



**NATIONAL AUSTRALIA BANK LIMITED**

(ABN 12 004 044 937)  
(incorporated with limited liability in the Commonwealth of Australia)



**BANK OF NEW ZEALAND**

(incorporated in New Zealand with limited liability under registered number 428849)

**BNZ INTERNATIONAL FUNDING LIMITED,  
acting through its London Branch**

(incorporated in New Zealand with limited liability under registered number 1635202  
and registered as a branch in England & Wales under numbers BR008377 and FC026206)

## **U.S.\$100,000,000,000 Global Medium Term Note Programme**

**unconditionally and irrevocably guaranteed in the case of Notes issued by  
BNZ International Funding Limited, acting through its London Branch by**

**BANK OF NEW ZEALAND**

(incorporated in New Zealand with limited liability under registered number 428849)

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This supplement (the **Supplement**) to the offering circular dated 15 November 2022, as previously supplemented by the supplements dated 24 November 2022 (in respect of BNZ and BNZ-IF only), 16 December 2022 (in respect of NAB only) and 17 February 2023 (in respect of NAB and BNZ only) (together, the **Offering Circular**) and relating to the U.S.\$100,000,000,000 Global Medium Term Note Programme (the **Programme**) constitutes:

- (i) in relation to PR Notes, a supplement to the Offering Circular for the purposes of Article 23(1) of the Prospectus Regulation and has been approved as such by the *Commission de Surveillance du Secteur Financier* (the **CSSF**) as competent authority under the Prospectus Regulation; and
- (ii) in relation to Exempt Notes, a supplement to the Offering Circular for the purposes of rule 206 of Part 2, Chapter 2 of the rules and regulations of the Luxembourg Stock Exchange and has been approved as such by the Luxembourg Stock Exchange as competent entity under Part IV of the Prospectus Act 2019.

This Supplement is prepared in connection with the Programme established by, *inter alios*, the Issuers and the Guarantor. Capitalised terms used but not otherwise defined in this Supplement shall have the meaning ascribed thereto in the Offering Circular. When used in this Supplement, **Prospectus Regulation** means Regulation (EU) 2017/1129 and **Prospectus Act 2019** means the Luxembourg act dated 16 July 2019 on prospectuses for securities.

This Supplement constitutes a supplement to, and should be read in conjunction with, the Offering Circular and all documents which are deemed to be incorporated therein by reference (see “*Documents Incorporated by Reference and Credit Ratings—(A) Documents Incorporated by Reference*” in the Offering Circular, as amended hereby).

Each of the Issuers and the Guarantor accepts responsibility for the information contained in this Supplement, other than in the case of the information contained in (i) sections 1 and 2 of this Supplement (including the document incorporated by reference therein in accordance with section 4 of this Supplement) as well as the

Annex to this Supplement, in respect of which, NAB accepts responsibility and (ii) section 3 of this Supplement, in respect of which, BNZ and BNZ-IF accept responsibility. To the best of the knowledge of the Issuers and the Guarantor (which have each taken all reasonable care to ensure that such is the case) the information contained in this Supplement (in respect of which they take responsibility) is in accordance with the facts and does not omit anything likely to affect the import of such information.

Statements contained in this Supplement, including any statement incorporated by reference into the Offering Circular by this Supplement, will, to the extent applicable and whether expressly, by implication or otherwise, be deemed to modify or supersede statements incorporated in the Offering Circular (or the documents incorporated by reference in the Offering Circular).

To the extent that there is any inconsistency between (a) any statement in this Supplement or any statement incorporated by reference into the Offering Circular by this Supplement and (b) any other statement in, or incorporated by reference into, the Offering Circular, the statements in (a) will prevail.

The Arranger and the Dealers have not separately verified the information contained in this Supplement. None of the Dealers or the Arranger makes any representation, express or implied, or accepts any responsibility, with respect to the accuracy or completeness of any of the information in this Supplement.

### **1. NAB 2023 Half Year Results**

On 4 May 2023, NAB published its unaudited consolidated half year financial statements for the six months ended 31 March 2023. A copy of NAB's "Half Year Results 2023 - Incorporating the requirements of Appendix 4D", which includes the unaudited consolidated half year financial statements of NAB (together with the notes addended thereto, the **NAB 2023 Half Year Financial Statements**) has been filed with the CSSF and the Luxembourg Stock Exchange.

Those sections of the NAB 2023 Half Year Financial Statements set out under section 4 of this Supplement below are, by virtue of this Supplement, incorporated by reference into, and form part of, the Offering Circular and are available via <https://dl.bourse.lu/dlp/1023b93ac427ad4d9999ad126f877c86a8>. The list of documents incorporated by reference on pages 87 to 91 (inclusive) of the Offering Circular (under the section headed, "Documents Incorporated by Reference and Credit Ratings—(A) Documents Incorporated by Reference") shall be construed accordingly.

The existing paragraph entitled "*Significant change in the financial performance or financial position of NAB*" on page 253 of the Offering Circular shall be deemed deleted and replaced with the following:

#### ***"Significant change in the financial performance or financial position of NAB***

There has been no significant change in the financial performance or financial position of the NAB Group since 31 March 2023."

### **2. Update of Risk Factors**

The risk factors under the heading "*NAB - Risks specific to the NAB Group*" on pages 22 to 42 (inclusive) of the Offering Circular shall be deemed deleted in their entirety and replaced with the updated risk factors set out in the Annex to this Supplement.

### **3. BNZ's unaudited summary financial information for the six months ended 31 March 2023**

The unaudited summary financial information for BNZ for the six months ended 31 March 2023, which is set out below, shall be inserted as a new paragraph immediately below the existing paragraph entitled "*Significant change in the financial performance or financial position of BNZ*" on page 257 of the Offering Circular:

**“BNZ Banking Group<sup>1</sup> unaudited summary financial information for the six months ended 31 March 2023**

Income Statement Summary (NZ\$m)	Mar 23	Sep 22	Mar 22	Mar 23 v	Mar 23 v
				Sep 22 %	Mar 22 %
Net interest income	1,464	1,340	1,164	9.3	25.8
Gains less losses on financial instruments	119	108	143	10.2	(16.8)
Other operating income	192	185	191	3.8	0.5
<b>Total operating income</b>	<b>1,775</b>	<b>1,633</b>	<b>1,498</b>	<b>8.7</b>	<b>18.5</b>
Operating expenses	(577)	(587)	(489)	(1.7)	18.0
<b>Total operating profit before credit impairment charge and income tax expense</b>	<b>1,198</b>	<b>1,046</b>	<b>1,009</b>	<b>14.5</b>	<b>18.7</b>
Credit impairment charge	(79)	(68)	(21)	16.2	Large
<b>Total operating profit before income tax expense</b>	<b>1,119</b>	<b>978</b>	<b>988</b>	<b>14.4</b>	<b>13.3</b>
Income tax expense on operating profit	(314)	(273)	(279)	15.0	12.5
<b>Net profit attributable to shareholder of Bank of New Zealand<sup>2</sup></b>	<b>805</b>	<b>705</b>	<b>709</b>	<b>14.2</b>	<b>13.5</b>

BNZ Balance Sheet Summary (NZ\$bn)					
Loans and advances to customers	101.0	99.3	97.8	1.7	3.3
Total assets	126.5	131.4	124.1	(3.7)	1.9
Deposits and other borrowings	78.9	78.2	79.9	0.9	(1.3)
Total liabilities	115.1	120.4	113.6	(4.4)	1.3
Total shareholder's equity	11.3	11.1	10.5	1.8	7.6

1. “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.
2. Statutory net profit has been prepared in accordance with Generally Accepted Accounting Practice in New Zealand (NZ GAAP). It complies with New Zealand equivalents to International Financial Reporting Standards (NZ IFRS) and other applicable Financial Reporting Standards.”

The existing paragraph entitled “*Significant change in the financial performance or financial position of BNZ*” on page 257 of the Offering Circular shall be deemed deleted and replaced with the following:

**“Significant change in the financial performance or financial position of BNZ**

There has been no significant change in the financial performance or financial position of the BNZ Group since 31 March 2023.”.

**4. Document incorporated by reference**

*Cross-reference list*

The cross-reference list below is to be read in conjunction with the cross-reference lists on pages 87 to 91 (inclusive) of the Offering Circular in the section headed, “*Documents Incorporated by Reference and Credit Ratings—(A) Documents Incorporated by Reference*”.

Each of the following pages of the NAB 2023 Half Year Financial Statements is incorporated by reference herein:

<i>NAB 2023 Half Year Financial Statements:</i>	
Report of the Directors	Pages 46 to 48 (inclusive)
Consolidated Income Statement	Page 50
Consolidated Statement of Comprehensive Income	Page 51
Consolidated Balance Sheet	Page 52
Consolidated Condensed Statement of Cash Flows	Page 53
Consolidated Statement of Changes in Equity	Pages 54 to 55 (inclusive)
Notes to the Consolidated Financial Statements	Pages 56 to 80 (inclusive)
Independent Auditor’s Review Report	Pages 82 to 83 (inclusive)

Any non-incorporated parts of a document referred to in this Supplement (which, for the avoidance of doubt, means any parts not included in the cross-reference list above) are either (i) not considered by the Issuers or the Guarantor, to be relevant for investors or (ii) included elsewhere in this Supplement.

