Table 10c
Table 4.5.A (i)	Net Derivatives Credit Exposure	APS 330 Table 11b
Table 4.5.A (ii)	Distribution of Current Credit Exposure	APS 330 Table 11b
Table 4.5.B	Credit Derivative Transactions	APS 330 Table 11c
Table 5.1.A	Exposures Securitised	APS 330 Table 12g and 12o
Table 5.1.B	Non-performing Banking Book Exposures Securitised	APS 330 Table 12h
Table 5.1.C	Recent Securitisation Activity	APS 330 Table 12i, 12j, 12p and 12q
Table 5.1.D	Securitisation Exposures Retained or Purchased	APS 330 Table 12k, 12m, 12r, 12s, 12t and 12v
Table 5.1.E	Securitisation Exposures by Risk-weight	APS 330 Table 12l
Table 6.1.A	Market Risk Risk-weighted Assets	APS 330 Table 13b
Table 6.1.B	Internal Model Approach Value at Risk and Stressed Value at Risk	APS 330 Table 14f
Table 7.1.A	Impact on Economic Value from Rate Shocks	APS 330 Table 17b
Table 7.2.A	Equity Holdings in the Banking Book	APS 330 Table 16b-c
Table 7.2.B	Gains and Losses from Equity Holdings	APS 330 Table 16d-f
Table 7.3.A	Liquidity Coverage Ratio Disclosure Template	APS 330 Table 20
Table 7.3.B	Net Stable Funding Ratio Disclosure Template	APS 330 Table 21

Glossary

ADI
Authorised Deposit-taking Institution.

Advanced Internal Ratings-based Approach (IRB)
The approach used by the Group, under approval from APRA, to calculate the capital requirement for credit risk, which utilises the outputs of internally developed models for probability of default, loss given default and exposure at default.

Alternative liquid assets (ALA)
Assets that qualify for inclusion in the numerator of the Liquidity Coverage Ratio in jurisdictions where there is insufficient supply of high-quality liquid assets in the domestic currency to meet the aggregate demand of banks with significant exposure in the domestic currency in the Liquidity Coverage Ratio framework. The Committed Liquidity Facility and Term Funding Facility provided by the Reserve Bank of Australia to ADIs are treated as ALAs in the Liquidity Coverage Ratio.

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 reliably provided over a one-year time horizon.

Banking book
Exposures not contained in the trading book.

BCBS
Basel Committee on Banking Supervision.

BNZ
Bank of New Zealand, a banking subsidiary regulated by the Reserve 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
Common Equity Tier 1 capital.

Citi consumer business
Citigroup's Australian consumer business, acquired by the Group in June 2022.

Citigroup
Citigroup Pty Limited and Citigroup Overseas Investment Corporation.

Collective provision for credit impairment
The provision assessed on a collective basis in accordance with Australian Accounting Standard AASB 9 'Financial Instruments'.

Committed Liquidity Facility (CLF)
A facility provided by the Reserve Bank of Australia to certain ADIs to assist them in meeting the Basel III liquidity requirements. The CLF was reduced to zero on 1 January 2023.

Common Equity Tier 1 capital ratio
Common Equity Tier 1 capital divided by risk-weighted assets.

Corporate
Under the revised capital framework, corporate consists of corporations, partnerships, proprietorships, public sector entities and any other credit exposure not elsewhere classified. Previously corporate consisted of corporations, partnerships or proprietorships not elsewhere classified and included non-banking entities held by banks.

Credit valuation adjustment (CVA)
A capital charge to reflect potential mark-to-market losses due to counterparty migration risk for bilateral over-the-counter derivative contracts.

D-SIB
Domestic Systemically Important Bank.

Default
Default occurs when a loan obligation is contractually 90 days or more past due, or when it is considered unlikely that the credit obligation to the Group will be paid in full without remedial action, such as realisation of security.

Default fund
Clearing members' funded or unfunded contributions towards, or underwriting of, a central counterparty's mutualised loss sharing arrangements.

Eligible financial collateral (EFC)
Under the standardised approach, eligible financial collateral is the amount of cash collateral, netting and eligible bonds and equities. Under the Internal Ratings-based Approach, EFC is limited to the collateral items detailed in APS 112 'Capital Adequacy: Standardised Approach to Credit Risk'. Recognition of EFC is subject to the minimum conditions detailed in APS 112.

