FIFTH SUPPLEMENT dated 2 June 2023 to the Offering Circular dated 15 November 2022

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*)

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), 17 February 2023 (in respect of NAB and BNZ only) and 5 May 2023 (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 issued by (a) BNZ or (b) BNZ-IF and guaranteed by the Guarantor, 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 issued by (a) BNZ or (b) BNZ-IF and guaranteed by the Guarantor, 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*, BNZ and BNZ-IF. 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).

BNZ and BNZ-IF accept responsibility for the information contained in this Supplement. To the best of the knowledge of BNZ and BNZ-IF (which have each taken all reasonable care to ensure that such is the case) the information contained in this Supplement 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.

Purpose of the Supplement

The purpose of this Supplement is to (i) incorporate by reference the BNZ disclosure statement for the six months ended 31 March 2023 (the **March 2023 HY Disclosure Statement**) and the relevant sections (as set out below) of BNZ's U.S. Debt Funding Information for the six months ended 31 March 2023; (ii) include a new "*Significant change in the financial performance or financial position*" statement for BNZ; (iii) update the risk factors under the heading "*BNZ and BNZ-IF - Risks specific to BNZ and BNZ-IF*"; and (iv) include a new section headed, "*Description of BNZ – Financial Information Concerning BNZ's Assets and Liabilities, Financial Position and Profits and Losses – Financial Measures HY 2023*" on page 257 of the Offering Circular.

1. Documents incorporated by reference

On 25 May 2023, BNZ published the March 2023 HY Disclosure Statement. A copy of the March 2023 HY Disclosure Statement, which includes the consolidated unaudited financial statements of BNZ for the six months ended 31 March 2023 (together with the notes and the auditor's independent review report thereto, the **BNZ 2023 Half Year Financial Statements**), has been filed with the CSSF and the Luxembourg Stock Exchange and, by virtue of this Supplement, is incorporated by reference into, and forms part of, the Offering Circular, to the extent provided in the relevant cross-reference list below, and is available via *https://dl.bourse.lu/dlp/10871d1b78936c4e2982a5b830f67302dd*.

A copy of BNZ's U.S. Debt Funding Information for the six months ended 31 March 2023 has also been filed with the CSSF and the Luxembourg Stock Exchange and, by virtue of this Supplement, is incorporated by reference into, and forms part of, the Offering Circular, to the extent provided in the relevant cross-reference list below, and is available via *https://dl.bourse.lu/dlp/10165f738711ca4fe0aa76aa1e92846aa1*.

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 cross-reference lists below are 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 following documents is incorporated by reference herein:

BNZ 2023 Half Year Financial Statements:	
Bank of New Zealand Corporate Information	Page 2
Financial Statements	Pages 3 to 6
- Income Statement and Statement of Comprehensive Income	Page 3
- Statement of Changes in Equity	Page 4
- Balance Sheet	Page 5
- Cash Flow Statement	Page 6
Notes to and Forming Part of the Interim Financial Statements	Pages 7 to 38
Independent Auditor's Review Report	Pages 39 to 42
Credit Ratings	Page 43

Conditions of Registration Directors' Statement	Page 43 Page 44
BNZ 2023 Half Year U.S. Debt Funding Information Results of Operations Results of Operations by Segments	 Pages 7 to 12 Pages 12 to 14

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.".

2. Update of Risk Factors

The risk factors under the heading "*BNZ and BNZ-IF - Risks specific to BNZ and BNZ-IF*" on pages 42 to 60 (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 Financial Measures

The following wording shall be inserted immediately below the existing paragraphs set out on page 257 of the Offering Circular under the heading "*Description of BNZ – Financial Information Concerning BNZ's Assets and Liabilities, Financial Position and Profits and Losses – Auditing of historical annual financial information*":

"***Financial Measures HY 2023***

The financial measures below (together the **Financial Measures** and each a **Financial Measure**) have been calculated based on line items included in the March 2023 HY Disclosure Statement and the "*Supplementary Business and Financial Disclosure*"[1] for the six months ended 31 March 2023. BNZ considers the Financial Measures to constitute alternative performance measures (**APMs**), as defined for the purposes of the European Securities and Markets Authority guidelines on APMs:

The cost to income ratio of BNZ as at 31 March 2023 was 32.51 per cent. and as at 31 March 2022 was 32.6 per cent.