Other than the URL for the document incorporated by reference into the Offering Circular by this Supplement, the content of any other websites or URLs referred to in this Supplement, or in any statement incorporated by reference into the Offering Circular by this Supplement, does not form part of this Supplement or the Offering Circular, and has not been scrutinised or approved by the CSSF.

Save as disclosed in this Supplement (and any supplement to the Offering Circular previously issued), there has been no other significant new factor, material mistake or material inaccuracy relating to information included in the Offering Circular since the publication of the Offering Circular.

In relation to PR Notes, copies of all documents incorporated by reference in the Offering Circular and this Supplement can be obtained from the website of the Luxembourg Stock Exchange at [www.luxse.com](http://www.luxse.com). In relation to Exempt Notes, pursuant to rule 206 of Part 2, Chapter 2 of the rules and regulations of the Luxembourg Stock Exchange, copies of all documents incorporated by reference in the Offering Circular and this Supplement can be obtained from the website of the Luxembourg Stock Exchange at [www.luxse.com](http://www.luxse.com) and, free of charge, from the registered office of each Issuer and the Guarantor. Copies may also be obtained, free of charge, from the specified office of the Agent at Winchester House, 1 Great Winchester Street, London EC2N 2DB.

## ANNEX

### (A) NAB - RISKS SPECIFIC TO THE NAB GROUP

Set out below are the principal risks and uncertainties associated with the NAB Group. It is not possible to determine the likelihood of these risks occurring with any certainty. However, the risk in each category that NAB considers most material is listed first, based on the information available at the date of this Supplement and NAB's best assessment of the likelihood of each risk occurring and the potential magnitude of the negative impact to the NAB Group should such risk materialise. In the event that one or more of these risks materialises, the NAB Group's reputation, strategy, business, operations, financial condition and future performance could be materially and adversely impacted.

The NAB Group's Risk Management Framework and internal controls may not be adequate or effective in accurately identifying, evaluating, or addressing risks faced by the NAB Group. There may be other risks that are unknown or deemed immaterial, but which may subsequently become known or material. These may individually, or in aggregate, adversely impact the NAB Group. Accordingly, no assurances or guarantees of future performance, profitability, distributions or returns of capital are given by the NAB Group.

#### **Strategic Risk**

Strategic risk is the risk to earnings, capital, liquidity, funding, or reputation arising from an inadequate response to changes in the external environment and risk of failing to properly consider downstream impacts and achieve effective outcomes when executing material change programmes.

*Strategic initiatives may fail to be executed, may not deliver all anticipated benefits, or may otherwise change the NAB Group's risk profile*

The NAB Group's corporate strategy sets its purpose, ambition, and objectives.

The NAB Group prioritises and invests significant resources in the execution of initiatives that are aligned to its chosen strategy, including transformation and change programmes. These programmes primarily focus on technology, digital and data assets, infrastructure, business improvement, cultural transformation, regulatory compliance, and changes to associated controls, and may have dependencies on external suppliers or partners. There is a risk that these programmes may not realise some or all of their anticipated benefits and outcomes. These programmes may also increase operational, compliance, and other risks, and new or existing risks may not be appropriately controlled.

The NAB Group's strategy includes Environmental, Social or Governance (**ESG**) related initiatives, including a climate strategy and various obligations, targets and goals. Achieving the NAB Group's sectoral decarbonisation targets and managing climate change related financial risks are in part reliant on the actions of others including customers, policy makers and other stakeholders.

Any failure by the NAB Group to deliver in accordance with its strategy, or to deliver strategic programmes effectively, may result in material losses to the NAB Group, reputational damage, or a failure to achieve anticipated benefits, and ultimately, may materially and adversely impact the NAB Group's operations and financial performance and position.

*The NAB Group faces intense competition*

There is substantial competition across the markets in which the NAB Group operates. The NAB Group faces competition from established financial services providers and other parties, including foreign banks and non-bank competitors, such as fintechs, Buy Now Pay Later (**BNPL**) providers, digital platforms and large global technology companies, some of which have lower costs, operating and business models or products that differ from or are more competitive than the NAB Group's and some of which are subject to a lesser regulatory environment.

In addition, evolving industry trends, rapid technology changes, and environmental factors may impact customer needs and preferences and the NAB Group may not predict these changes accurately or quickly enough, or have the resources and flexibility to adapt in sufficient time, to meet customer expectations and keep pace with competitors. These risks are heightened in the current context where the NAB Group has to navigate an uncertain economic environment and prioritise compliance with new regulation.

Other trends and recent regulatory and legislative developments that may increase competition in the NAB Group's relevant markets include, but are not limited to:

- increased focus on digital, data and analytics capabilities with the objective of creating easy and seamless customer experiences. The rapid development and deployment of artificial intelligence (**AI**) capabilities has also emerged as a key strategic risk and opportunity;
- increased demand for green or sustainability-related products or increased lending to assist customers in achieving their ESG-related performance objectives, for example, sustainability-linked loans;
- continued competitive pressures in home lending, particularly as customers of the NAB Group revert to variable rate loans as fixed rate periods expire on loans entered into at historically low rates in recent years. This increases the risk that a high number of customers may refinance outside the NAB Group;
- increased competition for customer deposits in the context of an uncertain market environment, with the risk of increasing the NAB Group's cost of funds;
- increased interest in regulation of the BNPL industry that may impact products sold by the NAB Group and its competition with existing BNPL providers;
- ongoing growth of the broker market and the risk of disintermediating customer relationships;
- the continued implementation of the Consumer Data Right (**CDR**), known as 'Open Banking', in the Australian banking sector. The CDR seeks to increase competition and innovation between service providers by mandating and standardising the sharing of certain consumer data and data relating to their products and services. The mandated roll out of the CDR was extended to business customers from November 2021. In 2022, a statutory review of the operation of the CDR was undertaken by the Australian Federal Government (**Australian Government**), which notes that the statutory framework has been broadly effective in the rollout of the CDR to date, however includes findings and recommendations which may lead to changes to the CDR legislative framework. The Australian Government has also consulted on draft legislation to enable consumers to instruct designated organisations to initiate actions on their behalf (and with their consent) and a draft Bill is currently before Parliament. Further, the CDR is designed to be economy-wide and has commenced roll out to the energy sector, and will later be extended to the telecommunications sector. There is a possibility for the CDR to be extended to large global technology companies, providing them with access to even more data which may further increase their competitiveness;
- the decision by the NZ Government, in July 2021, to similarly implement a CDR legislative framework, with the aim to introduce an exposure draft of CDR legislation in the second quarter of 2023. The adoption of Open Banking in NZ is designed to increase competition in the NZ banking industry;
- the continued consumer and institutional adoption of cryptocurrencies and other digital assets. The rate of digital asset adoption, digital asset product creation (for example, stable coins and decentralised finance) and government responses (including the possibility of the Reserve Bank of Australia (**RBA**) and/or the RBNZ issuing a Central Bank Digital Currency) are expected to shape the future of the sector and its impact on the NAB Group. The Australian Government has also recently completed a consultation on token mapping and is expected to propose a framework for custody and licensing for public comment in mid-2023. In addition, regulation of digital assets is nascent, but emerging, across

all markets in which the NAB Group operates, which may increase the NAB Group's costs, or require the NAB Group to invest in resources to adapt its products or systems to new technologies;

- the release of a consultation paper by the Australian Government seeking input into the strategic plan for the payments system in December 2022. The strategic plan is expected to be released in 2023; and
- the Retail Payment System Act 2022 (**RPS Act**) was enacted in NZ in 2022. The RPS Act enables the NZ Commerce Commission to regulate certain aspects of the retail payments system, such as standards for participants relating to information disclosure, pricing, and access to infrastructure.

Ongoing competition for customers can lead to compression in profit margins and loss of market share. Intense competition increases the risk of additional price pressure, especially in commoditised lines of business, where the providers with the lowest unit cost may win market share and industry profit pools may be eroded. Such factors may ultimately impact the NAB Group's financial performance and position, profitability and returns to investors.

*Risks may arise from pursuing acquisitions and divestments*

The NAB Group regularly considers a range of corporate opportunities, including acquisitions, divestments, joint ventures, and investments.

Pursuit of corporate opportunities inherently involves transaction risks, including the risk that the NAB Group over-values an acquisition or investment, or under-values a divestment, as well as exposure to reputational damage. The NAB Group may encounter difficulties in integrating or separating businesses, including failure to realise expected synergies, disruption to operations, diversion of management resources, or higher than expected costs. These risks and difficulties may ultimately have an adverse impact on the NAB Group's financial performance and position.

The NAB Group may incur unexpected financial losses following an acquisition, joint venture, or investment if the business it invests in does not perform as planned or causes unanticipated changes to the NAB Group's risk profile. Additionally, there can be no assurance that customers, employees, suppliers, counterparties, and other relevant stakeholders will remain with an acquired business following the transaction, and any failure to retain such stakeholders may have an adverse impact on the NAB Group's overall financial performance and position.

Specific risks exist in connection with NAB's acquisition of Citigroup's Australian consumer business which completed on 1 June 2022.

