Bank of New Zealand

Disclosure Statement

For the year ended 30 September 2022



Disclosure Statement

For the year ended 30 September 2022

This Disclosure Statement has been issued by Bank of New Zealand for the year ended 30 September 2022 in accordance with the Registered Bank Disclosure Statements (New Zealand Incorporated Registered Banks) Order 2014 (as amended) (the "Order").

In this Disclosure Statement, unless the context otherwise requires:

- "Banking Group" means Bank of New Zealand's financial reporting group, which consists of Bank of New Zealand, all of its wholly owned entities and other entities consolidated for financial reporting purposes; and
- Words and phrases defined by the Order have the same meanings when used in this Disclosure Statement.

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Address for Service

The name of the Registered Bank is Bank of New Zealand (referred to either by its full name or as the "Bank"). The Bank's address for service is Level 4, 80 Queen Street, Auckland 1010, New Zealand.

Nature of Business

The Bank is a company domiciled in New Zealand. It was incorporated in New Zealand on 29 July 1861. The Banking Group provides a broad range of banking and financial products and services to retail, business, private, corporate and institutional customers.

Voting Securities and Power to Appoint Directors

National Australia Group (NZ) Limited ("NAGNZ"), National Australia Bank Limited and National Equities Limited are the only holders of a direct or indirect qualifying interest in the 5,075,997,499 voting securities of the Bank. NAGNZ is the registered and beneficial holder of 5,075,997,499 voting securities and therefore holds 100% of the direct interest in the voting securities. Neither National Australia Bank Limited (the ultimate parent company) nor National Equities Limited (the immediate parent company of NAGNZ) is the registered or the beneficial holder of any of the voting securities of the Bank, but each has a relevant interest in all such securities by virtue of NAGNZ being related to them in terms of section 237(d) and 12(2) of the Financial Markets Conduct Act 2013 ("FMCA") due to the fact that National Equities Limited owns 100% of the voting securities in NAGNZ and National Australia Bank Limited owns 100% of the voting securities in NAGNZ and National Equities Limited.

The ultimate parent company has the power under the Bank's constitution to appoint any person as Director of the Bank or to remove any person from the office of Director, from time to time, by giving written notice to the Bank. Any appointment of a Director is subject to the Reserve Bank of New Zealand ("RBNZ") confirming it has no objection to that appointment.

Guarantees

Covered Bond Guarantee

Certain debt securities ("Covered Bonds") issued by the Bank, or its wholly owned controlled entity, BNZ International Funding Limited, acting through its London Branch ("BNZ-IF"), are guaranteed by CBG Trustee Company Limited, as trustee of the BNZ Covered Bond Trust (the "Covered Bond Guarantor"). The Covered Bond Guarantor has guaranteed the payment of all interest and principal under the Covered Bonds pursuant to a guarantee which is secured over a pool of assets. The Covered Bond Guarantor's address for service is Level 16, SAP Tower, 151 Queen Street, Auckland 1010, New Zealand.

The Covered Bond Guarantor is not a member of the Banking Group and has no credit ratings applicable to any senior unsecured obligations payable in New Zealand dollars. The Covered Bonds have been assigned a long term credit rating of Aaa and AAA from Moody's Investors Service Pty Limited and Fitch Australia Pty Limited, respectively.

There are no material conditions applicable to the guarantee other than non-performance. There are no material legislative or regulatory restrictions in New Zealand which subordinate any claims under the guarantee of any creditors of the Bank on the assets of the Covered Bond Guarantor, to other claims on the Covered Bond Guarantor, in a winding up of the Covered Bond Guarantor.

Refer to Note 26 Transfers of financial assets for further information.

Other material obligations of the Bank are not guaranteed.

Ultimate Parent Bank

Ultimate Parent Bank and Address for Service

The ultimate parent bank, and ultimate holding company, of Bank of New Zealand is National Australia Bank Limited ABN 12 004 044 937. National Australia Bank Limited's address for service is Level 28, 395 Bourke Street, Melbourne, Victoria 3000, Australia.

References in this document to "NAB" are references to National Australia Bank Limited's financial reporting group, which consists of National Australia Bank Limited, all of its wholly owned entities and other entities consolidated for financial reporting purposes.

Legally Enforceable Restrictions that may Materially Inhibit National Australia Bank Limited's Legal Ability to Provide Material Financial Support to Bank of New Zealand

National Australia Bank Limited does not guarantee the obligations of Bank of New Zealand.

The Australian Prudential Regulation Authority ("APRA") Prudential Standard APS 222 Associations with Related Entities ("APS 222") restricts associations between an authorised deposit-taking institution ("ADI") (such as National Australia Bank Limited) and its related entities (such as the Bank). Any dealings with the Bank must be consistent with terms and conditions that would be entered into with an unrelated entity (unless prior National Australia Bank Limited Board approval is obtained).

National Australia Bank Limited may provide support to a related entity such as the Bank, provided it complies with the requirements of APS 222. These requirements include that National Australia Bank Limited:

- 1. should not undertake any third-party dealings with the purpose of supporting the business of the Bank.
- 2. must not provide support unless there are formal legal arrangements in place providing for such support, the support is fixed in time and amount and in accordance with National Australia Bank Limited's policies.
- 3. must not hold unlimited exposures to the Bank.
- 4. must not agree to cross-default provisions whereby a default by the Bank on an obligation (whether financial or otherwise) is deemed to trigger a default of National Australia Bank Limited on its obligations.
- 5. must ensure that its Board of Directors, in determining limits on acceptable levels of exposure to the Bank, have regard to the level of exposures which would be approved for unrelated entities of equivalent credit status, and the impact on National Australia Bank Limited's stand-alone capital and liquidity positions in the event of a failure of any related entity to which National Australia Bank Limited is exposed.
- 6. must not have an exposure to the Bank that exceeds 25% of National Australia Bank Limited's stand-alone Level One Tier 1 capital base, and its aggregate exposure to all related ADIs cannot exceed 75% of that Level One Tier 1 capital base.

APRA has confirmed that during ordinary times, National Australia Bank Limited's non-equity exposures to the Bank must be below 5% of National Australia Bank Limited's Level One Tier 1 capital. Exposures subject to this 5% limit include all committed, non-intraday, non-equity exposures, including derivatives and off-balance sheet exposures. As at 30 September 2022, National Australia Bank Limited's non-equity exposures to the Bank are below 5% of National Australia Bank Limited's Level One Tier 1 capital.

APRA has also confirmed the terms on which National Australia Bank Limited may provide contingent funding support to a New Zealand banking subsidiary (including the Bank) during times of financial stress. APRA has confirmed that, at this time, only the purchase by National Australia Bank Limited of Covered Bonds issued by the Bank would meet its criteria for contingent funding arrangements. Such contingent funding support is proposed to be captured within an aggregate exposure limit (including debt, equity and any exposures held through a branch) of 50% of National Australia Bank Limited's Level One Tier 1 capital.

Pending Proceedings or Arbitration

The Bank's Directors are of the opinion that there are no pending proceedings or arbitrations concerning any member of the Banking Group, whether in New Zealand or elsewhere, that may have a material adverse effect on the Registered Bank or the Banking Group.

Other Matters

The Bank's Directors are of the opinion that there are no other matters relating to the business or affairs of the Registered Bank or the Banking Group which would, if disclosed in this Disclosure Statement, materially affect the decision of a person to subscribe for debt securities of which the Registered Bank or any member of the Banking Group is the issuer.

Directorate and Auditor

Communications addressed to the Directors and responsible persons, or any of them, may be sent to Level 4, 80 Queen Street, Auckland 1010, New Zealand.

Directors

Mai Chen retired as a Director of the Bank, effective 21 April 2022.

Warwick Ean Hunt has been appointed as an Independent Non-Executive Director of the Bank, effective 1 November 2022.

Directors' Details

The name, occupation, technical or professional qualifications, country of residence, and other directorships of each Director of the Bank as at the date of this Disclosure Statement are as follows:

Non-Executive Director, Chair

Douglas Alexander McKay, ONZM Primary Occupation: Company Director B.A. (Auckland), A.M.P. (Harvard Business School), CMInstD New Zealand

Other Directorships:

Fletcher Building Industries Limited, Fletcher Building Limited, IAG New Zealand Limited, IAG (NZ) Holdings Limited, National Australia Bank Limited, Vector Limited, Wymac Consulting Limited.

Executive Director

Daniel James Huggins Primary Occupation: Managing Director and Chief Executive Officer Other Occupation: Company Director BCom.(Hons.), MEM, MBA New Zealand

Other Directorships:

Nil

Independent Non-Executive Directors

Barbara Joan Chapman, CNZM Primary Occupation: Company Director

BCom., CMInstD New Zealand

Other Directorships:

Fletcher Building Limited, Fletcher Building Industries Limited, Chair of Genesis Energy Limited, Chair of NZME Limited, Deputy-Chair of The New Zealand Initiative Limited.

Bruce Ronald Hassall

Primary Occupation: Company Director

B.Com., FCA New Zealand

Other Directorships:

Chair of Fletcher Building Industries Limited, Chair of Fletcher Building Limited, Chair of Prolife Foods Limited, Fonterra Co-operative Group Limited, Marivan Holdings Limited, Chair of The Farmers' Trading Company Limited.

Kevin John Kenrick

Primary Occupation: Company Director

BMS

New Zealand

Other Directorships:

Nil

Linley Ann Wood

Primary Occupation: Company Director

BA., LL.B., MBA New Zealand

Other Directorships:

Kings School Auckland Limited, The Sleeping Giant (Fiji) Limited.

Louis Arthur Hawke

Primary Occupation: Company Director

BEc (Hons.), MBA

Australia

Other Directorships:

Hawke Business Associates Pty Limited, Hawke Family Pty Limited.

Warwick Ean Hunt, MNZM

Primary Occupation: Company Director

B.Acc, FCA New Zealand

Other Directorships:

Genesis Energy Limited

Non-Executive Director

Gary Andrew Lennon

Primary Occupation: NAB Group Chief Financial Officer

BEc (Hons.), Sydney, FCA

Australia

Other Directorships:

 ${\sf Jmega\ Pty\ Limited}, National\ Equities\ Limited, Stronger\ Smarter\ Institute\ Limited.}$

Diversity

As at 30 September 2022, the proportions of female Directors on the BNZ Board and female members as the Bank's Officers were 25% and 42%, respectively (30 September 2021: 38% and 40%).

For the purpose of this disclosure, the BNZ Executive Team has been treated as Officers.

The Bank has a Diversity & Inclusion Council to lead the BNZ diversity agenda, set strategic priorities and oversee performance related to diversity.

New Zealand Regional Audit Committee

Members of the New Zealand Regional Audit Committee as at the date of this Disclosure Statement were as follows:

Bruce Ronald Hassall (Chair) Independent Non-Executive Director Barbara Joan Chapman Independent Non-Executive Director Louis Arthur Hawke Independent Non-Executive Director

Responsible Persons

Mr. Douglas Alexander McKay, ONZM, Non-Executive Director, Chair, and Mr. Daniel James Huggins, Executive Director, have been authorised in writing to sign this Disclosure Statement in accordance with section 82 of the Banking (Prudential Supervision) Act 1989 (the "BPS Act"), on behalf of the other Directors, being:

Barbara Joan Chapman Bruce Ronald Hassall Kevin John Kenrick Louis Arthur Hawke Linley Ann Wood Gary Andrew Lennon Warwick Ean Hunt

Policy for Avoiding and Dealing with Conflicts of Interests

The policy and current practice of the Board of Directors of the Bank for avoiding or dealing with conflicts of interest which may arise from the personal, professional or business interests of the Directors, or any of them, are that, where a Director's judgement could potentially be impaired because a conflict of interest exists between the Director's business and personal affairs and the business affairs of the Bank, then that Director must declare that the conflict of interest exists and subject to certain exceptions set out in the constitution, will not vote on the matter nor be present while the matter is being considered in the meeting.

The Companies Act 1993 requires each Director to cause to be entered in the interests register and disclose to the Board of the Bank:

- the nature and monetary value of the Director's interest in a transaction or proposed transaction if its monetary value is able to be quantified; or
- the nature and extent of the Director's interest in a transaction or proposed transaction if its monetary value is not able to be quantified.

Directors' Benefits

There is no transaction which any Director or immediate relative or close business associate of any Director has with the Bank or any member of the Banking Group which either has been entered into on terms other than those which would, in the ordinary course of business of the Bank or any member of the Banking Group, be given to any other person of like circumstances or means, or could otherwise be reasonably likely to influence materially the exercise of that Director's duties.

Information pertaining to loans to and other transactions with Directors is disclosed in Note 23 Related entity transactions of this Disclosure Statement.

Auditor

The auditor whose report is referred to in this Disclosure Statement is Ernst & Young. Ernst & Young's address for service is Level 9, EY Building, 2 Takutai Square, Britomart, Auckland 1010, New Zealand.

Financial Statements

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Historical Summary of Financial Statements

	Banking Group				
Dollars in Millions	30/9/22	30/9/21	30/9/20	30/9/19	30/9/18
Income statement					
Interest income					
Effective interest income	3,800	2,891	3,440	3,904	3,716
Fair value through profit or loss	116	77	179	291	339
Interest expense	1,412	787	1,537	2,134	2,109
Net interest income	2,504	2,181	2,082	2,061	1,946
Gains less losses on financial instruments	251	277	88	129	191
Other operating income ¹	376	401	350	442	419
Total operating income	3,131	2,859	2,520	2,632	2,556
Operating expenses ¹	1,076	1,060	1,158	1,111	1,045
Total operating profit before credit impairment charge and income tax expense	2,055	1,799	1,362	1,521	1,511
Credit impairment charge/(write-back)	89	(37)	300	114	82
Total operating profit before income tax expense	1,966	1,836	1,062	1,407	1,429
Income tax expense on operating profit	552	514	300	385	400
Net profit attributable to the shareholder of the Bank	1,414	1,322	762	1,022	1,029
Dividends					
Dividends paid on ordinary shares	560	-	-	545	620
Dividends reinvested as ordinary shares	-	-	-	600	1,105
Total dividends paid on ordinary shares	560	-	-	1,145	1,725
Significant balance sheet items					
Total assets	131,420	119,122	112,310	109,112	99,991
Total liabilities	120,359	109,241	103,653	101,179	92,612
Ordinary shareholder's equity	11,061	9,881	8,657	7,933	7,379
Asset quality					
Individually impaired assets - at amortised cost	134	199	558	648	248
Individual financial assets designated at fair value through profit or loss	33	32	42	5	17
subject to credit risk adjustments					
Credit impairment charge/(write-back) to income statement - at amortised cost	89	(37)	300	114	82
Credit risk adjustments on financial assets charged to income statement -					
at fair value through profit or loss (including derivatives)	11	(30)	30	3	(14)
at fair value through profit or loss (including derivatives) For the year ended 30 September 2018, investment management expenses were classified within		` '			

¹ For the year ended 30 September 2018, investment management expenses were classified within operating expenses. Subsequently investment management expenses are classified within other operating income.

The information presented in the above table has been extracted from audited financial statements of the Banking Group that have been prepared in accordance with New Zealand equivalents to International Financial Reporting Standards ("NZ IFRS").

Basel III regulatory capital ratios

The table below shows the capital adequacy ratios based on the RBNZ's Capital Adequacy Framework (Internal Models Based Approach) ("BS2B") expressed as a percentage of total risk-weighted exposures.

		Ва	nking Group		
	Unaudited	Unaudited	Unaudited	Unaudited	Unaudited
	30/9/22	30/9/21	30/9/20	30/9/19	30/9/18
Common Equity Tier 1 capital ratio	12.8%	13.8%	11.9%	11.0%	10.6%
Tier 1 capital ratio	13.8%	15.1%	13.2%	12.3%	12.0%
Total qualifying capital ratio	15.4%	16.9%	14.9%	13.9%	13.6%
Buffer ratio	7.4%	8.9%	6.9%	5.9%	5.6%

Income Statement

For the year ended 30 September 2022

		Banking G	iroup
Dollars in Millions	Note	30/9/22	30/9/21
Interest income	2		
Effective interest income		3,800	2,891
Fair value through profit or loss		116	77
Interest expense	2	1,412	787
Net interest income		2,504	2,181
Gains less losses on financial instruments	3	251	277
Other operating income	4	376	401
Total operating income		3,131	2,859
Operating expenses	5	1,076	1,060
Total operating profit before credit impairment charge and income tax expense		2,055	1,799
Credit impairment charge/(write-back)	10	89	(37)
Total operating profit before income tax expense		1,966	1,836
Income tax expense on operating profit	6	552	514
Net profit attributable to the shareholder of the Bank		1,414	1,322

The accounting policies and other notes form part of, and should be read in conjunction with, these financial statements.

Statement of Comprehensive Income

For the year ended 30 September 2022

		Banking G	roup
Dollars in Millions	Note	30/9/22	30/9/21
Net profit attributable to the shareholder of the Bank		1,414	1,322
Other comprehensive income/(expense):			-
Items that will not be reclassified to profit or loss			
Actuarial gain on defined benefit plan		-	1
Movement in asset revaluation reserve		1	(1)
Credit risk adjustments on financial liabilities designated at fair value through profit or loss	24	70	(16)
Fax on items recognised in equity		(20)	5
		51	(11)
Items that may be reclassified subsequently to profit or loss			
Movement in cash flow hedge reserve	12	355	(119)
Movement in cost of hedging reserve		28	(2)
Tax on items recognised in equity		(108)	34
		275	(87)
Total other comprehensive income/(expense)		326	(98)
Total comprehensive income attributable to the shareholder of the Bank		1,740	1,224

 $The \ accounting \ policies \ and \ other \ notes \ form \ part \ of, \ and \ should \ be \ read \ in \ conjunction \ with, \ these \ financial \ statements.$

Statement of Changes in Equity

For the year ended 30 September 2022

	Banking Group (30/9/22)						
Dollars in Millions	Ordinary Capital	Retained Profits	Asset Revaluation Reserve	Cash Flow Hedge Reserve	Cost of Hedging Reserve	FVOCI Reserve	Total Share- holder's Equity
Balance at beginning of year	4,056	5,805	2	27	(10)	1	9,881
Comprehensive income/(expense)							
Net profit attributable to the shareholder of the Bank	-	1,414	-	-	-	-	1,414
Credit risk adjustments on financial liabilities designated at fair value through profit or loss	-	70	-	-	-	-	70
Reserve movement through other comprehensive income	-	-	1	355	28	-	384
Tax effect on items directly recognised in equity	-	(20)	-	(100)	(8)	-	(128)
Total comprehensive income/(expense)	-	1,464	1	255	20	-	1,740
Dividends paid on ordinary shares	-	(560)	-	-	-	-	(560)
Balance at end of year	4,056	6,709	3	282	10	1	11,061
			Bankin	g Group (30/9/	21)		
Balance at beginning of year	4,056	4,493	3	113	(9)	1	8,657
Comprehensive income/(expense)							
Net profit attributable to the shareholder of the Bank	-	1,322	-	-	-	-	1,322
Actuarial gain on defined benefit plan	-	1	-	-	-	-	1
Credit risk adjustments on financial liabilities designated at fair value through profit or loss	_	(16)	_	_	-	-	(16)
Reserve movement through other comprehensive income	-	-	(1)	(119)	(2)	-	(122)
Tax effect on items directly recognised in equity	-	5	-	33	1	-	39
Total comprehensive income/(expense)	-	1,312	(1)	(86)	(1)	-	1,224
Balance at end of year	4,056	5,805	2	27	(10)	1	9,881

 $The \ accounting \ policies \ and \ other \ notes \ form \ part \ of, \ and \ should \ be \ read \ in \ conjunction \ with, \ these \ financial \ statements.$

As at 30 September 2022

		Banking Group		
Dollars in Millions	Note	30/9/22	30/9/2	
Assets				
Cash and liquid assets	7	9,581	9,72	
Due from central banks and other institutions ¹		372	30-	
Collateral paid ¹		2,814	53	
Trading securities	8	7,414	7,34	
Derivative financial instruments	12	9,540	4,40	
Loans and advances to customers ¹	9	99,346	94,69	
Amounts due from related entities	23	210	179	
Other assets	14	1,013	89	
Deferred tax	13	293	28	
Property, plant and equipment		428	46	
Goodwill and other intangible assets	15	409	29	
Total assets		131,420	119,12	
Liabilities				
Due to central banks and other institutions ¹	16	5,160	4,93	
Collateral received ¹		2,134	570	
Trading liabilities		302	53	
Derivative financial instruments	12	8,228	3,18	
Deposits and other borrowings ¹	17	78,154	77,99	
Bonds and notes	18	20,181	17,51	
Current tax liabilities		333	15	
Amounts due to related entities	23	2,160	1,30	
Other liabilities	19	1,757	1,08	
Subordinated debt	21	1,950	1,950	
Total liabilities		120,359	109,24	
Net assets		11,061	9,88	
Shareholder's equity				
Contributed equity - ordinary shares		4,056	4,05	
Reserves		296	20	
Retained profits		6,709	5,80	
Total shareholder's equity		11,061	9,88	
Interest earning and discount bearing assets		117,840	110,990	
Interest and discount bearing liabilities		97,123	92,59	

Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 Principal accounting policies for further information

 $The \ accounting \ policies \ and \ other \ notes \ form \ part \ of, \ and \ should \ be \ read \ in \ conjunction \ with, \ these \ financial \ statements.$

Cash Flow Statement

For the year ended 30 September 2022

		Banking G	roup
Dollars in Millions	Note	30/9/22	30/9/2
Cash flows from operating activities			
Cash was provided from:			
Interest income		3,852	2,97
Net trading income		-	12
Other income		378	36
Cash was applied to:			
Interest expense		(1,282)	(886
Personnel expenses		(665)	(575
Net trading expense		(519)	(0.1
Other operating expenses		(295)	(306
Taxes and subvention payments		(512)	(347
Net cash flows from operating activities before changes in operating assets and liabilities		957	1,35
			1,50
Changes in operating assets and liabilities arising from cash flow movements Net movement in due from central banks and other institutions¹		(68)	(150
			,
Net movement in collateral paid ¹		(3,059)	1,24
Net movement in loans and advances to customers ¹		(4,753)	(7,310
Net movement in other assets		(50)	(41
Net movement in trading securities and trading liabilities		(430)	3,79
Net movement in deposits and other borrowings ¹		161	6,16
Net movement in due to central banks and other institutions ¹		(288)	41
Net movement in collateral received ¹		1,440	(33)
Net movement in other liabilities		590	28
Net change in operating assets and liabilities		(6,457)	3,69
Net cash flows from operating activities	35	(5,500)	5,04
Cash flows from investing activities			
Cash was applied to:			
Acquisition of intangible assets		(173)	(103
Purchase of property, plant and equipment		(23)	(3:
Net cash flows from investing activities		(196)	(134
Cash flows from financing activities			
Proceeds from issue of bonds and notes ¹		5,328	3,20
Repayment of bonds and notes ¹		(2,846)	(4,010
Net movement in derivative financial instruments		2,339	(893
Net movement in related entity funding		795	(18)
Proceeds from issue of subordinated debt ¹		-	55
Repayment of subordinated debt ¹		_	(549
Payment of lease liabilities		(45)	(48
Proceeds from repurchase agreements under RBNZ funding facilities ¹		2,491	2,64
Repayment of repurchase agreements under RBNZ funding facilities ¹		(1,702)	(26
Ordinary dividend		(560)	
Net cash flows from financing activities		5,800	69
Net movement in cash and cash equivalents		104	5,60
Cash and cash equivalents at beginning of year		7,204	1,59
Cash and cash equivalents at end of year		7,308	7,20
	7	Q E01	0.7
Cash and cash equivalents at end of year comprised:	16	9,581	9,72
Cash and liquid assets	16	(1,400)	(1,673
Cash and liquid assets Due to central banks and other institutions classified as cash and cash equivalents			1-
Cash and liquid assets Due to central banks and other institutions classified as cash and cash equivalents Amounts due from related entities classified as cash and cash equivalents	23	206	17
Cash and liquid assets Due to central banks and other institutions classified as cash and cash equivalents		206 (1,079)	(1,01

The accounting policies and other notes form part of, and should be read in conjunction with, these financial statements.

For the year ended 30 September 2022

Note 1 Principal Accounting Policies

In these financial statements Bank of New Zealand is referred to as the "Bank". The "Banking Group" means Bank of New Zealand, all of its wholly owned entities listed in Note 32 *Investments in wholly owned entities* and entities consolidated for financial reporting purposes listed in Note 30 *Structured entities, securitisation, funds management, fiduciary activities and insurance.*

The financial statements are general purpose financial reports prepared in accordance with the requirements of the Financial Markets Conduct Act 2013 and the Registered Bank Disclosure Statements (New Zealand Incorporated Registered Banks) Order 2014 (as amended).

Basis for preparation

The financial statements have been prepared under the historical cost convention, modified by the application of fair value measurements required or allowed by relevant accounting standards. Accounting policies have been consistently applied to all periods presented, unless otherwise stated, throughout the Banking Group.

Assumptions and estimates

The preparation of the financial statements requires the use of certain critical accounting estimates and assumptions that affect the reported amount of assets, liabilities, revenues and expenses and the disclosed amount of contingent liabilities. It also requires management to exercise judgement in the process of applying accounting policies.

Assumptions made as at each reporting date (e.g. the calculation of the allowance for expected credit losses and fair value measurements), are based on best estimates at that date. Although the Banking Group has internal control systems in place to ensure reliable estimates, actual amounts may differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the reporting period in which the estimates are revised and in any future periods affected.

Information on specific judgements and assumptions made and estimates applied, are contained within the notes to the financial statements.

Reclassification of financial information

Certain comparative balances have been reclassified to align with the presentation used in the current financial year, in particular to reflect the change in presentation of collateral paid and collateral received. Refer below for further detail. These reclassifications have no impact on the overall financial performance or financial position for the comparative year.

Statement of compliance

The financial statements have been prepared in accordance with Generally Accepted Accounting Practice in New Zealand ("NZ GAAP"). They comply with New Zealand Equivalents to International Financial Reporting Standards ("NZ IFRS") as appropriate for profit-oriented entities. The financial statements comply with International Financial Reporting Standards ("IFRS").

Changes in accounting policies and disclosure

Interest Rate Benchmark ("IBOR") Reform

During the 2022 financial year the Banking Group has transitioned all contracts referencing IBORs subject to cessation at 31 December 2021. Additionally, for contracts referencing USD IBOR benchmarks subject to cessation on 30 June 2023, to the extent such contracts do not mature before that date, fallback language or early termination are being discussed for execution ahead of cessation date.

The Banking Group continues to meet jurisdictional regulatory guidance and national working group timelines to cease referencing LIBOR in new transactions and actively transition legacy contracts to alternative risk-free rates. The Banking Group continues to manage risk arising from transition to ensure a low probability of occurrence and impact to the Banking Group and its customers. As at 30 September 2022, the Banking Group had no material exposure from financial instruments which have not yet been restructured to transition to an alternative risk-free rate. Risks arising from the Banking Group's IBOR transition have not resulted in changes to the Banking Group's risk management strategy. These risks continue to be managed within the Banking Group's existing risk management framework.

Presentation of collateral paid and collateral received

During the year ended 30 September 2022, the Banking Group changed the balance sheet presentation of collateral balances paid and received from financial institutions and other counterparties. The revised presentation results in two new balance sheet line items for collateral paid and collateral received, which now includes all collateral balances across the Banking Group with the exception of collateral balances with related parties are reported within Amounts due from related entities and Amounts due to related entities. This presentation enhances the ability of users of the financial statements to understand collateral balances within the Banking Group.

Collateral paid comprises the following amounts:

- \$2,798 million previously presented in Due from central banks and other institutions as at 30 September 2022 (30 September 2021: \$505 million).
- \$16 million previously presented in Loans and advances to customers as at 30 September 2022 (30 September 2021: \$30 million).

Collateral received comprises the following amounts:

- \$969 million previously presented in Due to central banks and other institutions as at 30 September 2022 (30 September 2021: \$457 million).
- \$1,165 million previously presented in Deposits and other borrowings as at 30 September 2022 (30 September 2021: \$113 million).

Currency of presentation

All amounts are expressed in New Zealand dollars, which is the Bank's functional and presentation currency, unless otherwise stated.

Foreign currency translation

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at the year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the income statement, except when recognised in other comprehensive income as qualifying cash flow hedges. Non-monetary items are translated using the exchange rate at the date of the initial recognition of the asset or liability.

Rounding of amounts

All amounts have been rounded to the nearest million dollars except where indicated.

Note 1 Principal Accounting Policies continued

Principles of consolidation

For the purpose of consolidation, the Bank controls another entity (including a structured entity) if the Bank is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. An assessment of control is performed on an ongoing basis. Entities are consolidated from the date on which control is obtained by the Bank. Entities are deconsolidated from the date that control

Inter-company balances and transactions, including income, expenses and dividends, are eliminated in full.

Fair value measurement

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price (i.e. the fair value of the consideration given or received) unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument (i.e. without modification or repackaging) or based on a valuation technique whose variables include only data from observable markets. When such evidence exists, the Banking Group recognises the difference between the transaction price and the fair value in profit or loss on initial recognition (i.e. on day one).

Where a financial asset or liability is subsequently measured at fair value, the best evidence of fair value is an independently quoted market price in an active market. Where such prices are unavailable, then depending on the circumstances, alternative evidence may be used, including the price of recent transactions, prices for similar instruments or prices obtained utilising component parts (which when aggregated form the price of the whole instrument).

Where no active market exists for a particular asset or liability, the Banking Group uses standard market valuation techniques to arrive at the estimated fair value, utilising observable market sourced inputs wherever possible. Depending on the circumstances, the same alternative evidence (as described above) may be used in the valuation techniques. The valuation techniques address factors such as interest rates, liquidity and credit risk.

Where a financial instrument is designated as measured at fair value through profit or loss and its fair value is determined using a valuation technique, the movement in fair value attributable to changes in interest rates is calculated based on observable market interest rates. The movement in fair value of a financial asset attributable to changes in credit risk is established through a statistical-based calculation to estimate expected losses attributable to adverse movements in credit risk. The movement in fair value of a financial liability attributable to changes in the Bank's own credit risk is calculated by determining the changes in credit spreads above observable market interest rates.

Fair value asset or liability prices defined above generally represent the present value of all future cash flows including those relating to interest, dividends or other cash flows as appropriate.

Financial assets

Financial assets comprise items such as Cash and liquid assets, Due from central banks and other institutions, Collateral paid, Trading securities, Derivative financial instruments, Loans and advances to customers and Amounts due from related entities.

Financial assets are classified as measured at fair value through profit or loss, at amortised cost or, in case of investments in equity instruments, at fair value through other comprehensive income. The classification depends on the Banking Group's business model for managing financial assets and the contractual terms of the financial assets' cash flows.

i) Financial assets measured at fair value through profit or loss

Financial assets at fair value through profit or loss include instruments held for trading, and instruments designated as measured at fair value through profit or loss.

Financial assets held for trading

A financial asset is classified as held for trading if it is acquired principally for the purpose of selling or repurchasing in the near term, or forms part of a portfolio of financial instruments that are managed together and for which there is evidence of short-term profit taking, or it is a derivative (not in a qualifying hedge relationship). The Banking Group holds certain public and other debt securities as held for trading.

Financial assets designated as measured at fair value through profit or loss

Upon initial recognition, financial assets may be designated as measured at fair value through profit or loss if such designation eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring items on a different basis. This may be the case where derivative financial instruments have been transacted to hedge financial assets which would otherwise be measured at amortised cost.

Financial assets measured at fair value through profit or loss are initially recognised at fair value, with transaction costs recognised in the income statement as incurred. Subsequently, they are measured at fair value with gains and losses recognised in the income statement as they arise.

ii) Financial assets measured at amortised cost

A financial asset is measured at amortised cost only if:

- it is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the financial asset give rise to cash flows that are solely payments of principal and interest.

Financial assets measured at amortised cost are initially recognised at fair value plus directly attributable transaction costs and subsequently measured at amortised cost using the effective interest method, less an allowance for expected credit losses.

iii) Investments in equity instruments measured at fair value through other comprehensive income

An investment in an equity instrument is measured at fair value through other comprehensive income if it is not held for trading and the Banking Group made the election to designate the instrument as measured at fair value through other comprehensive income.

Investments in equity instruments measured at fair value through other comprehensive income are initially recognised at fair value plus directly attributable transaction costs. Subsequently, they are measured at fair value with gains and losses recognised in other comprehensive income, except for dividends which are recognised in the income statement. When the financial asset is derecognised the cumulative gain or loss previously recognised in other comprehensive income is reclassified from equity directly to retained profits.

Note 1 Principal Accounting Policies continued

Refer to Note 24 Classification of financial instruments and fair value measurement for further detail on classification and measurement of the Banking Group's financial assets.

Financial liabilities

Financial liabilities comprise items such as Due to central banks and other institutions, Collateral received, Deposits and other borrowings, Trading liabilities, Derivative financial instruments, Bonds and notes, Amounts due to related entities and Subordinated debt.

Financial liabilities may be held at fair value through profit or loss or at amortised cost.

i) Financial liabilities held at fair value through profit or loss

Financial liabilities held at fair value through profit or loss comprise instruments held for trading and instruments designated as measured at fair value through profit or loss.

Financial liabilities held for trading

A financial liability is classified as held for trading if it is incurred principally for the purpose of selling in the near term, it forms part of a portfolio of financial instruments that are managed together and for which there is evidence of short term profit taking, or it is a derivative (not in a qualifying hedge relationship). The Banking Group has classified short sales of securities as Trading liabilities.

Financial liabilities designated as measured at fair value through profit or loss

Upon initial recognition, financial liabilities may be designated as measured at fair value through profit or loss if:

- the designation eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring items on a different basis; this may be the case where derivative financial instruments have been transacted to hedge financial liabilities which would otherwise be measured at amortised cost: or
- a group of financial liabilities or financial assets and financial liabilities is managed and its performance is evaluated on a fair value basis in accordance with the documented risk management or investment strategy; or
- they contain one or more embedded derivatives, except if the embedded derivative does not modify significantly the associated cash flows or it is clear with little or no analysis that separation is prohibited.