The loan to deposit ratio of BNZ as at 31 March 2023 was 1.35 and as at 31 March 2022 was 1.33.

The net yield on interest earning assets of BNZ as at 31 March 2023 was 2.45 per cent. and as at 31 March 2022 was 2.04 per cent.

Potential investors in Notes issued by BNZ or BNZ-IF should review the Financial Measures in conjunction with the March 2023 HY Disclosure Statement and the relevant sections (as indicated in the table below) of the "*BNZ U.S. Debt Funding Information*" (the **USDFI**) each incorporated by reference in this Offering Circular which relates solely to BNZ's past performance for the six months ended 31 March 2023.

Financial Measure	**Definitions and basis for calculation**	**Rationale for inclusion**	**Reconciliation with the March 2023 HY Disclosure Statement or USDFI (in relation to non-New Zealand GAAP line items)**

[1] This information package is available on: *https://www.bnz.co.nz/about-us/governance/suppdisc*.

Cost to income ratio	This measure is calculated as (x) operating expenses divided by (y) total operating income	A measure of how well BNZ manages its cost base relative to its income	See the section entitled “Income Statement” of the March 2023 HY Disclosure Statement
Loan to deposit ratio	This measure is calculated as (x) loans and advances to customers divided by (y) customer deposits	A balance sheet strength measure indicating the portion of lending assets funded by customer deposits	See the section entitled “Balance Sheet” and the corresponding note “Deposits and Other Borrowings” of the March 2023 HY Disclosure Statement
Net yield on interest earning assets	This measure is calculated as (x) (i) annualised interest income minus (ii) annualised interest expense divided by (y) total average interest earning assets	A measure of net interest income generated by BNZ's assets	See the sections entitled “Results of Operations” and “Results of Operations by Segments” of the USDFI

The line items used to calculate the above Financial Measures can be located in the March 2023 HY Disclosure Statement or the USDFI, as indicated in the table below:

Documents	Line Items
March 2023 HY Disclosure Statement	customer deposits loans and advances to customers operating expenses total operating income
USDFI	average interest earning assets interest expense interest income

Please note that the URL referred to in this section does not form part of this Offering Circular, and for the avoidance of doubt, attention should only be given to the specific line items referred to in the table above and the whole content of this URL and the USDFI is not incorporated by reference in this Offering Circular.”.

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 relevant cross-reference list above) are either (i) not considered by BNZ and BNZ-IF, to be relevant for investors or (ii) included elsewhere in this Supplement.

Other than the URLs for the documents 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 in relation to each of BNZ and BNZ-IF, 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*. 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* 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

(B) BNZ AND BNZ-IF - RISKS SPECIFIC TO BNZ AND BNZ-IF

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

BNZ's risk management framework and internal controls may not be adequate or effective in accurately identifying, evaluating or addressing risks faced by BNZ. 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 BNZ. Accordingly, no assurances or guarantees of future performance, profitability, distributions or returns of capital are given by BNZ or BNZ-IF.

Risk specific to BNZ-IF as an offshore funding entity of BNZ

BNZ-IF is an offshore funding entity

BNZ-IF is a funding entity, the primary business of which is carrying out offshore wholesale funding for BNZ through the issuance of debt securities (see "*Description of BNZ-IF*" on pages 258 to 260 of this Offering Circular for further details). BNZ-IF's debt securities are unconditionally and irrevocably guaranteed by BNZ to enable BNZ-IF to carry out such fundraising activities. As all funds raised by BNZ-IF will be on-lent to BNZ, the ability of BNZ-IF to fund its debt obligations in respect of Guaranteed Senior Notes will be entirely dependent on the ability of BNZ to fund its debt obligations to BNZ-IF.

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 BNZ's risk profile

BNZ's corporate strategy sets its purpose, ambition, and objectives. BNZ 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.

BNZ's strategy includes ESG related initiatives, including a climate strategy and various obligations, targets and goals. Achieving BNZ'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 BNZ to deliver in accordance with its strategy, or to deliver strategic programmes effectively, may result in material losses to BNZ, reputational damage, or a failure to achieve anticipated benefits, and ultimately, may materially and adversely impact BNZ's operations and financial performance and position.