NAB continues to rely on Citigroup's regional shared technology infrastructure for transitional services (and will do so through the transition period), as well as Citigroup's support for data migration activities after the development of technology systems within the NAB Group. There is a risk that as the integration project and the development of technology systems within the NAB Group continues, costs may be higher than anticipated, more internal resourcing is required than anticipated, or that key employees, customers, suppliers, or other stakeholders required for a successful transition, will not be retained. Additionally, there is a risk that the timeline for the integration is extended, which may result in further costs being incurred by NAB.

Citigroup has provided NAB with indemnities relating to certain matters which may have occurred pre-completion, as well as covenants and warranties in favour of NAB. There is a risk that these protections may be insufficient to fully cover liabilities relating to these matters, which may have an adverse impact on the NAB Group's financial performance and position.

NAB completed the acquisition of 86 400 on 19 May 2021 and continues to work through integration and migration activities required to integrate 86 400 with the ubank division. There is a risk that the timeline for the integration may be extended, integration costs may be higher than anticipated, more internal resourcing is

required than anticipated, or that key employees, customers, suppliers, or other stakeholders required for a successful integration will not be retained.

The NAB Group may also have ongoing exposures to divested businesses, including through a residual shareholding, the provision of continued services and infrastructure, or an agreement to retain certain liabilities of the divested businesses through warranties and indemnities. These ongoing exposures may have an adverse impact on the NAB Group's business and financial performance and position. The NAB Group may also enter into non-compete arrangements as part of divestments, which may limit the future operations of the NAB Group.

As announced on 31 May 2021, NAB completed the sale of its advice, platforms, superannuation and investments and asset management businesses to IOOF Holdings, now named Insignia Financial (**MLC Wealth Transaction**). As part of the MLC Wealth Transaction, NAB provided Insignia Financial with indemnities relating to certain pre-completion matters, including a remediation programme relating to workplace superannuation matters, breaches of anti-money laundering laws and regulations, regulatory fines and penalties, and certain litigation and regulatory investigations. NAB also provided covenants and warranties in favour of Insignia Financial. A breach or triggering of these contractual protections may result in NAB being liable to Insignia Financial.

As part of the MLC Wealth Transaction, NAB retained the companies that operated the advice businesses, such that the NAB Group has retained all liabilities associated with the conduct of these businesses pre-completion. From completion, NAB has agreed to provide Insignia Financial with certain transitional services and continuing access to records, as well as support for data migration activities. NAB may be liable to Insignia Financial if it fails to perform its obligations. There is a risk that costs associated with separation activities and the costs incurred by NAB in satisfying its obligations may be higher than anticipated. If so, or if NAB fails to perform its obligations, there may be an adverse impact on the NAB Group's financial performance and position.

On 17 November 2022, NAB announced its intention to exit its custody business, NAB Asset Servicing. The exit is expected to be effected through the transfer of all of NAB Asset Servicing's clients to alternative custody providers over a period of approximately three years. The transfer of a large number of clients over a relatively short period may be a complex exercise that is subject to a number of operational/transitional risks that will need to be managed carefully. There is a risk that this does not occur to plan, and that there may be a potential adverse impact on the NAB Group if not managed appropriately.

## **Credit Risk**

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

*Rising interest rates to combat persistent inflation may result in a deterioration in the NAB Group's credit risk profile in the short term through increases in defaulted loans*

Globally, central banks (including in Australia and NZ) have rapidly increased policy rates in response to elevated levels of inflation. Inflation has persisted for longer and at higher levels than many central banks had anticipated, which may increase the risks arising from further rate rises in 2023 and beyond.

Rising interest rates, coupled with existing inflationary pressures, may increase household and business financial stress across Australia and NZ, particularly for underprepared customers. Rising rates will reduce disposable income for households leaving sectors exposed to changes in household discretionary spending (including retail trade, tourism, hospitality, and personal services) vulnerable to significant financial stress in the event of changes to consumer spending behaviour. This includes a heightened risk of corporate and business bankruptcies, job losses and higher unemployment. The increased credit risk in affected sectors and



elevated levels of household financial stress may result in an increase in losses if customers default on their loan obligations and/or higher capital requirements through an increase in the probability of default.

*A decline in property market valuations may give rise to higher losses on defaulting loans*

Lending activities account for most of the NAB Group's credit risk exposure. The NAB Group's lending portfolio is largely based in Australia and NZ. Residential housing loans and commercial real estate loans constitute a material component of the NAB Group's total gross loans and acceptances.

Residential and commercial property prices in Australia and NZ increased for some years up until 2021, but experienced decline in 2022 following the central banks' moves to increase policy rates. House prices have stabilised somewhat in early 2023, however further declines are expected through the remainder of 2023 in both Australia and NZ.

A decline in the value of the residential or commercial property used as collateral (including in business lending) may give rise to greater losses to the NAB Group resulting from customer defaults, which may, in turn, impact the NAB Group's financial performance and position, profitability and returns to investors. The most significant impact, in the event of default, is likely to come through residential mortgage customers in high loan-to-value-ratio brackets.

*Adverse business conditions in Australia and NZ, in the agricultural and other sectors, may give rise to increasing customer defaults*

The NAB Group has a large market share among lenders to the Australian and NZ agricultural sectors. These sectors may be negatively impacted by several factors, including:

- vulnerability to labour constraints;
- trade restrictions and tariffs;
- volatility in commodity prices;
- foreign exchange rate movements;
- changes in consumer preference;
- disease and introduction of pathogens and pests (for example the threat of a local foot and mouth disease outbreak and spread in Australia of the varroa mite – impacting European honey bees);
- export and quarantine restrictions;
- supply chain constraints;
- extreme weather events (including substantial rainfall or drought);
- increasing weather volatility; and
- longer-term changes in climatic conditions.

For example, some customers are facing significant challenges from extreme weather events in NZ and floods in New South Wales (NSW) and Queensland, which have caused stock, crop and plant and equipment loss and damage. This may result in increased losses to the NAB Group from customer defaults, and ultimately may have an adverse impact on the NAB Group's financial performance and position. More broadly, physical and transition risks associated with climate change may also increase current levels of customer defaults in other sectors.

Adverse business conditions (including supply chain disruptions, labour constraints and rising input costs e.g. commodity and energy prices) may also lead to stress in certain other sectors such as construction, wholesale trade and manufacturing. Rising household financial pressures (including inflationary pressures) also pose a risk to sectors that are reliant on household expenditure.

*Market declines and increased volatility may result in the NAB Group incurring losses*

Some of the NAB Group's assets and liabilities comprise financial instruments that are carried at fair value, with changes in fair value recognised in the NAB Group's income statement. Market declines and increased volatility could negatively impact the value of such financial instruments and cause the NAB Group to incur losses.

*Other macro-economic, geopolitical, climate, other nature-related or social risks may adversely affect the NAB Group and pose a credit risk*

The majority of the NAB Group's businesses operate in Australia and NZ, with additional operations located in Asia, the United Kingdom, France and the United States. Levels of borrowing are heavily dependent on customer confidence, employment trends, market interest rates, and other economic and financial market conditions and forecasts.

Domestic and international economic conditions and forecasts are influenced by a number of macro-economic factors, such as: economic growth rates, environmental and social issues (including emerging issues such as payroll compliance, modern slavery, and nature-related risks), cost and availability of capital, central bank intervention, inflation and deflation rates, level of interest rates, yield curves, market volatility, and uncertainty. Deterioration in any of these factors may lead to the following negative impacts on the NAB Group:

- deterioration in the value and liquidity of assets (including collateral);
- the inability to price certain assets;
- environmental conditions and social and governance issues impacting the risk and return profile and/or value of customers' security or business operations;
- an increase in customer or counterparty default and credit losses;
- higher provisions for credit impairment;
- mark-to-market losses in equity and trading positions, including NAB's high-quality liquid asset (HQLA) portfolios;
- a lack of available or suitable derivative instruments for hedging purposes; and
- increased cost of insurance, lack of available or suitable insurance, or failure of the insurance underwriter.

Economic conditions may also be negatively impacted by climate change and major shock events, such as natural disasters, epidemics and pandemics, war and terrorism, political and social unrest, banking instability and sovereign debt restructuring and defaults.

The following macro-economic and financial market conditions are, as of the date of this Supplement, of most relevance to the credit risk facing the NAB Group and may affect revenue growth and/or customer balance sheets:

- Global economic growth is expected to slow significantly in the calendar year 2023, reflecting the impact of tightening monetary policy and lending standards in advanced economies, current volatility

in the United States and European banking sectors, energy disruptions in Europe and weaker than pre-COVID 19 pandemic growth rates in China. Given the rapid slowdown in activity, several advanced economies remain at a risk of recession and global economic growth is expected to remain below its long-term trend in both calendar years 2023 and 2024.