Financial liabilities held at fair value through profit or loss are initially recognised at fair value with transaction costs recognised immediately in the income statement. Subsequently, they are measured at fair value and any gains and losses are recognised in the income statement as they arise.

Where a financial liability is designated as measured at fair value through profit or loss the movement in fair value attributable to changes in the Banking Group's own credit risk is recognised in other comprehensive income.

The carrying amount disclosed is considered to approximate the contractual amount due on maturity on the financial liabilities designated as measured at fair value through profit or loss with the exception of Bonds and notes.

ii) Financial liabilities held at amortised cost

All Other financial liabilities, Due to central banks and other institutions, Amounts due to related entities, Subordinated debt and certain amounts within Bonds and notes and Deposits and other borrowings are measured at amortised cost.

Financial liabilities held at amortised cost are initially recognised at fair value minus directly attributable transaction costs and subsequently measured at amortised cost using the effective interest method.

Refer to Note 24 Classification of financial instruments and fair value measurement for further detail on classification and measurement of the Banking Group's financial liabilities.

Derecognition of financial instruments

The Banking Group derecognises a financial asset when the contractual cash flows from the asset expire or it transfers its rights to receive contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership are transferred. Any interest in transferred financial assets that is created or retained by the Banking Group is recognised as a separate asset or liability.

A financial liability is derecognised from the balance sheet when the Banking Group has discharged its obligation or the contract is cancelled or expired.

Goods and services tax

Revenues, expenses and assets are recognised net of the amount of value added tax such as goods and services tax, except where the tax incurred is not recoverable from Inland Revenue Department. In these circumstances, the tax is recognised as part of the expense or the acquisition of the asset.

Receivables and payables are stated at an amount with tax included. The net amount of tax recoverable from, or payable to, Inland Revenue Department is included within either other assets or other liabilities.

Cash flows are included in the cash flow statement on a net basis. The tax component of cash flows for all activities is classified within operating activities.

Note 1 Principal Accounting Policies continued

Reserves

Asset revaluation reserve

The asset revaluation reserve records revaluation adjustments on land and buildings. When an asset is sold or disposed of the related balance in the reserve is transferred directly to retained profits.

Cash flow hedge reserve

The cash flow hedge reserve records the effective portion of fair value changes of derivatives designated as cash flow hedging instruments.

Cost of hedging reserve

The cost of hedging reserve records changes in fair value of hedging instruments due to currency basis where the Banking Group excluded currency basis from the designation of a derivative as hedging instrument.

FVTOCI reserve

The fair value through other comprehensive income ("FVTOCI") reserve records changes in fair value of investments in equity instruments that are measured at fair value through other comprehensive income. The cumulative amount recognised in the reserve is transferred directly to retained profits when the related asset is derecognised.

Income Statement Notes

Note 2 Interest

Accounting policy

Net interest income is reflected in the income statement using the effective interest method or in case of financial instruments measured at fair value through profit or loss by reference to contractual interest rates.

The effective interest method is a method of calculating amortisation using the effective interest rate of a financial asset or financial liability. The effective interest rate discounts the estimated stream of future cash payments or receipts over the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or liability.

When calculating the effective interest rate, the cash flows are estimated considering all contractual terms of the financial instrument (for example, prepayment, call and similar options) excluding future credit losses.

The calculation of the effective interest rate includes all fees paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs and all other premiums or discounts. Where it is not possible to reliably estimate the cash flows or the expected life of a financial instrument (or group of financial instruments), the contractual cash flows over the full contractual term of the financial instrument (or group of financial instruments) are used.

	Banking Gr	roup
Dollars in Millions	30/9/22	30/9/21
Interest income		
Cash and liquid assets	170	21
Due from central banks and other institutions ¹	7	3
Trading securities	98	44
Loans and advances to customers	3,623	2,879
Related entities	3	19
Other ¹	15	2
Total interest income	3,916	2,968
Total interest income was derived from financial assets:		
Not at fair value through profit or loss	3,800	2,891
At fair value through profit or loss	116	77
	3,916	2,968
Interest expense		
Due to central banks and other institutions ¹	39	5
Deposits and other borrowings	762	427
Bonds and notes	483	257
Related entities	19	3
Subordinated debt to related entities	87	74
Subordinated notes to external investors	-	14
Other ¹	22	7
Total interest expense	1,412	787
Total interest expense was incurred on financial liabilities:		
Not at fair value through profit or loss	923	550
At fair value through profit or loss	489	237
	1,412	787
Comparative balances have been rectated to align with the presentation used in the current paried. Beforeta	Note 1 Drive in a constitute and initiation for the state of the	

Note 3 Gains Less Losses on Financial Instruments

Accounting policy

Gains less losses on financial instruments recognised in the income statement comprises fair value gains and losses from three distinct activities:

- trading financial instruments;
- instruments designated in hedge accounting relationships; and
- financial instruments designated as measured at fair value through profit or loss.

Trading financial instruments include trading derivatives and trading securities. In general, gains less losses on trading derivatives recognises the full change in fair value of the derivatives inclusive of interest income and expense. However, in cases where the trading derivative is economically hedging an asset or liability designated as measured at fair value through profit or loss, the interest income and expense attributable to the derivative is recognised within net interest income and not part of the fair value movement of the trading derivative. Interest income and expenses on trading securities are reported within net interest income.

Gains less losses on assets, liabilities and derivatives designated in hedge accounting relationships recognise fair value movements on both the hedged item and hedging derivative in a fair value hedge accounting relationship, and hedge ineffectiveness for both fair value and cash flow hedge accounting relationships. Interest income and expenses on both hedging instruments and hedged item are recognised in net interest income.

Gains less losses on financial assets and liabilities designated at fair value through profit or loss recognise fair value movements excluding interest, which is reported within net interest income. Changes in the fair value of financial liabilities designated at fair value through profit or loss attributable to the Banking Group's own credit risk are recognised in other comprehensive income.

Gains less losses on financial instruments includes gains and losses on the derecognition of financial instruments held at amortised cost.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Trading gains less losses on financial instruments	160	205
Net gain/(loss) attributable to assets, liabilities and derivatives designated in hedge relationships	18	(1)
Net gain/(loss) in the fair value of derivatives used for hedging purposes not designated in hedge relationships	(1)	21
Net gain/(loss) in the fair value of financial assets designated at fair value through profit or loss and related derivatives ^{1,2}	(7)	14
Net gain/(loss) in the fair value of financial liabilities designated at fair value through profit or loss and related derivatives (refer to table below) ²	79	37
Other gains less losses on financial instruments	2	1
Total gains less losses on financial instruments	251	277
Net gain/(loss) in the fair value of financial liabilities designated at fair value through profit or loss and related derivatives includes:		
Gain/(loss) attributable to derivatives used for hedging of financial liabilities designated at fair value through profit or loss	(564)	(285)
Gain/(loss) in the fair value of financial liabilities designated at fair value through profit or loss	643	322

¹ Included in Net gain/(loss) in the fair value of financial assets designated at fair value through profit or loss and related derivatives is a loss of \$2 million in the fair value of financial assets designated at fair value though profit or loss (30 September 2021: \$17 million loss).

All foreign currency gains/(losses) are excluded from this category. Due to the Banking Group's practice of managing all foreign exchange risk centrally, all foreign currency gains/(losses) are included within Trading gains less losses on financial instruments above.

Note 4 Other Operating Income

Accounting policy

Fees and commissions

Unless included in the effective interest rate, fees and commissions are recognised on an accruals basis when the service has been provided or on completion of the underlying transaction. Fees charged for providing ongoing services (for example, maintaining and administering existing facilities) are recognised as income over the period the service is provided.

Funds management and other fiduciary activities

Fees and commissions earned through the marketing of funds management products and other fiduciary activities are included in the income statement as they are earned.

Net Investment management income

Investment management income is recognised on an accruals basis as the services are provided and is presented net of direct and incremental investment management expenses incurred in the provision of these services.

	Banking G	iroup
Dollars in Millions	30/9/22	30/9/21
Other operating income		
Money transfer fees	84	106
Fees earned on financial assets and liabilities at fair value through profit or loss	12	24
Fees earned on financial assets and liabilities at amortised cost	189	157
Fees earned on trust and other fiduciary activities	7	7
Net investment management income	15	15
Other income, other fees and commissions income	69	92
Total other operating income	376	401
Net investment management income includes:		
Investment management income	32	35
Investment management expenses	(17)	(20)

Note 5 Operating Expenses

Accounting policy

Operating expenses are recognised as the underlying service is rendered or over the period in which an asset is consumed or once a liability is incurred.

Amounts received by the Banking Group as a reimbursement for costs incurred are recognised as a reduction of the related expense.

Employee entitlements

Employee entitlements to long service leave are measured as the present value of expected future payments using an actuarial valuation method based on legal and contractual entitlements and assessments having regard to staff departures, leave utilisation and future salary levels. Expected future payments are discounted using relevant market yields at the reporting date.

Wages and salaries, annual leave and other employee entitlements expected to be paid or settled within 12 months of providing the service are measured at their nominal amounts using remuneration rates that the Banking Group expects to pay when the liabilities are settled.

All other employee entitlements that are not expected to be paid or settled within 12 months of the reporting date are measured at the present value of net future cash flows.

	Banking G	roup
Dollars in Millions	30/9/22	30/9/21
Amortisation and depreciation		
Amortisation of intangible assets	57	39
Depreciation on property, plant and equipment	85	95
Total amortisation and depreciation	142	134
Personnel expenses		
Share based payments	1	1
Defined contribution pension expense	17	16
Salaries and other staff expenses	645	595
Total personnel expenses	663	612
Other		
Loss on disposal of property, plant and equipment	4	4
Rental expense	12	11
Related entity expenses	38	47
Other expenses	217	252
Total other operating expenses	271	314
Total operating expenses	1,076	1,060

Dollars in Thousands	Banking G	Froup
	30/9/22	30/9/21
Fees paid to auditors		
Audit and review of financial statements ¹	2,304	2,331
Other assurance and agreed upon procedures ²	592	278
Non-audit services ³	1,357	-

¹ Includes audits for funds and securitisation vehicles managed by the Banking Group.

² Fees paid to auditors were for other assurance services provided in relation to funding activities, other assurance procedures and agreed upon procedures related to funds

³ Fees paid for market insights and analysis services performed by an affiliate firm of Ernst & Young.

Note 6 Income Tax

Accounting policy

Income tax expense is the income tax charge or benefit incurred on the current reporting period's profit or loss and is the aggregate of the movements in deferred tax taken through the income statement and the amount of income tax payable or recoverable in respect of taxable profit or loss for the period at the applicable tax rate.

Income tax relating to items recognised directly in other comprehensive income is recognised in other comprehensive income and not in the income statement.

	Banking G	roup
Dollars in Millions	30/9/22	30/9/21
Income tax expense/ (benefit) on operating profit charged to income statement		
Current tax	562	462
Deferred tax	(10)	52
Total income tax expense/ (benefit) on operating profit charged to income statement	552	514
Reconciliation of income tax expense on operating profit shown in the income statement with		
prima facie tax payable on the pre-tax accounting profit		
Total operating profit before income tax expense	1,966	1,836
Prima facie income tax at 28%	550	514
Add/(deduct): Tax effect of amounts which are non-deductible or non-assessable:		
Non-assessable and tax paid income	(3)	-
Non-deductible expenses	1	-
Prior year adjustment	-	(1)
Other accounting movements	4	1
Total income tax expense on operating profit	552	514
Effective tax rate	28.1%	28.0%
Income tax expense/ (benefit) charged to other comprehensive income		
Current tax	128	1
Deferred tax	-	(40)
Total income tax expense/ (benefit) charged to other comprehensive income	128	(39)
Imputation Credit Account The amount of imputation credits available to the Banking Group as at 30 September 2022 was \$2,587 million (30 September 2022)	mber 2021: \$2,280 million).

Asset Notes

Note 7 Cash and Liquid Assets

Accounting policy

Cash and liquid assets consists of cash, transaction balances with central banks and other institutions and reverse repurchase agreements.

Reverse repurchase agreements

Securities purchased under agreements to resell are recorded as Cash and liquid assets and Amounts due from related entities. The difference between the purchase and the resale prices is treated as interest and accrued over the life of the agreements using the effective interest method.

Where the Banking Group has accepted collateral arising from secured placements and reverse repurchase agreements, the Banking Group is obliged to return equivalent securities. Securities repledged by the Banking Group are strictly for the purposes of providing collateral for the counterparty. These transactions are conducted under terms that are usual for customary standard lending, and securities borrowing and lending activities.

	Banking G	g Group	
Dollars in Millions	30/9/22	30/9/21	
Coins, notes and cash at bank	143	162	
Transaction balances with central banks	8,361	8,799	
Transaction balances with other institutions	760	165	
Securities purchased under agreements to resell with central banks	13	12	
Securities purchased under agreements to resell with other institutions	304	584	
Total cash and liquid assets	9,581	9,722	

The Banking Group has accepted collateral with a fair value of \$501 million as at 30 September 2022 arising from reverse repurchase agreements included in Cash and liquid assets and amounts due from related entities in Note 23 Related entity transactions, which it is permitted to sell or repledge (30 September 2021: \$737 million).

Government securities with a fair value of \$18 million were repledged as at 30 September 2022 (30 September 2021: \$96 million). The Bank's obligation to repurchase government securities is classified under Note 16 Due to central banks and other institutions.

Note 8 Trading Securities

		roup
Dollars in Millions	30/9/22	30/9/21
Government bonds, notes and securities	3,509	4,673
Semi-government bonds, notes and securities	2,804	1,336
Corporate and other institutions bonds, notes and securities	1,101	1,339
Total trading securities	7,414	7,348

Included in Trading securities as at 30 September 2022 were \$138 million encumbered through repurchase agreements (30 September 2021: \$508 million). These trading securities have not been derecognised by the Bank as the Bank retains substantially all the risks and rewards of ownership. Counterparties have the right to sell or repledge these encumbered securities. The Bank's obligation to repurchase trading securities is classified under Note 16 Due to central banks and other institutions and Amounts due to related entities in Note 23 Related entity transactions.

Note 9 Loans and Advances to Customers

Accounting policy

Loans and advances are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Banking Group provides money or services directly to a customer and has no intention of trading the loan.

Loans and advances are either measured at fair value through profit or loss or at amortised cost using the effective interest method, net of any allowance for expected credit losses. Under the effective interest method, fee income and costs directly related to the origination of the loan are deferred over the expected life of the assets or, where appropriate, a shorter period. When calculating the effective interest rate, the Banking Group estimates cash flows considering all contractual terms of the financial instrument and excluding future credit losses.

	Banking G	roup
Dollars in Millions	30/9/22	30/9/21
Overdrafts	2,195	1,948
Credit card outstandings	825	746
Housing loans	54,823	52,728
Other term lending	41,409	39,402
Other lending ¹	840	575
Total gross loans and advances to customers	100,092	95,399
Deduct:		
Allowance for expected credit losses and credit risk adjustments on financial assets (refer to Note 10)	812	778
Deferred and other unearned future income and expenses	(96)	(99)
Fair value hedge adjustments on housing loans	30	29
Total deductions	746	708
Total net loans and advances to customers	99,346	94,691

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

As at 30 September 2022, included within the Banking Group's Loans and advances to customers were housing loans with a carrying amount of \$21,104 million that have been transferred to consolidated structured entities but not derecognised in their entirety (30 September 2021: \$17,744 million). Details on transactions with the BNZ RMBS Trust Series 2008-1 (the "RMBS Trust") and the BNZ Covered Bond Trust (the "Covered Bond Trust") are provided in Notes 26 *Transfers of financial assets*, 30 *Structured entities, securitisation, funds management, fiduciary activities and insurance* and 34 *Risk management*.

Note 10 Allowance for Expected Credit Losses

Accounting policy

The Banking Group applies a three-stage approach to measuring expected credit losses ("ECL") for the following categories of financial assets:

- debt instruments measured at amortised cost
- loan commitments
- financial quarantee contracts

Exposures are assessed on a collective basis in each stage unless there is sufficient evidence that one or more events associated with an exposure could have a detrimental impact on estimated future cash flows. Where such evidence exists, the exposure is assessed on an individual basis. For the purposes of a collective evaluation of impairment, financial assets are grouped based on shared credit risk characteristics, considering instrument type, credit risk ratings, date of initial recognition, remaining term to maturity, industry, geographical location of the borrower and other relevant factors.

ECLs are either measured over 12 months or the expected lifetime of the exposure, depending on credit deterioration since origination, according to the following three-stage approach:

- 12-month ECL ("Stage 1") "Performing": For exposures where there has not been a significant increase in credit risk since initial recognition and that are not credit impaired upon origination, the portion of the lifetime ECL associated with the probability of default events occurring within the next 12 months is recognised.
- Lifetime ECL not credit impaired ("Stage 2") "Underperforming": For exposures where there has been a significant increase in credit risk since initial recognition but that are not credit impaired, a lifetime ECL is recognised reflecting the remaining lifetime of the financial asset.
- Lifetime ECL credit impaired ("Stage 3") "Non-performing": Financial assets are assessed collectively or individually as credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that asset have occurred. For financial assets that have become credit impaired, a lifetime ECL is recognised but interest revenue is calculated by applying the effective interest rate to the amortised cost (net of provision) rather than the gross carrying amount.

If credit risk were to improve in a subsequent period such that the exposure is no longer considered underperforming, the exposure returns to Stage 1 classification and a 12-month ECL is applied. The Banking Group considers reasonable and supportable information that is relevant and available without undue cost or effort, for this purpose. This includes quantitative and qualitative information and forward looking analysis.

Assessment of significant increase in credit risk

The Banking Group has an internally developed credit rating master-scale, derived from historical default data drawn from a number of sources, to assess the potential default risk in lending, or providing other financial services products to counterparties or customers. For loans and advances, the Banking Group has a single common master-scale across all Retail and Non-Retail counterparties for probability of default. The probability of default master-scale can be broadly mapped to external rating agencies and has performing (pre-default) and non-performing (post-default) grades.

- For Residential Mortgage and Non-Retail facilities, internally derived credit ratings, as described above, represent a key determinant of credit risk. The Banking Group assigns each customer a credit rating at initial recognition based on available information. Credit risk is deemed to have increased significantly if the credit rating has significantly deteriorated at the reporting date, relative to the credit rating at the date of initial recognition.
- For Other Retail facilities the number of days past due are used to determine a significant increase in credit risk.
- In addition, the Banking Group considers that a significant increase in credit risk occurs when a facility is more than 30 days past due.
- No material modification gains or losses have been recognised in respect of loans on deferral.

Note 10 Allowance for Expected Credit Losses continued

Definition of Default

Default occurs when a loan obligation is 90 days or more past due, or when it is considered unlikely that the credit obligation to the Banking Group will be paid in full without remedial action, such as realisation of security. When there is no realistic probability of recovery, loans are written off against the related impairment allowance on completion of the Banking Group's internal processes and when all reasonably expected recoveries have been collected. In subsequent periods, any recoveries of amounts previously written off are credited to credit impairment charge in the income statement.

Calculation of expected credit losses

ECLs are derived from unbiased and probability-weighted estimates of expected loss, and are measured as follows:

- Financial assets that are not credit impaired at the reporting date: as the present value of all cash shortfalls over the expected life of the financial asset discounted by the effective interest rate. The cash shortfall is the difference between the cash flows due to the Banking Group in accordance with the contract and the cash flows that the Banking Group expects to receive.
- Financial assets that are credit impaired at the reporting date: as the difference between the gross carrying amount and the present value of estimated future cash flows discounted by the effective interest rate.
- Undrawn loan commitments: as the present value of the difference between the contractual cash flows that are due to the Banking Group if the commitment is drawn down and the cash flows that the Banking Group expects to receive.
- Financial guarantee contracts: as the expected payments to reimburse the holder less any amounts that the Banking Group expects to recover.

Residential Mortgage and Corporate

For Residential Mortgage and Corporate facilities, overall credit default risk is represented by the Customer Rating Score ("CRS"), as it incorporates a measure of probability of default.

ECLs are calculated using three main parameters being a probability of default ("PD"), a loss given default ("LGD") and an exposure at default ("EAD"). These parameters are generally derived from internally developed statistical models combined with historical, current and forward looking information, including macro-economic data.

- For accounting purposes, the 12-month and lifetime PD represent the expected point-in-time probability of a default over the next 12 months and remaining lifetime of the financial instrument, respectively, based on conditions existing at the balance sheet date and future economic conditions that affect credit risk.
- LGD represents expected loss conditional on default, taking into account the mitigating effect of collateral, its expected value when realised and the time value of money.
- EAD represents the expected exposure at default, taking into account the repayment of principal and interest from the balance sheet date to the default event together with any expected drawdown of a facility.
- The 12-month ECL is equal to the discounted sum over the next 12 months of monthly PD multiplied by LGD and EAD. Lifetime ECL is calculated using the discounted sum of monthly PD over the full remaining life multiplied by LGD and EAD.

Other Retail

Collectively assessed allowances for credit cards and unsecured personal loans are assessed under NZ IFRS 9 Financial Instruments ("NZ IFRS 9") using the Roll Rate methodology at BNZ. This methodology is based on historical rates of delinquency (this is a proxy value for PD multiplied by LGD) and the amount of loss resulting.

Incorporation of forward looking information

- The Banking Group uses internal subject matter experts from Risk, Economics and Sector Heads to consider a range of relevant forward looking data, including macro-economic forecasts and assumptions, for the determination of unbiased general economic adjustments and any idiosyncratic or targeted portfolio / industry adjustments, in order to support the calculation of ECLs.
- Forward looking adjustments for both general macro-economic adjustments and more targeted portfolio / industry adjustments, reflect reasonable and supportable forecasts of potential future conditions that are not captured within the base ECL calculations.
- Macro-economic factors taken into consideration include, but are not limited to, unemployment, interest rates, gross domestic product, inflation, commercial and residential property prices, and require an evaluation of both the current and forecast direction of the macro-economic cycle.
- Incorporating forward looking information, including macro-economic forecasts, increases the degree of judgement required to assess how changes in these data points will affect ECLs. The methodologies and assumptions, including any forecasts of future economic conditions, are reviewed regularly.

Key judgements and estimates

- A collective assessment of impairment takes into account data from the loan portfolio (such as credit quality, levels of arrears, credit utilisation, loan to collateral ratios etc.) and concentrations of risk and economic data (including levels of unemployment, real estate price indices, country risk and the performance of different individual groups).
- Judgement is required by management in the estimation of the amount and timing of future cash flows when determining an impairment loss for loans and advances. In estimating these cash flows, the Banking Group makes judgements about the borrower's financial situation and the net realisable value of collateral. These estimates are based on assumptions about a number of factors and actual results may differ, resulting in future changes to the impairment allowance.

Movement in Allowance for Expected Credit Loss

The total allowance for ECL increased by \$29 million compared to the balance at 30 September 2021. This is mainly due to an increase in the corporate exposures allowance for ECL of \$31 million, driven by an increase in the modelled collectively assessed allowance and increase in forward looking adjustments ("FLAs") reflecting an increase in downside economic adjustments to 45%, offset by a reduction in individually assessed allowance.

Note 10 Allowance for Expected Credit Losses continued

The following table for the year ended 30 September 2022 is prescribed by Orders in Council and is broken down between Residential mortgage lending, Other retail exposures and Corporate exposures. The table provides a reconciliation from the opening balance to the closing balance of allowance for ECL and shows the movement in opening balance where financial assets have transferred between ECL stages and subsequent remeasurement of the allowance for ECL during the year.

Ban	king	Group	(30/	9/	(22	
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		вапкіпд	3roup (30/		
	Collecti	Individually ectively assessed allowance allowance			
Dollars in Millions	Stage 1	Stage 2	Stage 3	Stage 3	Total
Movement in Allowance for ECL					
Residential mortgage lending					
Balance at beginning of year	1	44	50	-	95
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	1	(1)	-	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	-	-	-	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	-	_	_	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	_	_	_	_	_
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	10	23	(31)	1	3
Amounts written off	-	-	-	(1)	(1)
Recovery of amounts written off	_	_	_	1	1
Balance at end of year - Residential mortgage lending	12	66	19	1	98
	12		15		
Other retail exposures	7	18	15	5	45
Balance at beginning of year	,	10	13	5	43
Changes to the opening balance due to transfer between ECL stages:	4	(2)	(4)		
Transferred to 12-months ECL - collectively assessed allowance	4	(3)	(1)	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(1)	2	(1)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(1)	1	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	(1)	(5)	6	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(1)	3	2	4	8
Amounts written off	-	-	-	(21)	(21)
Recovery of amounts written off	-	-	-	8	8
Balance at end of year - Other retail exposures	9	18	11	2	40
Corporate exposures					
Balance at beginning of year	39	445	20	114	618
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	23	(23)	-	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(7)	10	(3)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(8)	8	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	-	-	-	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(9)	63	21	3	78
Amounts written off	-	-	-	(46)	(46)
Recovery of amounts written off	-	-	-	_	-
Discount unwind ²	-	-	_	(1)	(1)
Balance at end of year - Corporate exposures	46	487	46	70	649
Total					
Balance at beginning of year	47	507	85	119	758
Changes to the opening balance due to transfer between ECL stages:					.00
Transferred to 12-months ECL - collectively assessed allowance	28	(27)	(1)	_	_
	(8)	12	(4)	_	
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(0)	(9)	9		
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-		_	-	_
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	(1)	(5)	6	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	-	89	(8)	8	89
Amounts written off	-	-	-	(68)	(68)
Recovery of amounts written off	-	-	-	9	9
Discount unwind ²	-	-	-	(1)	(1)
Total balance at end of year	67	571	76	73	787

 $^{^{\}rm 1}$ Classified as credit impairment charge/(write-back) in the income statement.

² The impairment loss on an impaired asset is calculated as the difference between the asset's carrying amount and the estimated future cash flows discounted to its present value using the original effective interest rate for the asset. This discount unwinds through interest income over the period the asset is held.

Note 10 Allowance for Expected Credit Losses continued

Ban	king	Group	(30)	/09,	/21)

	Collectively assessed allowance assessed allowance				
Dollars in Millions	Stage 1	Stage 2	Stage 3	Stage 3	Total
Movement in Allowance for ECL					
Residential mortgage lending					
Balance at beginning of year	5	33	53	3	94
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	4	(2)	(2)	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	-	2	(2)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(1)	1	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	-	-	-	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(8)	12	-	(2)	2
Amounts written off	-	-	-	(1)	(1)
Recovery of amounts written off	-	-	-	-	-
Balance at end of year - Residential mortgage lending	1	44	50	-	95
Other retail exposures					
Balance at beginning of year	8	48	15	7	78
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	8	(7)	(1)	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(1)	2	(1)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(2)	2	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	(1)	(6)	7	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(8)	(22)	6	4	(20)
Amounts written off	-	-	-	(25)	(25)
Recovery of amounts written off	-	-	-	12	12
Balance at end of year - Other retail exposures	7	18	15	5	45
Corporate exposures					
Balance at beginning of year	44	417	39	205	705
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	76	(73)	(3)	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(10)	20	(10)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(5)	5	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	(3)	(3)	6	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(71)	89	(8)	(29)	(19)
Amounts written off	-	-	-	(66)	(66)
Recovery of amounts written off	-	-	-	-	-
Discount unwind ²	-	-	-	(2)	(2)
Balance at end of year - Corporate exposures	39	445	20	114	618
Total					
Balance at beginning of year	57	498	107	215	877
Changes to the opening balance due to transfer between ECL stages:					
Transferred to 12-months ECL - collectively assessed allowance	88	(82)	(6)	-	-
Transferred to Lifetime ECL not credit impaired - collectively assessed allowance	(11)	24	(13)	-	-
Transferred to Lifetime ECL credit impaired - collectively assessed allowance	-	(8)	8	-	-
Transferred to Lifetime ECL credit impaired - individually assessed allowance	-	(4)	(9)	13	-
Charge/(credit) to income statement due to new and increased provisions (net of releases) ¹	(87)	79	(2)	(27)	(37)
Amounts written off	-	-	-	(92)	(92)
Recovery of amounts written off	-	-	-	12	12
Discount unwind ²		-	-	(2)	(2)
Total balance at end of year	47	507	85	119	758
1 Classified as credit impairment charge in the income statement					

 $^{^{\}rm 1}\,{\rm Classified}$ as credit impairment charge in the income statement.

² The impairment loss on an impaired asset is calculated as the difference between the asset's carrying amount and the estimated future cash flows discounted to its present value using the original effective interest rate for the asset. This discount unwinds through interest income over the period the asset is held.

Note 10 Allowance for Expected Credit Losses continued

The following table summarises the changes in the gross carrying amounts of loans and advances to customers to explain changes in the Banking Group's allowance for ECL for the year.

,	Banking Group (30/9/22)				
	Collecti	vely assessed	allowance	Individually assessed allowance	
Dollars in Millions	Stage 1	Stage 2	Stage 3	Stage 3	Total
Movement in gross loans and advances to customers					
Residential mortgage lending					
Gross carrying amount at beginning of year	51,916	571	240	1	52,728
Transfers					
Transferred to collectively assessed 12-months ECL	448	(401)	(46)	(1)	-
Transferred to collectively assessed lifetime ECL not credit impaired	(3,978)	3,991	(13)	-	-
Transferred to collectively assessed lifetime ECL credit impaired	(149)	(40)	189	-	-
Transferred to individually assessed lifetime ECL credit impaired		-	(5)	5	-
Net further lending/(repayment)	(2,392)	(19)	(6)	2	(2,415)
Additions	12,244	-	-	-	12,244
Deletions	(7,531)	(127)	(74)	(1)	(7,733)
Amounts written off		-	-	(1)	(1)
Total gross carrying amount at end of year	50,558	3,975	285	5	54,823
Allowance for ECL	12	66	19	1	98
Total net carrying amount at end of year	50,546	3,909	266	4	54,725
Other retail exposures					
Gross carrying amount at beginning of year	1,994	157	19	9	2,179
Transfers		()	(-)		
Transferred to collectively assessed 12-months ECL	84	(82)	(2)	-	-
Transferred to collectively assessed lifetime ECL not credit impaired	(184)	186	(1)	(1)	-
Transferred to collectively assessed lifetime ECL credit impaired	(14)	(9)	23	-	-
Transferred to individually assessed lifetime ECL credit impaired	(1)	(2)	(3)	6	>
Net further lending/(repayment)	(24)	(46)	(3)	19	(54)
Additions	506	- (44)	(40)	-	506
Deletions	(415)	(44)	(18)	(8)	(485)
Amounts written off	1046	100	- 45	(21)	(21)
Total gross carrying amount at end of year Allowance for ECL	1,946	160	15	4	2,125
	9	18	11	2	40
Total net carrying amount at end of year	1,937	142	4	2	2,085
Corporate exposures	14.700	24 505	122	100	20 552
Gross carrying amount at beginning of year Transfers	14,726	24,505	132	189	39,552
Transferred to collectively assessed 12-months ECL	4,829	(4,826)	(3)		
Transferred to collectively assessed 12-months ECL Transferred to collectively assessed lifetime ECL not credit impaired	(14,258)	14,282	(17)	(7)	_
Transferred to collectively assessed lifetime ECL credit impaired Transferred to collectively assessed lifetime ECL credit impaired	(14,238)	(66)	249	(8)	_
Transferred to contectively assessed lifetime ECL credit impaired Transferred to individually assessed lifetime ECL credit impaired	(47)	(4)	-	51	_
Net further lending/(repayment)	(1,906)	(479)	26	(3)	(2,362)
Additions	15,394	(4/3)	-	-	15,394
Deletions	(4,740)	(5,210)	(66)	(51)	(10,067)
Amounts written off	(4,740)	(3,210)	-	(46)	(46)
Total gross carrying amount at end of year	13,823	28,202	321	125	42,471
Allowance for ECL	46	487	46	70	649
Total net carrying amount at end of year	13,777	27,715	275	55	41,822
Total	20,,,,	27,720			12,022
Gross carrying amount at beginning of year	68,636	25,233	391	199	94,459
Transfers	,				.,
Transferred to collectively assessed 12-months ECL	5,361	(5,309)	(51)	(1)	_
Transferred to collectively assessed lifetime ECL not credit impaired	(18,420)	18,459	(31)	(8)	-
Transferred to collectively assessed lifetime ECL credit impaired	(338)	(115)	461	(8)	-
Transferred to individually assessed lifetime ECL credit impaired	(48)	(6)	(8)	62	-
Net further lending/(repayment)	(4,322)	(544)	17	18	(4,831)
Additions	28,144	-	-	-	28,144
Deletions	(12,686)	(5,381)	(158)	(60)	(18,285)
Amounts written off	-	-	-	(68)	(68)
Total gross carrying amount at end of year	66,327	32,337	621	134	99,419
Allowance for ECL	67	571	76	73	787
Total net carrying amount at end of year	66,260	31,766	545	61	98,632
	•				

Note 10 Allowance for Expected Credit Losses continued

Banking Group (30/9/21)

	Collectively	Collectively assessed allowance			
asidential mortgage lending alance at beginning of year transfers Transferred to collectively assessed 12-months ECL Transferred to collectively assessed lifetime ECL not credit impaired Transferred to individually assessed lifetime ECL credit impaired Transferred to individually assessed lifetime ECL credit impaired let further lending/(repayment) diditions sumounts written off otal gross carrying amount at end of year allowance for ECL total net carrying amount at end of year - Residential mortgage lending byther retail exposures alance at beginning of year transfers Transferred to collectively assessed 12-months ECL Transferred to collectively assessed lifetime ECL credit impaired Transferred to individually assessed lifetime ECL credit impaired Transferred to individually assessed lifetime ECL credit impaired let further lending/(repayment) diditions beletions mounts written off otal gross carrying amount at end of year allowance for ECL otal net carrying amount at end of year allowance for ECL Transferred to collectively assessed lifetime ECL credit impaired Transfers Transferred to collectively assessed lifetime ECL credit impaired Transferred to individually assessed lifetime ECL credit impaired Transferred to collectively assessed lifetime ECL credit impaired Transferred to individually a	Stage 1	Stage 2	Stage 3	Stage 3	Total
Movement in gross loans and advances to customers					-
Residential mortgage lending					
Balance at beginning of year	45,039	567	236	8	45,850
Transfers					
	434	(371)	(61)	(2)	-
Transferred to collectively assessed lifetime ECL not credit impaired	(583)	601	(18)	-	-
Transferred to collectively assessed lifetime ECL credit impaired	(164)	(38)	202	-	-
Transferred to individually assessed lifetime ECL credit impaired	-	-	(6)	6	-
Net further lending/(repayment)	(2,101)	(19)	(5)	1	(2,124)
Additions	18,293	-	-	-	18,293
Deletions	(9,002)	(169)	(108)	(11)	(9,290)
Amounts written off	-	-	-	(1)	(1)
Total gross carrying amount at end of year	51,916	571	240	1	52,728
Allowance for ECL	1	44	50	-	95
Total net carrying amount at end of year - Residential mortgage lending	51,915	527	190	1	52,633
	· · · · · · · · · · · · · · · · · · ·				
	2,258	176	26	8	2,468
Transfers	,				,
	98	(95)	(3)	_	_
	(196)	198	(2)	_	_
	(16)	(13)	29	-	_
	(5)	(2)	(4)	11	_
	(217)	(66)	(2)	24	(261)
	580	-	-	-	580
	(508)	(41)	(25)	(9)	(583)
	(300)	(41)	(23)	(25)	(25)
	1,994	157	19	9	2,179
	7	18	15	5	45
	1,987	139	4	4	2,134
	1,301	133			2,134
	18,824	18,855	234	542	38,455
	10,024	10,055	234	342	30,433
	3,949	(3,943)	(6)		
	(13,894)	14,007	(84)	(29)	_
	(79)	(65)	160	(16)	_
					-
	(35)	(19)	(18)	72	(1 244)
	(1,893)	597	(10)	(38)	(1,344)
	13,970	- (4.027)	(1.4.4)	(276)	13,970
	(6,116)	(4,927)	(144)	(276)	(11,463)
	-	-	-	(66)	(66)
	14,726	24,505	132	189	39,552
	39	445	20	114	618
Total net carrying amount at end of year - Corporate exposures	14,687	24,060	112	75	38,934
Total					
Balance at beginning of year ¹	66,121	19,598	496	558	86,773
Transfers					
Transferred to collectively assessed 12-months ECL	4,481	(4,409)	(70)	(2)	-
Transferred to collectively assessed lifetime ECL not credit impaired	(14,673)	14,806	(104)	(29)	-
Transferred to collectively assessed lifetime ECL credit impaired	(259)	(116)	391	(16)	-
Transferred to individually assessed lifetime ECL credit impaired	(40)	(21)	(28)	89	-
Net further lending/(repayment) ¹	(4,211)	512	(17)	(13)	(3,729)
Additions	32,843	-	-	-	32,843
Deletions	(15,626)	(5,137)	(277)	(296)	(21,336)
Amounts written off	-	-	-	(92)	(92)
Total gross carrying amount at end of year	68,636	25,233	391	199	94,459
Allowance for ECL	47	507	85	119	758
Total net carrying amount at end of year	68,589	24,726	306	80	93,701
	30,000	.,. ==			,

Note 10 Allowance for Expected Credit Losses continued

Impact of changes in gross carrying amount on ECL

Further information specific to each of the Banking Group's portfolios is included below.