BNZ faces intense competition

There is substantial competition across the markets in which BNZ conducts business. BNZ faces competition from established financial services providers and other parties, including foreign banks and new market entrants, particularly non-bank competitors, such as fintechs and digital platforms, some of which have lower costs, operating and business models or products that differ from or are more competitive than BNZ'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 BNZ 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 BNZ has to navigate an uncertain economic environment and prioritise compliance with new regulations.

Other trends and recent regulatory and legislative developments that may increase competition in BNZ'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 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 BNZ are due to adjust to higher rates in the calendar years 2023 and 2024 as fixed rate periods expire on loans entered into at historically low rates in recent years. This increases the risk that customers may refinance outside BNZ;

- increased competition for customer deposits in the context of an uncertain market environment, with the risk of increasing BNZ's cost of funds;

- ongoing growth of the broker market and the risk of disintermediating customer relationships;

- progress is being made in open banking in NZ. In July 2021, the NZ Government made the decision to implement a CDR legislative framework. On 1 August 2022, the NZ Government agreed to explore banking as the first sector to be designated under a CDR. Work is now underway on the design and cost of the CDR. This will be completed before any final decisions are made. Following this work, an exposure draft of a data sharing bill is intended to be released in the second quarter of 2023 for industry feedback. The adoption of open banking is designed to increase competition in the NZ banking industry, and may increase compliance costs for established institutions, including BNZ and limit BNZ's ability to charge for access to payments or data;

- the continued consumer 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 RBNZ issuing a central bank digital currency (**CBDC**) are expected to shape the future of the banking sector and its impact on BNZ. The introduction of a CBDC may increase competition for deposit funding or other products and services offered by BNZ which may have an adverse impact on BNZ's financial performance and position. In addition, regulation of digital assets is nascent, but emerging, across all markets in which BNZ conducts business, which may increase BNZ's costs or require BNZ to invest in resources to adapt its products or systems to new technologies; and

- the RPS Act was enacted in May 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 BNZ's financial performance and position.

BNZ's performance is largely dependent on the talents and efforts of highly skilled people; therefore, BNZ's continued ability to compete effectively depends on its ability to attract new talented and diverse employees and to retain and motivate its existing employees. Competition from within the financial services industry and from businesses outside the financial services industry, including the technology industry, for qualified employees has often been intense. BNZ has experienced increased competition in hiring and retaining employees to address the demands of new regulatory requirements, expanding consumer-oriented businesses and its technology initiatives.

Risks may arise from pursuing acquisitions and divestments

BNZ 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 BNZ over-values an acquisition or investment, or under-values a divestment, as well as exposure to reputational damage. BNZ 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 BNZ's financial performance and position.

BNZ 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 BNZ'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 BNZ's overall financial performance and position.

BNZ may also have ongoing exposures to divested businesses, including through any 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 BNZ's business and financial performance and position.

BNZ is part of a larger business group, and decisions by that larger business group, or any financial or reputational damage to that larger business group, may adversely impact BNZ's business, financial condition, liquidity, results of operations and prospects

As BNZ is part of the NAB Group, it may be impacted by the decisions made by, or events that affect, the NAB Group, as well as any financial or reputational damage by virtue of its association with the NAB Group. If financial resources are withdrawn by the NAB Group, or the NAB Group makes a business or corporate decision or is subject to actions, such as regulatory actions, that are not in BNZ's interests, this may adversely affect BNZ's business, financial condition, liquidity, results of operations and prospects. In addition, the reputational consequences of the occurrence of a risk event within the NAB Group, for example, a major operational failure, may have a material impact on BNZ's business, financial condition, reputation, liquidity, results of operations and prospects.

Credit Risk

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

Rising interest rates to combat persistent inflation may result in a deterioration in BNZ'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 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 BNZ's credit risk exposure. BNZ's lending portfolio is largely based in NZ. Residential housing loans and commercial real estate (**CRE**) loans constitute a material component of BNZ's total gross loans and acceptances.

Residential and commercial property prices in NZ increased for some years up until 2021, but experienced decline in 2022 following the central banks' moves to increase policy rates. Further declines are expected through the remainder of 2023 in NZ.