- Ongoing geopolitical instability, such as that caused by Russia's invasion of Ukraine, has negatively impacted, and could in the future negatively impact, the global and Australian economies, including by causing supply chain disruptions, rising prices for oil and other commodities, volatility in capital markets and foreign currency exchange rates, rising interest rates and heightened cybersecurity risks. In response to the Russia-Ukraine conflict, several countries (including Australia and NZ) imposed wide ranging economic sanctions and export controls on individuals and firms closely connected to the Russian Government or conducting economic activity in certain regions of Ukraine. These sanctions, as well as responsive measures, continue to impact the European and global economy, including through higher energy and commodity prices. Prices may remain elevated for an extended period, which would negatively impact most businesses and households, and may lead to increased credit losses for the NAB Group.
- Inflationary pressures emerged at the start of calendar year 2021, increasing the cost of living and reducing disposable income for consumers. Persistent inflation reflects a broad range of factors, including the impact of fiscal stimulus in a range of countries, disruptions to global supply chains, shortages of key inputs, commodities, and labour in various locations and the impact of the Russia-Ukraine conflict.
- Persistent inflation and fears that households' inflation expectations could become unanchored from central bank targets (driving increased wage demands) have driven global central banks (including in Australia and NZ) to rapidly lift policy rates since early 2022. Several major central banks have signalled that further rate rises may be expected in the first half of 2023, however there is lower certainty on the trajectory of policy rates due to recent instability in the United States and European banking sectors.
- Increasing policy rates, accompanied by tighter lending standards in many countries, may expose imbalances or weaknesses in balance sheets, including those of financial institutions, and asset markets that have built up over time. This may increase pressure on borrowers, particularly those that are highly geared and/or face reduced income due to weaker economic activity. Where concerns over the viability of financial institutions arise, it can trigger contagion fears, potentially destabilising global markets and, in turn, negatively affecting economic activity. More generally, higher policy rates may adversely affect the NAB Group's cost of funds, trading income, margins and the value of the NAB Group's lending and investments.
- Risk of contagion due to financial system instability remains an ongoing concern for the NAB Group due to the interdependency of financial market participants. Where concerns over the viability of financial institutions arise, it can trigger contagion fears, potentially destabilising global markets and, in turn, negatively affecting economic activity and adversely affecting the NAB Group's results. Government intervention in the United States and Europe was required to stabilise conditions in the first half of 2023, following volatility arising from liquidity issues with certain banks in the United States.
- China is a major trading partner for Australia and NZ, with export incomes and business investment exposed to changes in China's economic growth and trade policies. China's economic growth is expected to rebound in calendar year 2023 (from weak rates in 2022), following the abandonment of its restrictive zero-COVID policies. That said, growth is forecast to remain below pre-COVID-19 pandemic rates in calendar years 2023 and 2024. There remains considerable uncertainty around household consumption and the property sector in China, which could negatively impact the global economy generally, and the Australian economy in particular (including by reducing demand for

Australian exports). A range of medium to longer-term risks also continue to be present, including high corporate debt levels and demographic pressures from China's ageing population. Although diplomatic tensions between the Chinese and Australian governments appear to have eased since mid-calendar year 2022, the risk of trade restrictions being imposed on Australian exports remains. This may have a negative impact on the NAB Group's customers who are exposed to a range of sectors (including coal, barley, wine, beef, lamb, and cotton among others), and may give rise to increasing levels of customer defaults.

- As commodity exporting economies, Australia and NZ are exposed to shifts in global commodity prices that can be sudden, sizeable, and difficult to predict. Fluctuations in commodity markets can affect key economic variables like national income tax receipts and exchange rates. Commodity price volatility remains substantial and, given the NAB Group's sizeable exposures to commodity producing and trading businesses, this volatility poses a credit risk to the NAB Group.

Other geopolitical risks continue to present uncertainty to the global economic outlook, with negative impacts on consumption and business investment. Tensions between the United States and China around certain issues, including Taiwan, the Russia-Ukraine conflict and China's trade and technology policies, continue to persist, which could impact global economic growth and global supply chains. Similarly, geopolitical tensions in the Asia-Pacific region could increase as a result of the AUKUS pact or other similar agreements. An increasing fragmentation of, and a rise in populism in, many major democratic economies have led to difficulties in policy implementation and an increase in anti-globalisation sentiment. Political tensions between China and Taiwan remain high, as do those between China and the Hong Kong Special Administrative Region, with China exerting greater political power over the region. In addition, there are a range of other geopolitical risks, particularly given the ongoing uncertainty around the Middle East (including Afghanistan), the Korean Peninsula, and the South China Sea.

## **Market Risk**

The NAB Group may suffer losses as a result of a change in the value of the NAB Group's positions in financial instruments, bank assets and liabilities, or their hedges due to adverse movements in market prices. Adverse price movements impacting the NAB Group may occur in credit spreads, interest rates, foreign exchange rates, and commodity and equity prices, particularly during periods of heightened market volatility or reduced liquidity. Market volatility has increased in response to increased geopolitical risk, rising inflation and central banks lifting interest rates.

The occurrence of any event giving rise to material market risk losses may have a negative impact on the NAB Group's financial performance and position.

*The NAB Group is exposed to credit spread risk*

Credit spread risk is the risk that the NAB Group may suffer losses from adverse movements in credit spreads. This is a significant risk in the NAB Group's trading and banking books.

The NAB Group's trading book is exposed to credit risk movements in the value of securities and derivatives as a result of changes in the perceived credit quality of the underlying company or issuer. Credit spread risk accumulates in the NAB Group's trading book when it provides risk transfer services to customers seeking to buy or sell fixed income securities (such as corporate bonds). The NAB Group may also be exposed to credit spread risk when holding an inventory of fixed income securities in anticipation of customer demand or undertaking market-making activity (i.e., quoting buy and sell prices to customers) in fixed income securities. The NAB Group's trading book is also exposed to credit spread risk through credit valuation adjustments. A widening of credit spreads could negatively impact the value of the credit valuation adjustments.

The NAB Group's banking book houses the NAB Group's liquidity portfolio. While the NAB Group hedges the interest rate risk on this portfolio, it is subject to credit spread risk through changes in spreads on its holdings of semi-government and bank issued bonds. These positions form part of the required holdings of

HQLAs used in managing the NAB Group's liquidity risk, and can give rise to material profit and loss volatility within the NAB Group's Treasury portfolio during periods of adverse credit spread movements. Positions in Residential Mortgage Backed Securities that arise through the NAB Group's warehousing, underwriting, and syndication operations also form part of the banking book and are exposed to changes in credit spreads.

*The NAB Group is exposed to interest rate risk*

The NAB Group's financial performance and capital position are impacted by changes in interest rates. The NAB Group's trading book is exposed to changes in the value of securities and derivatives as a result of changes in interest rates. The NAB Group's trading book accumulates interest rate risk when the NAB Group provides interest rate hedging solutions for customers, holds interest rate risk in anticipation of customer requirements, or undertakes market-making activity in fixed income securities or interest rate derivatives. The level of volatility in interest rate markets has increased in the post-pandemic period after a broadening of inflationary pressures saw major central banks unwind stimulus and rapidly tighten monetary policy. Market volatility has increased in response to increased geopolitical risk, rising inflation, central banks lifting interest rates and potential risks in the banking sector following recent bank failures in the United States and recent pressure in the United States and European banking systems.

Balance sheet and off-balance sheet items can create an interest rate risk exposure within the NAB Group. As interest rates and yield curves change over time, the NAB Group may be exposed to a loss in earnings and economic value due to the interest rate profile of its balance sheet. Such exposure may arise from a mismatch between the maturity profile of the NAB Group's lending portfolio compared to its deposit portfolio (and other funding sources), as well as the extent to which lending and deposit products can be repriced should interest rates change, thereby impacting the NAB Group's net interest margin.

*The NAB Group is exposed to foreign exchange risk*

Foreign exchange risks are evident in the NAB Group's trading and banking books.

Foreign exchange and translation risks arise from the impact of currency movements on the value of the NAB Group's positions in financial instruments, profits and losses, and assets and liabilities due to participation in global financial markets and international operations.

The NAB Group's ownership structure includes investment in overseas subsidiaries and associates which gives rise to foreign currency exposures, including through the repatriation of capital and dividends. The NAB Group's businesses may therefore be affected by a change in currency exchange rates, and movements in the mark-to-market valuation of derivatives and hedging contracts.

The NAB Group's financial statements are prepared and presented in Australian dollars unless otherwise stated, and any adverse fluctuations in the Australian dollar against other currencies in which the NAB Group invests or transacts, and generates profits (or incurs losses), may adversely impact its financial performance and position.

## **Capital, Funding and Liquidity Risk**

*The NAB Group is exposed to funding and liquidity risk*

Funding risk is the risk that the NAB Group is unable to raise short and long-term funding to support its ongoing operations, regulatory requirements, strategic plans, and objectives. The NAB Group accesses domestic and global capital markets to help fund its business, along with using customer deposits. Final maturity dates of drawn Term Funding Facility maturities (a three-year facility established by the RBA to support lending to the NAB Group's customers) are concentrated across financial years 2023 and 2024 for all participating authorised deposit-taking institutions (ADIs), including the NAB Group. The NAB Group relies on offshore wholesale funding to support its funding and liquidity position. Periods of significant market volatility in particular may limit the NAB Group's access to this funding source. Dislocation in global capital

markets, reduced investor interest in the NAB Group's securities and/or reduced customer deposits, may adversely affect the NAB Group's funding and liquidity position. This may increase the cost of obtaining funds, reduce the tenor of available funds or impose unfavourable terms on the NAB Group's access to funds, constrain the volume of new lending, or adversely affect the NAB Group's capital position.

Liquidity risk is the risk that the NAB 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 NAB Group must also comply with prudential and regulatory liquidity obligations across the jurisdictions in which it operates. Any significant deterioration in the NAB Group's liquidity position may lead to an increase in the NAB Group's funding costs, constrain the volume of new lending or cause the NAB Group to breach its prudential or regulatory liquidity obligations. This may adversely impact the NAB Group's reputation and financial performance and position.