Residential mortgage lending

Residential mortgage lending gross carrying amount increased by \$2,095 million in the year ended 30 September 2022, with associated ECL increasing by \$3 million. The movement in ECL reflects an increase in the gross carrying amount and model enhancements.

Other retail exposures

Other retail exposures gross carrying amount decreased by \$54 million in the year ended 30 September 2022, with associated ECL decreasing by \$5 million. The decrease in associated ECL reflects the reduction in the gross carrying amount.

Corporate exposures

Corporate gross carrying amount increased by \$2,919 million in the year ended 30 September 2022, with associated ECL increasing by \$31 million. The movement in ECL includes an increase in the modelled collectively assessed allowance of \$35 million, with forward looking adjustments increasing by \$40 million reflecting an increase in downside economic adjustments to 45%, offset by a reduction in individually assessed allowance of \$44 million.

ECL scenario analysis

The Banking Group's forecasts assume the following key macro-economic variables used in the upside, base case and downside scenario as at 30 September 2022.

	Upside (%)				Base Case (%)			Downside (%)		
	FY 2023	FY 2024	FY 2025	FY 2023	FY 2024	FY 2025	FY 2023	FY 2024	FY 2025	
Macro-economic indicators¹										
Gross domestic product change year on year	1.0	2.8	2.7	0.3	2.2	2.2	(3.0)	(2.0)	(0.0)	
Unemployment	4.0	4.6	4.4	4.2	5.1	5.1	5.6	8.1	9.3	
House price change year on year	(5.0)	5.2	6.0	(5.9)	2.8	4.1	(21.9)	(18.6)	(8.7)	

 $^{^{1}}$ Macro-economic indicators represent annual change from September to September.

The Banking Group continues to use the following macro-economic scenarios in estimating ECL.

Upside scenario: The scenario reflects an easing in supply chain pressures and an over-rebuilding of inventories which leads to a faster than expected decline in global inflation. Improved labour supply, coupled with the decline in oil prices and other imported inflation, resulting in a lower inflation outcome and stronger growth.

Base case scenario: The base case scenario represents current forecasting of future macro-economic conditions, slowing economic growth, high inflation and tightening cash rates.

Downside scenario: The downside scenario was provided by recent portfolio solvency stress testing and reflects severe but plausible macro-economic conditions under high inflation and high interest rates combined with significant house price deterioration.

The probability weighted ECL is a blended outcome taking into consideration the respective scenarios applied across each of the Banking Group's major loan portfolios. The following table shows the probability weighting of scenarios.

	Upsi	Upside (%)		Base case (%)		ide (%)
	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021
Macro-economic scenario weightings						
Retail	2.5	2.5	52.5	60.0	45.0	37.5
Non-Retail	2.5	2.5	52.5	60.0	45.0	37.5

Sensitivity analysis

The following table shows the reported total allowance for ECL based on the probability weighting of scenarios, with the sensitivity range reflecting the ECL impacts assuming a 100% weighting is applied to the upside scenario, base case scenario or the downside scenario (with all other assumptions held constant).

	Banking Group		
Dollars in Millions	30/9/22	30/9/21	
Reported probability weighted ECL	787	758	
100% upside ECL	472	609	
100% base case ECL	549	650	
100% downside ECL	1,083	940	

Gross carrying amounts written off during the year still subject to enforcement activity

As at 30 September 2022, the contractual amount outstanding on loans and advances to customers written off during the year and that are still subject to enforcement activity was \$28 million for the Banking Group (30 September 2021: \$16 million¹).

¹ The comparative balance has been restated to align with the presentation used in the current period.

Note 10 Allowance for Expected Credit Losses continued

Credit risk adjustment on financial assets designated at fair value through profit or loss

The changes in value of financial assets designated at fair value through profit or loss that are attributable to changes in credit risk have been calculated using a statistical-based calculation that estimates expected losses attributable to adverse movement in credit risks.

Credit risk adjustments on financial assets designated at fair value through profit or loss are analysed in the following table.

Credit risk adjustments of imaricial assets designated at fair value through profit of loss are analysed in	_	(30/9/22)		
Dollars in Millions	Residential Mortgage Lending	Other Retail Exposures	Corporate Exposures	Total
Credit risk adjustment on individual financial assets				
Loans and advances to customers				
Balance at beginning of year	-	-	15	15
Charge/(credit) to income statement	-	-	4	4
Balance at end of year	-	-	19	19
Credit risk adjustment on groups of financial assets				
Loans and advances to customers				
Balance at beginning of year	-	-	5	5
Charge/(credit) to income statement	-	-	1	1
Balance at end of year	-	-	6	6
Total credit risk adjustments on loans and advances designated at fair value through profit or loss	-	-	25	25
Trading derivative financial instruments				
Balance at beginning of year	-	-	11	11
Charge/(credit) to income statement	-	-	6	6
Balance at end of year	-	-	17	17
Total credit risk adjustments on trading derivative financial instruments	-	-	17	17
		Banking Group	(30/9/21)	
Credit risk adjustment on individual financial assets				
Loans and advances to customers				
Balance at beginning of year	-	-	22	22
Charge/(credit) to income statement	-	-	(7)	(7)
Balance at end of year	-	-	15	15
Credit risk adjustment on groups of financial assets				
Loans and advances to customers				
Balance at beginning of year	-	-	11	11
Charge/(credit) to income statement	-	-	(6)	(6)
Balance at end of year	-	-	5	5
Total credit risk adjustments on loans and advances designated at fair value through profit or loss	-	-	20	20
Trading derivative financial instruments				
Balance at beginning of year	-	-	28	28
Charge/(credit) to income statement	-	-	(17)	(17)
Balance at end of year	-	-	11	11
Total credit risk adjustments on trading derivative financial instruments	-	-	11	11

Note 11 Asset Quality

Accounting policy

The Banking Group has disclosed certain components of its loan portfolio as impaired assets according to the classifications below:

- Credit impaired assets are defined in Note 10 Allowance for expected credit losses under credit risk credit quality of financial assets.
- Individually impaired assets are impaired assets where an individually assessed allowance has been recorded.

The following categories are also disclosed but are not considered to be impaired assets:

- Other assets under administration are those loans that are not impaired or past due, but where the customer is in receivership, liquidation, bankruptcy, statutory management, a no asset procedure, voluntary administration or any other form of administration in New Zealand, or is in an equivalent form of voluntary or involuntary administration in an overseas jurisdiction.
- Past due assets not individually impaired are those loans for which payments of principal or interest are contractually past due but adequate security is held.

The Banking Group provides for credit impairment as disclosed in Note 10 *Allowance for expected credit losses*. Accordingly, when management determines that a loan is not expected to be recovered in full, the principal amount and accrued interest on the obligation are written down to estimated net realisable value.

			Banking Group	(30/9/22)	
Dollars in Millions	Note	Residential Mortgage Lending	Other Retail Exposures	Corporate Exposures	Total
Individual financial assets designated at fair value through profit or loss subject to credit risk adjustments					
Balance at beginning of year		-	-	32	32
Additions		-	-	2	2
Deletions		-	-	(1)	(1)
Balance at end of year		-	-	33	33
Credit risk adjustments on individual financial assets designated at fair value through profit or loss	10	-	-	19	19
Individually impaired assets - at amortised cost					
Gross carrying amount at end of year		5	4	125	134
Individually assessed allowance for ECL - Stage 3	10	1	2	70	73
Total individually impaired assets at end of year		5	4	158	167
Individually impaired assets - undrawn lending commitments					
At amortised cost		-	-	4	4
At fair value through profit or loss		-	-	-	
Other assets under administration		2	-	-	2
			Banking Group	(30/9/21)	
Individual financial assets designated at fair value through profit or loss subject to credit risk adjustments					
Balance at beginning of year		-	-	42	42
Additions		-	-	13	13
Deletions		-	-	(23)	(23)
Balance at end of year		-	-	32	32
Credit risk adjustments on individual financial assets designated at fair value through profit or loss	10	-	-	15	15
Individually impaired assets - at amortised cost					
Gross carrying amount at end of year		1	9	189	199
Individually assessed allowance for ECL - Stage 3	10	-	5	114	119
Total individually impaired assets at end of year		1	9	221	231
Individually impaired assets - undrawn lending commitments					
At amortised cost		-	1	4	5
At fair value through profit or loss		-	-	-	
Other assets under administration		5	-	1	6

Note 11 Asset Quality continued

		Banking Group	(30/9/22)				
Pollars in Millions	Residential Mortgage Lending	Other Retail Exposures	Corporate Exposures	Total			
Past due assets not individually impaired							
Loans and advances to customers							
1 - 7 days past due	121	28	199	348			
8 - 29 days past due	90	19	32	141			
1 - 29 days past due	211	47	231	489			
30 - 59 days past due	45	6	17	68			
60 - 89 days past due	23	3	22	48			
90+ days past due	58	9	197	264			
Total past due assets not individually impaired	337	65	467	869			
		Banking Group (30/9/21)					
Past due assets not individually impaired							
Loans and advances to customers							
1 - 7 days past due	79	37	136	252			
8 - 29 days past due	52	19	29	100			
1 - 29 days past due	131	56	165	352			
30 - 59 days past due	34	9	14	57			
60 - 89 days past due	25	5	5	35			
90+ days past due	48	14	84	146			
Total past due assets not individually impaired	238	84	268	590			

Note 12 Derivative Financial Instruments Accounting Policy

Derivative financial instruments are contracts whose value is dependent on an underlying price, index or other variable, such as interest rates, foreign exchange rates and commodity prices.

All derivatives are recognised in the balance sheet at fair value on trade date and are classified as trading except where they are designated in a qualifying hedge relationship. The carrying value of a derivative is remeasured at fair value throughout the life of the contract. Derivatives are carried as assets when the fair value is positive, and liabilities when the fair value is negative. The fair value of derivative financial instruments is obtained from quoted market prices, discounted cash flow models or option pricing models as appropriate.

The method of recognising the fair value gain or loss on a derivative depends on whether the derivative is a hedging instrument in a qualifying hedge relationship and, if so, the nature of the risk being hedged.

Derivatives used for risk management purposes which, for various reasons, do not meet the qualifying criteria for hedge accounting, are included in trading derivatives.

The Banking Group applies NZ IFRS 9 to account for designated hedge relationships. As at 31 March 2022, the Banking Group discontinued portfolio fair value hedge relationships under NZ IAS 39 *Financial Instruments: Recognition and Measurement.*

The Banking Group utilises the following types of hedge relationship in managing its exposure to risk. At inception of all hedge relationships the Banking Group documents the relationship between the hedging instrument and hedged item, the risk being hedged, the Banking Group's risk management objective and strategy and how effectiveness will be measured throughout the hedge relationship. The Banking Group measures hedge effectiveness on a prospective basis at inception, as well as retrospectively over the term of the hedge relationship.

	Cash flow hedge	Fair value hedge
Objective	To hedge changes to cash flows arising from interest rate and foreign currency risk.	To hedge fair value changes arising from interest rate and foreign currency risk.
Methods for testing hedge ineffectiveness	Principally regression analysis. For portfolio hedges, capacity analysis to ensure interest cash flows arising from the portfolio of hedged items are in excess of the hedging instruments.	Regression analysis and the cumulative dollar offset method.
Potential sources of ineffectiveness	Mainly mismatches in terms of the hedged item and the hedging instrument. For example: frequency and timing of interest rate resets.	Mainly mismatches in terms of the hedged item and the hedging instrument as well as prepayment risk.
Recognition of effective hedge portion	Fair value changes of the hedging instrument associated with the hedged risk are recognised in the cash flow hedge reserve in equity and transferred to the income statement and recognised in net interest income when the hedge item affects profit or loss.	Fair value changes of the hedging instrument and those arising from the hedged risk on the hedged item are recognised in the income statement.
Recognition of ineffective hedge portion	Recognised in the income statement as ineffectiveness arises.	Recognised in the income statement as ineffectiveness arises.
Hedging instrument expires, is sold, or when hedging criteria are no longer met	Transferred to the income statement as/when the hedged item affects the income statement. If the hedged item is no longer expected to occur the effective portion accumulated in equity is transferred to the income statement immediately.	is amortised to the income statement on an effective yield basis. If the hedged item no longer exists (e.g. due to prepayment), the cumulative

Derivative financial instruments

	Banking Group (30,	Banking Group (30/9/22)		
Dollars in Millions		ir Value abilities		Fair Value Liabilities
Trading derivatives (including economic hedges)	8,786	7,748	4,286	3,115
Hedging derivatives	754	480	118	74
Total derivative financial instruments	9,540	8,228	4,404	3,189

Note 12 Derivative Financial Instruments continued

Trading derivatives

The Banking Group maintains trading positions in a variety of derivative financial instruments primarily to satisfy the needs of its customers through foreign exchange, interest rate related services and other market related contracts. In addition, the Banking Group takes positions on its own account within a prescribed limit framework, to manage its exposure to market and credit risks relating to trading activities. It satisfies customer needs and maintains access to market liquidity by quoting bid and offer prices on those instruments and trading with other market makers. All trading derivative positions are revalued on a daily basis to reflect market movements and any revaluation profit or loss is recognised immediately in the income statement.

The fair values of trading derivative assets and liabilities are outlined in the table below.

	Banking Group	Banking Group (30/9/2		
Dollars in Millions	Fair Value Assets	Fair Value Liabilities		Fair Value Liabilities
Foreign exchange rate-related contracts				
Spot and forward contracts	3,584	3,316	1,134	1,105
Cross currency swaps	2,847	2,573	639	581
Options	93	93	38	38
	6,524	5,982	1,811	1,724
Interest rate-related contracts				
Swaps	2,226	1,726	2,395	1,311
Options	-	5	-	1
	2,226	1,731	2,395	1,312
Other market-related contracts				
Commodity derivatives	36	35	78	77
Credit derivatives	-	-	2	2
	36	35	80	79
Total trading derivatives (including economic hedges)	8,786	7,748	4,286	3,115

Hedging derivatives

The Banking Group's hedging strategy is to manage its exposure to interest rate risk on a net variable basis in New Zealand dollars. This requires the Banking Group to enter into interest rate swaps where the exposure is to a fixed interest rate. Alternatively, cash flow hedges of interest rate risk are used to arrive at a net variable rate position. In some instances, foreign currency exposures are swapped to New Zealand dollars using cross-currency interest rate

Not all exposures are automatically managed under the above strategy. Where a risk is within acceptable limits the Banking Group may decide not to apply hedge accounting to that risk. Instead, the Banking Group will manage its exposure under broader risk management processes.

The notional amount and fair value of hedging instruments are outlined in the table below by the type of hedge relationship in which they are designated. The calculation of the notional amount reflects the gross volume of transactions outstanding at the reporting period end and is not indicative of either the market risk or credit risk. The Banking Group may designate separate derivatives to hedge different risk components of one hedged item. In such scenario the notional amount of hedging derivatives will, in sum, exceed the notional amount of the hedged item. In the case of cross-currency swaps the Banking Group may designate a single instrument to hedge both interest rate risk in a fair value hedge and currency risk in a cash flow hedge.

Dollars in Millions					Banking Group (30/9/2	
	Hedging instrument	Risk	Notional Amount	Fair Value Amount	Notional Amount	Fair Value Amount
Derivative assets						
Cash flow hedges	Interest rate swaps	Interest	17,915	-	12,054	49
Cash flow hedges	Cross-currency swaps	Currency	9,445	754	3,758	60
Cash flow hedges	Futures	Interest	-	-	1,960	-
Fair value hedges	Interest rate swaps	Interest	-	-	3,049	-
Fair value and cash flow hedges	Cross-currency swaps	Interest and currency	-	-	448	9
			27,360	754	21,269	118
Derivative liabilities						
Cash flow hedges	Interest rate swaps	Interest	5,272	-	7,646	-
Cash flow hedges	Cross-currency swaps	Currency	2,497	361	1,954	74
Cash flow hedges	Futures	Interest	354	-	-	-
Fair value hedges	Interest rate swaps	Interest	7,649	50	8,533	-
Fair value and cash flow hedges	Cross-currency swaps	Interest and currency	537	69	-	_
			16,309	480	18,133	74

Note 12 Derivative Financial Instruments continued **Hedging derivatives**

The following table shows the maturity profile of hedging instruments based on their notional amounts.

	Ва	Banking Group (30/9/22)			Banking Group (30/9/21)			
Dollars in Millions	0 to 12 Months	1 to 5 Years	Over 5 Years	Total	0 to 12 Months	1 to 5 Years	Over 5 Years	Total
Interest rate swaps	5,805	22,573	2,458	30,836	11,607	18,237	1,438	31,282
Futures	354	-	-	354	1,960	-	-	1,960
Cross-currency swaps	-	7,548	4,931	12,479	-	2,856	3,304	6,160
Total notional amount	6,159	30,121	7,389	43,669	13,567	21,093	4,742	39,402

The balance of the cash flow hedge reserve, amounts recognised in the reserve, and amounts transferred out of the reserve are shown in the following table.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Balance at beginning of year	27	113
Transferred to the income statement	(1,045)	(37)
Net gains from change in fair value	1,400	(82)
Net movement before tax	355	(119)
Tax on net movement in cash flow hedge reserve	(100)	33
Balance at end of year	282	27

There were no transactions for which cash flow hedge accounting had to be ceased as a result of the highly probable cash flows no longer being expected to occur (30 September 2021: nil). There are \$16 million of balances recognised in the cash flow hedge reserve for which hedge accounting is no longer applied (30 September 2021: nil).

A gain of \$2 million was recognised in gains less losses on financial instruments in the income statement related to hedge ineffectiveness from cash flow hedge relationships (30 September 2021: \$2 million loss).

Hedged items

The carrying amount of hedged items in fair value hedge relationships and the accumulated amount of fair value hedge adjustments included in the carrying amount are shown in the table below.

The accumulated amount of fair value hedge adjustments included in the carrying amount of hedged items that have ceased to be adjusted for hedging gains and losses are \$30 million (30 September 2021: nil).

		Banking Group			
Dollars in Millions	Amount	Fair value Carrying hedge Amount adjustments 30/9/21 30/9/22		hedge adjustments	
Assets Loans and advances to customers (housing loans) ¹	-	7,941	(30)	(29)	
Liabilities Bonds and notes	8,166	4,062	(846)	1	

¹ As at 31 March 2022, the Banking Group discontinued portfolio fair value hedge relationships under NZ IAS 39. Loans and advances to customers (housing loans) are no longer designated as hedged items in portfolio fair value hedges.

Fair value hedge relationships resulted in the following changes in value used as the basis for recognising hedge ineffectiveness during the period.

	Banking Group		
Dollars in Millions	30/9/22	30/9/21	
Gains/(losses) on hedging instruments	(750)	108	
Gains/(losses) on hedged items attributable to the hedged risk	766	(107)	
Hedge ineffectiveness recognised in gains less losses on financial instruments in the income statement	16	1	

Note 13 Deferred Tax

Accounting policy

Deferred tax assets are the amounts of income tax recoverable in future periods including unused tax losses and unused tax credits carried forward. Deferred tax liabilities are the amounts of income tax payable in future periods. Deferred tax assets and liabilities arise when there is a temporary difference between the tax bases (amount attributable to the asset or liability for tax purposes) of assets and liabilities and their carrying amounts in the balance sheet. Deferred tax assets and liabilities are determined using tax rates (and laws) that have been enacted or substantially enacted by the reporting date and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

Deferred income tax liabilities are recognised for all taxable temporary differences, except:

- for a deferred income tax liability arising from the initial recognition of goodwill;
- where the deferred income tax liability arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit or loss nor taxable profit or loss; and
- in respect of taxable temporary differences associated with investments in wholly owned entities, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred income tax assets are recognised for all deductible temporary differences, carry-forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry-forward of unused tax credits and unused tax losses can be utilised:

- except where the deferred income tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit or loss nor taxable profit or loss;
- in respect of deductible temporary differences associated with investments in wholly owned entities, associates and interests in joint ventures, deferred tax assets are only recognised to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilised.

The carrying amounts of deferred income tax assets are reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Deferred tax assets and liabilities are offset where there is a legally enforceable right to offset current tax assets and liabilities and they relate to income taxes levied by the same tax authority on the same taxable entity, or on different tax entities, but they intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities are realised simultaneously.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Deferred tax assets		
Balance at beginning of year	283	295
Tax benefit/(expense) recognised in income statement	10	(52)
Tax credit recognised in other comprehensive income/(expense)	-	40
Balance at end of year	293	283
Deferred tax assets were attributable to the following items:		
Employee entitlements	9	8
Credit risk adjustments on financial assets designated at fair value through profit or loss	12	9
Allowance for expected credit losses on credit exposures	220	212
Depreciation and amortisation	29	34
Operating expense provisions	5	14
Prepaid pension assets	(2)	(2)
NZ IFRS 16 leases	-	(2)
Other	20	10
Total deferred tax assets	293	283

The recognition of the deferred tax assets relies on management's judgements about the probability and sufficiency of future taxable profits and future reversals of existing taxable temporary differences.

Note 14 Other Assets

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Accrued interest receivable	169	102
Prepaid pension assets	8	9
Securities sold - not yet settled	479	574
Other assets	357	212
Total other assets	1,013	897

Note 15 Goodwill and Other Intangible Assets

Accounting policy

Goodwill

Goodwill arises on the acquisition of an entity and represents the excess of the consideration paid over the fair value of the identifiable net assets acquired.

Software costs

External and internal costs that are incurred to acquire or develop software are capitalised and recognised as an intangible asset. Capitalised software costs and other intangible assets are amortised on a systematic basis once deployed, using the straight-line method over their expected useful lives which are between three and ten years.

Impairment of intangible assets

Assets with an indefinite useful life, including goodwill, are not subject to amortisation and are tested on an annual basis for impairment, and additionally whenever an indication of impairment exists. Assets that are subject to amortisation are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the carrying amount of an asset exceeds its recoverable amount. The recoverable amount of an asset is the higher of its fair value less costs to sell or its value in use. For assets that do not generate largely independent cash flows, the recoverable amount is determined for the cash-generating unit ("CGU") to which that asset belongs. Goodwill impairment is assessed at the group of CGUs that represents the lowest level within the Banking Group at which goodwill is maintained for internal management purposes.

Key judgements and estimates

The determination of appropriate cash flows, growth rates and discount rates for the calculation of value in use is subjective and requires a significant degree of judgement.

		iroup
Dollars in Millions	30/9/22	30/9/21
Goodwill	15	15
Internally generated software	379	265
Acquired software	15	13
Total goodwill and other intangible assets	409	293
At cost	1,266	1,094
Deduct: Accumulated amortisation/impairment losses	(857)	(801)
Total goodwill and other intangible assets	409	293

Liability Notes

Note 16 Due to Central Banks and Other Institutions

Accounting policy

Due to central banks and other institutions consists of transaction balances with central banks and other institutions, deposits from central banks and other institutions and repurchase agreements.

Repurchase agreements

Securities sold under agreements to repurchase are classified in the trading portfolios and accounted for accordingly. The Bank's obligation to repurchase is classified under Note 16 Due to central banks and other institutions and Note 23 Related entity transactions. The difference between the sale and repurchase prices represents interest expense and is recognised in the income statement over the term of the repurchase agreements.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Transaction balances with other institutions ¹	1,250	1,126
Deposits from central banks ²	79	99
Deposits from other institutions ^{2,3}	229	496
Securities sold under agreements to repurchase from central banks ⁴	3,453	2,664
Securities sold under agreements to repurchase from other institutions ¹	149	546
Total due to central banks and other institutions	5,160	4,931

¹Classified as cash and cash equivalents in the cash flow statement.

Deposits from central banks and deposits from other institutions are unsecured and rank equally with the Banking Group's other unsecured liabilities. In the unlikely event that the Bank was put into liquidation or ceased to trade, the claims of secured creditors and those creditors set out in Schedule 7 of the Companies Act 1993 would rank ahead of the claims of unsecured creditors.

Note 17 Deposits and Other Borrowings

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Deposits not bearing interest	12,784	12,077
On-demand and short term deposits bearing interest ⁵	33,295	34,668
Term deposits	28,126	24,386
Total customer deposits	74,205	71,131
Certificates of deposit	1,661	2,435
Commercial paper	2,288	4,429
Total deposits and other borrowings	78,154	77,995

⁵ Comparative balance has been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Deposits and other borrowings are unsecured and rank equally with the Banking Group's other unsecured liabilities. In the unlikely event that the Bank was put into liquidation or ceased to trade, the claims of secured creditors and those creditors set out in Schedule 7 of the Companies Act 1993 would rank ahead of the claims of unsecured creditors.

² Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

³ Included in deposits from other institutions as at 30 September 2022 was \$1 million classified as cash and cash equivalents in the cash flow statement (30 September 2021: \$1 million).

⁴ Included in securities sold under agreements to repurchase from central banks was nil (30 September 2021: nil) classified as cash and cash equivalents in the cash flow statement, \$1,353 million (30 September 2021: \$1,664 million) relating to Term Lending Facility and \$2,100 million (30 September 2021: \$1,000 million) relating to Funding for Lending Programme.

Note 18 Bonds and Notes

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Domestic Covered Bonds	302	314
Offshore Covered Bonds	4,893	4,025
Domestic medium term notes	3,161	2,811
Offshore medium term notes	11,825	10,368
Total bonds and notes	20,181	17,518

As at 30 September 2022, the contractual amount to be paid at maturity of the Bonds and notes is \$21,391 million (30 September 2021: \$17,158 million).

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Bonds and notes by currency		
US Dollar	8,238	5,861
New Zealand Dollar	3,463	3,124
Australian Dollar	185	153
Hong Kong Dollar	140	170
Euro	7,203	7,275
Swiss Franc	952	935
Total bonds and notes by currency	20,181	17,518

Note 19 Other Liabilities

		iroup
Dollars in Millions	30/9/22	30/9/21
Accrued interest payable	221	99
Payables and accrued expenses	344	147
Securities purchased - not yet settled	682	300
Employee entitlements	101	98
Lease liabilities	279	315
Other liabilities	130	130
Total other liabilities	1,757	1,089

As at 30 September 2022, \$121 million (30 September 2021: \$96 million) of certain unsecured liabilities as set out in Schedule 7 of the Companies Act 1993 rank in priority to general creditors' claims in a winding up of the Bank.

Note 20 Leases

Accounting policy

At the inception of a contract, the Banking Group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. At inception or on reassessment of a contract that contains a lease component, the Banking Group allocates the consideration in the contract to each lease component on the basis of their relative stand-alone selling prices. For the leases of land and buildings where the Banking Group is the lessee, the Banking Group has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Banking Group recognises a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset, less any lease incentives received.

The right-of-use asset is subsequently measured under the cost model and depreciated using the straight-line method from the commencement date to the end of the lease term. In addition, the right-of-use asset is reviewed for impairment and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that have not been paid at the commencement date, discounted using an incremental borrowing rate which reflects the rate that the Banking Group would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions. The lease liability is subsequently measured at amortised cost using the effective interest method. It is remeasured when there is a lease modification that is not accounted for as a separate lease, there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Banking Group's estimate of the amount expected to be payable under a residual value quarantee, or if the Banking Group changes its assessment of whether it will exercise a purchase, extension or termination option. The Banking Group does not include extension options in the measurement of its lease liability until such time that it is reasonably certain that the options will be exercised.

The Banking Group has elected not to recognise right-of-use assets and lease liabilities for short-term leases and leases of low-value assets. The Banking Group recognises the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

When the Banking Group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. To classify each lease, the Banking Group makes an overall assessment of whether the lease transfers substantially all the risks and rewards incidental to ownership of the underlying asset. Where this is the case, the lease is a finance lease. All other leases are classified as operating leases.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Effect of leases on the Balance Sheet		
Right-of-use assets		
Property, plant and equipment		
Buildings	277	317
Technology and other	3	5
Total right-of-use assets	280	322
Additions to right-of-use assets during the period	8	111
Lease Liabilities		
Other liabilities	279	315
Total lease liabilities	279	315
	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Effect of leases on the Income Statement		
Depreciation		
Buildings	48	53
Technology and other	2	2
Total depreciation on right-of-use assets	50	55
Interest	7	6
Total interest expense on lease liability	7	6
Short-term lease expense	6	4

Future cash flow effect of leases

The table below is a maturity analysis of future lease payments in respect of existing lease arrangements on an undiscounted basis.

	Banking Group	
Dollars in Millions	30/9/22	30/9/21
Due within one year	49	48
Due after one year but no later than five years	124	151
Due after five years	145	152
Total non-cancellable lease commitments	318	351

The Banking Group has committed to a number of future lease contracts in relation to new buildings across New Zealand. As these new leases become effective the Banking Group will recognise additional right-of-use assets and lease liabilities of approximately \$182 million over the next five years (year ended 30 September 2021: \$244 million).

Note 21 Subordinated Debt

Note 21 Subordinated Debt			
	Banking G	Banking Group	
Dollars in Millions	30/9/22	30/9/21	
Subordinated Notes due to related entity			
National Australia Bank Limited	1,050	1,050	
Total Subordinated Notes due to related entity	1,050	1,050	
Perpetual Notes due to related entity			
National Australia Bank Limited	900	900	
Total Perpetual Notes due to related entity	900	900	
Total subordinated debt	1,950	1,950	

2028 Subordinated Notes due to related entity - treated as Tier 2 capital

On 8 May 2018, the Bank issued \$500 million of subordinated unsecured notes ("2028-Subordinated Notes") to National Australia Bank Limited. The 2028-Subordinated Notes are treated as Tier 2 capital under the Bank's regulatory capital requirements and are subject to a transitional phase-out from 1 January 2022. For further information refer to Note 33 *Capital adequacy*. The 2028-Subordinated Notes will mature on 8 May 2028. The 2028-Subordinated Notes do not confer any right to vote in general meetings of the Bank or National Australia Bank Limited.

Redemption

Subject to certain conditions, including the approval of the RBNZ, the Bank has the option to redeem all or some of the 2028-Subordinated Notes for their face value together with accrued interest (if any) on any interest payment date on or after 8 May 2023. In addition, subject to certain conditions, including the approval of the RBNZ, the Bank may redeem at any time all (but not some only) of the 2028-Subordinated Notes if a regulatory or tax event occurs.

Interest

The interest rate for the 2028-Subordinated Notes is reset every six months based on the prevailing six-month bank bill rate plus a margin of 1.95% per annum for the term of the 2028-Subordinated Notes. Interest is payable semi-annually in arrear subject to the Bank being solvent (by satisfying the solvency test in section 4 of the Companies Act 1993) on the relevant payment date and remaining solvent immediately after making the payment. If the Bank does not pay an amount on the 2028-Subordinated Notes because it has not satisfied the solvency test, the Bank must pay that amount on the first date on which it is able to make the payment and satisfy the solvency test.