Expected loss (EL)
A calculation of the estimated loss that may be experienced over the next 12 months. Expected loss calculations are based on the probability of default, loss given default and exposure at default values of the portfolio at the time of the estimate which includes stressed loss given default for economic conditions. As such, expected loss is not an estimate of long-run average expected loss.

Exposure at default (EaD)
An estimate of the credit exposure amount outstanding if a customer defaults. EaD is presented net of eligible financial collateral, except where indicated.

Extended Licensed Entity
The ADI and any APRA approved subsidiaries assessed as effectively part of a single 'stand-alone' entity, as defined in APS 222 'Associations with Related Entities'.

Foundation Internal Ratings-based Approach (Foundation IRB)
An approach to calculate the capital requirement for credit risk, which utilises the outputs of internally developed models for probability of default, and supervisory estimates for loss given default and exposure at default.

Group
NAB and its controlled entities.

High-quality liquid assets (HQLA)
Consists primarily of cash, deposits with central banks, Australian government and semi-government securities and securities issued by foreign sovereigns as defined in APS 210 'Liquidity'.

Internal Model Approach (IMA) - Non-traded Market Risk
The approach used by the Group, under approval from APRA, to calculate the capital requirement for non-traded market risk. The IMA is used to calculate interest rate risk in the banking book for transactions in the banking book.

Internal Model Approach (IMA) - Traded Market Risk
The approach used by the Group, under approval from APRA, to calculate the capital requirement for traded market risk. The IMA is used to calculate general market risk for transactions in the trading book, other than those covered by the standard method.

Liquidity Coverage Ratio (LCR)
A metric that measures the adequacy of high-quality liquid assets 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.

LVR
Loan-to-valuation ratio.

NAB
National Australia Bank Limited ABN 12 004 044 937.

NAB Europe
National Australia Bank Europe S.A.

Net Stable Funding Ratio (NSFR)
A ratio of the amount of available stable funding to the amount of required stable funding.

Net write-offs
Write-offs, net of recoveries.

Non-performing exposures
Exposures which are in default aligned to the definition in APS 220 'Credit Risk Management'.

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.

RBA
Reserve Bank of Australia.

RBNZ
Reserve Bank of New Zealand.

Required Stable Funding (RSF)
The amount of stable funding an ADI is required to hold measured as a function of the liquidity characteristics and residual maturities of the various assets held by an ADI, including off-balance sheet exposures.

Revised capital framework
Revisions to APRA's capital adequacy and credit risk capital requirements for ADIs, which came into effect on 1 January 2023. The revised requirements are contained in APS 110 'Capital Adequacy', APS 112 'Capital Adequacy: Standardised Approach to Credit Risk' and APS 113 'Capital Adequacy: Internal Ratings-based Approach to Credit Risk'.

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.

SA-CCR
Standardised approach for measuring counterparty credit risk exposures.

Securitisation 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 securitisation vehicle or to cover the inability of the securitisation vehicle 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.
- securities: holding of debt securities issued by securitisation vehicles.
- derivatives: derivatives provided to securitisation vehicles, other than for credit risk mitigation purposes.

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 'Financial Instruments'.

SPV

Special purpose vehicle.

Standard method

An alternative approach used to calculate the capital requirement for traded market risk, which applies supervisory risk-weights to positions arising from trading activities.

Standardised approach

An alternative approach used to calculate the capital requirement for credit risk, which utilises regulatory prescribed risk-weights based on external ratings and/or the application of specific regulator defined metrics to determine risk-weighted assets.

Standardised Measurement Approach (SMA)

An approach used to calculate the capital requirement for operational risk based on a business indicator, a financial statement proxy of operational risk exposure. This approach was applied by the Group from 1 January 2022.

Term Funding Facility (TFF)

A facility provided by the Reserve Bank of Australia to certain ADIs to support lending to Australian businesses. The facility closed to new drawdowns of funding on 30 June 2021.

Tier 1 capital ratio

Tier 1 capital divided by risk-weighted assets.

Total capital ratio

Total capital divided by risk-weighted assets.

Trading book

Positions in financial instruments, including derivatives and other off-balance sheet instruments, that are held either with a trading intent or to hedge other elements of the trading book.

Value at Risk (VaR)

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.