*The NAB Group's capital position may be constrained by prudential requirements*

Capital risk is the risk that the NAB Group does not hold sufficient capital and reserves to cover exposures and to protect against unexpected losses. Capital is the cornerstone of the NAB Group's financial strength. It supports the NAB Group's operations by providing a buffer to absorb unanticipated losses from its activities.

The NAB Group must comply with prudential requirements in relation to capital across the jurisdictions in which it operates. Compliance with these requirements, and any further changes to these requirements may:

- limit the NAB Group's ability to manage capital across the entities within the NAB Group;
- limit payment of dividends or distributions on shares and hybrid instruments;
- require the NAB Group to raise more capital (in an absolute sense) or raise more capital of higher quality; and
- restrict balance sheet growth.

Current regulatory changes that could present a risk to the NAB Group's capital position include loss-absorbing requirements for Domestic Systemically Important Banks, which include NAB. These changes require an increase to total capital by 4.5 per cent. of risk weighted assets (**RWA**) by 1 January 2026, with an interim increase by 3 per cent. of RWA by 1 January 2024. These requirements are expected to be satisfied primarily through the issue of additional Tier 2 Capital which will further increase the NAB Group's funding costs due to the higher cost of Tier 2 Capital issuance relative to senior debt.

APRA's revised capital framework came into effect from 1 January 2023, including prudential standards, prudential practice guides, and reporting standards in relation to the risk-weighting framework and other capital requirements. The impacts of the revised framework are incorporated into the NAB Group's 2023 half year results, which are presented in NAB's unaudited consolidated half year financial statements for the six months ended 31 March 2023 (the **NAB 2023 Half Year Financial Statements**) which are incorporated by reference in this Offering Circular. In addition, revisions to RBNZ capital requirements (to be phased in by 2028) will require the NAB Group to hold more capital in NZ.

If the information or the assumptions upon which the NAB Group's capital requirements are assessed prove to be inaccurate, this may adversely impact the NAB Group's operations, financial performance and financial position.

*A downgrade in the NAB Group's credit ratings or outlook may adversely impact its cost of funds and capital market access*

Credit ratings are an assessment of a borrower's creditworthiness and may be used by market participants in evaluating the NAB Group and its products, services, and securities. Credit rating agencies conduct ongoing review activities, which can result in changes to credit rating settings and outlooks for the NAB Group, or credit ratings of sovereign jurisdictions where the NAB Group conducts business. Credit ratings may be affected by operational, ESG-related and market factors, or changes in a credit rating agency's rating methodologies.

A downgrade in the credit ratings or outlook of the NAB Group, the NAB Group's securities, or the sovereign rating of one or more of the countries in which the NAB Group operates, may increase the NAB Group's cost of funds or limit its access to capital markets. This may also cause a deterioration of the NAB Group's liquidity position and trigger additional collateral requirements in derivative contracts and other secured funding arrangements. A downgrade to the NAB Group's credit ratings relative to its peers may also adversely impact the NAB Group's competitive position and financial performance and position.

*The NAB Group may fail to, or be unable to, sell down its underwriting risk*

As financial intermediaries, members of the NAB Group underwrite or guarantee different types of transactions, risks and outcomes, including the placement of listed and unlisted debt, equity-linked and equity securities. The underwriting obligation or guarantee may be over the pricing and placement of these securities, and the NAB Group may therefore be exposed to potential losses, which may be significant, if it fails to sell down some or all of this risk to other market participants.

## **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.

*Disruption to technology may adversely impact the NAB Group's reputation and operations*

Most of the NAB Group's operations depend on technology and therefore the reliability, resilience, and security of the NAB Group's (and its third-party vendors') information technology systems and infrastructure are essential to the effective operation of the NAB Group's business and consequently to its financial performance and position. The reliability, security and resilience of the NAB Group's technology 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.

The rapid evolution of technology in the financial services industry and the increased expectations of customers for internet and mobile services on demand expose the NAB Group to changing operational scenarios.

Any disruption to the NAB Group's technology (including disruption to the technology systems of the NAB Group's external providers) may be wholly or partially beyond the NAB Group's control and may result in operational disruption, regulatory enforcement actions, customer redress, litigation, financial losses, theft or loss of customer data, loss of market share, loss of property or information, or may adversely impact the NAB Group's speed and agility in the delivery of change and innovation.

In addition, any such disruption may adversely affect the trust that internal and external stakeholders have in the NAB Group's ability to protect key information (such as customer and employee records) and infrastructure. This may in turn affect the NAB Group's reputation, including the view of regulators or ratings agencies, which may result in loss of customers, a reduction in share price, ratings downgrades and regulatory censure or penalties. Social media commentary may exacerbate such adverse outcomes for the NAB Group and negatively impact the NAB Group's reputation.

*Privacy, information security and data breaches may adversely impact the NAB Group's reputation and operations*

The NAB Group collects, processes, stores and transmits large amounts of personal and confidential information through its people, technology systems and networks and the technology systems and networks of its external service providers. Records are retained and disposed of in line with NAB policies and retention schedules. Threats to information security are constantly evolving and techniques used to perpetrate cyber-attacks are increasingly sophisticated. In addition, the number, nature and resources of adverse actors that could pose a cyber threat to the NAB Group is growing, including individual cybercriminals, criminal or terrorist syndicate networks and large sophisticated foreign governments with significant resources and capabilities.

Although the NAB Group invests in protecting the confidentiality, integrity and availability of this information, as cyber threats continue to evolve, the NAB Group may be required to expend significant additional resources to continue to modify or enhance its layers of defence or to investigate and remediate any information security vulnerabilities. The NAB Group may also not always be able to anticipate a security threat, or be able to implement effective information security policies, procedures, and controls to prevent or minimise the resulting damage. The NAB Group may also inadvertently retain information which is not specifically required or is not permitted by legislation, thus increasing the impact of a potential data breach or non-compliance. A successful cyber-attack could persist for an extended period of time before being detected, and, following detection, it could take considerable time for the NAB Group to obtain full and reliable information about the cybersecurity incident and the extent, amount and type of information compromised. During the course of an investigation, the NAB Group may not necessarily know the full effects of the incident or how to remediate it, and actions and decisions that are taken or made in an effort to mitigate risk may further increase the costs and other negative consequences of the incident. Moreover, potential new regulations may require the NAB Group to disclose information about a cybersecurity event before it has been resolved or fully investigated. Additionally, the NAB Group uses select external providers (in Australia and overseas) to process and store confidential data and to develop and provide its technology services, including the increasing use of cloud infrastructure. While the NAB Group negotiates comprehensive risk-based controls with its service providers, it is limited in its ability to monitor and control the security protocols that service providers implement on a day-to-day basis. The NAB Group may also submit confidential information to its key regulators under a legal obligation and as part of regulatory reporting.

A breach of security at any of these external providers, regulators or within the NAB Group may result in operational disruption, theft or loss of customer or employee data, a breach of privacy laws, regulatory enforcement actions, civil penalties, customer or employee redress, litigation, financial losses, or loss of market share, property, or information. This may be wholly or partially beyond the control of the NAB Group and may adversely impact its financial performance and position.

The threat environment has also seen a new vector appear in the form of Generative AI such as ChatGPT which is a step-change in artificial intelligence as it can not only predict and identify information, but also create well written content as well as code. These codes have the potential to assist and enable and enhance existing methods for criminals to perpetrate fraud, scams, and cyber threats against NAB and its customers.

In addition, any such event may give rise to increased regulatory scrutiny or adversely affect the view of ratings agencies. Social media commentary, and the NAB Group's responses to the relevant event, may exacerbate the impact on the NAB Group's reputation.

*Complexity of infrastructure, processes and models, gives rise to a significant risk to the NAB Group's operations*

The NAB Group's business involves the execution of many processes and transactions with varying degrees of complexity. The NAB Group is reliant on its policies, processes, controls, and supporting infrastructure functioning as designed, along with third parties appropriately managing their own operational risk and



delivering services to the NAB Group as required. A failure in the design or operation of these policies, processes, controls, and infrastructure, failure of the NAB Group to manage external service providers, or the disablement of a supporting system, all pose a significant risk to the NAB Group's operations and consequently its financial performance and reputation.

Models are used extensively in the conduct of the NAB Group's business, for example, in calculating capital requirements or customer compensation payments, and in measuring and stressing exposures. If the models used prove to be inadequate, or are based on incorrect or invalid assumptions, judgements or inputs, this may adversely affect the NAB Group's customers and the NAB Group's financial performance and position.

*The NAB Group is exposed to the risk of human error*

The NAB Group's business, including the internal processes and systems that support business decisions, relies on appropriate actions and inputs from its employees, agents, and external providers. The NAB Group is exposed to operational risk due to process or human error, including incorrect or incomplete data capture and records maintenance, incorrect or incomplete documentation to support activities, or inadequate design of processes or controls. The NAB Group uses select external providers (in Australia and overseas) to provide services to the NAB Group and is exposed to similar risks arising from such failures in the operating environment of its external providers. The materialisation of any of these risks could lead to direct financial loss, loss of customer, employee or commercially sensitive data, regulatory penalties, and reputational damage.