Interest will accrue daily (at the interest rate then applicable to the 2028-Subordinated Notes) on any interest that is not paid when scheduled as a result of the Bank not satisfying the solvency test on the relevant payment date. If some or all of the 2028-Subordinated Notes are converted or written off, any rights to receive interest on those 2028-Subordinated Notes (including any accrued but unpaid interest) are also terminated and written off.

Conversion

If a non-viability trigger event ("NVTE") occurs, some or all of the 2028-Subordinated Notes will automatically and immediately be converted into ordinary shares in the Bank ("BNZ Shares") or written off.

Under the terms and conditions of the 2028-Subordinated Notes, an NVTE will occur if: (i) the RBNZ gives the Bank a direction under the BPS Act requiring the Bank to exercise its right of conversion or write off of its Tier 2 capital instruments; or (ii) the Bank is subject to statutory management under the BPS Act and the New Zealand statutory manager announces his or her decision, to convert or write off the Bank's Tier 2 capital instruments.

Ranking of 2028-Subordinated Notes

In a liquidation of the Bank (if the 2028-Subordinated Notes have not been converted or written off), the claims of holders of 2028-Subordinated Notes will rank: (1) ahead of claims of holders of BNZ Shares and other subordinated securities that rank below the 2028-Subordinated Notes (such as the Perpetual Notes due to related entity); (2) equally with claims of other holders of 2028-Subordinated Notes, the holders of the 2031-Subordinated Notes and holders of other subordinated securities that rank equally with the 2028-Subordinated Notes; and (3) behind all other claims (such as those of the Bank's secured creditors, depositors and holders of unsecured unsubordinated bonds issued by the Bank from time to time). If the 2028-Subordinated Notes are converted into BNZ Shares, holders will rank equally with existing shareholders of the Bank.

2031 Subordinated Notes due to related entity - treated as Tier 2 capital

On 25 June 2021, the Bank issued \$550 million of subordinated unsecured notes ("2031-Subordinated Notes") to National Australia Bank Limited. The 2031-Subordinated Notes are treated as Tier 2 capital under the Bank's regulatory capital requirements. The 2031-Subordinated Notes will mature on 25 June 2031. The 2031-Subordinated Notes do not confer any right to vote in general meetings of the Bank or National Australia Bank Limited.

Redemption

Subject to certain conditions, including the approval of the RBNZ, the Bank has the option to redeem all or some of the 2031-Subordinated Notes for their face value together with accrued interest (if any) on any interest payment date on or after 25 June 2026. In addition, subject to certain conditions, including the approval of the RBNZ, the Bank may redeem at any time all (but not some only) of the 2031-Subordinated Notes if a regulatory or tax event occurs.

Interest

The interest rate for the 2031-Subordinated Notes is reset every three months based on the prevailing three-month bank bill rate plus a margin of 1.36% per annum for the term of the 2031-Subordinated Notes. Interest is payable quarterly in arrear subject to the Bank being solvent (by satisfying the solvency test in section 4 of the Companies Act 1993) on the relevant payment date and remaining solvent immediately after making the payment. If the Bank does not pay an amount on the 2031-Subordinated Notes because it has not satisfied the solvency test, the Bank must pay that amount on the first date on which it is able to make the payment and satisfy the solvency test.

Interest will accrue daily (at the interest rate then applicable to the 2031-Subordinated Notes) on any interest that is not paid when scheduled as a result of the Bank not satisfying the solvency test on the relevant payment date.

Note 21 Subordinated Debt continued

Ranking of 2031-Subordinated Notes

In a liquidation of the Bank, the claims of holders of 2031-Subordinated Notes will rank: (1) ahead of claims of holders of BNZ Shares and other subordinated securities that rank below the 2031-Subordinated Notes (such as the Perpetual Notes due to related entity); (2) equally with claims of other holders of 2031-Subordinated Notes, the holders of the 2028-Subordinated Notes and holders of other subordinated securities that rank equally with the 2031-Subordinated Notes; and (3) behind all other claims (such as those of the Bank's secured creditors, depositors and holders of unsecured unsubordinated bonds issued by the Bank from time to time).

Perpetual Notes due to related entity - treated as Additional Tier 1 capital

On 20 October 2016, the Bank issued \$900 million of mandatorily convertible subordinated perpetual unsecured notes ("Perpetual Notes") to National Australia Bank Limited. The Perpetual Notes are treated as Additional Tier 1 capital under the Bank's regulatory capital requirements and are subject to a transitional phase out from 1 January 2022. For further information refer to Note 33 Capital adequacy. The Perpetual Notes have no fixed maturity date and will remain on issue indefinitely if not repaid, converted or written off. The Perpetual Notes do not confer any right to vote in general meetings of the Bank or National Australia Bank Limited.

From 20 October 2021, the interest rate for the Perpetual Notes changed from a fixed rate of 6.7539% per annum to a floating interest rate equal to the three-month bank bill rate plus a margin of 4.410% per annum.

Interest is payable quarterly in arrear subject to the Bank's discretion and certain conditions being satisfied (including RBNZ requirements). If interest is not paid, the Bank may not (except in limited circumstances) pay any dividends on BNZ Shares or undertake a share buy-back or other capital reduction until interest is next paid. Unpaid interest is cancelled and does not accumulate.

Conversion

On 20 October 2023, subject to certain mandatory conversion conditions, all of the Perpetual Notes will be converted into BNZ Shares. If the mandatory conversion conditions are not met, the mandatory conversion will be deferred for a specific period (provided that conversion is not required to take place as a result of a common equity trigger event ("CETE") or an NVTE).

The number of BNZ Shares issued on a conversion is determined by reference to the net assets of the Bank in the Bank's most recently published Disclosure Statement and such other information as the Bank considers appropriate.

On any date that a regulatory or tax event occurs, the Bank may convert or redeem some or all of the Perpetual Notes. Any such conversion or redemption is subject to certain conditions, including in the case of redemption the approval of the RBNZ.

If a CETE or an NVTE occurs, the Bank must convert some or all of the Perpetual Notes into BNZ Shares. Under the terms and conditions of the Perpetual Notes, a CETE will occur if the Banking Group's Common Equity Tier 1 capital ratio is equal to or less than 5.125% and an NVTE will occur if the RBNZ directs the Bank to convert or write off the Perpetual Notes, or the Bank is made subject to statutory management and the statutory manager decides the Bank must convert or write off the Perpetual Notes.

Ranking of Perpetual Notes

In a liquidation of the Bank (if the Perpetual Notes have not been converted or written off), the claims of holders of Perpetual Notes will rank: (1) ahead of claims of holders of BNZ Shares and other subordinated securities that rank below the Perpetual Notes; (2) equally with claims of other holders of Perpetual Notes and holders of other subordinated securities that rank equally with the Perpetual Notes; and (3) behind all other claims on the Bank (such as those of the Bank's secured creditors, depositors and holders of the Subordinated Notes, and other unsecured unsubordinated bonds issued by the Bank from time to time). If the Perpetual Notes are converted into BNZ Shares, holders will rank equally with existing shareholders of the Bank.

Subordinated Notes due to external investors - treated as Tier 2 capital (redeemed)

On 17 December 2015, the Bank issued \$550 million of subordinated unsecured notes ("Listed Subordinated Notes") which were scheduled to mature on 17 December 2025. On 17 June 2021, the Bank exercised its option to fully redeem the Listed Subordinated Notes prior to the scheduled maturity date of 17 December 2025. The Listed Subordinated Notes were treated as Tier 2 capital under the Bank's and National Australia Bank Limited's regulatory capital requirements.

Shareholder's Equity Note

Note 22 Contributed Equity

	Banking G	Banking Group	
Number of shares in Millions	30/9/22	30/9/21	
Issued and fully paid ordinary shares			
Balance at beginning of year	5,076	5,076	
Balance at end of year	5,076	5,076	

The issued and fully paid ordinary share capital is included in Tier 1 capital of the Banking Group and the Registered Bank (refer to Note 33 *Capital adequacy*).

Ordinary shares

The ordinary shares do not have a par value. All ordinary shares have equal voting rights and share equally in dividends and any distribution of the surplus assets of the Bank in the event of liquidation.

Dividends on ordinary shares for the year ended 30 September 2022 were a weighted average of 11.03 cents per share (year ended 30 September 2021: nil).

Other Notes

Note 23 Related Entity Transactions

The Bank is a wholly owned controlled entity of NAGNZ. The ultimate parent bank of Bank of New Zealand is National Australia Bank Limited. During the year ended 30 September 2022, there were dealings between the Bank and its related entities (including NAB) as well as other related parties (including key management personnel, their close family members and their controlled entities). Details of these transactions are outlined below.

Dealings with NAB included on-balance sheet activities such as funding and accepting deposits and other activities such as foreign exchange transactions.

	Banking G	iroup	
Dollars in Millions	30/9/22	30/9/21	
Total balances with related entities			
Amounts due from ultimate parent	195	150	
Amounts due from controlled entities of ultimate parent	15	29	
Total amounts due from related entities ¹	210	179	
Derivative financial assets with related entities	3,997	1,713	
Amounts due to ultimate parent	1,123	366	
Amounts due to controlled entities of ultimate parent	1,037	940	
Total amounts due to related entities ²	2,160	1,306	
Derivative financial liabilities with related entities	3,112	1,352	
Subordinated debt due to related entities (refer to Note 21)	1,950	1,950	

¹ Included in amounts due from related entities as at 30 September 2022 was \$206 million classified as cash and cash equivalents in the cash flow statement (30 September 2021: \$172 million).

No provisions have been recognised in respect of loans provided to related entities (year ended 30 September 2021: nil). There were no debts with any of the above parties written off or forgiven during the year ended 30 September 2022 (year ended 30 September 2021: nil).

Included within the amounts due from and due to related entities were the following balances:

	Banking G	Banking Group			
Dollars in Millions	30/9/22	30/9/21			
Amounts due from related entities Securities purchased under agreements to resell to ultimate parent	184	145			
Amounts due to related entities					
Deposit from controlled entity of ultimate parent	972	893			
Collateral received from ultimate parent to meet derivative trading obligations	1,045	212			
Securities sold under agreements to repurchase from ultimate parent	9	60			

Transactions with related entities

The Banking Group provides banking and other administrative services to members of NAB operating in New Zealand at arm's length and on normal terms and conditions.

During the financial year, there have been dealings between the Bank and its controlled entities, and the Banking Group and its related entities. The Bank provides a range of services to related entities including the provision of banking facilities. These transactions are normally subject to normal commercial terms and conditions. The Bank provides some accounting administration and banking services to controlled entities for which fees may not be charged.

Dividends paid to the shareholder are disclosed in the Statement of Changes in Equity and in Note 22 Contributed equity.

For the year ended 30 September 2022, dividends were paid by National Wealth Management New Zealand Holdings Limited, a controlled entity of the Bank's ultimate parent until 30 September 2022, therefore \$8 million of imputation credits were utilised from the group imputation credit account (year ended 30 September 2021: \$12 million).

BNZ Investment Services Limited ("BNZISL"), a wholly owned controlled entity of the Bank, is the manager and issuer of the BNZ KiwiSaver Scheme ("KiwiSaver"), the Private Wealth Series ("PWS"), the YouWealth Scheme ("YWS"), the BNZ Wholesale Funds ("BWF") and the BNZ Term PIE (collectively the "Investment Schemes"). The banking arrangements for these Investment Schemes are provided by the Bank. Investments by the Investment Schemes currently include, among other things, bank deposits with the Bank. As at 30 September 2022, KiwiSaver, PWS, YWS and BWF collectively held \$22 million in transactional bank accounts with the Bank (30 September 2021: \$39 million). Refer to Note 30 Structured entities, securitisation, funds management, fiduciary activities and insurance for further information.

The RMBS Trust provides an internal residential mortgage-backed securities programme to issue securities as collateral for borrowing from the RBNZ. The Covered Bond Trust holds certain Bank of New Zealand housing loans and its trustee guarantees covered bonds issued by the Bank and BNZ-IF. Refer to Note 26 Transfers of financial assets for further information.

The Bank guarantees the obligations of BNZ-IF in respect of securities issued by BNZ-IF to investors.

On 30 September 2022, NAB completed the sale of National Wealth Management New Zealand Holdings Limited, BNZ Life Insurance Limited and BNZ Insurance Services Limited to Partners Life Limited, at which point these companies ceased to be controlled entities of National Australia Bank Limited and related entities of the Banking Group.

² Included in amounts due to related entities as at 30 September 2022 was \$1,079 million classified as cash and cash equivalents in the cash flow statement (30 September 2021: \$1,017 million).

Note 23 Related Entity Transactions continued

	Banking G	roup
Dollars in Millions	30/9/22	30/9/21
Interest income on amounts due from related entities		
Ultimate parent	3	19
Total interest income on amounts due from related entities	3	19
Interest expense on amounts due to related entities		
Ultimate parent	93	75
Controlled entities of ultimate parent	13	2
Total interest expense on amounts due to related entities	106	77
Gains less losses on financial instruments and other operating income		
Net unrealised gain on derivative contracts with ultimate parent	524	54
Commissions received from controlled entities of ultimate parent for sale of insurance	12	18
Operating expenses		
Intercompany recharges paid to ultimate parent	23	32
Other service charges paid to ultimate parent	15	15
Other transactions		
Payment for the use of tax losses to controlled entities of ultimate parent	4	6

Key management personnel

Key management personnel are defined as being Directors and the executive team of the Bank. The information relating to key management personnel disclosed below includes transactions with those individuals, their close family members and their controlled entities.

Loans and deposits with non-executive key management personnel of the Bank are made in the ordinary course of business on commercial terms and conditions. Loans and deposits with executive key management personnel of the Bank are made either:

- on commercial terms and conditions; or
- on terms and conditions which apply to other employees of the Bank.

All other transactions with key management personnel, their related entities and other related parties are conducted in the ordinary course of business on commercial terms and conditions.

All loans made to key management personnel have been made in accordance with the Bank's lending policies. No individually assessed allowance has been recognised in respect of loans provided to key management personnel. There were no debts written off or forgiven during the year ended 30 September 2022 (year ended 30 September 2021: nil).

	Banking	g Group	
Dollars in Millions	30/9/22	30/9/21	
Transactions with key management personnel			
Short term employee benefits	14	12	
Other long-term benefits	1	-	
Termination benefits	1	-	
Share-based payments	1	1	
Total key management personnel benefits	17	13	
Loans to key management personnel	14	7	
Deposits from key management personnel	9	7	
Interest income on amounts due from key management personnel ¹	-	-	
Interest expense on amounts due to key management personnel ¹	-		

 $^{^{1}}$ Interest income and expense amounts are shown as nil in the table above as a result of rounding to the nearest million.

The Banking Group engages in equity settled share-based payment transactions via its ultimate parent, National Australia Bank Limited, in respect of services received from its employees. The value of the services received is measured by reference to the grant date fair value of the shares or performance rights. The cost relating to the shares or performance rights granted is recognised in the income statement over the period in which the services are received, which is the vesting period. The Banking Group reimburses National Australia Bank Limited for the cost of shares or performance rights granted to its employees.

The following table shows performance rights and shares granted to the Banking Group employees:

	Banking Group (30/9/22)			roup (30/9/21)
		Weighted average		Weighted average
	Number	grant date fair value	Number	grant date fair value
Performance rights granted during the year	54,019	A\$17.30	86,714	A\$11.50
Fully paid ordinary shares granted during the year	31,829	A\$29.22	-	-

The number of performance rights outstanding as at 30 September 2022 was 54,019 (30 September 2021: 207,176).

For performance rights that do not have any market-based performance hurdles attached, the weighted average grant date fair value is adjusted for expected dividends over the vesting period.

Note 24 Classification of Financial Instruments and Fair Value Measurement **Categories of financial instruments**

For the purposes of this note, carrying amount refers to amounts reflected on the balance sheet.

	Banking	Banking Group (30/9/22) Banking Group			g Group (30/9/2	лр (30/9/21)	
Dollars in Millions	Fair Value Through Profit or Loss	At Amortised Cost	Total Carrying Amount	Fair Value Through Profit or Loss	At Amortised Cost	Total Carrying Amount	
Financial assets							
Cash and liquid assets	-	9,581	9,581	-	9,722	9,722	
Due from central banks and other institutions ¹	-	372	372	-	304	304	
Collateral paid ¹	-	2,814	2,814	-	535	535	
Trading securities	7,414	-	7,414	7,348	-	7,348	
Derivative financial instruments	9,540	-	9,540	4,404	-	4,404	
Loans and advances to customers ¹	648	98,698	99,346	920	93,771	94,691	
Amounts due from related entities	-	210	210	-	179	179	
Other financial assets	-	711	711	-	703	703	
Total financial assets	17,602	112,386	129,988	12,672	105,214	117,886	
Financial liabilities							
Due to central banks and other institutions ¹	-	5,160	5,160	-	4,931	4,931	
Collateral received ¹	-	2,134	2,134	-	570	570	
Trading liabilities	302	-	302	537	-	537	
Derivative financial instruments	8,228	-	8,228	3,189	-	3,189	
Deposits and other borrowings ¹	3,949	74,205	78,154	6,864	71,131	77,995	
Bonds and notes	12,015	8,166	20,181	13,457	4,061	17,518	
Amounts due to related entities	-	2,160	2,160	-	1,306	1,306	
Other financial liabilities	-	1,519	1,519	-	812	812	
Subordinated debt	-	1,950	1,950	-	1,950	1,950	
Total financial liabilities	24,494	95,294	119,788	24,047	84,761	108,808	

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 Principal accounting policies for further information.

Movements in fair value of financial liabilities designated at fair value through profit or loss on initial recognition attributable to changes in credit risk

	Banking G	roup
Dollars in Millions	30/9/22	30/9/21
Bonds and notes		
Balance at beginning of year	121	105
Movement during the year	(70)	16
Balance at end of year	51	121

The movement in fair value attributable to changes in the credit risk of financial liabilities designated at fair value through profit or loss is determined as the amount of change in fair value that is not attributable to changes in market conditions that give rise to market risk.

Hierarchy for fair value measurements

The tables on page 46 present a three-level fair value hierarchy of the Banking Group's financial instruments.

The three levels in the hierarchy are based on the valuation methods and assumptions used in determining the fair values of financial instruments. The levels are as follows:

- Level 1 Quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Management uses its judgement in selecting an appropriate valuation technique for financial instruments which are not quoted in an active market.

The Banking Group considers transfers between levels of the fair value hierarchy, if any, to have occurred at the beginning of the respective reporting period. There were no transfers between any of the levels for the year ended 30 September 2022 (year ended 30 September 2021: nil).

Note 24 Classification of Financial Instruments and Fair Value Measurement continued Financial instruments at fair value

	В	Banking Group (30/9/22)				
Dollars in Millions	Fair Value Total	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3		
Financial assets						
Trading securities	7,414	2,914	4,500	-		
Derivative financial instruments	9,540	-	9,540	-		
Loans and advances to customers	648	-	648	-		
Financial liabilities						
Trading liabilities	302	277	25	-		
Derivative financial instruments	8,228	-	8,228	-		
Deposits and other borrowings	3,949	-	3,949	-		
Bonds and notes	12,015	-	12,015			
		Banking Group	(30/9/21)			
Financial assets						
Trading securities	7,348	4,361	2,987	-		
Derivative financial instruments	4,404	-	4,404	-		
Loans and advances to customers	920	-	920	-		
Financial liabilities						
Trading liabilities	537	460	77	-		
Derivative financial instruments	3,189	-	3,189	-		
Deposits and other borrowings	6,864	-	6,864	-		
Bonds and notes	13,457	-	13,457	-		

Financial instruments at amortised cost¹

		Banking Group (30/9/22)					
ollars in Millions	Carrying Amount	Fair Value Total	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3		
Financial assets							
Loans and advances to customers	98,698	97,315	-	2,195	95,120		
Financial liabilities							
Deposits and other borrowings	74,205	74,082	-	74,082	-		
Bonds and notes	8,166	8,103	-	8,103	-		
Subordinated debt	1,950	1,974	-	1,974	-		
		Banking Group (30/9/21)					
Financial assets							
Loans and advances to customers ²	93,771	93,452	-	1,948	91,504		
Financial liabilities							
Deposits and other borrowings ²	71,131	71,115	-	71,115	-		
Bonds and notes	4,061	4,097	-	4,097	-		
Subordinated debt	1,950	2,004	-	2,004	-		

¹ Fair values for financial assets and liabilities at amortised cost, where the carrying amount is not considered a close approximation of fair value.

² Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Note 24 Classification of Financial Instruments and Fair Value Measurement continued

The fair value estimates are based on the following methodologies and assumptions:

Due from central banks and other institutions/Due to central banks and other institutions and Collateral paid/Collateral received

These assets and liabilities are primarily short term in nature or are receivable or payable on demand. In such cases the carrying amounts approximate their fair value or have been determined using discounted cash flow models based on observable market prices as appropriate.

Trading securities and Trading liabilities

Trading securities include treasury bills, bank bills and bonds, promissory notes, and government and other securities. Trading liabilities include short sales of securities. Where quoted market prices are not available, the Banking Group obtains the fair value by means of discounted cash flows and other valuation techniques based on observable market prices. These techniques have accounted for factors such as interest rates, credit risk and liquidity.

Derivative financial instruments

The fair values of trading and hedging derivatives, including foreign exchange contracts, interest rate swaps, interest rate and currency option contracts, and currency swaps, are obtained from observable market prices as at the reporting date, discounted cash flow models or option pricing models as

Loans and advances to customers

The carrying amount of loans and advances is net of allowance for expected credit losses, credit risk adjustments, unearned and deferred income. Floating rate loans to customers generally reprice within six months, therefore, their fair value is assumed to equate to their carrying amount. For fixed rate loans, the fair value is estimated by discounting the expected future cash flows based on the maturity of the loans and advances, using current market interest rates. The fair value of loans and advances reflects the movement in observable market interest rates since origination but does not include any adjustments for deferred income.

Deposits and other borrowings

With respect to customer deposits, the carrying amounts of non-interest-bearing, call and variable rate deposits and fixed rate deposits maturing within six months approximate their fair value. For other fixed rate term deposits, the fair value is estimated by discounting the cash flows based on the maturity of the deposit, using current market interest rates.

With respect to certificates of deposit and commercial paper, these liabilities are primarily short term in nature. The carrying amounts have been determined using discounted cash flow models based on observable market prices.

The fair value of bonds and notes is calculated based on a discounted cash flow model using a yield curve appropriate to the remaining maturity of the instruments. This is based on observable market prices as at the reporting date where available, otherwise alternative observable market source data is used. The fair value includes a calculation of the Banking Group's own credit risk based on observable market data.

Subordinated debt

For Subordinated Notes and Perpetual Notes, the fair value is estimated by discounting the expected future cash flows based on the maturity of the notes, using current market interest rates of similar types of notes.

Other financial assets/liabilities

These include securities sold/purchased but not yet settled and accrued interest. Securities sold/purchased but not yet settled and the fair value of accrued interest is approximately equal to the carrying amounts on the balance sheet due to their short term nature.

Note 25 Offsetting Financial Assets and Financial Liabilities Accounting policy

Under NZ IAS 32 *Financial Instruments: Presentation* ("NZ IAS 32"), financial assets and financial liabilities shall be offset in the balance sheet only when two requirements are met: there is a legally enforceable right to offset the recognised amounts and an intention to either settle on a net basis or realise the asset and settle the liability simultaneously.

The table below illustrates the amounts of financial instruments that have been offset on the balance sheet and also those amounts that are subject to enforceable master netting arrangements or similar agreements (i.e. offsetting agreements and any related financial collateral). The table excludes financial instruments not subject to offset and that are only subject to collateral arrangements.

The 'Net amounts' presented in the table are not intended to represent the Banking Group's actual exposure to credit risk, as the Banking Group utilises a wide range of strategies to mitigate credit risk in addition to netting and collateral arrangements. The 'Carrying amount' is comprised of the sum of the 'Net amounts reported on balance sheet' and 'Amounts not subject to enforceable netting arrangements' included in the table below.

Banking Group (30/9/22)

					J				
	Effect of Offse		nts Subject to Er ance Sheet		ting Arrangem Related Amoun			Amounts not	
Dollars in Millions	Gross Amounts	Amount Offset	Net Amounts Reported on Balance Sheet	Financial Instru- ments	Non-Cash Collateral ¹	Cash Collateral ¹	Net Amount	Subject to Enforceable Netting Arrange- ments	Carrying Amount
Financial assets									
Derivative financial instruments	20,595	11,727	8,868	4,773	161	2,877	1,057	672	9,540
Collateral paid ²	3,945	1,131	2,814	-	-	1,921	893	-	2,814
Reverse repurchase agreements ³	501	-	501	-	501	-	-	-	501
Loans and advances	928	895	33	-	-	-	33	99,313	99,346
Financial liabilities									
Derivative financial instruments	20,245	12,741	7,504	4,773	-	1,921	810	724	8,228
Collateral received ⁴	3,296	117	3,179	-	-	2,877	302	-	3,179
Repurchase agreements ⁵	3,611	-	3,611	-	3,611	-	-	-	3,611
Deposits and other borrowings	2,211	895	1,316	-	-	-	1,316	76,838	78,154
				Bankin	g Group (30/9	/21)			
Financial assets									
Derivative financial instruments	9,821	5,830	3,991	2,389	-	647	955	413	4,404
Collateral paid ²	887	352	535	-	-	146	389	-	535
Reverse repurchase agreements ³	741	-	741	-	741	-	-	-	741
Loans and advances ⁶	644	608	36	-	-	-	36	94,655	94,691
Financial liabilities									
Derivative financial instruments	8,907	5,940	2,967	2,389	-	146	432	222	3,189
Collateral received ⁴	1,024	242	782	-	-	647	135	-	782
Repurchase agreements ⁵	3,270	-	3,270	-	3,270	-	-	-	3,270
Deposits and other borrowings ⁶	1,279	608	671	-	-	-	671	77,324	77,995

¹Collateral amounts (cash and non-cash financial collateral) included are reflected at their fair value; however, this amount is limited to the net balance sheet exposure in order to not include any overcollateralisation. Non-cash financial collateral relating to derivatives financial instruments is not recorded on the balance sheet.

Derivative financial instruments

Derivative financial instrument contracts are typically subject to International Swaps and Derivatives Association ("ISDA") master netting agreements, as well as relevant Credit Support Annexes ("CSA") around collateral arrangements attached to those ISDA agreements, or derivative exchange or clearing counterparty agreements if contracts are settled via an exchange or clearing house.

Derivative amounts will only be offset on the balance sheet where the Banking Group has a legally enforceable right of offset in all circumstances and there is an intention to settle the asset and liability on a net basis, or to realise the asset and settle the liability simultaneously.

Financial instruments refer to amounts that are subject to relevant close out netting arrangements under a relevant ISDA agreement. Cash collateral and Non-cash collateral include amounts of cash and non-cash collateral respectively, which are either obtained or pledged, to cover the net exposure between the counterparty in the event of default or insolvency.

² Collateral paid to meet derivative trading obligations is reported in the balance sheet within Collateral paid of \$2,814 million (30 September 2021: \$535 million).

³ Reverse repurchase agreements are reported in the balance sheet within Cash and liquid assets of \$317 million (30 September 2021: \$596 million) and Amounts due from related entities of \$184 million (30 September 2021: \$145 million) respectively. Refer to Note 7 *Cash and liquid assets* and Note 23 *Related entity transactions* for further information.

⁴ Collateral received to meet derivative trading obligations is reported in the balance sheet within Collateral received of \$2,134 million (30 September 2021: \$570 million) and Related entity transactions of \$1,045 million (30 September 2021: \$212 million). Refer to Note 23 *Related entity transactions* for further information.

⁵Repurchase agreements are reported in the balance sheet within Due to central banks and other institutions of \$3,602 million (30 September 2021: \$3,210 million) and Amounts due to related entities of \$9 million (30 September 2021: \$60 million) respectively. Refer to Note 16 *Due to central banks and other institutions* and Note 23 *Related entity transactions* for further information.

⁶ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Note 25 Offsetting Financial Assets and Financial Liabilities continued

Reverse repurchase and repurchase agreements

Reverse repurchase and repurchase agreements will typically be subject to Global Master Repurchase Agreements ("GMRAs") or similar agreements whereby all outstanding transactions with the same counterparty can be offset and closed out upon a default or insolvency event.

When, under the relevant agreement, the Banking Group has a legal right to offset both for payments and default netting, the Banking Group will offset amounts with that counterparty in the balance sheet.

Where the Banking Group has a right of offset on default or insolvency only, the related financial instrument amounts represents highly liquid securities either obtained or pledged, which can be realised in the event of a default or insolvency by one of the counterparties. The value of such securities obtained or pledged must at least equate to the value of the exposure to the counterparty, therefore, the net exposure is considered to be nil.

Loans and advances, deposits and other borrowings

The amounts offset for loans and advances and deposits and other borrowings represent amounts subject to set-off agreements. The net amounts reported on balance sheet are included within overdrafts in Note 9 Loans and advances to customers and deposits not bearing interest and on-demand and short term deposits bearing interest in Note 17 Deposits and other borrowings. The amounts not subject to enforceable netting arrangement represent all other loans and advances and deposits and other borrowings of the Banking Group.

Note 26 Transfers of Financial Assets

A financial asset is considered to be transferred when the Bank transfers the contractual rights to receive the cash flows of the asset, or retains the contractual rights to receive the cash flows with a contractual obligation to pay the cash flows to another party.

Transfers of financial assets that have not been derecognised in their entirety

The RMBS Trust provides an internal residential mortgage-backed securities ("RMBS") programme. Securities issued by the RMBS Trust are initially held by the Bank and are eligible to be sold to the RBNZ under agreements to repurchase for liquidity purposes. The Bank has transferred housing loans to the RMBS Trust which secure these securities. These housing loans have not been derecognised by the Bank for financial reporting purposes as the Bank retains substantially all of the risks and rewards of ownership. These housing loans, collections receivable and cash of the RMBS Trust secure these securities issued to the Bank as detailed in the Liquidity portfolio management section in Note 34 Risk management.

The BNZ Covered Bond Trust holds certain Bank of New Zealand housing loans and its trustee guarantees the payment of all interest and principal under the Covered Bonds issued by the Bank and BNZ-IF. The assets of the BNZ Covered Bond Trust are not available to the Bank unless and until all prior ranking creditors of the BNZ Covered Bond Trust have been satisfied. The housing loans held by the BNZ Covered Bond Trust have not been derecognised by the Bank for financial reporting purposes as the Bank retains substantially all of the risks and rewards of ownership.

Government bonds and securities transferred under the agreements to repurchase have not been derecognised from the balance sheet as the Bank retains substantially all the risks and rewards of ownership. The fair value of these agreements is approximately equal to the carrying amount on the balance sheet due to their short term nature.

The Bank's obligation under agreements to repurchase are classified under Due to central banks and other institutions. Further detail on securities sold under agreements to repurchase are provided in Notes 7 Cash and liquid assets, 8 Trading securities and 16 Due to central banks and other institutions.

The table below presents the carrying amount of the transferred assets and the associated liabilities.

		Banking Group			
	Carrying Amount of Assets	Carrying Amount of Assets	Carrying Amount of Associated Liabilities	Carrying Amount of Associated Liabilities	
Dollars in Millions	30/9/22	30/9/21	30/9/22	30/9/21	
Housing loans held by RMBS Trust	14,745	12,646	3,453	2,664	
Housing loans held by Covered Bond Trust	6,359	5,098	5,195	4,339	
Government bonds and securities	138	508	138	508	
	21,242	18,252	8,786	7,511	

The Banking Group had issued debt securities with a face value of \$5,613 million that were guaranteed by the Covered Bond Trust as at 30 September 2022 (30 September 2021: \$4,262 million). The underlying collateral that supports the guarantee provided by the Covered Bond Trust comprised housing loans, collections receivable and cash with a carrying amount of \$6,550 million as at 30 September 2022 (30 September 2021: \$5,274 million).

Further details on the transactions with the RMBS Trust and the Covered Bond Trust are provided in Notes 30 Structured entities, securitisation, funds management, fiduciary activities and insurance and 34 Risk management.

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Note 27 Segment Analysis

Operating segments

An operating segment is a component of an entity engaging in business activities and whose operating results are regularly reviewed by the entity's chief operating decision maker. For each operating segment identified by the Banking Group, financial information is regularly reported to the Bank's Executive Team for the purposes of performance evaluation and resource allocation.

The Banking Group's business is organised into two major reportable and operating segments: Partnership Banking; and Corporate and Institutional Banking. Partnership Banking provides financial products and services to retail, business and private customers. Corporate and Institutional Banking provides financial products and services to corporate and institutional customers.

Revenues and expenses directly associated with each operating segment are included in determining their result. Transactions between operating segments are based on agreed recharges between segments. Segment revenue represents revenue directly attributable to a segment and a portion of the Banking Group's revenue that can be allocated to a segment on a reasonable basis. Segment revenue includes Net interest income and Other income, and includes transfer pricing adjustments to reflect inter-segment funding arrangements.

The profit for each operating segment represents operating profit before unrealised fair value gains or losses on financial instruments, fair value credit risk adjustment and income or expenses which are one-off in nature and are not part of the Banking Group's core business operations. These are reported in the 'Other' category.

Included within the 'Other' category in the following table are business activities that are not separately reportable segments; other balances excluded for management reporting purposes, but included in the consolidated financial statements of the Banking Group for statutory financial reporting purposes; elimination entries on consolidation of the results of the Banking Group's controlled entities in the preparation of the consolidated financial statements of the Banking Group; and results of an entity included for management reporting purposes, but excluded from the consolidated financial statements of the Banking Group for statutory financial reporting purposes.

The Banking Group primarily conducts business in New Zealand and has limited exposure to risks associated with different economic environments or political conditions in other countries. On this basis, no geographical segment information is provided.