Changes to working patterns (i.e., working remotely) across NZ following on from the COVID-19 pandemic may adversely affect the CRE industry when existing leases expire. Office CRE customers who are unable to respond to changes in working patterns may face elevated levels of vacancy rates and diminishing rental returns which could result in a rise in customer defaults across BNZ and adversely impact on BNZ's financial performance and position.

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 BNZ resulting from customer defaults, which may, in turn, impact BNZ's financial performance and position. 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 NZ, in the agricultural and other sectors, may give rise to increasing customer defaults

BNZ has a large market share among lenders to the 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);
- 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, which have caused stock, crop and plant and equipment loss and damage. This may result in increased losses to BNZ from customer defaults, and ultimately may have an adverse impact on BNZ'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.

Labour constraints continue to have a negative impact on tourism, hospitality, construction and other businesses. As a bank with exposure to business in these sectors, this ongoing constraint may result in increased losses to BNZ from customer defaults, and ultimately may have an adverse impact on BNZ's financial performance and position.

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 other sectors. 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 BNZ incurring losses

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

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

As BNZ primarily conducts business in NZ, BNZ's performance is dependent principally on the performance of the economy in NZ. 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 BNZ:

- 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 BNZ's 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 currently of most relevance to the credit risk facing BNZ and may affect revenue growth and/or customer balance sheets:

- Global economic growth is expected to slow significantly in 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 NZ 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 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 BNZ.

- 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 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 BNZ's cost of funds, trading income, margins and the value of BNZ's lending and investments.

- Risk of contagion due to financial system instability remains an ongoing concern for BNZ 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 BNZ'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 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 NZ economy in particular (including by reducing demand for NZ 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. Due to its export mix, NZ's economy is exposed to any slowdown in China, which could therefore have a negative impact on BNZ's customers with material exposure to China and its economy, and may give rise to increasing levels of customer defaults.

- As a commodity exporting economy, NZ is 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 BNZ's sizeable exposures to commodity producing and trading businesses, this volatility poses a credit risk to BNZ.

- 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.

- A slowdown in economic growth in Australia and NZ and any resulting increase in unemployment may negatively impact debt servicing levels, increase customer defaults and negatively impact BNZ's financial performance and position and its profitability.

Market Risk

Market risk is the risk of loss from BNZ's trading activities. BNZ may suffer losses as a result of a change in the value of BNZ's positions in financial instruments, bank assets and liabilities, or their hedges due to adverse movements in market prices. Adverse price movements impacting BNZ 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 a material trading loss may have a negative impact on BNZ's financial performance and position.

Credit spread risk is the risk of BNZ's market operations and trading activities being exposed to 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 BNZ's market operations and trading activities when it provides risk transfer services to customers seeking to buy or sell fixed income securities (such as corporate bonds). BNZ 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. BNZ'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 adjustment book.

Outside the trading book, BNZ's liquidity portfolio is also subject to credit spread risk through changes in spreads on its holdings of semi-government and bank issued bonds. BNZ hedges the interest rate risk from its liquidity portfolio. These positions form part of the required holdings of HQLAs used in managing BNZ's liquidity risk, and can give rise to material profit and loss volatility within BNZ's portfolio during periods of adverse credit spread movements.

Interest rate risk is the risk of BNZ's trading activities being exposed to changes in the value of securities and derivatives as a result of changes in interest rates. BNZ's trading activities accumulate interest rate risk when BNZ 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 Liquidity Risk

Balance sheet and liquidity risk comprises key banking book structural risks of BNZ such as liquidity risk, funding risk, interest rate risk, capital risk and foreign exchange risk.

BNZ is exposed to funding and liquidity risk

Funding risk is the risk that BNZ is unable to raise short and long-term funding to support its ongoing operations, regulatory requirements, strategic plans and objectives. BNZ accesses domestic and global capital markets to help fund its business, along with using customer deposits. BNZ relies on offshore wholesale funding to support its funding and liquidity position. Periods of significant market volatility in particular may limit BNZ's access to this funding source. Dislocation in global capital markets, reduced investor interest in BNZ's securities and/or reduced customer deposits, may adversely affect BNZ's funding and liquidity position. This may increase the cost of obtaining funds, reduce the tenor of available funds or impose unfavourable terms on BNZ's access to funds, constrain the volume of new lending, or adversely affect BNZ's capital position.