*The NAB Group may not be able to attract and retain suitable talent*

The NAB Group is dependent on its ability to attract and retain key executives, employees, and Board members with a deep understanding of banking and technology, who are qualified to execute the NAB Group's strategy, as well as the technology transformation the NAB Group is undertaking to meet the changing needs of its customers. Potential weaknesses in employment practices, including diversity, anti-discrimination, workplace flexibility, payroll compliance, workplace health and safety and employee wellbeing, are sources of operational risk that can impact the NAB Group's ability to attract and retain qualified personnel with the requisite knowledge, skills and capability. These risks may be heightened in connection with the ongoing re-negotiation of NAB's Enterprise Agreement, and emerging risks related to the Federal Court proceedings issued by the Finance Sector Union in relation to work hours.

The COVID-19 pandemic resulted in international border closures limiting access to international talent markets. The majority of global border restrictions, including Australia and NZ have been lifted. The Australian Government has put in place a number of visa programmes to allow the fast-tracking of key talent and the NZ Government has introduced (or reintroduced) a number of measures designed to attract skilled migrants. While these measures are helping to stimulate talent migration from overseas to Australia and NZ respectively, suitably filling specialist roles in fields such as technology, data analytics, and financial crime continues to be a challenge.

The COVID-19 pandemic has had, and may continue to have, negative effects on attracting and retaining suitable talent, including volatility and fluctuations in unemployment. If new COVID-19 variants or other diseases emerge, the Australian and NZ employment market may experience greater stress and an increased risk of talent shortage. In countries where COVID-19 restrictions have eased or been removed, there is evidence of an increased level of voluntary attrition and tightness in labour supply. These factors may impact the NAB Group's capacity to attract and retain key talent.

The NAB Group's capacity to attract and retain key talent, in addition to providing attractive career opportunities, also depends on its ability to design and implement effective remuneration and talent structures. This may be constrained by several factors, including by regulatory requirements (particularly in the highly regulated financial services sector).

The unexpected loss of key resources or the inability to attract personnel with suitable experience may adversely impact the NAB Group's ability to operate effectively and efficiently, or to meet the NAB Group's

strategic objectives. This risk may also impact third party vendors (including offshore vendors) engaged by the NAB Group, who may be experiencing similar personnel related challenges.

*External events may adversely impact the NAB Group's operations*

Operational risk can arise from external events such as biological hazards, climate change, natural disasters, widespread disease or pandemics, or acts of terrorism and geopolitical conflict.

The COVID-19 pandemic has had, and may continue to have, negative effects on global economic conditions, including disruption and volatility of financial markets, supply chain disruptions, fluctuations in unemployment and other negative outcomes, including inflation. If new COVID-19 variants or other diseases emerge, the Australian and NZ economies, as well as most other major economies, may experience greater stress and an increased risk of recession. Such an outcome has the potential to increase customer defaults and materially adversely impact the NAB Group's financial performance, position, and profitability.

The NAB Group has branches across Australia in locations that are prone to seasonal natural disasters, including fires and floods, such as the bushfires over the 2019/2020 summer period in NSW and Victoria, followed by severe floods in Eastern Australia in early 2021 and 2022. Significant flooding events have continued to occur in Queensland, the Northern Territory and Northern NSW in early 2023.

In addition, the NAB Group has branches and office buildings in NZ, which is prone to extreme weather events and has experienced significant flooding and earthquakes in recent years, as well as a severe and damaging tropical cyclone in February 2023, and which may be exposed to the risk of future extreme weather events and earthquakes.

Given the NAB Group's physical presence in major cities in Australia, NZ and other countries where it has, or is intending to establish, offshore operations, it may also be exposed to the risk of a terrorist attack.

External events, such as extreme weather, natural disasters, biological hazards, and acts of terrorism may cause property damage and business disruption, which may adversely impact the NAB Group's financial performance. In addition, if the NAB Group is unable to manage the impacts of such external events, it may lead to reputational damage and compromise the NAB Group's ability to provide a safe workplace for its personnel.

The environment the NAB Group is operating in has become more complex and more uncertain and could create operational risks that are yet to be identified.

## **Sustainability Risk**

Sustainability risk is the risk that events or conditions (which includes ESG issues) arise that could negatively impact the sustainability, resilience, risk and return profile, value, or reputation of the NAB Group or its customers and suppliers. Inadequate management of ESG risks by the NAB Group or its customers may expose the NAB Group to other potential risks across risk categories such as strategic, credit, compliance, conduct, operational risk and capital, funding and liquidity risk.

*Physical and transition risks arising from climate change, other environmental impacts and nature-related risks may lead to increasing customer defaults and decrease the value of collateral*

Extreme weather, increasing weather volatility, and longer-term changes in climatic conditions, as well as environmental impacts such as land contamination and other nature-related risks such as deforestation, biodiversity loss and ecosystem degradation, may affect property and asset values or cause customer losses due to damage, crop losses, existing land use ceasing to be viable, and/or interruptions to, or impacts on, business operations and supply chains.

Parts of Australia are prone to, and have experienced, acute physical climate events such as severe drought conditions and bushfires over the 2019/2020 summer period, followed by severe floods in Eastern Australia in early 2021 and again in 2022. NZ has also experienced drought, severe flooding and cyclones. Recent flooding in Auckland and impacts from Cyclone Gabrielle in other regions, in particular Hawke's Bay and Tairāwhiti, highlight the risk of such physical climate events. The impact of extreme weather events can take time to be fully realised and be widespread, extending beyond residents, businesses, and primary producers in highly impacted areas, to supply chains in other cities and towns relying on agricultural and other products from within these areas. The impact of these losses on the NAB Group may be exacerbated by a decline in the value and liquidity of assets held as collateral and the extent to which these assets are insured or insurable, which may impact the NAB Group's ability to recover its funds when loans default.

Climate-related transition risks are increasing as economies, governments, and companies seek to transition to low-carbon alternatives and adapt to climate change. Certain customer segments may be adversely impacted as the economy transitions to renewable and low-emissions technology. Decreasing investor appetite and customer demand for carbon intensive products and services, increasing climate-related litigation, and changing regulations and government policies designed to mitigate climate change, may negatively impact revenue and access to capital for some businesses. Furthermore, management of transition risk is more challenging given the presence of social risks such as modern slavery are present in relevant supply chains e.g. input materials and equipment required to support the low carbon transition.

Nature-related risks (caused by impacts and dependencies on nature), such as deforestation and illegal land clearing, biodiversity loss and ecosystem degradation including, for example, the decline of bee populations, the collapse of fishing or agricultural yields, and a decrease in air or water quality, may disrupt business activities and supply chains, and may cause business impacts including contributing to raw material and/or commodity price volatility, stranded assets, changes in customer demand and changes in the regulatory environment.

These risks may increase current levels of customer defaults, thereby increasing the credit risk facing the NAB Group and adversely impacting the NAB Group's financial performance and position, profitability and returns to investors.

*The NAB Group, its customers, or its suppliers may fail to comply with legal, regulatory or voluntary standards or broader shareholder, community and stakeholder expectations concerning ESG risk performance*

ESG issues have been subject to increasing legal, regulatory, voluntary, and prudential standards and increasing (and sometimes differing) community and stakeholder expectations. These include:

- environmental issues – such as climate change, deforestation and illegal land clearing, biodiversity loss, ecosystem degradation, and pollution. Supervisory and regulatory guidance and requirements for banks are increasingly focusing on ESG risks, as regulators seek to understand and manage system-wide impacts such as those arising from climate-related risks. This focus is quickly evolving to broader environmental issues, such as nature-related risks, as the links between nature and economic prosperity and societal wellbeing are becoming better understood. This has been a particular focus of the Task Force on Nature-related Financial Disclosures, the development of which is supported by the Australian and United Kingdom governments;
- social issues – such as human rights (including modern slavery), compliance with recognised labour standards and fair working conditions, unfair and inequitable treatment of people including discrimination, product responsibility, appropriate remuneration, and indigenous land rights and cultural heritage including any such potential impacts on these matters from a customer's operations and/or projects; and

- governance issues – such as bribery and corruption, tax avoidance, greenwashing and other false or misleading environmental or sustainability claims, poor governance, lack of transparency, and not fulfilling accountabilities.

As certain issues become better understood and the associated risks can be more accurately quantified, corporate ESG commitments, and performance against those commitments, may be more closely monitored by external stakeholders. Australian regulators have strengthened their policy statements in relation to sustainability-related disclosures and governance practices, with particular emphasis on greenwashing. Consumer and fair-trading issues in relation to environmental and sustainability claims are a 2022-23 compliance and enforcement priority of the Australian Competition and Consumer Commission (**ACCC**) and effective regulatory frameworks underpinning sustainable finance continues to be a key theme and strategic priority of the Australian Securities and Investments Commission (**ASIC**) in 2023. In 2022, Australian regulators (in particular, ASIC) increased enforcement activity in relation to sustainability-related disclosures and that trend has continued in early 2023. Well-funded and strategic private litigants are also actively looking for sustainability-related claim opportunities against Australian corporates.