	Banking Group (30/9/22)				
	Partnership	Corporate and Institutional	Total Reportable		Total Banking
Dollars in Millions	Banking	Banking	Segments	Other	Group
Net interest income	1,915	543	2,458	46	2,504
Other income ¹	234	272	506	121	627
Total operating income ²	2,149	815	2,964	167	3,131
Operating expenses	869	166	1,035	41	1,076
Total operating profit before credit impairment charge and income tax expense	1,280	649	1,929	126	2,055
Credit impairment charge/(write-back)	43	2	45	44	89
Total operating profit before income tax expense	1,237	647	1,884	82	1,966
Income tax expense on operating profit	346	181	527	25	552
Net profit attributable to the shareholder of the Bank	891	466	1,357	57	1,414
Lending assets	75,445	23,816	99,261	85	99,346
Deposit liabilities	59,480	11,926	71,406	2,799	74,205
		Bankin	g Group (30/9/2	21)	
Net interest income	1,706	438	2,144	37	2,181
Other income ¹	220	242	462	216	678
Total operating income ²	1,926	680	2,606	253	2,859
Operating expenses	820	158	978	82	1,060
Total operating profit before credit impairment charge and income tax expense	1,106	522	1,628	171	1,799
Credit impairment charge/(write-back)	(78)	(24)	(102)	65	(37)
Total operating profit before income tax expense	1,184	546	1,730	106	1,836
Income tax expense on operating profit	332	153	485	29	514
Net profit attributable to the shareholder of the Bank	852	393	1,245	77	1,322
Lending assets ³	71,964	22,677	94,641	50	94,691
Deposit liabilities ³	56,585	11,159	67,744	3,387	71,131

 $^{^{1}}$ Other income includes Gains less losses on financial instruments and Other operating income.

² For the year ended 30 September 2022, there were no revenues deriving from transactions with a single external customer that amounted to 10% or more of the Banking Group's revenues (30 September 2021: nil).

³ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 Principal accounting policies for further information.

Note 28 Contingent Liabilities and Other Commitments

Accounting policy

Contingent liabilities are possible obligations whose existence will be confirmed only by uncertain future events or present obligations where the transfer of economic benefits is not probable or cannot be reliably measured. Where loss is probable and can be reliably measured, provisions have been made. Contingent liabilities are not recognised on the balance sheet, but are disclosed unless the likelihood of payment is remote.

The Banking Group provides quarantees in its normal course of business on behalf of its customers. Guarantees written are conditional commitments issued by the Banking Group to guarantee the performance or financial obligations of a customer to a third party.

In accordance with NZ IFRS 9, the financial guarantee contract is initially recorded at fair value which is equal to the premium received, unless there is evidence to the contrary.

Subsequently, the Banking Group records and measures the financial guarantee contract at the higher of:

- the amount initially recognised less, when appropriate, amortisation of the fee that is recognised over the life of the guarantee; and
- the liability recognised for the estimated amount of the loss payable, where it is likely the Banking Group will incur a loss as a result of issuing the

Contingent liabilities and credit related commitments at face value arising in respect of the Banking Group's operations were:

	Banking G	oup
Dollars in Millions	30/9/22	30/9/21
Contingent liabilities		
Bank guarantees ¹	473	436
Standby letters of credit	356	279
Documentary letters of credit	254	153
Performance related contingencies ¹	1,167	853
Total contingent liabilities	2,250	1,721
Credit related commitments		
Revocable commitments to extend credit ²	5,904	9,735
Irrevocable commitments to extend credit ²	14,433	12,662
Total credit related commitments	20,337	22,397
Total contingent liabilities and credit related commitments	22,587	24,118

¹Comparative information has been restated due to a change in product classification and a system optimisation project.

Contingent liabilities

The Banking Group's maximum exposure to credit risk for contingent exposures is the notional amount which represents the amount that the Banking Group would have to pay if the contingent liability is called upon. The full notional amount of contingent liabilities is considered as "on-demand" because the Banking Group has no control when the holder might call upon the instrument. The Banking Group expects that not all of the contingent liabilities will be drawn before their contractual expiry.

The Bank typically has recourse to specific assets pledged as collateral in the event of a default by a party for which the Bank has guaranteed its obligations to a third party and therefore tend to carry the same credit risk as loans.

Guarantees

The Banking Group has four principal types of guarantees:

- Bank quarantees.
- Standby letters of credit.
- Documentary letters of credit.
- Performance related contingencies.

Clearing and settlement obligations

The Banking Group is a member of various central clearing houses, most notably the London Clearing House ("LCH") SwapClear platform, which enables the Banking Group to centrally clear derivative instruments. As a member of LCH, the Banking Group is required to make a default fund contribution. In the event of a default of another clearing member, the Banking Group could be required to commit additional funds to the default fund.

Other contingent liabilities

The Banking Group is exposed to contingent risks and liabilities arising from conduct of its business, including:

- actual and potential disputes, claims and legal proceedings;
- investigations into past conduct, including actual and potential regulatory breaches, carried out by regulatory authorities;
- internal investigations and reviews into past conduct, including actual and potential regulatory breaches, carried out by or on behalf of the Banking
- contracts that involve giving contingent commitments such as warranties, indemnities or guarantees.

The Banking Group has received information requests from its regulators as part of both industry and bank-specific reviews being undertaken, and the Banking Group has also initiated contact with its regulators on compliance-related matters. The scope of reviews, inquiries and investigations can be wideranging and can result in enforcement proceedings, fines and other financial penalties, as well as customer remediation programmes.

There are contingent liabilities in respect of all such matters. Such matters are often highly complex and uncertain. Where appropriate, provisions have been made. The aggregate potential liability of the Banking Group in relation to these matters cannot be accurately assessed.

² Following a review of the contractual terms of the Banking Group's credit facilities, the Banking Group has reclassified a portion of the facilities from revocable to irrevocable.

Note 28 Contingent Liabilities and Other Commitments continued

The Banking Group has been progressing a programme of work to strengthen its Anti-Money Laundering ("AML") and Countering Financing of Terrorism ("CFT") programme. The work involves significant investment in systems and personnel to ensure an effective control environment and an uplift in compliance capability. In addition to a general uplift in capability, the Banking Group is remediating specific compliance issues and weaknesses. The Banking Group continues to keep the RBNZ informed of significant AML or CFT compliance issues and its progress in resolving these issues, and will continue to cooperate with, and respond to queries from, the RBNZ. As this work progresses, further compliance issues may be identified and reported to the RBNZ or equivalent foreign regulators, and additional strengthening may be required. The potential outcome (including enforcement proceedings) and total costs associated with specific issues identified to date, and for any issues that may be identified in the future, remain uncertain.

Credit related commitments

For commitments to extend credit, the maximum credit exposure to the Banking Group is the full amount of the commitment. Irrevocable commitments to extend credit are agreements to lend to a customer which can be drawn down at any time before the commitments expire as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiry dates or other termination clauses and may require payment of a fee by the customer. Since many of the commitments are expected to expire without being drawn down, the total commitment amounts do not necessarily represent future cash requirements.

Revocable commitments to extend credit represent those facilities which can be cancelled at any time at the Bank's discretion without the risk of incurring significant penalty or expense. These facilities are generally on-demand.

For information on the Banking Group's risk management policies, refer to Note 34 Risk management.

Guarantees to wholly owned controlled entities

The Bank guarantees the obligations of BNZ-IF in respect of securities issued by BNZ-IF to investors.

Note 29 Credit Exposures to Connected Persons and Non-bank Connected Persons

Credit exposures to connected persons have been derived in accordance with the Bank's Conditions of Registration and RBNZ's Connected Exposures Policy ("BS8"). The amounts are net of individual credit impairment allowances and exclude advances of a capital nature.

The RBNZ defines Connected Persons to be other members of NAB and Directors of the Bank. Controlled entities of the Bank are not connected persons.

Credit exposures to connected persons have been calculated on a partial bilateral net basis. The gross amount and amount netted off under a bilateral netting agreement are included in the table below. There is a limit of 125% of the Banking Group's Tier 1 capital in respect of the gross amount of aggregate credit exposure to connected persons that can be netted off in determining the net exposure.

	Banking Group (30/9/22)
	% of Tier One Dollars in Capita Millions As Af
As at end of year	
Credit exposure to connected persons (on gross basis, before netting)	6,947 63.8%
Credit exposure to connected persons (amount netted)	3,112 28.6%
Credit exposure to connected persons (on partial bilateral net basis)	3,835 35.2%
Credit exposure to non-bank connected persons	
Peak for the year ended	
Credit exposure to connected persons (on gross basis, before netting)	8,294 76.1%
Credit exposure to connected persons (amount netted)	4,212 38.7%
Credit exposure to connected persons (on partial bilateral net basis)	4,082 37.4%
Credit exposure to non-bank connected persons	

As at 30 September 2022, the Banking Group's rating-contingent limit to connected persons was 60% of the Banking Group's Tier 1 capital. This limit has not changed during the year. Within the overall rating-contingent limit, there is a sublimit of 15% of Tier 1 capital that applies to aggregate credit exposures to non-bank connected persons.

The rating-contingent limit on credit exposures to connected persons as set out in the Bank's Conditions of Registration has been complied with at all times during the year ended 30 September 2022. The peak for the year ended credit exposure to connected persons and non-bank connected persons are calculated by determining the maximum end-of-day aggregated amount of actual credit exposure over Banking Group's Tier 1 Capital as at 30 September

Where a bank is funding a large loan it is common practice to share the risk of a customer default with other connected banks. These arrangements are called risk lay-off arrangements. As at 30 September 2022, the Banking Group had no contingent credit exposures arising from risk lay-off arrangements with connected persons. There were no credit exposures to connected persons that were credit-impaired, and no allowance for impairment losses on credit exposures to connected persons as at 30 September 2022.

Note 30 Structured Entities, Securitisation, Funds Management, Fiduciary Activities and Insurance Funds management

The Bank markets and distributes managed investment schemes that are managed and issued by its wholly owned subsidiary BNZISL. Refer to Note 23 *Related entity transactions* for further information. The Bank provides banking services to BNZISL for these products. All arrangements are conducted on arms' length commercial terms. The Bank also provides services to a number of customers, including advice on, administration of, and management of investment portfolios.

The outstanding value of assets related to fund management activities is set out in the table below.

	Banking	Group
Dollars in Millions	30/9/22	30/9/21
Managed Investment Scheme Regulated Offers	6,537	6,690
BNZ Term PIE	890	873

Managed Investment Scheme Regulated Offers do not represent deposits or other liabilities of the Bank or any other member of NAB, are not owned by the Banking Group and are therefore not included as part of the Banking Group's assets on the balance sheet. Investments made in the Investment Schemes are subject to investment risk, including possible delays in repayment and loss of income and principal invested. None of the Bank, or any other member of NAB, the Supervisor (The New Zealand Guardian Trust Company Limited), any Director of any of them, the New Zealand Government or any other person guarantees (either fully or in part) the performance or returns of the Investment Schemes or the repayment of capital.

BNZ Term PIE, a controlled entity of the Bank, invests solely in debt securities issued by the Banking Group and on consolidation its assets are eliminated against liabilities recorded by the Bank. Unitholders' interests are included as part of the Banking Group's liabilities.

During the year ended 30 September 2022, the Bank held deposits on behalf of customers of JBWere (NZ) Pty Limited and JBWere (NZ) Nominees Limited. JBWere (NZ) Pty Limited and JBWere (NZ) Nominees Limited, as controlled entities of the ultimate parent, are related parties of the Banking Group, but are not a part of the Banking Group.

Insurance business

The Banking Group does not conduct any Insurance Business, as defined by condition 3 of the Bank's Conditions of Registration set out on page 88.

Marketing and distribution of insurance products

The Banking Group is involved in marketing insurance products for the following entities: IAG New Zealand Limited, AIG Insurance New Zealand Limited and Partners Life Limited. All of these entities are unrelated to the Banking Group.

During the reporting period, up until 30 September 2022, the Banking Group was also involved in marketing insurance products for BNZ Life Insurance Limited, a controlled entity of National Australia Bank Limited. BNZ Life Insurance Limited was an Affiliated Insurance Entity as defined in BPR160 *Insurance, Securitisation, and Loan Transfers.*

On 30 September 2022, NAB completed the sale of National Wealth Management New Zealand Holdings Limited, BNZ Life Insurance Limited and BNZ Insurance Services Limited to Partners Life Limited, at which point these companies ceased to be controlled entities of National Australia Bank Limited and related entities of the Banking Group.

Structured entities

A structured entity is an entity that has been designed so that voting or similar rights are not the dominant factor in deciding who controls the entity. Structured entities generally have restricted activities and a narrow and well-defined objective which are both created through contractual arrangements.

Depending on the Banking Group's power over the relevant activities of the structured entity and its exposure to and ability to influence its own returns, it may or may not consolidate the entity.

The Banking Group's involvement in structured entities is subject to internal credit, compliance and legal approval processes to ensure that any difficulties arising from the structured entities do not impact adversely on the Banking Group, beyond that which is normal for arm's length commercial relationships.

Consolidated structured entities

The Banking Group has interests in the following structured entities which are consolidated for financial reporting purposes:

Name	Country of Domicile	Principal Activities
BNZ RMBS Trust Series 2008-1	New Zealand	Securitisation entity
BNZ Covered Bond Trust	New Zealand	Securitisation entity
BNZ Term PIE	New Zealand	Portfolio investment entity

RMBS Trust and Covered Bond Trust

The RMBS Trust provides an internal residential mortgage-backed securities programme to issue securities as collateral for borrowing from the RBNZ. The Covered Bond Trust holds certain Bank of New Zealand housing loans and its trustee guarantees the payment of all interest and principal under the covered bonds issued by the Bank and BNZ-IF.

Further details on the transactions with the RMBS Trust and the Covered Bond Trust are provided in Note 26 Transfers of financial assets.

Term PIE Investment Entity

The Banking Group's interest in BNZ Term PIE, a consolidated investment entity, is noted in the funds management section above.

Note 30 Structured Entities, Securitisation, Funds Management, Fiduciary Activities and Insurance continued **Unconsolidated structured entities**

Unconsolidated structured entities refer to all structured entities that are not controlled by the Banking Group. The Banking Group enters into transactions with unconsolidated structured entities in the normal course of business to facilitate customer transactions and for specific investment opportunities.

The Banking Group engages with third party (client) securitisations by providing funding, liquidity support and derivatives.

Interests in unconsolidated structured entities include, but are not limited to, debt investments, guarantees, liquidity arrangements, and commitments that expose the Banking Group to the risks of the unconsolidated structured entity. Interests do not include plain vanilla derivatives (e.g. interest rate swaps and currency swaps).

The table below shows the carrying amount and maximum exposure to loss and credit quality of the Banking Group's interests in unconsolidated securitisation entities as at 30 September 2022.

	i i	Banking Grou	p (30/9/22)			Banking Group	(30/9/21)	
Dollars in Millions	Senior Investment Grade	Investment Grade	Sub- Investment Grade	Total	Senior Investment Grade	Investment Grade	Sub- Investment Grade	Total
Carrying amount of loans and advances	1,795	21	11	1,827	1,382	17	5	1,404
Commitments and guarantees	511	1	1	513	679	9	4	692
Total maximum exposure to credit loss	2,306	22	12	2,340	2,061	26	9	2,096

The total assets of unconsolidated structured entities are not considered meaningful for the purpose of understanding the Banking Group's financial risks associated with these entities and so have not been presented. Unless specified otherwise, the Banking Group's maximum exposure to loss is the total of its on-balance sheet positions and its off-balance sheet arrangements, being loan commitments, financial guarantees, and liquidity support. Exposure to loss is managed as part of the Banking Group-wide risk management framework. Refer to Note 34 Risk management for further information.

Income earned from interests in unconsolidated structured entities primarily resulted from interest income, fees and commission income.

Risk management

The Banking Group has in place policies and procedures to ensure that the activities identified above are conducted in an appropriate manner. Should adverse investment or liquidity conditions arise it is considered that the Banking Group's policies and procedures will minimise the possibility that those conditions will adversely impact the Banking Group. The policies and procedures referred to include comprehensive and prominent disclosure of information regarding products, formal and regular review of operations and policies by internal auditors and management, appropriate contractual agreements and compliance with contractual obligations and regulatory requirements.

The Banking Group's risk review and risk management systems are equally applicable to the marketing and distribution of products issued by the third party entities identified in the marketing and distribution of insurance products and funds management sections of this note.

In addition, the following measures are also taken to manage any risk to the Banking Group of marketing and distributing insurance products:

- disclaimers on policies, application forms and other collateral relating to insurance products expressly state that the policy is not an obligation of the Bank and that the Bank does not guarantee the obligations of the insurer;
- the risks under policies issued by BNZ Life Insurance Limited (prior to the sale of this company to Partners Life Limited on 30 September 2022) are reinsured appropriately; and
- the introduction of new policies and changes to existing policies marketed or distributed by the Banking Group are subject to the Banking Group's standard risk management policies and procedures.

The Bank does not guarantee the capital, income or return of any of the products referred to above.

Transactions with Banking Group entities

Financial services provided by any member of the Banking Group to entities which are involved in trust, custodial, funds management and other fiduciary activities and securitisation arrangements, and to affiliated insurance entities which conduct marketing and distribution of insurance products, or on whose behalf the marketing and distribution of insurance products are conducted, have been provided on arm's length terms and conditions and at fair value. Assets purchased from any such entities by any member of the Banking Group have been purchased on arm's length terms and conditions and at fair value.

Peak aggregate funding provided to entities

The Bank does not provide any funding to individual unit trusts which the Banking Group distributes on behalf of third parties.

During the year ended 30 September 2022, the Banking Group did not provide any funding to individual affiliated insurance entities and unconsolidated entities involved in securitisation activities, where the Banking Group is involved in the origination of securitised assets and the marketing of securitisation schemes.

Note 31 Concentrations of Credit Exposures to Individual Counterparties and Groups of Closely Related Counterparties

The Banking Group's disclosure of concentrations of credit exposures to individual counterparties and groups of closely related counterparties is based on actual credit exposures and excludes credit exposures to connected persons, the central government or central bank of any country with a long term credit rating of A- or A3 or above, or its equivalent, and excludes supranationals or quasi-sovereign agencies with a long term credit rating of A- or A3 or above, or its equivalent. Peak credit exposures to individual counterparties are calculated using the Banking Group's end of period Common Equity Tier 1 capital.

Credit exposures to individual counterparties and groups of closely related counterparties were:

Banking	Group ((30/	9/	(22)
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Number of bank counterparties	Peak End-of-Day A- or A3 or above or its equivalent	Balance Sheet Date A- or A3 or above or its equivalent
Percentage of Common Equity Tier 1 capital		
10-14%	1	-
15-19%	-	-
20-24%	<u> </u>	
Number of non-bank counterparties		
Percentage of Common Equity Tier 1 capital		
10-14%	1	1
15-19%	-	-
20-24%	-	-

The above table has been compiled using gross exposures. No account is taken of collateral, security and/or netting agreements that do not qualify for offset in accordance with NZ IAS 32 which the Banking Group may hold in respect of the various counterparty exposures.

The Banking Group had no bank counterparties, supranationals or quasi-sovereign agencies with a long term credit rating below A- or A3, to whom their aggregate credit exposure, as at 30 September 2022, or peak end-of-day aggregate credit exposure, for the six months ended 30 September 2022, equalled or exceeded 10% of the Banking Group's Common Equity Tier 1 capital.

The Banking Group had no non-bank counterparties with a long term credit rating below A- or A3, to whom their aggregate credit exposure, as at 30 September 2022, or peak end-of-day aggregate credit exposure, for the six months ended 30 September 2022, equalled or exceeded 10% of the Banking Group's Common Equity Tier 1 Capital.

Note 32 Investments in Wholly Owned Entities

Wholly owned entities of the Bank as at 30 September 2022 were:

Name	Country of Incorporation	Principal Activities
BNZ Equity Investments No.2 Limited	New Zealand	Investment company
BNZ Facilities Management Limited	New Zealand	Facilities management
BNZ International Funding Limited	New Zealand	Funding company
BNZ Investments Limited	New Zealand	Investment company
BNZ Property Investments Limited	New Zealand	Property company
BNZ Branch Properties Limited	New Zealand	Property company
BNZ Investment Services Limited	New Zealand	Investment administration and management
All wholly owned entities listed above have the same	reporting date as the Bank.	

Note 33 Capital Adequacy

The RBNZ minimum regulatory capital requirements for banks have been established under the RBNZ Capital Adequacy Framework, outlined in the new "Banking Prudential Requirements" ("BPR") documents based on the international framework developed by the Bank for International Settlements, Committee on Banking Supervision, commonly known as Basel III. These requirements outline how minimum regulatory capital is to be calculated and provide methods for measuring risks incurred by the banks in New Zealand.

Basel III consists of three pillars - Pillar One covers the capital requirements for banks for credit, operational, and market risks. Pillar Two covers all other material risks that are not already included in Pillar One. Pillar Three relates to market disclosure.

RBNZ Capital Adequacy Framework

The Banking Group has calculated its Risk Weighted Assets ("RWA") and minimum regulatory capital requirements based on the BPR documents.

The RBNZ Capital Adequacy Framework allows accredited banks to use their own models for calculating RWA for credit risk; this is the Internal Ratings Based ("IRB") approach. Subject to a condition of registration requiring the Banking Group to meet minimum systems and governance requirements on a continuing basis, the Bank has been accredited to use the IRB approach for certain credit risk exposures. Under the IRB approach for credit risk, the level of risk associated with customers' exposures is determined by way of the primary components of Probability of Default, Loss Given Default and Exposure at Default. For exposures in the Specialised Lending asset category (including Project Finance, Object Finance, Commodity Finance and Income Producing Real Estate) the Banking Group uses supervisory slotting estimates provided by the RBNZ. From 1 January 2022 the Banking Group has complied with the RBNZ requirement that IRB banks calculate exposures to Bank and Sovereign asset classes using the prescribed standardised methodology in BPR131 Standardised Credit Risk RWAs ("BPR131").

Credit risk for portfolios of relatively low materiality for which the Bank has not sought model approval are also subject to the standardised treatment.

From 1 January 2022 an IRB bank must also use the standardised calculation methodology set out in BPR131 to calculate the standardised equivalent RWA for each credit exposure subject to the IRB calculation methodology and, after multiplying by the 1.06 scalar, apply a floor on IRB exposure equal to 85% of the value of those RWA recalculated using the standardised methodology.

Capital for market risk has been calculated in accordance with the approach specified in BPR140 Market Risk.

Capital requirement for operational risk has been calculated in accordance with the approach specified in BPR150 Standardised Operational Risk ("BPR150"), subject to a minimum value of \$600 million.

Capital management policies

The Banking Group's primary objectives in relation to the management of capital adequacy are to comply with the requirements set out by the RBNZ, the Banking Group's primary prudential supervisor, to provide a sufficient capital base to cover risks faced by the Bank and to maintain a credit rating to support future business development.

The Banking Group is required under its Conditions of Registration to maintain a minimum ratio of total eligible or qualifying capital to total RWA of 8%, of which a minimum of 4.5% must be held in Common Equity Tier 1 capital and a minimum of 6% must be held in Tier 1 capital. The Banking Group must maintain a minimum prudential capital buffer ratio of 3.5% above these minimum ratios or it will face restrictions on the distribution of earnings and be required to prepare a capital plan that restores the Banking Group's buffer ratio and have that capital plan approved by the RBNZ.

In June 2021 the RBNZ published the final BPR on regulatory capital, which took effect from 1 October 2021. The key capital requirements for the Banking Group include:

- an increase in the Tier 1 capital requirement to 16% of RWA (including a prudential capital buffer of 9% of RWA), of which up to 2.5% can be in the form of Additional Tier 1 ("AT1") capital, and an increase in the total capital requirement to 18% of RWA, of which up to 2% can be in the form of Tier 2 capital:
- phased implementation of the increase in capital buffers from 1 July 2022 with a transition period of six years before banks are required to fully comply with the new rules;
- changes to the qualification requirements for AT1 and Tier 2 capital instruments. Phased derecognition of existing, non-qualifying AT1 and Tier 2 capital instruments over a transitional period which started on 1 January 2022;
- effective from 1 October 2022, an increase in the scalar for IRB calculated credit RWA from 1.06 to 1.2, and a reduction in the scalar from 1.06 to 1 for credit RWA calculated under BPR131 such as for Bank and Sovereign asset classes; and
- since 1 January 2022, IRB banks have been required to calculate IRB and RBNZ standardised capital calculations and implement an output floor on IRB exposure at 85% of the value of those RWA that would be calculated under the RBNZ standardised approach.

The Banking Group has an Internal Capital Adequacy Assessment Process ("ICAAP") in place which complies with the requirements set out in BPR100 Capital Adequacy as specified under the Bank's Conditions of Registration. The Banking Group's ICAAP outlines the approach to maintaining capital adequacy, risk appetite and stress testing. The ICAAP considers all material risks consistent with the Banking Group's risk appetite and outlines the capital requirements.

Capital requirements, as detailed in the Banking Group's ICAAP document, are managed by the Bank's Executive Risk and Compliance Committee ("ERCC") and Asset, Liability and Capital Committee under delegated authority from the Board of Directors.

For more information on the capital structure of the Banking Group, refer to page 65.

The tables on the following pages detail the capital calculation, capital ratios and capital requirements as at 30 September 2022. During the reporting period the Banking Group complied with all RBNZ's capital requirements as set out in the Bank's Conditions of Registration.

Note 33 Capital Adequacy continued

Regulatory capital

The following table shows the qualifying capital for the Banking Group.

Dollars in Millions	Banking Group Unaudited 30/9/22
	<u> </u>
Qualifying capital Common Equity Tier 1 capital	
Contributed equity - ordinary shares	4,056
Retained profits	6,709
Accumulated other comprehensive income and other disclosed reserves	293
Deductions from Common Equity Tier 1 capital:	233
Goodwill and other intangible assets	409
Cash flow hedge reserve	282
Credit value adjustment on liabilities designated at fair value through profit or loss	(37)
Prepaid pension assets (net of deferred tax)	6
Deferred tax asset	293
Total expected loss less total eligible allowances for impairment	-
Total Common Equity Tier 1 capital	10,105
Additional Tier 1 capital	
Perpetual Notes ¹	788
Total Additional Tier 1 capital	788
Total Tier 1 capital	10,893
Tier 2 capital	
Revaluation reserves	3
Subordinated Notes ²	988
Total eligible impairment allowance in excess of expected loss	268
Total Tier 2 capital	1,259
Total Tier 1 and Tier 2 qualifying capital	12,152

¹The Perpetual Notes are subject to phase-out in accordance with BPR110 *Capital Definitions* ("BPR110"). The phase-out, which commenced on 1 January 2022, takes place until 1 July 2028, with the maximum eligible amount of AT1 capital for these instruments declining by 12.5% each year. The base amount for phase-out was fixed at the nominal amount outstanding as at 30 September 2021 and amounted to \$900 million.

Banking Group Basel III regulatory capital ratios

 $The table below shows the capital adequacy \ ratios for the \ Banking \ Group \ based \ on \ BPR, expressed \ as \ a \ percentage \ of total \ risk-weighted \ exposures.$

	Banking Group		
	Regulatory	egulatory Unaudited	Unaudited
	Minima	30/9/22	30/9/21
Common Equity Tier 1 capital ratio	4.5%	12.8%	13.8%
Tier 1 capital ratio	6.0%	13.8%	15.1%
Total qualifying capital ratio	8.0%	15.4%	16.9%
Prudential capital buffer ratio	3.5%	7.4%	8.9%

Registered Bank Basel III regulatory capital ratios

The table below shows the capital adequacy ratios for the Registered Bank based on BPR, expressed as a percentage of total risk-weighted exposures.

	The Registered Bank	
	Unaudited	Unaudited
	30/9/22	30/9/21
Common Equity Tier 1 capital ratio	12.8%	13.7%
Tier 1 capital ratio	13.8%	15.1%
Total qualifying capital ratio	15.4%	16.9%

For the purpose of calculating capital adequacy ratios for the Registered Bank under BPR, subsidiaries are consolidated within the Registered Bank if they are either funded exclusively and wholly owned by the Registered Bank, or there is a full, unconditional and irrevocable cross guarantee between the subsidiaries and the Registered Bank.

²The 2028-Subordinated Notes are subject to phase-out in accordance with BPR110. The phase-out, which commenced on 1 January 2022, takes place until 1 July 2028, with the maximum eligible amount of Tier 2 capital for these instruments declining by 12.5% each year. The base amount for phase-out was fixed at the nominal amount outstanding as at 30 September 2021 and amounted to \$500 million.

Note 33 Capital Adequacy continued

Total regulatory capital requirements

		ballkilig Group			
	Una	udited (30/9/22))		
Dollars in Millions	Total Exposure at Default after Credit Risk Mitigation	Risk- Weighted Exposure or Implied Risk- Weighted Exposure	Total Capital Require- ment ¹		
Credit risk					
Exposures subject to the internal ratings based approach ¹	111,677	43,583	3,487		
Specialised lending subject to the slotting approach ¹	7,883	7,303	584		
Exposures subject to the standardised approach ¹	20,614	2,631	211		
Equity exposures ¹	1	5	-		
Credit Value Adjustment subject to BPR ("CVA")	N/A	1,346	108		
Adjustment for standardised RWA floor ²	N/A	10,704	856		
Total credit risk ³	140,175	65,572	5,246		
Operational risk	N/A	9,138	731		
Market risk	N/A	4,212	337		
Total	140,175	78,922	6,314		

In calculating the total capital requirement, a scalar of 1.06 has been applied to the risk-weighted assets, as required by the RBNZ in accordance with the Bank's Conditions of

Advanced Internal Ratings Based approach to credit risk management

The Banking Group's quantitative credit risk measurement is based on the IRB approach (IRB for Retail Credit portfolios and Advanced IRB for Non-retail Credit portfolios) and uses a series of models to calculate loss estimates for the credit portfolio. This includes consideration of:

- probability of default ("PD") which estimates the probability that a customer will default over the next 12 months;
- exposure at time of default ("EAD") which estimates the amount of outstanding principal, fees and interest owed at the time of default; and
- loss given default ("LGD") which estimates the expected loss in the event of default. It is the percentage of exposure which will be lost after all recovery efforts, including legal expenses, time value of money and recovery expenses.

The above three elements (PD, EAD, and LGD) are important inputs in determining the risk-weighted exposure calculations for both on and off-balance sheet exposures, including undrawn portions of credit facilities, committed and contingent exposures. These ratings are also an important input into the credit approval, risk management, internal capital allocation and corporate governance functions of the Banking Group.

Methodologies used to calculate credit risk estimates (PD, EAD and LGD) are in accordance with the BPR and the Bank's Conditions of Registration. For credit risk estimates on some portfolios, the RBNZ has set prescribed risk estimates required to be used when calculating risk-weighted assets and capital under the BPR.

Controls surrounding credit risk rating systems

The credit risk rating systems cover all methods, processes, controls, data collection and technology that support the assessment of credit risk, the assignment of internal credit risk ratings and the quantification of associated default and loss estimates.

The credit risk rating systems and risk estimate processes are governed by the Banking Group's ERCC and are an integral part of reporting to senior management. Management and staff of the credit risk function regularly assess the performance of the rating systems, monitor progress on changes being made to systems and identify any areas for improvement. These systems are subject to rigorous internal review and approval and regular independent review. The annual validation of models is undertaken by specialists who are responsible for overseeing the design, implementation and performance of all rating models across the Banking Group.

The risk-weighted asset amounts presented in the following tables include a scalar of 1.06 as required by the RBNZ in accordance with the Bank's Conditions of Registration, which is not in the risk weight percentages shown.

Banking Group

² From 1 January 2022, the Banking Group's IRB RWA (after multiplying by the 1.06 scalar) are subject to a floor equal to 85% of the value of those RWA re-calculated using the standardised methodology.

³ In prior periods an agribusiness supervisory adjustment was recognised which increased the risk weight of the Banking Group's rural lending portfolio to a minimum as specified by the RBNZ. Effective from 31 March 2022 the Banking Group is no longer required to overlay this adjustment.

Note 33 Capital Adequacy continued

Credit risk subject to the Internal Ratings Based ("IRB") approach

The following tables analyse credit risk exposures by asset class split into PD bandings. The lower the PD banding the less the probability of default over the next 12 months.