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

BNZ's capital position may be constrained by prudential requirements

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

BNZ is required by its prudential obligations to hold minimum levels of capital relative to the size of its balance sheet and its operational risk profile.

BNZ must comply with prudential requirements in relation to capital in NZ. Compliance with these requirements and any further changes to these requirements may:

- require BNZ to raise more capital (in an absolute sense) or raise more capital of higher quality; and
- restrict balance sheet growth.

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

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

BNZ's financial performance and capital position may be adversely impacted by interest rate fluctuations

Interest rate risk is the risk to BNZ's financial performance and capital position caused by changes in interest rates.

Balance sheet and off-balance sheet items can create an interest rate risk exposure within BNZ. As interest rates and yield curves change over time, BNZ 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 BNZ'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 net interest margins. This may adversely impact BNZ's competitive position and financial performance and position.

When interest rates are increasing, BNZ can generally earn higher net interest income. However, higher interest rates can also lead to fewer originations of loans, less liquidity in the financial markets, and higher funding costs, each of which could adversely affect BNZ's revenues and its liquidity and capital levels. Higher interest rates can also negatively affect the payment performance on loans that are linked to variable interest rates. If borrowers of variable rate loans are unable to afford higher interest payments, those borrowers may reduce or stop making payments, thereby causing BNZ to incur losses and leading to increased operational costs related to servicing a higher volume of delinquent loans.

BNZ may fail to, or be unable to, sell down its underwriting risk

As a financial intermediary, BNZ underwrites or guarantees different types of transactions, risks and outcomes, including the placement of listed and unlisted debt. The underwriting obligation or guarantee may be over the pricing and placement of these securities, and BNZ 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.

The value of BNZ's banking book may be adversely impacted by foreign exchange rates

Foreign exchange and translation risks arise from the impact of currency movements on the value of BNZ's cash flows, profits and losses and assets and liabilities due to participation in global financial markets and international operations. As BNZ's business primarily operates in NZ, it is particularly exposed to fluctuations in the value of the New Zealand dollar.

Operational Risk

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

There are inherent risks within BNZ's operations due to the range of customers, products and services BNZ provides and the multiple markets and channels these products and services are delivered through.

Disruption to technology may adversely impact BNZ's reputation and operations

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

Any disruption to BNZ's technology (including disruption to the technology systems of BNZ's external providers) may be wholly or partially beyond BNZ'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 BNZ'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 BNZ's ability to protect key information (such as customer and employee records) and infrastructure. This may in turn affect BNZ's reputation, including the view of regulators or ratings agencies, which may result in loss of customers, ratings downgrades and regulatory censure or penalties. Social media commentary may exacerbate such adverse outcomes for BNZ and negatively impact BNZ's reputation.

Privacy, information security and data breaches may adversely impact BNZ's reputation and operations

BNZ 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. Threats to information security are constantly evolving, with the likelihood of cyber attacks increasing in the changing geopolitical environment, 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 BNZ is growing, including individual cybercriminals, criminal or terrorist syndicate networks, and large sophisticated foreign governments with significant resources and capabilities.

Although BNZ invests in protecting the confidentiality, integrity and availability of this information, as cyber threats continue to evolve, BNZ 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. BNZ 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. BNZ 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 BNZ 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, BNZ 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 BNZ to disclose information about a cybersecurity event before it has been resolved or fully investigated.

Additionally, BNZ uses select external providers (in NZ and overseas) to process and store confidential data and to develop and provide its technology services, including the increasing use of cloud infrastructure. While BNZ 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. BNZ 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 BNZ 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 BNZ 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 AI 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 BNZ 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 responses to the relevant event, may exacerbate the impact on BNZ's reputation.

Complexity of infrastructure, processes and models, gives rise to a significant risk to BNZ's operations

BNZ is reliant on its policies, processes, controls and supporting infrastructure being designed effectively and functioning as designed, along with third parties appropriately managing their own operational risk and delivering services to BNZ as required. A failure in the design or operation of these policies, processes, controls, and infrastructure, failure of BNZ to manage external service providers, or the disablement of a supporting system all pose a significant risk to BNZ's operations and consequently its financial performance and reputation.