Failure by the NAB Group to:

- comply with ESG-related regulatory requirements or standards, including new ESG-related disclosure requirements arising globally from the release of the International Sustainability Standards Board's Sustainability and Climate disclosure standards and the introduction of climate-related disclosure regulatory requirements in Australia and NZ related to the recommendations of the Task Force on Climate-related Financial Disclosures;
- meet ESG-related commitments, goals and targets set by the NAB Group, or NAB Group ESG-related policies;
- meet community and stakeholder expectations in relation to ESG;
- apply appropriate ESG standards to its customers, or to entities in the NAB Group's supply chain; or
- appropriately make representations about its ESG-related products and performance,

may adversely impact the NAB Group's reputation, and shareholder, customer and employee sentiment towards the NAB Group, may increase the risk of ESG-related litigation against the NAB Group, or may result in regulatory fines or penalties, including litigation or regulatory action related to green washing.

Certain products, services or industries may become subject to heightened public scrutiny, either generally or following a specific adverse event, or as a result of activism by shareholders, investors or special interest groups. This could result in a sudden and significant decrease in demand for these products or services and a negative impact on revenue and access to capital for some businesses, and increasing litigation risk. Reputational damage to impacted suppliers, customers or customer sectors may give rise to associated reputational damage to the NAB Group. In addition, levels of customer defaults in an impacted sector may increase, adversely impacting the NAB Group's financial performance and position, profitability and returns to investors.

## **Conduct Risk**

Conduct risk is the risk that any action of the NAB Group, or those acting on behalf of the NAB Group, will result in unfair outcomes for any of the NAB Group's customers.

*The NAB Group is reliant on its employees, contractors and external suppliers acting in an appropriate and ethical way*

Organisational culture can greatly influence individual and group behaviours. Poor culture can expose an organisation and lead to unfair customer outcomes. The behaviours that could expose the NAB Group to conduct risk include:

- failure to design products and services that are transparent, accessible, and easy for the NAB Group's customers to understand;
- unmanaged conflicts of interest that could influence behaviour that is not in the customer's best interest;
- non-adherence to applicable learning and competency training requirements;
- selling, providing, or unduly influencing customers to purchase or receive products or services that may not meet their existing needs or that place the customer at risk of future hardship;
- making representations to customers about products or services of the NAB Group which are inaccurate, misleading or deceptive, including representations which may mislead the customer on the extent to which the NAB Group's practices are environmentally friendly, sustainable or ethical;
- being a party to fraud;
- failure to protect customers from fraud or scams when banking through digital channels or failure to respond adequately to customers impacted by external fraud or scams;
- non-adherence to applicable requirements or providing financial advice which is not appropriate or in the customer's interests;
- delays in appropriately escalating regulatory and compliance issues;
- failure to resolve issues and remediate customers in a timely manner and in accordance with community expectations;
- failure to deliver on product and service commitments;
- failure to remediate ineffective business processes and stop re-occurrence of issues in a timely manner; and
- failure to act in accordance with the NAB Group's Code of Conduct or Financial Markets Conduct Policy.

If the NAB Group's conduct related controls were to fail significantly, be designed inappropriately, or not meet legal or regulatory requirements or community expectations, then the NAB Group may be exposed to, among other things:

- increased costs of compliance, fines, additional capital requirements, public censure, loss of customer confidence, class actions and other litigation, settlements, and restitution to customers or communities;
- increased supervision, oversight, or enforcement by regulators or other stakeholders;
- unenforceability of contracts such as loans, guarantees, and other security documents;
- enforced suspension of operations, amendments to licence conditions, or loss of licence to operate all or part of the NAB Group's businesses; and

- other enforcement or administrative action or agreements, including legal proceedings.

A failure of the NAB Group's conduct-related controls to accurately reflect relevant legal, regulatory or community expectations may adversely impact the NAB Group's reputation, financial performance and position, profitability, operations and returns to investors and can lead to unfair customer outcomes.

## 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 fair and equitable treatment of customers.

*The NAB Group may be involved in a breach or alleged breach of laws governing bribery, corruption and financial crime*

Supervision and regulation of financial crime and enforcement of anti-bribery and corruption, anti-money laundering and counter-terrorism financing (AML/CTF) laws have increased in recent years.

On 29 April 2022, NAB entered into an enforceable undertaking (**Enforceable Undertaking**) with the Chief Executive Officer of the Australian Transaction Reports and Analysis Centre (**AUSTRAC**) to address AUSTRAC's concerns with the NAB Group's compliance with certain AML and CTF requirements. In accepting the Enforceable Undertaking, the Chief Executive Officer of AUSTRAC stated that the regulator had "formed the view at the start of the investigation that a civil penalty proceeding was not appropriate at that time" and that it had "not identified any information during the investigation to change that view". Under the terms of the Enforceable Undertaking, NAB and the relevant members of the NAB Group are required to:

- complete a Remedial Action Plan (**RAP**) approved by AUSTRAC; and
- address, to AUSTRAC's satisfaction, any deficiencies or concerns with activities in the RAP identified by AUSTRAC.

In May 2022, NAB appointed an external auditor (as required under the Enforceable Undertaking). NAB will obtain interim reports from the external auditor on a quarterly basis and an annual basis. The external auditor will provide a final report to NAB for the period up to 31 March 2025.

NAB has completed approximately half of its required activities under the RAP (subject to confirmation by the external auditor where required and noting that some of the more complex activities under the RAP have longer timeframes for completion).

The NAB Group has reported a number of AML/CTF compliance issues to relevant regulators including those related to the Enforceable Undertaking. The NAB Group continues to investigate and remediate a number of known AML/CTF compliance issues and weaknesses, including in accordance with the Enforceable Undertaking. As this work progresses, further compliance issues may be identified and reported to AUSTRAC or equivalent foreign regulators, and additional enhancements of the NAB Group's systems and processes may be required. The potential outcomes and total costs associated with these contingent matters remain uncertain.

A negative outcome to any investigation or remediation process, or a failure to comply with the Enforceable Undertaking, may adversely impact the NAB Group's reputation, business operations, financial position, and results. Further, given the large volume of transactions that the NAB Group processes, the undetected failure of internal AML/CTF controls, or the ineffective remediation of compliance issues, could result in a significant number of breaches of AML/CTF obligations and significant civil penalties for the NAB Group.

As a bank engaged in global finance and trade, the NAB Group also faces risks relating to compliance with financial sanctions laws across multiple jurisdictions. Should the NAB Group's sanctions controls fail, this

could lead to sanctions violations, resulting in potentially significant monetary and regulatory penalties. This, in turn, may adversely impact the NAB Group's reputation, financial performance, and position. These risks are increased in the context of additional, wide ranging economic sanctions and export controls imposed in 2022 and 2023 as a result of the Russia-Ukraine conflict.

Refer to '*Notes to the Consolidated Financial Statements—Note 13—Contingent liabilities and other commitments*', on pages 76 to 79 in the NAB 2023 Half Year Financial Statements, which are incorporated by reference in this Offering Circular, under the heading '*Regulatory activity, compliance investigations and associated proceedings – Anti-Money Laundering and Counter-Terrorism Financing program uplift and compliance issues*' for more information.

*The NAB Group may fail to comply with applicable laws and regulations which may expose the NAB Group to significant compliance and remediation costs, regulatory enforcement action or litigation, including class actions*

The NAB Group is highly regulated and subject to various regulatory regimes which differ across the jurisdictions in which it operates, trades, and raises funds.

Ensuring compliance with all applicable laws is complex. There is a risk the NAB Group will be unable to implement the processes and controls required by relevant laws and regulations in a timely manner, or that the NAB Group's internal controls will prove to be inadequate or ineffective in ensuring compliance. There is also a potential risk of misinterpreting new or existing regulations.

There is significant cost associated with the systems, processes, controls, and personnel required to comply with applicable laws and regulations. Such costs may negatively impact the NAB Group's financial performance and position. Any failure to comply with relevant laws and regulations may have a negative impact on the NAB Group's reputation and financial performance and position and may give rise to class actions, litigation, or regulatory enforcement, which may in turn result in the imposition of civil or criminal penalties, or additional regulatory capital requirements, on the NAB Group.

Entities within the NAB Group have been, and may continue to be, involved from time to time in regulatory enforcement and other legal proceedings arising from the conduct of their business. There is inherent uncertainty regarding the possible outcome of any legal or regulatory proceedings involving the NAB Group. It is also possible that further class actions, regulatory investigations, compliance reviews, civil or criminal proceedings, or the imposition of new licence conditions or regulatory capital requirements could arise in relation to known matters or other matters of which the NAB Group is not yet aware. The aggregate potential liability and costs associated with legal proceedings cannot be estimated with any certainty.

A negative outcome to regulatory investigations or litigation involving the NAB Group may impact the NAB Group's reputation, divert management time from operations, and affect the NAB Group's financial performance and position, profitability, and returns to investors. Refer to '*Notes to the Consolidated Financial Statements—Note 13—Contingent liabilities and other commitments*', on pages 76 to 79 in the NAB 2023 Half Year Financial Statements, which are incorporated by reference in this Offering Circular, for details in relation to certain current legal and regulatory proceedings, compliance reviews and associated remediation, and other contingent liabilities which may impact the NAB Group.

*Extensive regulatory change poses a significant risk to the NAB Group*

Globally, the financial services and banking industries are subject to significant and increasing levels of regulatory change, reviews and political scrutiny, including in Australia, NZ and other countries where the NAB Group has, or is intending to establish, offshore operations.