Ban	king	Gro	up
Linaudi	ted (3U /0	1/22

Dollars in Millions	Weighted Average PD (%)	Exposure at Default²	Exposure- Weighted LGD used for the Capital Calculation (%)	Exposure- Weighted Risk Weight (%)	Risk- Weighted Assets	Minimum Capital Requirement
Corporate						
Exposure-weighted PD grade >0 ≤ 0.1%	0.05	5,986	46	17	1,049	84
Exposure-weighted PD grade >0.1≤ 0.5%	0.32	21,882	35	37	8,667	693
Exposure-weighted PD grade > 0.5 ≤ 1.5%	0.92	16,498	32	56	9,805	785
Exposure-weighted PD grade >1.5 ≤ 5.0%	2.42	5,483	32	75	4,342	347
Exposure-weighted PD grade >5.0 ≤ 99.99%	9.73	984	41	146	1,520	122
Default PD grade = 100%	100.00	480	40	214	1,090	87
Total corporate exposures	1.82	51,313	35	49	26,473	2,118
Residential mortgage						
Exposure-weighted PD grade >0 ≤ 0.1%	-	-	-	-	-	-
Exposure-weighted PD grade >0.1≤0.5%	0.40	1,339	17	12	173	14
Exposure-weighted PD grade >0.5 ≤ 1.5%	0.92	54,219	19	24	13,803	1,104
Exposure-weighted PD grade >1.5 ≤ 5.0%	4.92	1,947	18	63	1,301	104
Exposure-weighted PD grade >5.0 ≤ 99.99%	-	-	-	-	-	-
Default PD grade = 100%	100.00	275	18	216	628	50
Total residential mortgage exposures	1.52	57,780	19	26	15,905	1,272
Other retail ¹						
Exposure-weighted PD grade >0 ≤ 0.1%	0.05	745	86	12	97	8
Exposure-weighted PD grade >0.1≤ 0.5%	0.24	465	86	38	186	15
Exposure-weighted PD grade > 0.5 ≤ 1.5%	0.90	212	85	81	182	15
Exposure-weighted PD grade >1.5 ≤ 5.0%	2.76	116	83	112	138	11
Exposure-weighted PD grade >5.0 ≤ 99.99%	14.20	51	79	141	76	6
Default PD grade = 100%	100.00	8	74	471	41	3
Total other retail exposures	1.38	1,597	86	42	720	58
Retail small to medium enterprises						
Exposure-weighted PD grade >0 ≤ 0.1%	0.07	163	39	7	13	1
Exposure-weighted PD grade >0.1≤0.5%	0.30	768	30	15	125	10
Exposure-weighted PD grade >0.5 ≤ 1.5%	0.92	470	33	32	157	13
Exposure-weighted PD grade >1.5 ≤ 5.0%	2.63	287	33	45	137	11
Exposure-weighted PD grade >5.0 ≤ 99.99%	10.80	32	38	62	21	2
Default PD grade = 100%	100.00	15	39	196	32	2
Total retail SME exposures	1.92	1,735	32	26	485	39
Total ³						
Exposure-weighted PD grade >0 ≤ 0.1%	0.05	6,894	50	16	1,159	93
Exposure-weighted PD grade >0.1≤0.5%	0.32	24,454	34	35	9,151	732
Exposure-weighted PD grade > 0.5 ≤ 1.5%	0.92	71,399	22	32	23,947	1,917
Exposure-weighted PD grade >1.5 ≤ 5.0%	3.05	7,833	30	71	5,918	473
Exposure-weighted PD grade >5.0 ≤ 99.99%	9.98	1,067	43	143	1,617	130
Default PD grade = 100%	100.00	778	33	217	1,791	142
Total exposures	1.66	112,425	27	37	43,583	3,487

 $^{^{\}rm 1}$ Other retail includes credit cards, current accounts and personal overdrafts.

 $^{^{\}rm 2}$ Exposure at default is pre-credit risk mitigation.

 $^{^{\}rm 3}$ The CVA and adjustment for RWA floor have not been included in the above exposures.

Note 33 Capital Adequacy continued

The following table analyses the value and exposure at default of on-balance sheet exposures, off-balance sheet exposures and market related contracts under the IRB approach by asset class.

		Banking Group				
		Unaudited (3	30/9/22)			
Dollars in Millions	Total Exposure	Exposure at Default²	Risk- Weighted Assets	Minimum Capital Requirement		
On-balance sheet exposures						
Corporate	36,870	36,870	19,399	1,552		
Residential mortgage	54,824	54,824	15,179	1,214		
Other retail	827	827	487	39		
Retail small to medium enterprises	1,308	1,308	384	31		
Total on-balance sheet exposures	93,829	93,829	35,449	2,836		
Off-balance sheet exposures						
Corporate	13,124	11,576	5,709	457		
Residential mortgage	3,421	2,956	726	58		
Other retail	2,421	770	233	19		
Retail small to medium enterprises	482	427	101	8		
Total off-balance sheet exposures	19,448	15,729	6,769	542		
Derivatives and securities financing transactions ¹						
Corporate	2,867	2,867	1,365	109		
Total derivatives and securities financing transactions	2,867	2,867	1,365	109		
Summary ³						
Corporate		51,313	26,473	2,118		
Residential mortgage		57,780	15,905	1,272		
Other retail		1,597	720	58		
Retail small to medium enterprises		1,735	485	39		

 $^{^{1}}$ Total exposure for derivatives and securities financing transactions represents exposure at default pre-credit risk mitigation.

Total credit risk exposures subject to the IRB approach

112,425

43,583

3,487

² Exposure at default is pre-credit risk mitigation.

 $^{^{\}rm 3}$ The CVA and adjustment for RWA floor have not been included in the above exposures.

Note 33 Capital Adequacy continued

Specialised lending subject to the slotting approach

The tables below show specialised lending exposures for which the supervisory slotting approach has been used and includes Project Finance, Object Finance, Commodity Finance and Income Producing Real Estate exposures.

Banking Group

Unaudited (30/9/22)				
Total Exposure at Default after Credit Risk Mitigation	Risk Weight (%)	Risk- Weighted Assets	Minimum Pillar One Capital Requirement	
1,539	70	1,142	92	
4,875	90	4,638	371	
640	115	779	62	
10	250	27	2	
45	-	-	-	
7,109	87	6,586	527	
	Exposure at Default after Credit Risk Mitigation 1,539 4,875 640 10 45	Total Exposure at Default after Credit Risk Mitigation Weight (%) 1,539 70 4,875 90 640 115 10 250 45 -	Exposure at Default after Credit Risk Risk Weighted Assets 1,539 70 1,142 4,875 90 4,638 640 115 779 10 250 27 45	

The categories of specialised lending above are associated with the risk weight shown. These categories broadly correspond to external credit assessments from S&P Global Ratings Australia Pty Limited rating scale: BBB- or better (Strong); BB+ or BB (Good); BB- or B+ (Satisfactory); B to C- (Weak).

Banking Group Unaudited (30/9/22)

Dollars in Millions	Total Exposure	Exposure at Default	Average Risk Weight (%)	Risk- Weighted Assets	Minimum Pillar One Capital Requirement
Off-balance sheet exposures subject to the slotting approach					
Off-balance sheet exposures	13	6	71	5	-
Undrawn commitments	1,488	761	88	706	56
Market related contracts	729	7	85	6	1
Total off-balance sheet exposures subject to the slotting approach	2,230	774	87	717	57
Total exposures subject to the slotting approach		7,883	87	7,303	584

Note 33 Capital Adequacy continued

Credit risk exposures subject to the standardised approach

The tables below show credit risk exposures in respect of the Banking Group, for which the standardised approach has been used.

Unaudited (30/9/22)

Dollars in Millions	Total Exposure at Default after Credit Risk Mitigation	Average Risk Weight (%)	Risk- Weighted Assets	Minimum Pillar One Capital Requirement
On-balance sheet exposures subject to the standardised approach				
Sovereigns and central banks	12,917	-	-	-
Multilateral development banks and other international organisations	477	-	-	-
Public sector entities	1,119	20	237	19
Bank	1,032	43	472	38
Corporate	64	99	68	6
Residential mortgage	16	74	12	1
Past due assets	-	135	-	-
Other assets ¹	1,761	51	949	75
Total on-balance sheet exposures subject to the standardised approach	17,386	9	1,738	139

¹Other assets relate to all other assets (including interest receivables, account receivables, intangibles and cash accounts) that are not included in the other categories in the

			Banking (Unaudited (3	•		
Dollars in Millions	Total Exposure or Principal Amount	Average Credit Conversion Factor (%)	Credit Equivalent Amount	Average Risk Weight (%)	Risk- Weighted Assets	Minimum Pillar One Capital Requirement
Off-balance sheet exposures subject to the standardised approach Total off-balance sheet exposures subject to the standardised approach	964	93	898	34	323	26

	Banking Group Unaudited (30/9/22)					
Dollars in Millions	Total Exposure	Credit Equivalent Amount		Risk- Weighted Exposure	Minimum Pillar One Capital Requirement	
Counterparty credit risk for counterparties subject to the standardised approach						
Foreign exchange contracts ²	2,578	1,301	28	391	31	
Interest rate contracts ²	2,321	1,028	16	179	15	
Other	13	1	14	-	-	
Total counterparty credit risk for counterparties subject to the standardised approach	4,912	2,330	23	570	46	
Total exposures subject to the standardised approach		20,614	12	2,631	211	

² The total exposure reflects the exposure at default pre-credit risk mitigation. The credit equivalent amount reflects the exposure at default after credit risk mitigation.

Equity exposures

The table below shows the capital required to be held as a result of equities held.

	Banking Group Unaudited (30/9/22				
Dollars in Millions	Exposure at Default	Risk Weight (%)	Risk- Weighted	Minimum Pillar One Capital Requirement	
Equity holdings (not deducted from capital) included in the NZX 50 or overseas equivalent index	-	300	-	-	
All other equity holdings (not deducted from capital)	1	400	5	-	
Total equity exposures	1	400	5	-	

Note 33 Capital Adequacy continued

Credit risk mitigation

The Banking Group assesses the integrity and ability of counterparties to meet their contractual financial obligations for repayment. Collateral security in the form of property or a security interest in personal property is generally taken for business credit except for major government, bank and corporate counterparties of strong financial standing. Longer term consumer finance (e.g. housing loans) is generally secured against real estate while short term revolving consumer credit is generally unsecured.

The table below shows the total value of exposures covered by eligible financial collateral for portfolios subject to the standardised approach and total value of exposures covered by credit derivatives and guarantees for all portfolios.

D------

Panking Group

	Unaudited (30/09/22)		
Dollars in Millions	Bank	Sovereign	(Including Specialised Lending)
For portfolios subject to the standardised approach: Total value of exposures covered by eligible financial collateral	1,651	5,535	1
For all portfolios: Total value of exposures covered by credit derivatives or guarantees	-	-	

Residential mortgages by loan-to-valuation ("LVR") ratio

The table below sets out residential mortgages (including loans to businesses) wholly or partly secured by mortgages over residential properties as used to calculate the Banking Group's Pillar One capital requirement.

The LVRs are calculated as the greater of the customer's current loan limit or balance, divided by the Banking Group's valuation of the security at the last credit event for the customer. Where no LVR is available, the exposure is included in the over 90% category.

	Banking Group				
	Una	udited (30/9/22	/22)		
	On-balance Sheet Exposures	Off-balance Sheet Exposures	Total Exposures		
Dollars in Millions	at Default	at Default¹	at Default		
LVR Range					
0-59%	27,202	1,469	28,671		
60-69%	12,379	531	12,910		
70-79%	12,560	612	13,172		
80-89%	1,840	25	1,865		
Over 90%	843	319	1,162		
Total exposures at default secured by residential mortgages	54,824	2,956	57,780		

 $^{^{\}mathrm{1}}$ Off-balance sheet items include unutilised limits and loans approved, but not yet drawn.

Reconciliation of exposures secured by residential mortgages to housing loans in Note 9 Loans and advances to

customers	Banking Group
	On-balance Sheet Exposures at Default Unaudited
Dollars in Millions	30/9/22
Loans and advances to customers - housing loans	54,823
Add: Partial write offs excluded under the IRB approach	1
Total housing loan exposures secured by residential mortgages	54,824

0

Operational risk		
·	Banking	Group
	Unaudited ((30/9/22)
Dollars in Millions	Implied Risk- Weighted Exposure	Operational
Operational risk	9,138	731

The Banking Group calculated operational risk capital using the standardised approach set out in BPR150, subject to a minimum value of \$600 million.

Note 33 Capital Adequacy continued

Market risk

The table below shows market risk end of period and peak end-of-day capital charges.

Banking Group Unaudited (30/9/22)

		Oriadalted (30/ 5/22)			
		Implied Risk- Weighted Exposure Peak			
Dollars in Millions	End of Period		End of Period	Peak End-of-Day	
Interest rate risk	4,150	5,531	332	443	
Foreign exchange risk	61	175	5	14	
Equity risk	1	1	-	-	
Total market risk	4,212	5,707	337	457	

The aggregate market risk exposure above is derived in accordance with BPR and the Bank's Conditions of Registration.

For each category of market risk, the Banking Group's end of period aggregate capital charge is the charge as at the end of period reported. The peak endof-day aggregate capital charge is the maximum over the half year accounting period at the close of each business day.

Equity risk subject to a market risk capital charge as shown above relates to equities owned by the Bank.

Capital for other material risks

The Banking Group actively manages and measures all material risks affecting its operations. These risks go beyond the traditional banking risks of credit, operational and market risk. The measurement and management of all material risks is determined under the Banking Group's ICAAP and includes consideration of all other material risks, additional to those included in determining the minimum regulatory capital requirements under BPR. Other material risks assessed by the Banking Group include strategic risk, balance sheet and liquidity risk, conduct risk, compliance risk and sustainability risk.

As at 30 September 2022, the Banking Group had an internal capital allocation for strategic risk of nil (30 September 2021: \$105 million).

Capital structure

Contributed equity - Ordinary shares

These shares do not have a par value; each share entitles the shareholder to one vote at any meeting of shareholders. All shares rank equally in dividends and proceeds available to ordinary shareholders in a winding up.

On 1 July 2022, the RBNZ lifted its restrictions on dividends and outlined its expectations for banks to continue to exercise prudence when setting dividend levels.

Subordinated debt

Refer to Note 21 Subordinated debt for further information on Perpetual Notes, Subordinated Notes and Listed Subordinated Notes.

Accumulated other comprehensive income and other disclosed reserves in Tier 1 Capital includes the cost of hedging reserve of \$10 million which captures changes in fair value of hedging instruments due to currency basis and the FVOCI reserve of \$1 million which captures changes in the fair value of investments in equity instruments that are measured at fair value through other comprehensive income.

The asset revaluation reserve of \$3 million included in Tier 2 Capital relates to increments and any subsequent decrements arising from the revaluation of property, plant and equipment.

National Australia Bank Limited capital adequacy

The table below shows the capital adequacy ratios based on APRA capital adequacy standards, expressed as a percentage of total risk-weighted assets.

	Ultimate I	Ultimate Parent Banking Group		Ultimate Parent	
	Banking ((
	Unaudited	audited Unaudited	Unaudited	Unaudited	
	30/9/22	30/9/21	30/9/22	30/9/21	
Common Equity Tier 1 Capital ratio	11.51%	13.00%	11.24%	12.78%	
Tier 1 Capital ratio	13.14%	14.64%	13.05%	14.58%	
Total Capital ratio	18.17%	18.91%	18.57%	19.20%	

The ultimate parent banking group data is the Level 2 capital ratio (as published in the National Australia Bank Limited Pillar 3 report) and represents the consolidation of NAB and its subsidiary entities, other than the non-consolidated subsidiaries as outlined in the Pillar 3 report.

The ultimate parent bank of the Banking Group is National Australia Bank Limited which reports under the Advanced Internal Ratings Based approach for credit risk (other than for regulatory prescribed portfolios and other portfolios where the standardised approach to credit risk is applied), and the Standardised Measurement Approach to operational risk (previously the Advanced Measurement Approach for the year ended 30 September 2021). The ultimate parent bank capital ratios are effectively represented by the Level 1 capital ratios, which comprises National Australia Bank Limited and its subsidiary entities approved by APRA as part of the Extended Licensed Entity.

Under prudential regulations, NAB is required to hold capital above the prudential capital ratio ("PCR") and capital conservation buffer as determined by APRA for both the Level 1 and Level 2 Groups. The PCR is prescribed on a bilateral basis, and is not publicly disclosed. National Australia Bank Limited met the minimum capital adequacy requirements set by APRA as at 30 September 2022.

National Australia Bank Limited is required to publicly disclose risk management and capital adequacy information specified in APRA's Prudential Standard APS 330: Public Disclosure ("APS 330"). Updates are provided on a quarterly basis in accordance with the APS 330 reporting requirements.

National Australia Bank Limited's Annual Report and Pillar 3 report, incorporating the requirements of APS 330, can be accessed at www.nab.com.au.

Note 34 Risk Management

Risk management

Risk exists in all aspects of the Banking Group and the environment in which it operates. Risk is managed through the Banking Group's risk management framework. Forming part of the Banking Group's risk management strategy, this starts with the BNZ Board approved Strategy, Risk Appetite and Financial Plans. Risk appetite is translated and cascaded to the businesses qualitatively (through risk policies, standards and operating procedures) and quantitatively (through the Banking Group's risk limits, settings and decision authorities).

Compliance with the risk management framework is non-negotiable. Risk management accountabilities are allocated for risk ownership and functionally independent oversight and assurance using the Three Lines of Accountability Model as follows:

- first line: Management (who own and manage the risks, obligations and controls within their business in line with risk appetite);
- second line: Risk (who establish risk frameworks and provide insight, oversight and set appetite); and
- third line: Internal Audit (who provide independent assurance).

BNZ is primarily regulated by the RBNZ and the Banking Group is subject to the prudential reporting requirements of APRA as part of the NAB Group.

The key risks faced by the Banking Group include:

- credit risk;
- operational risk;
- compliance risk;
- conduct risk;
- strategic risk:
- market risk trading;
- market risk non-trading/banking positions, including interest rate risk in the banking book;
- liquidity risk: and
- sustainability risk.

Further details regarding the nature and extent of key risks faced by the Banking Group, and how these risks are managed, are outlined as part of this note. Regulatory and strategic risks are managed and overseen as part of the Banking Group's broader corporate governance structure and risk management framework as follows:

Board governance

The Banking Group's corporate governance structure provides quidance for effective decision making in all areas of the Banking Group through:

- strategic and operational planning;
- risk management and compliance;
- financial management and external reporting; and
- succession planning and culture.

The BNZ Board has ultimate responsibility to monitor and review the adequacy of the Banking Group's corporate governance practices (including risk management) and is supported by a number of committees. The Board Risk and Compliance Committee ("BRC") supports the framework for risk management across the Banking Group.

Executive governance

At an executive level, risk is overseen by the Chief Executive Officer ("CEO") through the Executive Risk and Compliance Committee ("ERCC"), which leads management in respect of risk matters relating to culture, integrated governance processes, risk strategy and performance. ERCC refers any matters of significant importance to BRC for its consideration and attention.

Internal audit function

The internal audit function is the responsibility of the General Manager Internal Audit who reports to the New Zealand Regional Audit Committee ("NZRAC"), the Managing Director and CEO of BNZ, the Chief Financial Officer of BNZ and to the Executive General Manager, NAB Group Audit. Audits are conducted using a risk-based approach to assess key business risks and internal control systems.

NZRAC assists the BNZ Board to fulfil its statutory and fiduciary responsibilities relating to accounting and financial controls, reporting systems and processes of the Banking Group and to oversee the internal audit function.

External auditor and credit rating agencies

As part of their work in issuing an auditor's independent review report on the Banking Group's six month Disclosure Statement or an auditor's independent audit report on the Banking Group's external auditor, Ernst & Young, may review parts of the Banking Group's risk management framework that impact significant aspects of the financial systems, to the extent necessary to form their independent review or audit opinion.

Credit rating agencies also conduct periodic reviews of the Banking Group's risk management approach and risk profile.

Note 34 Risk Management continued

Credit risk

Credit risk is the risk that a customer will fail to meet their obligations to the Banking Group in accordance with agreed terms. Credit risk arises from both the Banking Group's lending activities and markets and trading activities.

Bank lending activities account for most of the Banking Group's credit risk, however other sources of credit risk also exist throughout the Banking Group. These activities include the banking book, the trading book, and other financial instruments and loans, as well as in the extension of commitments and quarantees and the settlement of transactions.

The Banking Group structures the levels of credit risk it undertakes by placing limits on the amount of risk accepted in relation to existing or potential counterparties or customers, groups of related counterparties or groups of related customers, and to geographical and industry segments. Such risks are monitored on an ongoing basis and are subject to an annual or more frequent review.

Administration of the Banking Group's credit policies and procedures is the responsibility of the Risk division of the Banking Group. All loans are subject to a customer rating which estimates the probability of default derived from historical default data. There are monitoring procedures and systems in place to control exposures to individual customers, geographical and industry segments to ensure diversification and asset quality are maintained. Exposure to any one customer is further restricted by sub-limits covering on and off-balance sheet exposures, and daily settlement risk limits in relation to trading items such as forward foreign exchange contracts. Actual exposures against limits are monitored on a daily basis. Individual lending authorities are allocated according to demonstrated skills, accreditation and experience. Consequences are in place for any breaches of these authorities.

Exposure to credit risk is managed through regular analysis of the ability of existing or potential counterparties, customers, groups of related counterparties or groups of related customers to meet interest and capital repayment obligations and by changing limits where appropriate. Exposure to credit risk is also managed in part by obtaining collateral and corporate and personal guarantees.

The Banking Group continuously monitors its credit risk to counterparties through the examination of key risk indicators such as irregular or delinquent accounts and early warning signals. In addition, the Strategic Business Services unit has specific responsibility for the management of accounts classified as categorised assets. These processes enable credit impairments to be identified at the earliest possible time. Allowances are raised based on an expected credit loss model in line with the requirements of NZ IFRS 9. Recoverable amounts for impaired assets take into account the current market value of collateral held and the realisability of securities.

In general, the Banking Group does not take possession of collateral it holds as security or call on other credit enhancements that would result in recognition of an asset on the balance sheet. The following section discloses the Bank's policies and procedures for collateral taken to mitigate credit risk.

Cash and liquid assets

Cash and liquid assets consist of cash, transaction balances with central banks and other institutions and reverse repurchase agreements. Reverse repurchase agreements are collateralised with high quality liquid securities which are permitted to be sold or re-pledged. The fair values of this collateral is disclosed in Note 7 Cash and liquid assets.

Collateral paid

Collateral paid consists of collateral to meet derivative trading obligations. Balances held with central supervisory banks and other interest bearing assets that are due from other banks are managed based on the counterparty's creditworthiness. The Banking Group will utilise master netting arrangements where possible to reduce its exposure to credit risk.

Trading securities

The Banking Group may utilise credit derivatives, quarantees provided by central banks or other forms of credit enhancements or collateral in order to minimise the Banking Group's exposure to credit risk.

Derivative financial instruments

The Banking Group uses documentation including ISDA Master Agreements to document derivative activities. Under the ISDA Master Agreements, if a counterparty defaults, all contracts with that counterparty are terminated. They are then settled on a net basis at market rates current at the time of settlement. The Banking Group also executes CSAs in conjunction with ISDA Master Agreements.

Credit risk from over-the-counter derivatives is mitigated where possible through netting arrangements whereby derivative assets and liabilities with the same counterparty can be offset in certain circumstances. Derivatives that are cleared through a central clearing counterparty or an exchange have less credit risk than over-the-counter derivatives and are subject to relevant netting and collateral agreements.

Gross loans and advances to customers

The majority of Gross loans and advances to customers comprise general lending and line of credit products. The distinction in classification is reflective of the type of lending product. These lending and line of credit products will generally have a significant level of collateralisation depending on the nature of the product.

Credit card outstandings are mostly unsecured. However, where the borrower has provided collateral for other lending, the collateral can also be available to secure any credit card debt.

Housing loans are secured by mortgages over residential properties. LVR thresholds range up to, or exceed 100% in limited circumstances, including remediation of damaged properties that are held by the Banking Group as security. Further details on LVR are provided in Note 33 Capital adequacy.

Overdrafts and Other term lending to non-retail customers are mostly secured by acceptable collateral (highly rated investment grade institutional clients may borrow on an unsecured basis). Collateral generally comprises commercial or agricultural properties, business assets, inventories, and in some cases personal assets of the borrower (e.g. residential properties). The Banking Group manages its exposure to these products by completing a credit evaluation to assess the customer's character, industry, business model and capacity to meet their commitments. Collateral provides a secondary source of repayment in the event that a customer cannot meet its contractual repayment obligations.

Amounts due from related entities

Depending on the nature of the transaction entered into, collateral may be taken to secure such exposures.

Note 34 Risk Management continued

Concentrations of credit exposure

The table below presents the maximum exposure to credit risk of financial assets before taking into account any collateral held or other credit enhancements.

	Banking G	Banking Group		
Dollars in Millions	30/9/22	30/9/21		
Maximum exposure to credit risk				
Cash and liquid assets	9,438	9,560		
Due from central banks and other institutions ¹	372	304		
Collateral paid ¹	2,814	535		
Trading securities	7,414	7,348		
Derivative financial instruments	9,540	4,404		
Gross loans and advances to customers ¹	100,092	95,399		
Amounts due from related entities	210	179		
Total on-balance sheet credit exposures	129,880	117,729		
Off-balance sheet credit exposures ²	16,683	14,383		
Total maximum exposure to credit risk	146,563	132,112		

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

² Off-balance sheet credit exposures include contingent liabilities and irrevocable commitments to extend credit. Comparative information has been restated due to a change in product classification and system optimisation project. In 2022 the Banking Group changed the classification of some of its credit facilities from revocable to irrevocable. Refer to Note 28 *Contingent liabilities and other commitments* for further information.

The table below presents the Banking Group's concentrations of credit exposure by industry sector and geographical location. Except for derivative financial instruments, the majority of the overseas credit exposures relate to New Zealand based assets funded in New Zealand dollars for offshore customers. The concentrations of credit exposure by industry sector are based on Australian and New Zealand Standard Industrial Classification ("ANZSIC") codes. The concentrations of credit exposure by geographical location are based on the geographical location of the counterparty's tax residency.

	Banking Group (30/9/22)			Banking Group (30/9/21)		
Dollars in Millions	On-balance sheet	Off-balance sheet	Total exposure	On-balance sheet	Off-balance sheet³	Total exposure
Concentration by industry						
Agriculture	14,327	1,205	15,532	13,839	963	14,802
Forestry and fishing	1,066	341	1,407	974	260	1,234
Mining	330	225	555	363	195	558
Manufacturing	4,240	1,478	5,718	3,405	1,449	4,854
Electricity, gas and water	668	721	1,389	817	687	1,504
Construction	1,317	861	2,178	1,126	676	1,802
Wholesale and retail trade	4,270	1,390	5,660	3,591	1,415	5,006
Accommodation, restaurants, culture and recreation	1,561	408	1,969	1,479	409	1,888
Transport and storage	1,954	1,366	3,320	1,983	832	2,815
Communications	361	171	532	387	163	550
Financial, investment and insurance	20,106	1,737	21,843	15,294	1,789	17,083
Property, business and personal services	11,297	2,369	13,666	10,655	1,961	12,616
Government, education, health and community services	8,516	1,291	9,807	8,341	1,472	9,813
Real estate - mortgage	54,823	3,108	57,931	52,728	2,095	54,823
Personal lending	837	12	849	855	17	872
Related entities ⁴	4,207	-	4,207	1,892	-	1,892
Total credit exposures by industry	129,880	16,683	146,563	117,729	14,383	132,112
Concentration by geography						
New Zealand	119,840	16,317	136,157	113,467	14,032	127,499
Overseas	10,040	366	10,406	4,262	351	4,613
Total credit exposures by geography	129,880	16,683	146,563	117,729	14,383	132,112

³ Comparative information has been restated due to a change in product classification and system optimisation project.

⁴ Related entities include amounts due from related entities and derivative financial assets with related entities.

Note 34 Risk Management continued

Credit risk exposures by risk grade

The table below shows significant exposures to credit risk to which the expected credit loss model is applied, for recognised and unrecognised financial assets at amortised cost, based on the following risk grades:

- Senior investment grade: broadly corresponds with Standard & Poor's ratings of AAA to A- (internal rating 1 to 5);
- Investment grade: broadly corresponds with Standard & Poor's ratings of BBB+ to BBB- (internal rating 6 to 11);
- Sub-investment grade: broadly corresponds with Standard & Poor's ratings of BB+ (internal rating 12 to 23); and
- Default: broadly corresponds with Standard & Poor's rating of D (internal rating 98 to 99).

Notional stage allocations (Stage 1, Stage 2 and Stage 3) for gross credit risk exposures incorporate the impact of forward looking stress applied in the expected credit loss model. Refer to the accounting policy section of Note 10 Allowance for expected credit losses for further information.

Banking Group (30/9/22)

Dollars in Millions		Loans and advances and loan commitments for which the loss allowance is measured at:			
	12-months ECL	Lifetime ECL Not Credit Impaired	Lifetime ECL Credit Impaired	Total	
Credit risk exposure by risk grade					
Senior investment grade	38,040	2,879	-	40,919	
Investment grade	27,519	11,858	=	39,377	
Sub-investment grade	13,810	27,109	=	40,919	
Default	-	-	791	791	
Total credit risk exposure by risk grade	79,369	41,846	791	122,006	
		Banking Group (30/9/21)			
Credit risk exposure by risk grade					
Senior investment grade	33,363	1,770	-	35,133	
Investment grade	32,046	9,577	-	41,623	
Sub-investment grade	17,758	23,273	-	41,031	
Default	-	-	629	629	
Total credit risk exposure by risk grade	83,167	34,620	629	118,416	

The Banking Group maintains appropriate control limits on net open derivative positions (the difference between purchase and sale contracts), by both amount and term. At any one time, the amount subject to risk is limited to the current fair value of instruments that are favourable to the Banking Group (assets where their fair value is positive), which in relation to derivatives is only a small fraction of the contract, or notional values used to express the volume of instruments outstanding. This credit risk exposure is managed as part of the overall lending limits with customers, together with potential exposures from market movements. The requirement for collateral or other security for these instruments is assessed based on the creditworthiness of the counterparty.

Undrawn credit commitments

Undrawn credit commitments represent unused portions of authorisations to extend credit in the form of loans, guarantees or letters of credit. The Banking Group is potentially exposed to credit risk for undrawn credit commitments for an amount equal to the total amount undrawn. However, the level of credit risk is mitigated through most commitments to extend credit being contingent upon customers maintaining specific credit standards. The Banking Group monitors the term to maturity of all credit commitments, drawn and undrawn, because longer term commitments generally have a greater degree of credit risk than shorter term commitments.

Operational risk

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or external events. This includes legal risk, but excludes strategic risk.

There are inherent risks within the Banking Group's operations due to the range of customers, products and services that the Banking Group provides, the multiple markets and channels these products and services are delivered through, and the reliability and resilience of BNZ's technology, which may be impacted by the complex technology environment, failure to keep technology systems up-to-date, an inability to restore or recover systems and data in acceptable timeframes, or a physical or cyber attack.

Operational risk can also arise from external events such as biological hazards, climate change, natural disasters, cyber attacks or acts of terrorism.

The Banking Group has adopted the NAB Group's Operational Risk Management Practices Framework, which sets out the principles for managing operational risks across the Banking Group. The Banking Group takes a proactive risk-based approach to the identification, assessment, management, reporting, assurance, review and challenge of risks and controls reflecting the Banking Group's risk appetite, strategic objectives and values. This ensures that end-to-end risks and obligations are understood and managed, and that the control environment is fit for purpose. Timely and accurate information on risks, issues and events is provided to enable prompt reporting and sustainable remedial action.

Effective operational risk management within the Banking Group is based upon a three lines of accountability model. The Banking Group's business units are the first line of accountability and are accountable for the management of their risks. Review and challenge are provided by the Banking Group's Risk division (second line of accountability) who report to the Banking Group's Chief Risk Officer. Assurance is provided by the internal audit function (third line of accountability).

Note 34 Risk Management continued

The primary roles of the Banking Group's Risk division in relation to operational risk are risk appetite setting, policy making; advisory and support, including monitoring, review and challenge. The team also provides subject matter expertise and additional assistance to business units and identifies systemic trends across the business.

For the Banking Group's approach to calculating operational risk capital for the purposes of capital adequacy, refer to Note 33 Capital adequacy.

The operational risk calculations are performed on an aggregate bank-wide basis, and the resultant capital is allocated across major business lines.

Compliance risk

Compliance risk is the risk of failing to understand and comply with relevant laws, regulations, licence conditions, supervisory requirements, self-regulatory industry codes of conduct and voluntary initiatives as well as the internal policies, standards, procedures and frameworks that support sustainable compliance.

The Banking Group has adopted the NAB Group's Compliance Framework (Compliance Obligation Management Policy) (as appropriate for the Banking Group) which sets out the principles for managing compliance risk across the Banking Group.

The Banking Group has a fundamental duty to obey the law when delivering banking and financial services, and is committed to the fair treatment of customers, and maintaining open, constructive and transparent relationships with the Banking Group's regulators. The Banking Group therefore strives to maintain effective practices for compliance risk management to ensure compliance obligations are met. Timely identification, investigation, escalation, reporting and remediation of any instances of non-compliance is emphasised by the Banking Group.

Conduct risk

Conduct risk is the risk that a behaviour, or action by either the Banking Group, or those acting on behalf of the Banking Group, does not lead to the appropriate outcome for the Banking Group's colleagues, customers, communities and other stakeholders.

Conduct risk is inherent in the Banking Group's business activities. It may arise intentionally or unintentionally from decisions and actions made during the execution of the Banking Group's business activities.

Conduct Risk is managed by leveraging policies, frameworks, processes and tools used for other material risk types, such as operational risk, compliance risk and through the Banking Group's Enterprise Conduct Risk Framework. At an executive level, governance and oversight of conduct risk and the conduct strategy resides with the Customer and Conduct Committee, a sub-committee of the Banking Group's ERCC.

Strategy in using financial instruments

By their nature, the Banking Group's activities involve the use of financial instruments. The core activity of the Banking Group is to accept deposits from customers at both fixed and floating rates for various periods, and seek to earn interest margins by investing these funds. The Banking Group also deals in a range of other financial products including derivatives and foreign exchange contracts where the Bank has deemed it has the expertise in the relevant market and infrastructure to support management processes.

Executing this strategy may result in market risk for the Banking Group, which is the risk of financial loss from unfavourable movements in market variables such as interest or foreign exchange rates. The Banking Group may use financial instruments to mitigate this market risk or selectively position for favourable movements in these market variables. The Board places limits on the level of market risk exposure that can be taken from these activities while a comprehensive governance structure is in place to ensure compliance with the Banking Group's risk appetite. This includes independent risk oversight teams which provide oversight over the Banking Group's market risk exposures and escalate any limit breaches.

The Banking Group's activities are divided into traded market risk and non-traded market risk. The differences between the two, including the measures used to control the level of market risk exposure, are documented further in this note.

Market risk - traded

Traded market risk is the risk of loss to the trading book from unfavourable movements in market variables such as interest rates or foreign exchange rates. Financial instruments designated as traded market risk include those which:

- are held for short term resale;
- are taken on by the Banking Group with the intention of benefitting in the short term from actual and/or expected differences between their buying and selling prices, or from other price or interest rate variations;
- arose from broking and market making; and
- are hedging a derivative valuation adjustment.