Reputational damage may adversely impact BNZ, including, among other things, by impacting its ability to pursue new business opportunities, increasing the risk premium being applied to BNZ, and impacting the cost of funding BNZ's operations or its financial condition.

Models are used extensively in the conduct of BNZ'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 BNZ's customers and BNZ's financial performance and position.

BNZ is exposed to the risk of human error

BNZ'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. BNZ 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. BNZ uses select external providers (in NZ and overseas) to provide services to BNZ 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.

BNZ may not be able to attract and retain suitable talent

BNZ 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 BNZ's strategy, as well as the technology transformation BNZ 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 BNZ's ability to attract and retain qualified personnel with the requisite knowledge, skills and capability.

The COVID-19 pandemic resulted in international border closures limiting access to international talent markets. The majority of global border restrictions, including NZ have been lifted 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 NZ, suitably filling specialist roles in fields such as technology, data analytics, and financial crime continues to be a challenge. Further, the reopening of the border post COVID-19 restrictions may mean an increased level of migration from NZ.

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 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 BNZ's capacity to attract and retain key talent.

BNZ'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), as well as community expectations. BNZ's ability to employ suitably trained people is also influenced by the NZ Government's immigration settings and strategy.

The unexpected loss of key resources or the inability to attract personnel with suitable experience may adversely impact BNZ's ability to operate effectively and efficiently, or to meet BNZ's strategic objectives. This risk may also impact third party vendors (including offshore vendors) engaged by BNZ, who may be experiencing similar personnel related challenges.

External events may adversely impact BNZ'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 NZ economy, 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 BNZ's financial performance, position, and profitability.

In addition, BNZ 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.

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 BNZ's financial performance. In addition, if BNZ is unable to manage the impacts of such external events, it may lead to reputational damage and compromise BNZ's ability to provide a safe workplace for its personnel.

The environment BNZ 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 BNZ or its customers and suppliers. Inadequate management of ESG risks by BNZ or its customers may expose BNZ 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 NZ are prone to, and have recently experienced, acute physical climate events such as drought conditions, cyclones and flooding which highlight the risk of such physical climate events. Recent flooding in Auckland and impacts from Cyclone Gabrielle in other regions, in particular Hawke's Bay and Tairawhiti (Gisborne), 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 BNZ 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 BNZ'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 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 BNZ and adversely impacting BNZ's financial performance and position. Physical and transition risks associated with climate change have led to regulatory change in NZ, such as the Climate Change Response (Zero Carbon) Amendment Act 2019 (NZ), which commits NZ to a net zero carbon economy by 2050 or sooner. This regulatory change may disrupt the operations of BNZ's customers involved in a wide range of sectors and industries, and may impact the wider NZ economy. As NZ transitions to a net zero carbon economy, there is a risk that an increase in adoption of emission-reducing technology, changes to farming and manufacturing practices, changes to insurance practices, tax changes and revised land use regulation may impact collateral values. Changing physical conditions may also reduce the ability of businesses to service loans. Participants in the agricultural sector are particularly vulnerable including businesses in their supply chains. NZ could also see damage to its natural assets that may reduce tourism income. These risks may lead to changes to BNZ's operations, strategy and risk profile, which may adversely impact BNZ's financial performance and position.

In NZ, the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 requires mandatory climate-related reporting by large publicly listed companies, large licenced insurers, large investment managers, large banks, large building societies and large credit unions. It will require BNZ, as a "climate reporting entity", to annually prepare and make public climate disclosures on the effects of climate change to its business, in accordance with the climate-related disclosure standards, issued by the External Reporting Board in December 2022. Climate disclosure statements are required to be published from early 2024 for accounting periods that start on or after 1 January 2023. BNZ's first mandatory reporting period commences on 1 October 2023, with the first climate disclosure statement due in December 2024.

BNZ, its customers, or its suppliers may fail to comply with legal, regulatory or voluntary standards or broader 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, NZ and UK governments;

- social issues – such as human rights (including modern slavery), compliance with recognised labour standards and fair working conditions (such as NZ's Recognised Seasonal Employer scheme), 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.