Examples of regulatory change in other jurisdictions that may directly or indirectly impact the NAB Group's Australian operations include changes relating to G20 over-the-counter derivative products and potential updates to the United Kingdom and European market abuse regulations. The pace and volume of change also

expose the NAB Group to the increased risk of failure to adequately identify all applicable regulatory changes. Changes to laws and regulations or their interpretation and application can be unpredictable, are beyond the NAB Group's control, and may not be harmonised across the jurisdictions in which the NAB Group operates.

Regulatory change may result in significant capital and compliance costs, changes to the NAB Group's corporate structure, and increasing demands on management, colleagues and information technology systems. This may also impact the viability of the NAB Group's participation in certain markets or require the divestment of a part of the NAB Group's business.

Following the change in the Australian Government in May 2022, the regulatory change landscape has continued to shift as the new government considers reforms initiated by the previous government as well as its own strategic and policy priorities. The new government may decide to establish its own strategic agenda as evidenced by the consultation released in December 2022 on its proposed inaugural strategic plan for the payments system. The strategic plan is an important initiative for the government to provide clarity about its policy priorities, with a view to supporting the resilience of the payments system, strengthening the powers of regulators to adapt to new payments methods and promoting the transition to a more modern payments infrastructure.

The Australian Government has introduced legislation in the Australian Parliament in relation to a compensation scheme of last resort (see further below) and a new Financial Accountability Regime (to replace the Banking Executive Accountability Regime). This legislation is in response to recommendations from the 2018 Royal Commission into Misconduct in the Banking, Superannuation and Financial Services Industry. APRA is expected to update CPS 520 Fit and Proper to align with the Financial Accountability Regime. The RBNZ has also proposed the introduction of a broad executive accountability regime for directors and senior employees of banks, non-bank deposit taking (**NBDT**) institutions and insurers, although the NZ Government has indicated that this work is currently on hold. These legislative and regulatory changes have resulted, and will result, in significant policy, system, and operational changes across the NAB Group.

In July 2022, the Treasurer of Australia announced a review of the RBA with the objective of identifying how to make the RBA the 'world's best and most effective central bank into the future'. The independent review was the first review of the RBA since commencement of the current approach to monetary policy began in the 1990s. The Review, released in April 2023, recommended the establishment of separate boards for monetary policy and governance of RBA. The RBA will work with the government on recommendations from the Review. While the outcomes of the Review will not have an immediate impact on the operating environment for the NAB Group, it is possible that, once implemented, any changes to the RBA will have implications for the NAB Group and for the Australian economy.

Operationalising large volumes of regulatory change presents ongoing risks for the NAB Group. Extensive work is done to assess proposed design solutions and to test design effectiveness of controls for each regulatory change before the effective date, however, the operating effectiveness of some controls cannot be fully tested until the go-live date for the relevant regulatory change has occurred. There are also inherent risks associated with the dependency on third parties for the effectiveness of some controls.

There are a number of ongoing or proposed regulatory changes, reviews and inquiries relevant to the NAB Group. These include the Australian Securities Exchange (**ASX**) CHES replacement (noting that the replacement programme has been paused since November 2022 while ASX revisits the solution design and adequately addresses the findings and recommendations of the external review to uplift identified gaps and deficiencies in relation to the ASX Group's portfolio, programme and project management frameworks), operational resilience (including cyber security), financial contingency and resolution planning, risk management (including developments relating to crypto assets and the new operational risk standard incorporating outsourcing and business continuity management), governance, vulnerability (including the new ASIC framework to help deliver positive financial outcomes for First Nations people), financial advice reforms, capital reform relating to market risk, (including ADI public disclosure requirements), liquidity reforms, market abuse or conduct related regulations, changes to financial benchmarks, derivatives reform, modification



of legislation applicable to deposit takers in NZ, payments, data quality, protection and privacy law reforms, competition inquiries, financial crime legislation, accounting and financial reporting requirements, sustainability and climate risk disclosure, modern slavery and tax reform. Customer-centric regulatory changes that are due to take effect include enhancing the Unfair Contract Terms regime for consumers and small businesses, the Banking Code of Practice and the ePayment Code. Meanwhile, the Australian Government is exploring three broad options that aim to provide a regulatory foundation for the future growth of BNPL in Australia.

Further inquiries and regulatory reviews impacting the financial services industry may be commissioned by the Australian and NZ governments, which, depending on their scope, findings and recommendations, may adversely impact the NAB Group.

Examples of specific reviews and regulatory reforms currently relevant to the NAB Group, and which present a potential material regulatory risk includes those set out below.

- The Financial Markets (Conduct of Institutions) Amendment Act 2022 (**FMMA Act**) will create an oversight and licensing regime for regulating conduct in the banking, NBDT and insurance sectors in NZ. The FMMA Act is expected to come into force in early 2025.
- In September 2021, NAB became accredited to receive CDR data (that is, as an ‘accredited data recipient’) under the Open Banking regime. This means that NAB is now subject to further obligations under the CDR legal framework in the context of its role as an accredited data recipient. Legislation was introduced into Parliament late last year to enable ‘write access’ or ‘action initiation’ within the CDR regime, and there is potential for additional cyber and fraud risks in the CDR ecosystem as a result of these proposed changes, if passed. Governance mechanisms including accountabilities, controls, and frameworks are still evolving and, under the Open Banking regime, customer data may be shared with, and received from, a broader range of stakeholders. Significant NAB Group resources and management time have been, and will continue to be, utilised to implement Open Banking.
- Legislation to establish the financial services Compensation Scheme of Last Resort (**CSLR**) was introduced into the Australian Parliament on 8 September 2022, together with a funding framework to support the scheme. Two of the package of four bills to establish the CSLR are currently before the Senate. If implemented, the CSLR will facilitate payment of compensation for eligible consumers who have received a determination for compensation from the Australian Financial Claims Authority that remains unpaid.
- At the direction of the Treasurer in February 2023, the ACCC is conducting an inquiry into the market for the supply of retail deposit products. This was motivated by the recent increases in the target cash rate by the RBA and the subsequent increases in home loan interest rates but perceived lagging increase in deposit rates. The inquiry will look at matters including the interest rates paid by ADIs for retail deposits, how the interest rates are set, decisions made in light of changes to the RBA target cash rate, the extent of competition in the market for retail deposit products and how deposit products are a source of funding for the supply of credit. The ACCC is to provide its report by 1 December 2023. The Government and ACCC want to ensure that banks are behaving fairly when it comes to passing on interest rate increases, particularly to savings accounts.
- Globally, regulators increasingly expect that the financial services industry, including banks, will play a more substantive role in protecting customers from scams and other fraudulent activity. While recognising the potential for regulatory change to address the impact of scams, the NAB Group continues to proactively educate its customers about scams and further enhance its systems and processes to detect and protect customers and the NAB Group from scams and fraud. In this way, the NAB Group seeks to mitigate the risk to customers from scam or fraud activity that may be difficult for the NAB Group to anticipate or control. Although no government policy or position in relation to a contingent reimbursement scheme has been promulgated in Australia, the NAB Group’s strategic

planning and enhancement of systems and processes will also prepare it for expected regulatory change in this regard. Given the considerable growth in industry and customer losses from fraud, the potential costs associated with control failures and transferal of risk from the customer may be significant.

- Proposed ESG-related regulatory regimes, including increasing obligations relating to modern slavery, climate, and other sustainability risk-related prudential guidance, and regulatory and reporting requirements. These include the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 in NZ, which requires mandatory climate-related reporting from early 2024, and the expected introduction of similar requirements in Australia in 2024/2025 following the consultation by Australian Treasury in early 2023 on the design and implementation of standardised, internationally-aligned requirements for disclosure of climate-related financial risks and opportunities in Australia, forthcoming changes to accounting standards on disclosure of sustainability and climate-related financial information expected to be published by the International Sustainability Standards Board in 2023 and other reporting standards, and the developing recommendations of the Taskforce on Nature-related Financial Disclosures which are in late-stage consultation and are expected to be published in September 2023.

The full scope, timeline and impact of current and potential inquiries and regulatory reforms such as those mentioned above, or how they will be implemented (if at all in some cases), is not known.

Depending on the specific nature of the regulatory change requirements and how and when they are implemented or enforced, they may have an adverse impact on the NAB Group's business, operations, structure, compliance costs or capital requirements, and ultimately its reputation, financial performance, or financial position.

*The NAB Group may be exposed to losses if critical accounting judgements and estimates are subsequently found to be incorrect*

Preparation of the NAB Group's financial statements requires management to make estimates and assumptions and to exercise judgement in applying relevant accounting policies, each of which may directly impact the reported amounts of assets, liabilities, income, and expenses. A higher degree of judgement is required for the recognition and estimates used in the measurement of provisions (including for customer-related remediation and other regulatory matters), the determination of income tax, the valuation of financial assets and liabilities (including fair value and credit impairment of loans and advances), and the valuation of goodwill and intangible assets arising from business acquisitions.

If the judgements, estimates, and assumptions used by the NAB Group in preparing the financial statements are subsequently found to be incorrect, there could be a significant loss to the NAB Group beyond that anticipated or provided for, which may adversely impact the NAB Group's reputation, financial performance and financial position.