The trading activities of the Banking Group are carried out by BNZ Markets.

The types of market risk arising from these activities include interest rate, foreign exchange, commodity, credit spread and volatility risk.

Independent oversight of the Banking Group's traded market risk, including compliance with limits, is undertaken by the Market risk team, which reports through to the Chief Risk Officer. At an executive level, governance is provided by the Banking Group's Market Risk Committee, which is a subcommittee of the Banking Group's ERCC.

All trading activities are subject to the disciplines prescribed in the NAB Group Traded Market Risk Policy which is approved by the National Australia Bank Limited Board of Directors ("NAB Board"), and approved by the BNZ Board for adoption by the Banking Group (as appropriate).

Objectives and limitations of the Value at Risk ("VaR") methodology

VaR is an estimate of potential loss resulting from shifts in market variables such as interest rates, foreign exchange rates, traded credit spreads, option volatility and commodity prices. The estimate is calculated on an entire trading portfolio basis, which includes all financial instruments and derivatives.

VaR is calculated using the historical simulation method. This method involves multiple revaluations of the trading books using 550 days of historical pricing shifts. The pricing data is updated daily so as to have the most recent 550 day history of prices. The results are ranked and the loss at the 99th percentile confidence level identified. The calculation and rate shifts used assume a one day holding period for all positions. This means the model estimates there is a 99% chance that the loss will not exceed the VaR estimate on any given day.

Note 34 Risk Management continued

The use of a VaR methodology has limitations, which include:

- the historical data used to calculate VaR is not always an appropriate proxy for current market conditions. If market volatility or correlation conditions change significantly, losses may occur more frequently and to a greater magnitude than the VaR measure suggests;
- the VaR methodology assumes that positions are held for one day and may underestimate losses on positions that cannot be hedged or reversed inside that timeframe:
- VaR is calculated on positions at the close of each trading day, and does not measure risk on positions taken and closed before the end of each trading session; and
- VaR does not describe the directional bias or size of the positions generating the risk.

VaR estimates are checked against profit/loss via backtesting for reasonableness and to assess the continued relevance of the model assumptions.

The following table shows the Banking Group VaR for the trading portfolio, including both physical and derivative positions:

	Banking Group							
	As At		Average Value During Year		Minimum Value During Year		Maximum Value During Year	
Dollars in Millions	30/9/22	30/9/21	30/9/22	30/9/21	30/9/22	30/9/21	30/9/22	30/9/21
VaR at a 99% confidence level								
Foreign exchange risk	0.46	0.27	0.33	0.80	0.08	0.07	1.29	2.01
Interest rate risk	1.73	1.84	2.81	2.95	1.20	1.31	6.09	6.06
Volatility risk	0.03	0.04	0.03	0.05	0.01	-	0.08	0.09
Credit spread risk	0.85	0.35	0.46	0.55	0.22	0.26	0.85	1.09
Diversification benefit	(1.19)	(0.01)	(0.49)	(1.00)	N/A	N/A	N/A	N/A
Total VaR for physical and derivative positions	1.88	2.49	3.14	3.35	1.36	1.76	5.74	6.39

VaR is measured individually for foreign exchange risk, interest rate risk, volatility and credit spread risk.

Due to the limitations of the measure, VaR is supplemented with stress testing which is reported daily and also by other measures such as foreign exchange limits, basis point sensitivity limits, stop loss limits, and profit/loss referral levels.

Foreign exchange risk

Foreign exchange and translation risk arise from the impact of currency movements on the value of the Banking Group's cash flows, profits and losses, and assets and liabilities due to participation in global financial markets and international operations.

Foreign exchange limits are in place to control the level of foreign currency exposure run by the Banking Group. This exposure is measured by calculating the net present value position of the products the Banking Group deals in which are denominated in a non-New Zealand dollar currency. This includes foreign currency loans and deposits, foreign currency cash balances and the trading of foreign currency denominated products, such as spot and forward contracts, currency options, foreign currency interest rate derivatives and foreign currency securities.

An analysis of the net open position by currency is shown in the following table. The net open position in each currency represents the net of the nonderivative assets and liabilities in that currency aggregated with the net expected cash flows from derivative financial instrument purchases and sales from foreign exchange transactions in that currency including foreign currency options and futures and the principal on currency swaps. The amounts are stated in New Zealand dollar equivalents translated using the spot exchange rates as at the reporting date.

Net open position

• •	Banking Grou	ıp
Dollars in Millions	30/9/22 3	30/9/21
US dollar	54	16
Australian dollar	56	11
Japanese yen	1	-
Pound sterling	2	2
Euro	(4)	-
Swiss franc	(1)	-
Hong Kong dollar	(1)	-
Other	1	(1)

Market risk - non-traded/banking positions

Non-traded market risk includes all market risks which are not designated as traded market risk. Non-traded market risk largely consists of structural interest rate risk in the balance sheet arising from loans and deposits and also holdings of high quality liquid assets within the prudential asset portfolio.

Non-traded market risk also includes funding and liquidity risk.

Non-traded market risk policies are approved by the NAB Board, with the NAB Group Liquidity Policy and the NAB Group Capital Policy approved by the BNZ Board for adoption by the Banking Group (as appropriate).

Note 34 Risk Management continued

Interest rate risk

Interest rate risk is the risk of the Banking Group's market operations and trading activities being exposed to changes in the value of securities and derivatives as a result of changes in interest rates.

Cash flow interest rate risk is the risk that the future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Fair value interest rate risk is the risk that the fair value of a financial instrument will fluctuate because of changes in market interest rates.

Interest rate risks primarily result from exposures to changes in the level, slope and curvature of the yield curve, the volatility of interest rates, mortgage prepayment speeds and credit spreads. The Banking Group has exposure to the effects of fluctuations in the prevailing levels of market interest rates on both its fair value and cash flow risks. Exposure to interest rate risk arises in respect of the following activities: borrowing from and lending to customers; borrowing to fund the Banking Group in both domestic and international wholesale debt markets; transacting in money market instruments such as government stock, bank bills, and commercial paper; foreign exchange instruments such as foreign exchange contracts; and derivative financial instruments such as swaps, options and futures.

Interest rate risk for non-traded market risk is measured, managed and monitored using VaR and Earnings at Risk ("EaR") limits, complemented by cash flow analysis, basis point sensitivity and stress testing limits.

Similar to the methodology applied for traded market risk, VaR is calculated using the historic simulation method. Due to the generally longer holding period for non-traded products, the parameters applied differ. The key parameters for measuring non-traded market risk are as follows:

- 99% confidence level;
- three-month holding period;
- six years of historical data;
- rate changes are absolute rather than proportional;
- investment term for capital is three years; and
- investment term for core "Non-Interest Bearing" liabilities (the sum of low and non-interest rate bearing liabilities) is five years.

EaR is the potential accrual income loss over the next 12 months (the forecast period). VaR exposures are measured and reported weekly while EaR exposures are measured and reported monthly.

Banking Group

The table below shows the aggregate VaR figures for non-traded market risk:

		,	
Dollars in Millions	30/9/22	30/9/21	
VaR for physical and derivative positions at a 99% confidence level			
New Zealand			
As at end of year	29	37	
Average value during year ended	34	45	
Minimum value during year ended	25	26	
Maximum value during year ended	41	66	
The table below shows the aggregate EaR figures for non-traded market risk:			
	Banking G	roup	
	Banking G 30/9/22	7 roup 30/9/21	
The table below shows the aggregate EaR figures for non-traded market risk:	_	-	
The table below shows the aggregate EaR figures for non-traded market risk: Dollars in Millions	_	-	
The table below shows the aggregate EaR figures for non-traded market risk: Dollars in Millions EaR for physical and derivative positions at a 99% confidence level New Zealand	_	-	
The table below shows the aggregate EaR figures for non-traded market risk: Dollars in Millions EaR for physical and derivative positions at a 99% confidence level New Zealand	30/9/22	30/9/21	
The table below shows the aggregate EaR figures for non-traded market risk: Dollars in Millions EaR for physical and derivative positions at a 99% confidence level New Zealand As at end of year	30/9/22	30/9/21	

Note 34 Risk Management continued

Interest rate repricing schedule

The following tables represent a breakdown of the balance sheet by repricing dates or contractual maturity, whichever is the earlier. As interest rates and yield curves change over time, the Banking Group may be exposed to a loss in earnings due to the characteristics of the assets and their corresponding liability funding. These mismatches are actively managed as part of the overall interest rate risk management process. In managing the structural interest rate risk, the primary objectives are to limit the extent to which net interest income could be impacted from an adverse movement in interest rates and to maximise shareholder's earnings.

	Banking Group (30/9/22)							
Dollars in Millions	Total	Up to 3 Months	Over 3 Months and up to 6 Months	Over 6 Months and up to 1 Year	Over 1 Year and up to 2 Years	Over 2 Years	Non- Interest Bearing	
Assets								
Cash and liquid assets	9,581	9,402	-	-	-	-	179	
Due from central banks and other institutions	372	328	44	-	-	-	-	
Collateral paid	2,814	2,814	-	-	-	-	-	
Trading securities	7,414	1,626	671	1,097	344	3,676	-	
Derivative financial instruments	9,540	-	-	-	-	-	9,540	
Gross loans and advances to customers	100,092	47,818	7,207	14,585	15,337	12,695	2,450	
Deductions from loans and advances to customers	(746)	-	-	-	-	-	(746)	
Amounts due from related entities	210	196	-	-	-	-	14	
All other assets	2,143	-	-	-	-	-	2,143	
Total assets	131,420	62,184	7,922	15,682	15,681	16,371	13,580	
Liabilities								
Due to central banks and other institutions	5,160	3,700	28	74	25	1,333	-	
Collateral received	2,134	2,134	-	-	-	-	-	
Trading liabilities	302	-	-	-	159	143	-	
Derivative financial instruments	8,228	-	-	-	-	-	8,228	
Deposits and other borrowings	78,154	47,329	8,743	7,441	1,210	646	12,785	
Bonds and notes	20,181	2,638	1,176	1,187	4,587	10,593	-	
Amounts due to related entities	2,160	2,027	-	-	-	-	133	
Subordinated debt	1,950	1,950	-	-	-	-	-	
All other liabilities	2,090	-	-	-	-	-	2,090	
Total liabilities	120,359	59,778	9,947	8,702	5,981	12,715	23,236	
Shareholder's equity								
Total shareholder's equity	11,061	-	-	-	-	-	11,061	
Total liabilities and shareholder's equity	131,420	59,778	9,947	8,702	5,981	12,715	34,297	
On-balance sheet sensitivity gap	-	2,406	(2,025)	6,980	9,700	3,656	(20,717)	
Derivative financial instruments								
Net hedging derivative notionals	-	(1,256)	4,599	(5,738)	(4,104)	6,499		
Interest sensitivity gap - net	-	1,150	2,574	1,242	5,596	10,155	(20,717)	

Note 34 Risk Management continued

Banking Group (30/9/21)							
Dollars in Millions	Total	Up to 3 Months	Over 3 Months and up to 6 Months	Over 6 months and up to 1 Year	Over 1 Year and up to 2 Years	Over 2 Years	Non- Interest Bearing
Assets							
Cash and liquid assets	9,722	9,501	-	-	-	-	221
Due from central banks and other institutions ¹	304	273	31	-	-	-	-
Collateral paid ¹	535	535	-	-	-	-	-
Trading securities	7,348	1,880	1,625	1,029	33	2,781	-
Derivative financial instruments	4,404	-	-	-	-	-	4,404
Gross loans and advances to customers ¹	95,399	48,324	7,426	17,180	9,927	10,278	2,264
Deductions from loans and advances to customers	(708)	-	-	-	-	-	(708)
Amounts due from related entities	179	167	-	-	-	-	12
All other assets	1,939	-	-	-	-	-	1,939
Total assets	119,122	60,680	9,082	18,209	9,960	13,059	8,132
Liabilities							
Due to central banks and other institutions ¹	4,931	3,175	2	36	56	1,660	2
Collateral received ¹	570	570	-	-	-	-	-
Trading liabilities	537	-	-	27	47	463	-
Derivative financial instruments	3,189	-	-	-	-	-	3,189
Deposits and other borrowings ¹	77,995	48,448	9,830	5,936	1,113	590	12,078
Bonds and notes	17,518	515	736	1,667	3,251	11,349	-
Amounts due to related entities	1,306	1,172	-	-	-	-	134
Subordinated debt	1,950	1,950	-	-	-	-	-
All other liabilities	1,245	-	-	-	-	-	1,245
Total liabilities	109,241	55,830	10,568	7,666	4,467	14,062	16,648
Shareholder's equity							
Total shareholder's equity	9,881	-	-	-	-	-	9,881
Total liabilities and shareholder's equity	119,122	55,830	10,568	7,666	4,467	14,062	26,529
On-balance sheet sensitivity gap	-	4,850	(1,486)	10,543	5,493	(1,003)	(18,397)
Derivative financial instruments							
Net hedging derivative notionals		(1,563)	3,470	(8,216)	559	5,750	
Interest sensitivity gap - net	-	3,287	1,984	2,327	6,052	4,747	(18,397)

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Equity risk

Equity risk results from exposures to changes in the price of individual equities, equity baskets and equity indices. Management reviews the Banking Group's exposure to any equity risk on a monthly basis.

Liquidity risk

Liquidity risk is the risk that the Banking Group is unable to meet its financial obligations as they fall due. These obligations include the repayment of deposits on demand or at their contractual maturity, the repayment of wholesale borrowings and loan capital as they mature, the payment of interest on borrowings and the payment of operational expenses and taxes. The liquidity associated with financial markets can be reduced substantially as a result of external economic or market events, market size or the actions of individual participants.

Maintaining adequate liquidity to meet current and future payment obligations at a reasonable cost is a core objective of the Banking Group. The Banking Group must also comply with APRA prudential and regulatory liquidity obligations as part of the NAB Group.

The following are types of liquidity risks:

- Intra-Day: Ability of the Banking Group to meet its intra-day collateral requirements in relation to its clearing and settlement obligations;
- Operational: Ability of the Banking Group to meet its refinancing requirements for a predefined period, e.g. up to 30 days; and
- Structural: Liquidity risk profile of the balance sheet to accommodate the Banking Group's strategic plan and risk appetite.

The Banking Group manages liquidity risk through a combination of positive cash flow management, the maintenance of portfolios containing high quality liquid assets and maintenance of a prudent funding strategy. The Banking Group undertakes a conservative approach by imposing internal limits that are in addition to regulatory requirements, including engaging in regulatory and internal thematic liquidity stress tests.

Independent oversight of the Banking Group's non-traded market risk, including compliance with limits, is undertaken by the Balance Sheet and Liquidity risk team, which reports through to the Chief Risk Officer. At an executive level, governance is provided by the Banking Group's Asset, Liability and Capital Committee ("ALCCO"), which is a subcommittee of the Banking Group's ERCC.

Note 34 Risk Management continued

The BNZ Board has the ultimate responsibility to monitor and review the adequacy of the Banking Group's liquidity compliance and management framework, with the guidance of the Banking Group's BRC. To aid in the fulfilment of its guidance responsibilities, the BRC receives recommendations from the RRMC and regular reports on the Banking Group's liquidity management activity, risk limits and sensitivity metrics. ALCCO is responsible for approval and providing overview of the execution of the liquidity strategy and escalation of issues to RRMC.

The Banking Group is subject to RBNZ's liquidity requirements (as set out in the RBNZ's Liquidity Policy (BS13/BS13A) ("BS13")). Consistent with the requirements of BS13, liquidity risk is measured and managed in the Banking Group on a cash flow mismatch and also core funding basis to ensure that the Banking Group exceeds RBNZ's specified minimum standards for these metrics. The Banking Group is required to monitor both 'one week' and 'one month' mismatches. Cash flow mismatch limits have been established to limit the Banking Group's exposure in these time buckets. The Banking Group maintains an Internal Liquidity Adequacy Assessment framework that meets the requirements set out in BS13.

The Banking Group also complies with APRA's prudential liquidity standard APS 210 "Liquidity" ("APS 210") as a member of NAB. In accordance with the requirements of APS 210, the Banking Group also measures and manages its funding and liquidity risk based on the Liquidity Coverage Ratio ("LCR"), and Net Stable Funding ratio ("NSFR") methodologies.

LCR is a Basel III requirement, which requires a bank to hold sufficient high quality liquid assets to cover its total net cash outflows over a 30 day period. NSFR was introduced on 1 January 2018 and requires a bank to maintain a stable funding position to support the composition of its assets and off-balance

The ability to realise assets quickly is an important source of liquidity for the Banking Group. The Banking Group holds sizeable balances of high quality liquid assets such as cash and securities that are acceptable under repurchase agreements with the RBNZ to meet these needs.

A three-level contingency funding plan has been established for the management of an escalated liquidity event where the Banking Group experiences either restricted access to wholesale funding, or a large increase in the withdrawal of funds. The plan identifies triggers at each level, details the actions required, allocates the key tasks to individuals, provides timeframes and defines a management committee to oversee the action plan.

Maturity profile

The tables on pages 75 and 76 present the Banking Group's cash flows by remaining contractual maturities as at the reporting date.

The gross cash flows disclosed hereafter are the contractual undiscounted cash flows and include both principal and associated future interest payments and therefore will not agree to the carrying values on the balance sheet. Actual cash flows can differ significantly from contractual cash flows as a result of future actions of the Banking Group and its counterparties. Off-balance sheet exposures are excluded from the tables below as contractual cash flows, if any, are contingent in nature. Irrevocable commitments to extend credit can be drawn down at any time before the commitments expire. Details of offbalance sheet exposures are included in Note 28 Contingent liabilities and other commitments. Other assets and other liabilities only include balances which have contractual future cash flows.

Banking Group (30/9/22)

	Banking Group (30/9/22)							
Dollars in Millions	On Demand	3 Months or less	3 to 12 Months	1 to 5 Years	Over 5 Years	Total Inflow/ (Outflow)		
Assets								
Cash and liquid assets	9,264	317	-	-	-	9,581		
Due from central banks and other institutions	-	330	44	-	-	374		
Collateral paid	-	2,814	-	-	-	2,814		
Trading securities	-	1,570	1,866	3,120	1,758	8,314		
Loans and advances to customers	5,310	19,726	14,681	30,805	63,337	133,859		
Amounts due from related entities	22	188	-	-	-	210		
Other assets	-	914	-	-	-	914		
Total	14,596	25,859	16,591	33,925	65,095	156,066		
Liabilities								
Due to central banks and other institutions	(1,250)	(658)	(1,123)	(2,254)	-	(5,285)		
Collateral received	=	(2,134)	-	-	-	(2,134)		
Trading liabilities	-	(1)	(4)	(297)	(31)	(333)		
Deposits and other borrowings	(45,883)	(13,340)	(17,543)	(1,947)	-	(78,713)		
Bonds and notes	-	(1,296)	(2,665)	(15,398)	(3,261)	(22,620)		
Amounts due to related entities	(1,070)	(1,090)	-	-	-	(2,160)		
Other liabilities	-	(1,117)	(37)	(124)	(145)	(1,423)		
Subordinated debt ¹	-	(13)	(33)	(1,175)	(1,180)	(2,401)		
Total	(48,203)	(19,649)	(21,405)	(21,195)	(4,617)	(115,069)		
Derivative financial liabilities ²								
Derivative financial liabilities inflow	-	51,309	16,707	21,673	5,529	95,218		
Derivative financial liabilities (outflow)	-	(55,359)	(22,048)	(32,424)	(8,447)	(118,278)		

¹ The maturity classification of the Bank's Perpetual Notes reflects the scheduled mandatory conversion date. Refer to Note 21 Subordinated debt for further information.

² Derivative financial liabilities include hedging and trading derivative cash flows.

Note 34 Risk Management continued

Banking Group (30/9/21)

						Total
Dollars in Millions	On Demand	3 Months or less	3 to 12 Months	1 to 5 Years	Over 5 Years	Inflow/ (Outflow)
	Demand	01 1033	Months	rears	rears	(outitow)
Assets	0.120	500				0.722
Cash and liquid assets	9,126	596	-	-	-	9,722
Due from central banks and other institutions ¹	-	273	31	-	-	304
Collateral paid ¹	-	535	-	-	-	535
Trading securities	-	1,803	2,749	1,599	1,515	7,666
Loans and advances to customers ¹	4,726	17,650	12,995	29,456	52,959	117,786
Amounts due from related entities	27	152	-	-	-	179
Other assets	-	795	-	-	-	795
Total	13,879	21,804	15,775	31,055	54,474	136,987
Liabilities						
Due to central banks and other institutions ¹	(1,127)	(1,498)	(1,232)	(1,082)	-	(4,939)
Collateral received ¹	-	(570)	-	-	-	(570)
Trading liabilities	-	(4)	(38)	(400)	(153)	(595)
Deposits and other borrowings ¹	(46,652)	(13,911)	(15,894)	(1,755)	-	(78,212)
Bonds and notes	-	(339)	(2,813)	(12,584)	(2,055)	(17,791)
Amounts due to related entities	(956)	(350)	-	-	-	(1,306)
Other liabilities	-	(511)	(36)	(150)	(152)	(849)
Subordinated debt ²	-	(6)	(20)	(1,107)	(1,125)	(2,258)
Total	(48,735)	(17,189)	(20,033)	(17,078)	(3,485)	(106,520)
Derivative financial liabilities ³						
Derivative financial liabilities inflow	-	34,374	13,035	21,363	5,698	74,470
Derivative financial liabilities (outflow)	-	(35,978)	(14,978)	(25,821)	(7,033)	(83,810)

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Liquidity portfolio management

The table below shows net financial assets held by the Banking Group for the purpose of managing liquidity risk.

	Banking Grou			
Dollars in Millions	30/9/22	30/9/21		
Cash and balances immediately convertible to cash ⁴	9,314	9,126		
Securities purchased under agreements to resell	343	135		
Government bonds, notes and securities	3,232	4,213		
Semi-government bonds, notes and securities	2,779	1,259		
Corporate and other institutions bonds, notes and securities	1,101	1,339		
Total liquidity portfolio	16,769	16,072		

⁴ Included within Cash and balances immediately convertible to cash is \$50 million due from other institutions (30 September 2021: nil).

As at 30 September 2022, the Banking Group also held RMBS of \$15,000 million (30 September 2021: \$13,000 million) of which \$14,160 (30 September 2021: \$12,240 million) is available to be sold to the RBNZ under agreements to repurchase. The amount of \$14,160 million is subject to a 19% reduction in value in accordance with RBNZ's Operating Rules and Guidelines. These RMBS are secured by housing loans and other assets.

For liquidity purposes, from May 2021 there is a 5% limit on the Banking Group's total assets (previously 4%) giving a net balance of \$6,394 million (30 September 2021: \$5,966 million).

Additional RBNZ facilities

On 26 May 2020, the RBNZ made available a Term Lending Facility ("TLF") to offer loans for a fixed term of three years at the rate of the Official Cash Rate ("OCR"). On 20 August 2020, the RBNZ announced it would extend the availability of the TLF to 31 January 2021 and extend the term to five years. On 16 December 2020, the RBNZ announced the extension of the availability of the TLF to 28 July 2021. It is now closed for additional drawdowns. As at 30 September 2022, the Banking Group had repurchase agreements with the RBNZ with a value of \$1,353 million (30 September 2021: \$1,664 million) under the TLF.

On 7 December 2020, the RBNZ made available its Funding for Lending Programme ("FLP") aimed at lowering the cost of borrowing for New Zealand businesses and households. The FLP allows eligible participants to access three-year floating interest rate funding at the prevailing OCR within eighteen months for an initial allocation of 4% of eligible loans, with a further six months for an additional allocation of 2% of eligible loans, using qualifying collateral. As at 30 September 2022, Banking Group had repurchase agreements with the RBNZ with a value of \$2,100 million (30 September 2021: \$1,000 million) under the FLP.

The underlying collateral accepted by the RBNZ in relation to the TLF and FLP facilities as at 30 September 2022 are RMBS to the value of \$4,195 million (30 September 2021: \$3,184 million).

² The maturity classification of the Bank's Perpetual Notes reflects the scheduled mandatory conversion date. Refer to Note 21 Subordinated debt for further information.

³ Derivative financial liabilities include hedging and trading derivative cash flows.

Note 34 Risk Management continued

Regulatory liquidity ratios

The table below shows the three-month average of the respective daily ratio values in accordance with BS13 and the Bank's Conditions of Registration relating to liquidity-risk management.

The one-week mismatch ratio is a measure of the Bank's one-week mismatch amount over its total funding, where the one-week mismatch amount represents the Bank's portfolio of primary liquid assets plus expected cash inflows minus expected cash outflows during a one-week period of stress. The Bank is required to maintain this ratio above a minimum level of zero percent on a daily basis. The one-week mismatch ratio = 100 x (one-week mismatch dollar amount / total funding).

The one-month mismatch ratio is a measure of the Bank's one-month mismatch amount over its total funding, where the one-month mismatch amount represents the Bank's stock of primary and secondary liquid assets plus expected cash inflows minus expected cash outflows during a one-month period of stress. The Bank must maintain this ratio above a minimum level of zero percent on a daily basis. The one-month mismatch ratio = 100 x (one-month mismatch dollar amount / total funding).

The one-year core funding ratio measures the extent to which loans and advances are funded by funding that is considered stable. The one-year core funding ratio = 100 x (one-year core funding dollar amount / BS13 total loans and advances) and must currently remain above 65 percent on a daily basis.

	Banking	Group
	Unaudited For the 3 months ended 30/9/22	Unaudited For the 3 months ended 30/6/22
One-week mismatch ratio	7.1%	7.2%
One-month mismatch ratio	7.1%	7.4%
One-year core funding ratio	90.0%	88.8%

Note 34 Risk Management continued

Concentrations of funding

The Banking Group's concentrations of funding are reported by industry sector and geographical location in the following table. The concentration of funding by industry sector is based on ANZSIC codes. The concentration of funding by geographical location is based on the principal market location of the funding programmes.

	Banking Group)
Dollars in Millions	Note 30/9/22	30/9/21
Concentration by industry		
Customer deposits		
Agriculture, forestry and fishing	3,260	3,273
Mining	483	379
Manufacturing	2,252	2,240
Electricity, gas and water	128	101
Construction	1,470	1,458
Wholesale and retail trade	2,577	2,458
Accommodation, restaurants, culture and recreation	1,605	1,484
Transport and storage	1,310	898
Communications	342	329
Financial, investment and insurance ¹	7,487	7,944
Property, business and personal services	14,003	13,326
Government, education, health and community services ¹	3,359	3,665
Personal deposits	35,929	33,576
Total customer deposits by industry	74,205	71,131
Concentration by geography		
Wholesale funding		
New Zealand ¹	16,528	14,316
Overseas ²	19,006	18,823
Total wholesale funding by geography	35,534	33,139
Total funding	109,739	104,270
Total funding comprised:		
Customer deposits ¹	17 74,20 5	71,131
Wholesale funding		
Due to central banks and other institutions ¹	5,160	4,931
Collateral received ¹	2,134	570
Other borrowings	17 3,94 9	6,864
Bonds and notes	20,181	. 17,518
Amounts due to related entities	2,160	1,306
Subordinated debt	1,950	1,950
Total wholesale funding	35,534	33,139
Total funding	109,739	104,270

¹ Comparative balances have been restated to align with the presentation used in the current period. Refer to Note 1 *Principal accounting policies* for further information.

Sustainability risk

Sustainability risk is the risk that events or conditions (which includes Environmental, Social or Governance issues) arise that could negatively impact the sustainability, resilience, risk and return profile, value or reputation of BNZ or its customers and suppliers.

In relation to climate change risk, extreme weather, increasing weather volatility, and longer-term changes in climatic conditions, as well as other environmental impacts such as biodiversity loss and ecosystem degradation, may affect property and asset values or cause customer losses. The impact of these extreme weather events can be widespread, extending beyond primary producers to customers of BNZ who are suppliers to the agricultural sector, and to those who reside in, and operate businesses within, impacted communities.

Climate-related transition risks are also increasing as economies, governments and companies seek to transition to low-carbon alternatives and adapt to climate change. Customer segments may be adversely impacted as the economy transitions to renewable and low-emissions technology.

Physical and transition risk impacts may increase current levels of customer defaults and increase the credit risk facing the Bank, and adversely impact financial performance and position.

The Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 introduced mandatory climate-related reporting by publicly listed companies, large insurers, investment managers, banks and non-bank deposit takers. It will require BNZ, as a "climate reporting entity", to annually prepare and make public climate disclosures on the effects of climate change to its business, in accordance with climate-related disclosure standards, to be issued by the External Reporting Board. The External Reporting Board is expected to issue the first climate-related disclosure standards by December 2022, which means climate statements will be required to be published from early 2024 for accounting periods that start on or after 1 January 2023.

Sustainability risk is managed by implementing policies, frameworks, processes and tools used for other material risk types, such as operational risk. At an executive level, governance and oversight of sustainability risk resides with the ERCC.

 $^{^2}$ This represents the wholesale active funding programmes of BNZ-IF and the Bank from offshore markets.

N	nto '	25	Notes	tothe	Cach	Flow	Statement	
N	ote.	53	NOLES	LO LNE	Cash	FLOW	Statement	

	Banking Group		
Dollars in Millions	30/9/22	30/9/21	
Reconciliation of net profit attributable to the shareholder of Bank of New Zealand			
to net cash flows from operating activities			
Net profit attributable to the shareholder of Bank of New Zealand	1,414	1,322	
(Increase)/decrease in accrued interest receivable	(67)	10	
Depreciation and amortisation expense	142	134	
Credit impairment charge/(write-back)	89	(37)	
Impairment losses and write offs on non-financial assets	3	-	
Increase in provision for tax	40	167	
Unrealised gains less losses on financial instruments	(770)	(152)	
Increase/(decrease) in accrued interest payable	130	(99)	
Decrease in other liabilities	(69)	(41)	
(Gain)/loss on disposal of property, plant and equipment	(1)	4	
Gain on equity investments	1	-	
Add back items classified as financing activities included in net profit:			
Payment of lease liabilities	45	48	
Deduct operating cash flows not included in net profit:			
Net change in operating assets and liabilities	(6,457)	3,693	
Net cash flows from operating activities	(5,500)	5,049	

Banking Group (30/9/22)

					Amounts due	
Dollars in Millions	Bonds and Notes	Subordinated Debt	RBNZ Facilities	to Related Entities ¹	from Related Entities ¹	Tota
Reconciliation of net debt						
Balance at beginning of year	17,518	1,950	2,664	289	(7)	22,414
Net cash flows	2,482	-	789	792	3	4,066
Non-cash changes						
Foreign exchange adjustments	1,751	_	-	-	-	1,751
Fair value adjustments	(714)	-	-	-	-	(714)
Hedge adjustments	(847)	-	-	-	-	(847)
Other non-cash movements	(9)	-	-	-	-	(9)
Balance at end of year	20,181	1,950	3,453	1,081	(4)	26,661
	Banking Group (30/9/21)					
Balance at beginning of year	19,512	1,949	42	471	(8)	21,966
Net cash flows	(809)	1	2,622	(182)	1	1,633
Non-cash changes						
Foreign exchange adjustments	(809)	-	-	-	-	(809)
Fair value adjustments	(304)	-	-	-	-	(304)
Hedge adjustments	(63)	-	-	-	-	(63)
Other non-cash movements	(9)	-	-	-	-	(9)
Balance at end of year	17,518	1,950	2,664	289	(7)	22,414
¹ Balances at beginning and end of year exclude amounts class	sified as cash and cash equivalents in t	he cash flow state	ement.			
	<u>'</u>					



Independent auditor's report to the Shareholder of Bank of New Zealand

Report on the audit of the consolidated financial statements and supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements)

Opinion

We have audited the consolidated financial statements required by Clause 24 of the Registered Bank Disclosure Statements (New Zealand Incorporated Registered Banks) Order 2014 (as amended) (the "Order") and the supplementary information required by Schedules 4, 7, 13 to 15 and 17 of the Order of Bank of New Zealand (the "Bank") and the entities it controlled at 30 September 2022 or from time to time during the year (collectively the "Banking Group") as included on pages 8 to 79 of the Disclosure Statement. The consolidated financial statements and supplementary information comprise:

- the balance sheet of the Banking Group as at 30 September 2022;
- the income statement, statement of comprehensive income, statement of changes in equity and cash flow statement for the year then ended of the Banking Group;
- · the notes to the consolidated financial statements of the Banking Group including a summary of significant accounting policies; and
- the supplementary information required by Schedules 4, 7, 13 to 15 and 17 of the Order.

In our opinion, the consolidated financial statements on pages 8 to 79 (excluding the supplementary information disclosed in accordance with Schedules 4, 7, 13 to 15 and 17 of the Order and included within notes 11, 29, 30, 31 and 34) give a true and fair view of the consolidated financial position of the Banking Group as at 30 September 2022 and its consolidated financial performance and cash flows for the year then ended in accordance with New Zealand equivalents to International Financial Reporting Standards and International Financial Reporting Standards.

In our opinion, the supplementary information disclosed in accordance with Schedules 4, 7, 13 to 15 and 17 of the Order and included within the balance sheet and notes 11, 29, 30, 31 and 34 has been prepared, in all material respects, in accordance with the guidelines issued under section 78(3) of the Reserve Bank of New Zealand Act 1989 and any conditions of registration, is in accordance with the books and records of the Banking Group, and fairly states, in all material respects, the matters to which it relates in accordance with those schedules.

This report is made solely to the Bank's shareholder. Our audit has been undertaken so that we might state to the Bank's shareholder those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Bank and the Bank's shareholder for our audit work, for this report, or for the opinions we have formed.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (New Zealand). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements and supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements)* section of our report.

We are independent of the Banking Group in accordance with Professional and Ethical Standard 1 *International Code of Ethics for Assurance Practitioners (including International Independence Standards) (New Zealand)* issued by the New Zealand Auditing and Assurance Standards Board, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Ernst & Young provides interim review, other assurance, agreed-upon procedure and market insights and analysis services to the Banking Group. Partners and employees of our firm may deal with the Banking Group on normal terms within the ordinary course of trading activities of the business of the Banking Group. We have no other relationship with, or interest in, the Banking Group.



Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current year. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, but we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the financial statements and supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements) section of the audit report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying consolidated financial statements.

Allowance for Expected Credit Losses

Why significant

As disclosed in Notes 10 Allowance for Expected Credit Losses and 34 Risk management, the allowance for expected credit losses is determined in accordance with New Zealand Equivalent to International Financial Reporting Standard 9 Financial Instruments (NZ IFRS 9).

The assessment of the allowance for expected credit losses is complex and requires significant judgement and estimation. Key areas of judgment included:

- the application of the impairment requirements under NZ IFRS 9 within the Banking Group's expected credit loss methodology;
- the identification of exposures with a significant increase in credit risk:
- assumptions used in the expected credit loss model, for both exposures assessed on an individual or collective basis; and
- the incorporation of forward-looking information to reflect current and anticipated future external factors, both in the multiple economic scenarios and the probability weighting determined for each of these scenarios.

This was a key audit matter due to the value of the allowance for expected credit losses and the degree of judgment and estimation uncertainty associated with the calculations.

How our audit addressed the key audit matter

We assessed the alignment of the Banking Group's expected credit loss model and its underlying methodology with the requirements of NZ IFRS 9.

We assessed the following for exposures evaluated on a collective basis:

- significant modelling and macroeconomic assumptions, including the reasonableness of forward-looking information and scenarios;
- The determination and assessment of significant increase in credit risk;
- the basis for and data used to determine forward looking adjustments; and
- the sensitivity of the allowance for expected credit losses to changes in modelling assumptions.

We involved our actuarial specialists to test the mathematical accuracy of the model and to consider key assumptions and significant judgements.

We assessed a sample of exposures evaluated on an individual basis by:

- assessing the reasonableness and timeliness of internal credit quality assessments based on the borrowers' particular circumstances; and
- evaluating the associated allowances for expected credit losses by assessing the reasonableness of key inputs into the credit impairment calculation, with particular focus on high-risk industries, work out strategies, collateral values, and the value and timing of expected recoveries.

In conjunction with our IT specialists, we assessed the effectiveness of relevant controls relating to the:

- capture of data, including loan origination and transactional data, ongoing internal credit quality assessments, storage of data in data warehouses, and interfaces with the models; and
- expected credit loss models, including functionality, ongoing monitoring/ validation and model governance.

We assessed the adequacy and appropriateness of the disclosures related to expected credit losses within the Notes to the consolidated financial statements.



Information Technology (IT) systems and controls over financial reporting

Why significant

A significant part of the Banking Group's financial reporting process is primarily reliant on IT systems with automated processes and controls relating to the capture, storage and extraction of a high volume of information.

A fundamental component of these IT systems and controls is ensuring that risks relating to inappropriate user access management, unauthorised program changes and IT operating protocols are addressed.

This was a key audit matter as our audit approach is dependent on the effective operation of the IT controls.

How our audit addressed the key audit matter

We focused on those IT systems and controls that are significant to the Banking Group's financial reporting process.

We involved our IT specialists, as audit procedures over IT systems and controls require specific expertise.

We assessed the design and tested the operating effectiveness of the Banking Group's IT controls, including those related to user access management, change management and IT operations management and data integrity.

Where we identified design and/or operating deficiencies in the IT control environment, our procedures included the following:

- assessing the integrity and reliability of the systems and data related to financial reporting; and
- where automated procedures were supported by systems with identified deficiencies, we assessed compensating or mitigating controls that were not reliant on the IT control environment. This involved varying the nature, timing and extent of substantive procedures performed.

Information other than the consolidated financial statements, supplementary information and auditor's report

The directors of the Bank are responsible, on behalf of the Bank, for the Disclosure Statement, which includes information other than the consolidated financial statements, the supplementary information required by Schedules 4, 7, 13 to 15 and 17 of the Order and our auditor's report.

Our opinion on the consolidated financial statements and supplementary information does not cover the other information and we do not express any form of assurance conclusion thereon except as otherwise stated.

In connection with our audit of the consolidated financial statements and supplementary information, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or supplementary information or our knowledge obtained during the audit, or otherwise appears to be materially misstated.

If, based upon the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Directors' responsibilities for the consolidated financial statements and supplementary information (excluding supplementary information relating to capital adequacy and regulatory liquidity requirements)

The directors are responsible, on behalf of the Bank, for the preparation of the consolidated financial statements in accordance with Clause 24 of the Order, New Zealand equivalents to International Financial Reporting Standards and International Financial Reporting Standards, and that give a true and fair view of the matters to which they relate. The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In addition, the directors are responsible, on behalf of the Bank, for the preparation and fair presentation of the supplementary information in the Disclosure Statement which complies with Clause 24 and Schedules 2, 4, 7, 13 to 15 and 17 of the Order.

In preparing the consolidated financial statements and, where relevant, the supplementary information the directors are responsible for assessing the Banking Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Banking Group or cease operations, or have no realistic alternative but to do so.

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Auditor's responsibilities for the audit of the consolidated financial statements and supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements)

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole and the supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements disclosed in notes 33 and 34) disclosed in accordance with Clause 24 and Schedules 4, 7, 13 to 15 and 17 of the Order are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (New Zealand) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of the auditor's responsibilities for the audit of the financial statements is located at the External Reporting Board's website: https://www.xrb.govt.nz/standards-for-assurance-practitioners/auditors-responsibilities/audit-report-1/. This description forms part of our auditor's report.

Report on other legal and regulatory requirements (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements)

We also report in accordance with the requirements of Clauses 2(1)(d) and 2(1)(e) of Schedule 1 of the Order. In relation to our audit of the consolidated financial statements and supplementary information (excluding the supplementary information relating to capital adequacy and regulatory liquidity requirements disclosed in notes 33 and 34) for the year ended 30 September 2022:

- we have obtained all the information and explanations we have required; and (i)
- (ii) in our opinion, proper accounting records have been kept by the Banking Group as far as appears from an examination of those

Report on the review of supplementary information relating to capital adequacy and regulatory liquidity requirements

Conclusion

We have reviewed the supplementary information relating to capital adequacy and regulatory liquidity requirements required by Schedule 11 of the Order as disclosed in notes 33 and 34 of the consolidated financial statements of the Banking Group for the year ended 30 September 2022.

Based on our review nothing has come to our attention that causes us to believe that the accompanying supplementary information relating to capital adequacy (disclosed in note 33) and regulatory liquidity requirements (being the regulatory liquidity ratios disclosed in note 34) are not prepared, in all material respects, in accordance with Schedule 11 of the Order.

This report is made solely to the Bank's shareholder. Our review has been undertaken so that we might state to the Bank's shareholder those matters we are required to state to them in a review report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Bank and the Bank's shareholder for our review work, for this report, or for our findings,



Basis for conclusion

We conducted our review in accordance with the New Zealand Standard on Review Engagements 2410 (Revised) *Review of Financial Statements Performed by the Independent Auditor of the Entity* ("NZ SRE 2410"). Our responsibilities under this standard are further described in the *Auditor's responsibilities for the review of the supplementary information relating to capital adequacy and regulatory liquidity requirements* section of this report.

Directors' responsibility for the supplementary information relating to capital adequacy and regulatory liquidity requirements

The directors are responsible, on behalf of the Bank, for the preparation and fair presentation of the supplementary information relating to capital adequacy and regulatory liquidity requirements disclosed in accordance with Schedule 11 of the Order. The directors are also responsible for such internal control as the directors determine is necessary to enable the preparation of the supplementary information relating to capital adequacy and regulatory liquidity requirements that is free from material misstatement, whether due to fraud or error.

Auditor's responsibilities for the supplementary information relating to capital adequacy and regulatory liquidity requirements

Our responsibility in relation to the supplementary information relating to capital adequacy disclosed in note 33 and regulatory liquidity requirements (being the regulatory liquidity ratios disclosed in note 34) that is required to be disclosed in accordance with Schedule 11 of the Order is to express a conclusion based on our review.

NZ SRE 2410 (Revised) requires us to conclude whether anything has come to our attention that causes us to believe that the supplementary information relating to capital adequacy disclosed in Note 33 and regulatory liquidity requirements (being the regulatory liquidity ratios disclosed in Note 34), is not, in all material respects, disclosed in accordance with Schedule 11 of the Order.

A review of the supplementary information relating to capital adequacy and regulatory liquidity requirements disclosed in notes 33 and 34 in accordance with NZ SRE 2410 is a limited assurance engagement. We perform procedures, consisting of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. The procedures performed in a review are substantially less than those performed in an audit conducted in accordance with International Standards on Auditing (New Zealand) and consequently do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly we do not express an audit opinion on the supplementary information relating to capital adequacy and regulatory liquidity requirements disclosed in notes 33 and 34.

The engagement partner on the engagement resulting in this independent auditor's report is Emma Winsloe.

Chartered Accountants

Ernst + Young

Auckland

17 November 2022

Credit Ratings

As at the date on which this Disclosure Statement is signed, the Bank has the following credit ratings applicable to its long term senior unsecured obligations payable in New Zealand, in New Zealand dollars.

Rating Agency	Current Credit Rating	Qualification
S&P Global Ratings Australia Pty Limited	AA-	Outlook Stable
Moody's Investors Service Pty Limited	A1	Outlook Stable
Fitch Australia Pty Limited	A+	Outlook Stable

During the two-year period ended immediately before the signing date:

- there was no change to the Bank's Moody's Investors Service Pty Limited ("Moody's Investors Service") issuer credit rating;
- on 12 April 2021, Fitch Australia Pty Limited ("Fitch Ratings") revised the Bank's credit rating outlook from "outlook negative" to "outlook stable"; and
- on 7 June 2021, Standard & Poor's revised the Bank's credit rating outlook from "outlook negative" to "outlook stable".

The following is a summary of the descriptions of the major rating categories for rating agencies for the rating of long term obligations.

Standard & Poor's	Moody's Investors Service	Fitch Ratings	Description of Grade
AAA	Aaa	AAA	Ability to repay principal and interest is extremely strong. This is the highest investment category.
AA	Aa	AA	Very strong ability to repay principal and interest.
A	А	А	Strong ability to repay principal and interest although somewhat susceptible to adverse changes in financial conditions.
BBB	Baa	BBB	Adequate ability to repay principal and interest. More vulnerable to adverse changes.
ВВ	Ва	BB	Significant uncertainties exist which could affect the payment of principal and interest on a timely basis.
В	В	В	Greater vulnerability and therefore greater likelihood of default.
CCC	Caa	CCC	Likelihood of default considered high. Timely repayment of principal and interest is dependent on favourable financial conditions.
CC to C	Ca to C	CC to C	Highest risk of default.
D	-	RD & D	Obligations currently in default.

Credit ratings by Standard & Poor's and Fitch Ratings may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories. Moody's Investors Service applies numeric modifiers 1, 2 and 3 to show relative standing within the major rating categories with 1 indicating the higher end of that category and 3 indicating the lower end.

The conditions of registration imposed on Bank of New Zealand by the Reserve Bank of New Zealand pursuant to section 74 of the BPS Act which were applicable as at the balance date of this Disclosure Statement are as follows:

Conditions of registration that apply on and after 5 September 2022 - Bank of New Zealand

The registration of Bank of New Zealand ("the bank") as a registered bank is subject to the following conditions:

- 1. That—
 - (a) the Total capital ratio of the banking group is not less than 8%;
 - (b) the Tier 1 capital ratio of the banking group is not less than 6%;
 - (c) the Common Equity Tier 1 capital ratio of the banking group is not less than 4.5%;
 - (d) the Total capital of the banking group is not less than \$30 million.

For the purposes of this condition of registration,—

"Total capital ratio", "Tier 1 capital ratio", and "Common Equity Tier 1 capital ratio" have the same meaning as in Subpart B2 of BPR100: Capital Adequacy, except that in the formulae for calculating the ratios, the term "total capital requirement for operational risk" included in "total RWA equivalents" has the same meaning as in BPR150: Standardised Operational Risk, subject to a minimum value of \$600 million;

"Total capital" has the same meaning as in BPR110: Capital Definitions.

1A. That-

- (a) the bank has an internal capital adequacy assessment process ("ICAAP") that accords with the requirements set out in Part D of BPR100: Capital Adequacy;
- (b) under its ICAAP the bank identifies and measures its "other material risks" defined in Part D of BPR100: Capital Adequacy; and
- (c) the bank determines an internal capital allocation for each identified and measured "other material risk".
- 1B. That the bank must—
 - (a) comply with the minimum requirements for using the IRB approach set out in BPR134: IRB Minimum System Requirements;
 - (b) comply with the minimum qualitative requirements for using the AMA approach for operational risk set out in subpart B1 of BPR151: AMA Operational Risk;
 - (c) follow the process in Part E of BPR120: Capital Adequacy Process Requirements for obtaining Reserve Bank approval for any changes to any IRB credit risk model:
 - (d) maintain a compendium of approved models in accordance with the requirements of section E1.5 of BPR120: Capital Adequacy Process requirements.
- 1C. That, if the Prudential Capital Buffer (PCB) ratio of the banking group is 3.5% or less, the bank must—
 - (a) according to the following table, limit the aggregate distributions of the bank's earnings, other than discretionary payments payable to holders of Additional Tier 1 capital instruments, to the percentage limit on distributions that corresponds to the banking group's PCB ratio; and

Banking group's PCB ratio	Percentage limit on distributions of the bank's earnings	Capital Buffer Response Framework stage
0% - 0.5%	0%	Stage 3
>0.5 - 1%	30%	Stage 2
>1 - 2%	60%	Stage 1
>2 - 3.5%	100%	None

(b) comply with the Capital Buffer Response Framework requirements as set out in Part D of BPR120: Capital Adequacy Process Requirements.

For the purposes of this condition of registration,—

"prudential capital buffer ratio", "distributions", and "earnings" have the same meaning as in Subpart B2 of BPR100: Capital Adequacy, except that in the formula for calculating the prudential capital buffer ratio, the term "total capital requirement for operational risk" included in "total RWA equivalents" has the same meaning as in BPR150: Standardised Operational Risk, subject to a minimum value of \$600 million;

an Additional Tier 1 capital instrument is an instrument that meets the requirements of B2.2(2)(a), (c) or (d) of BPR110: Capital Definitions.

1CA. That the bank must not make any distribution on a transitional AT1 capital instrument on or after the date on which on any conversion or write-off provision in the terms and conditions of the instrument is triggered due to either a loss absorption trigger event or a non-viability trigger event.

For the purposes of this condition of registration, "transitional AT1 capital instrument" has the meaning given in section A2.3 of BPR110: Capital Definitions and "loss absorption trigger event" and "non-viability trigger event" have the meanings given in sub-section C2.2(3) of BPR120: Capital Adequacy Requirements.

1D. That:

- (a) the bank must not include the amount of an Additional Tier 1 capital instrument or Tier 2 capital instrument issued on or after 17 June 2021 in the calculation of its capital ratios unless it has completed the notification requirements in Part B of BPR120: Capital Adequacy Process Requirements in respect of the instrument; and
- (b) the bank meets the requirements of Part C of BPR120: Capital Adequacy Process Requirements in respect of regulatory capital instruments.

For the purposes of this condition of registration,—

an Additional Tier 1 capital instrument is an instrument that meets the requirements of subsection B2.2(2)(a) or (c) of BPR110: Capital Definitions;

a Tier 2 capital instrument is an instrument that meets the requirements of subsection B3.2(2)(a) or (c) of BPR110: Capital Definitions.

- That the banking group does not conduct any non-financial activities that in aggregate are material relative to its total activities.
 - In this condition of registration, the meaning of "material" is based on generally accepted accounting practice.
- That the banking group's insurance business is not greater than 1% of its total consolidated assets.

For the purposes of this condition of registration, the banking group's insurance business is the sum of the following amounts for entities in the banking group:

- (a) if the business of an entity predominantly consists of insurance business and the entity is not a subsidiary of another entity in the banking group whose business predominantly consists of insurance business, the amount of the insurance business to sum is the total consolidated assets of the group headed by the entity; and
- (b) if the entity conducts insurance business and its business does not predominantly consist of insurance business and the entity is not a subsidiary of another entity in the banking group whose business predominantly consists of insurance business, the amount of the insurance business to sum is the total liabilities relating to the entity's insurance business plus the equity retained by the entity to meet the solvency or financial soundness needs of its insurance business.

In determining the total amount of the banking group's insurance business—

- (a) all amounts must relate to on balance sheet items only, and must comply with generally accepted accounting practice; and
- if products or assets of which an insurance business is comprised also contain a non-insurance component, the whole of such products or assets must be considered part of the insurance business.

For the purposes of this condition of registration,—

"insurance business" means the undertaking or assumption of liability as an insurer under a contract of insurance:

"insurer" and "contract of insurance" have the same meaning as provided in sections 6 and 7 of the Insurance (Prudential Supervision) Act 2010.

That the aggregate credit exposures (of a non-capital nature and net of any allowances for impairment) of the banking group to all connected persons do not exceed the rating-contingent limit outlined in the following matrix:

Credit rating of the bank ¹	Connected exposure limit (% of the banking group's Tier 1 capital)	
AA/Aa2 and above	75	
AA-/Aa3	70	
A+/A1	60	
A/A2	40	
A-/A3	30	
BBB+/Baa1 and below	15	

¹ This table uses the rating scales of Standard & Poor's, Fitch Ratings and Moody's Investors Service. (Fitch Ratings' scale is identical to Standard & Poor's.)

Within the rating-contingent limit, credit exposures (of a non-capital nature and net of any allowances for impairment) to non-bank connected persons shall not exceed 15% of the banking group's Tier 1 capital.

For the purposes of this condition of registration, compliance with the rating-contingent connected exposure limit is determined in accordance with the Reserve Bank of New Zealand document entitled "Connected exposures policy" (BS8) dated October 2021.

- That exposures to connected persons are not on more favourable terms (e.g. as relates to such matters as credit assessment, tenor, interest rates, amortisation schedules and requirement for collateral) than corresponding exposures to non-connected persons.
- That the bank complies with the following corporate governance requirements:
 - (a) the board of the bank must have at least five directors;
 - (b) the majority of the board members must be non-executive directors;
 - (c) at least half of the board members must be independent directors;
 - (d) an alternate director,
 - for a non-executive director must be non-executive; and
 - for an independent director must be independent;
 - (e) at least half of the independent directors of the bank must be ordinarily resident in New Zealand;
 - (f) the chairperson of the board of the bank must be independent; and
 - (g) the bank's constitution must not include any provision permitting a director, when exercising powers or performing duties as a director, to act other than in what he or she believes is the best interests of the company (i.e. the bank).

For the purposes of this condition of registration, "non-executive" and "independent" have the same meaning as in the Reserve Bank of New Zealand document entitled "Corporate Governance" (BS14) dated July 2014.

- That no appointment of any director, chief executive officer, or executive who reports or is accountable directly to the chief executive officer, is made in respect of the bank unless:
 - (a) the Reserve Bank has been supplied with a copy of the curriculum vitae of the proposed appointee; and
 - (b) the Reserve Bank has advised that it has no objection to that appointment.
- That a person must not be appointed as chairperson of the board of the bank unless:
 - (a) the Reserve Bank has been supplied with a copy of the curriculum vitae of the proposed appointee; and
 - (b) the Reserve Bank has advised that it has no objection to that appointment.

- 9. That the bank has a board audit committee, or other separate board committee covering audit matters, that meets the following requirements:
 - (a) the mandate of the committee must include: ensuring the integrity of the bank's financial controls, reporting systems and internal audit standards:
 - (b) the committee must have at least three members;
 - (c) every member of the committee must be a non-executive director of the bank;
 - (d) the majority of the members of the committee must be independent; and
 - (e) the chairperson of the committee must be independent and must not be the chairperson of the bank.

For the purposes of this condition of registration, "non-executive" and "independent" have the same meaning as in the Reserve Bank of New Zealand document entitled "Corporate Governance" (BS14) dated July 2014.

- 10. That a substantial proportion of the bank's business is conducted in and from New Zealand.
- 11. That the bank will not, without first obtaining the written approval of the Reserve Bank, revoke the constitution of BNZ International Funding Limited or alter the constitution of BNZ International Funding Limited if such alteration would delete or amend or negate the effect of clause 2.2 of the constitution.
- 12. That:
 - (a) the business and affairs of the bank are managed by, or under the direction or supervision of, the board of the bank;
 - (b) the employment contract of the chief executive officer of the bank or person in an equivalent position (together "CEO") is with the bank, and the terms and conditions of the CEO's employment agreement are determined by, and any decisions relating to the employment or termination of employment of the CEO are made by, the board of the bank; and
 - (c) all staff employed by the bank shall have their remuneration determined by (or under the delegated authority of) the board or the CEO of the bank and be accountable (directly or indirectly) to the CEO of the bank.
- 13. That the bank has legal and practical ability to control and execute any business, and any functions relating to any business, of the bank that are carried on by a person other than the bank, sufficient to achieve, under normal business conditions and in the event of stress or failure of the bank or of a service provider to the bank, the following outcomes:
 - (a) that the bank's clearing and settlement obligations due on a day can be met on that day;
 - (b) that the bank's financial risk positions on a day can be identified on that day;
 - (c) that the bank's financial risk positions can be monitored and managed on the day following any failure and on subsequent days; and
 - (d) that the bank's existing customers can be given access to payments facilities on the day following any failure and on subsequent days.

This condition ceases to apply in respect of an existing outsourcing arrangement on the earlier of either 1 October 2023 or when the existing outsourcing arrangement becomes compliant with condition 22, from which point in time condition 22 will apply to that outsourcing arrangement.

For the purposes of this condition of registration:

- (a) the term "legal and practical ability to control and execute" is explained in the Reserve Bank of New Zealand document entitled "Outsourcing Policy" (BS11) dated January 2006; and
- (b) the term "existing outsourcing arrangement" is defined in the Reserve Bank of New Zealand document entitled "Outsourcing Policy" (BS11) dated September 2022.
- 14. That the banking group complies with the following quantitative requirements for liquidity-risk management:
 - (a) the one-week mismatch ratio of the banking group is not less than zero per cent at the end of each business day;
 - (b) the one-month mismatch ratio of the banking group is not less than zero per cent at the end of each business day; and
 - (c) the one-year core funding ratio of the banking group is not less than 75 per cent at the end of each business day.

For the purposes of this condition of registration, the ratios identified must be calculated in accordance with the Reserve Bank of New Zealand documents entitled "Liquidity Policy" (BS13) dated July 2022 and "Liquidity Policy Annex: Liquid Assets" (BS13A) dated July 2022.

- 15. That the bank has an internal framework for liquidity risk management that is adequate in the bank's view for managing the bank's liquidity risk at a prudent level, and that, in particular:
 - (a) is clearly documented and communicated to all those in the organisation with responsibility for managing liquidity and liquidity risk;
 - (b) identifies responsibility for approval, oversight and implementation of the framework and policies for liquidity risk management;
 - (c) identifies the principal methods that the bank will use for measuring, monitoring and controlling liquidity risk; and
 - (d) considers the material sources of stress that the bank might face, and prepares the bank to manage stress through a contingency funding plan.
- 16. That no more than 10% of total assets may be beneficially owned by a SPV.

For the purposes of this condition,—

"total assets" means all assets of the banking group plus any assets held by any SPV that are not included in the banking group's assets:

"SPV" means a person-

- (a) to whom any member of the banking group has sold, assigned, or otherwise transferred any asset;
- (b) who has granted, or may grant, a security interest in its assets for the benefit of any holder of any covered bond; and
- (c) who carries on no other business except for that necessary or incidental to guarantee the obligations of any member of the banking group under a covered bond:

"covered bond" means a debt security issued by any member of the banking group, for which repayment to holders is guaranteed by a SPV, and investors retain an unsecured claim on the issuer.

17. That-

- no member of the banking group may give effect to a qualifying acquisition or business combination that meets the notification threshold, and does not meet the non-objection threshold, unless:
 - the bank has notified the Reserve Bank in writing of the intended acquisition or business combination and at least 10 working days have passed; and
 - at the time of notifying the Reserve Bank of the intended acquisition or business combination, the bank provided the Reserve Bank with the information required under the Reserve Bank of New Zealand Banking Supervision Handbook document "Significant Acquisitions Policy" (BS15) dated December 2011; and
- (b) no member of the banking group may give effect to a qualifying acquisition or business combination that meets the non-objection threshold
 - the bank has notified the Reserve Bank in writing of the intended acquisition or business combination;
 - at the time of notifying the Reserve Bank of the intended acquisition or business combination, the bank provided the Reserve Bank with the information required under the Reserve Bank of New Zealand Banking Supervision Handbook document "Significant Acquisitions Policy" (BS15) dated December 2011; and
 - the Reserve Bank has given the bank a notice of non-objection to the significant acquisition or business combination.

For the purposes of this condition of registration, "qualifying acquisition or business combination", "notification threshold" and "non-objection" and "non-objection" and "non-objection" are also as a combination of the purposes of this condition of the purposes of this condition of the purposes of this condition of the purpose of the purthreshold" have the same meaning as in the Reserve Bank of New Zealand Banking Supervision Handbook document "Significant Acquisitions Policy" (BS15) dated December 2011.

- That the bank is pre-positioned for Open Bank Resolution and in accordance with a direction from the Reserve Bank, the bank can—
 - (a) close promptly at any time of the day and on any day of the week and that effective upon the appointment of the statutory manager
 - all liabilities are frozen in full; and
 - no further access by customers and counterparties to their accounts (deposits, liabilities or other obligations) is possible;
 - (b) apply a de minimis to relevant customer liability accounts;
 - (c) apply a partial freeze to the customer liability account balances;
 - (d) reopen by no later than 9am the next business day following the appointment of a statutory manager and provide customers access to their unfrozen funds:
 - (e) maintain a full freeze on liabilities not pre-positioned for open bank resolution; and
 - reinstate customers' access to some or all of their residual frozen funds.

For the purposes of this condition of registration, "de minimis", "partial freeze", "customer liability account", and "frozen and unfrozen funds" have the same meaning as in the Reserve Bank of New Zealand document "Open Bank Resolution (OBR) Pre-positioning Requirements Policy" (BS17) dated

- 19. That the bank has an Implementation Plan that—
 - (a) is up-to-date: and
 - demonstrates that the bank's prepositioning for Open Bank Resolution meets the requirements set out in the Reserve Bank document: "Open Bank Resolution Pre-positioning Requirements Policy" (BS17) dated June 2022.

For the purposes of this condition of registration, "Implementation Plan" has the same meaning as in the Reserve Bank of New Zealand document "Open Bank Resolution (OBR) Pre-positioning Requirements Policy" (BS17) dated June 2022.

- 20. That the bank has a compendium of liabilities that—
 - (a) at the product-class level lists all liabilities, indicating which are
 - pre-positioned for Open Bank Resolution; and
 - not pre-positioned for Open Bank Resolution;
 - (b) is agreed to by the Reserve Bank; and
 - (c) if the Reserve Bank's agreement is conditional, meets the Reserve Bank's conditions.

For the purposes of this condition of registration, "compendium of liabilities", and "pre-positioned and non pre-positioned liabilities" have the same meaning as in the Reserve Bank of New Zealand document "Open Bank Resolution (OBR) Pre-positioning Requirements Policy" (BS17) dated June 2022.

That on an annual basis the bank tests all the component parts of its Open Bank Resolution solution that demonstrates the bank's prepositioning for Open Bank Resolution as specified in the bank's Implementation Plan.

For the purposes of this condition of registration, "Implementation Plan" has the same meaning as in the Reserve Bank of New Zealand document "Open Bank Resolution (OBR) Pre-positioning Requirements Policy" (BS17) dated June 2022.

- 22. That the bank must comply with the Reserve Bank of New Zealand document "Outsourcing Policy" (BS11) dated September 2022.
- 23. That, for a loan-to-valuation measurement period ending on or after 31 July 2021, the total of the bank's qualifying new mortgage lending amount in respect of property-investment residential mortgage loans with a loan-to-valuation ratio of more than 60%, must not exceed 5% of the total of the qualifying new mortgage lending amount in respect of property-investment residential mortgage loans arising in the loan-to-valuation measurement
- 24. That, for a loan-to-valuation measurement period ending on or before 31 December 2021, the total of the bank's qualifying new mortgage lending amount in respect of non property-investment residential mortgage loans with a loan-to-valuation ratio of more than 80%, must not exceed 20% of the total of the qualifying new mortgage lending amount in respect of non property-investment residential mortgage loans arising in the loan-tovaluation measurement period.

- 25. That, for a loan-to-valuation measurement period ending on or after 31 January 2022, the total of the bank's qualifying new mortgage lending amount in respect of non property-investment residential mortgage loans with a loan-to-valuation ratio of more than 80%, must not exceed 10% of the total of the qualifying new mortgage lending amount in respect of non property-investment residential mortgage loans arising in the loan-to-valuation measurement period.
- 26. That the bank must not make a residential mortgage loan unless the terms and conditions of the loan contract or the terms and conditions for an associated mortgage require that a borrower obtain the registered bank's agreement before the borrower can grant to another person a charge over the residential property used as security for the loan.

In these conditions of registration,—

"banking group" means Bank of New Zealand (as reporting entity) and all other entities included in the group as defined in section 6(1) of the Financial Markets Conduct Act 2013 for the purposes of Part 7 of that Act.

"generally accepted accounting practice" has the same meaning as in section 8 of the Financial Reporting Act 2013.

In these conditions of registration, the version dates of the Reserve Bank of New Zealand Banking Prudential Requirement (BPR) documents that are referred to in the capital adequacy conditions 1 to 1D, or are referred to in turn by those documents or by Banking Supervision Handbook (BS) documents, are—

BPR document	Version date
BPR100: Capital adequacy	1 October 2021
BPR110: Capital definitions	1 October 2021
BPR120: Capital adequacy process requirements	1 July 2021
BPR130: Credit risk RWAs overview	1 July 2021
BPR131: Standardised credit risk RWAs	1 October 2021
BPR132: Credit risk mitigation	1 October 2021
BPR133: IRB credit risk RWAs	1 October 2021
BPR134: IRB minimum system requirements	1 July 2021
BPR140: Market risk exposure	1 October 2021
BPR150: Standardised operational risk	1 July 2021
BPR151: AMA operational risk	1 July 2021
BPR160: Insurance, securitisation, and loan transfers	1 July 2021
BPR001: Glossary	1 July 2021

In conditions of registration 23 to 26,—

"loan-to-valuation ratio", "non property-investment residential mortgage loan", "property-investment residential mortgage loan", "qualifying new mortgage lending amount in respect of property-investment residential mortgage loans", "qualifying new mortgage lending amount in respect of non property-investment residential mortgage loans", and "residential mortgage loan" have the same meaning as in the Reserve Bank of New Zealand document entitled "Framework for Restrictions on High-LVR Residential Mortgage Lending" (BS19) dated October 2021:

"loan-to-valuation measurement period" means a period of three calendar months ending on the last day of the third calendar month.

Changes in Conditions of Registration

Between 30 September 2021 and 30 September 2022, the RBNZ made the following changes to the Bank's Conditions of Registration.

On 1 October 2021, the Bank's Conditions of Registration were updated to reflect the implementation of (i) the new Banking Prudential Requirements and (ii) the changes to LVR restrictions.

On 1 January 2022, the Bank's Conditions of Registration were updated to reflect (i) the normalisation of the minimum requirement for the core funding ratio back to 75% and (ii) changes clarifying the timing of the measurement period for LVR restrictions.

On 23 June 2022, the Bank's Conditions of Registration were updated to refer to updated versions of BS11: Outsourcing Policy and BS17: Open Bank Resolution Policy which contained changes to the definitions of "Business Day" in those policies.

On 1 July 2022, the Bank's Conditions of Registration were updated to (i) remove dividend restrictions implemented in response to COVID-19, (ii) increase the Prudential Capital Buffer for Domestic-Systemically Important Banks (D-SIBs) in line with the Reserve Bank's Capital Review decisions, and (iii) refer to updated versions of the BS13A: Liquidity Policy Annex: Liquid Assets and BS13: Liquidity Policy to correct a typographical error and make a corresponding amendment respectively.

On 5 September 2022, the Bank's Conditions of Registration were updated to refer to an updated version of BS11: Outsourcing Policy, which contains changes to (i) create a temporary suspension clause which suspends the requirement to include mandatory risk mitigants in outsourcing arrangements that need to be entered into following an adverse impact from an extreme event and which potentially threatens the stability of the bank, and (ii) renaming the term "White List" to "Exempt List".

Non-compliance with Conditions of Registration

In the Bank's Disclosure Statement for the year ended 30 September 2020, the Bank noted that the investigation phase of its comprehensive review of the data and systems used to calculate its regulatory capital had concluded and the Bank was continuing with remediation activities with the RBNZ being provided regular updates on progress. The Bank intends to provide a final update in its Disclosure Statement on completion of the programme.

Directors' Statement

The Directors of Bank of New Zealand state that each Director of the Bank believes, after due enquiry, that:

- as at the date on which this Disclosure Statement is signed:
 - (a) the Disclosure Statement contains all the information that is required by the Order; and
 - (b) the Disclosure Statement is not false or misleading; and
- during the year ended 30 September 2022:
 - (a) the Bank has complied with its Conditions of Registration applicable during that period, except as disclosed on page 91 of this Disclosure Statement;
 - (b) credit exposures to connected persons were not contrary to the interests of the Banking Group; and
 - (c) the Bank had systems in place to monitor and control adequately the Banking Group's material risks, including credit risk, concentration of credit risk, interest rate risk, currency risk, equity risk, liquidity risk, operational risk and other business risks, and that those systems were being properly applied.

This Disclosure Statement is dated 17th November 2022 and signed by Mr. McKay and Mr. Huggins as Directors and as responsible persons on behalf of all the other Directors.

D A McKay

Chair

D J Huggins

Managing Director and Chief Executive Officer