Failure by BNZ to:

- comply with ESG-related legislation, 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 BNZ, or its ESG-related policies;

- meet community and stakeholder expectations in relation to ESG;

- apply appropriate ESG standards to its customers, or to entities in BNZ's supply chain; or

- appropriately make representations about its ESG-related products and performance,

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

BNZ has published decarbonisation targets under the Net Zero Banking Alliance and, in order to achieve these targets, it may need to make commercial decisions that impact the profile of its lending portfolio.

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 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 BNZ. In addition, levels of customer defaults in an impacted sector may increase, adversely impacting BNZ's financial performance and position and its profitability.

Conduct Risk

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

BNZ 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 outcomes. The behaviours that could expose BNZ to conduct risk include:

- failure to design products and services that are transparent, accessible, and easy for BNZ'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 BNZ which are inaccurate, misleading or deceptive, including representations which may mislead the customer on the extent to which BNZ'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 its Code of Conduct.

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

- increased costs of compliance, fines, additional capital requirements, public censure, loss of customer confidence, representative 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 BNZ's businesses; and
- other enforcement or administrative action or agreements, including legal proceedings.

A failure of BNZ's conduct-related controls to accurately reflect relevant legal, regulatory or community expectations may adversely impact BNZ'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.

BNZ 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 countering financing of terrorism laws (collectively referred to as **AML/CFT**) continue to increase in recent years.

BNZ has reported a number of potential AML/CFT compliance issues to the RBNZ and has responded to a number of requests from the RBNZ requiring the production of documents and information. BNZ continues to investigate and remediate a number of potential AML/CFT compliance issues. As this work progresses, further compliance issues may be identified and reported to the RBNZ, and additional uplifting and strengthening of BNZ's systems and processes may be required. The potential outcome and total costs associated with the investigation and remediation process remain uncertain.

A negative outcome which may arise from any investigation or remediation process may adversely impact BNZ's reputation, business operations, financial position, and results. Further, given the large volume of transactions that BNZ processes, the undetected failure of internal AML/CFT controls, or the ineffective remediation of compliance issues, could result in a significant number of breaches of AML/CFT obligations and significant civil penalties for BNZ.

As a bank engaged in global finance and trade, BNZ also faces risks relating to compliance with financial sanctions laws across multiple jurisdictions. Should BNZ's sanctions controls fail, this could lead to sanctions violations, resulting in potentially significant monetary and regulatory penalties. This, in turn, may adversely impact BNZ'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 and Forming Part of the Interim Financial Statements—Note 16—Contingent Liabilities and Other Commitments*' on page 23 of BNZ's Disclosure Statement for the six months ended 31 March 2023 (the **March 2023 HY Disclosure Statement**), which is incorporated by reference in this Offering Circular, for more information.

BNZ may fail to comply with applicable laws and regulations which may expose BNZ to significant compliance and remediation costs, regulatory enforcement action or litigation, including representative actions

BNZ is highly regulated and subject to various regulatory regimes which differ across the jurisdictions in which it conducts its own business or has some connection through being a member of the NAB Group.

Ensuring compliance with all applicable laws is complex. There is a risk BNZ will be unable to implement the processes and controls required by relevant laws and regulations in a timely manner, or that BNZ'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 BNZ's financial performance and position. Any failure to comply with relevant laws and regulations may have a negative impact on BNZ's reputation and financial performance and position, and may give rise to representative actions, litigation, or regulatory enforcement, which may in turn result in the imposition of civil or criminal penalties, or additional regulatory capital requirements, on BNZ.

BNZ may be involved from time to time in regulatory enforcement and other legal proceedings arising from the conduct of its business. There is inherent uncertainty regarding the possible outcome of any legal or regulatory proceedings involving BNZ. It is also possible that representative 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 these matters or other matters of which BNZ is not yet aware. The aggregate potential liability and costs associated with legal proceedings cannot be estimated with any certainty.

A negative outcome which may arise from regulatory investigations or litigation involving BNZ may impact BNZ's reputation, divert management time from operations and affect BNZ's financial performance and position. Refer to '*Notes to and Forming Part of the Interim Financial Statements—Note 16—Contingent Liabilities and Other Commitments*' on page 23 of the March 2023 HY Disclosure Statement, which is incorporated by reference in this Offering Circular, for details in relation to BNZ's contingent liabilities which may impact BNZ.

Extensive regulatory change poses a significant risk to BNZ

Globally, the financial services and banking industries are subject to significant and increasing levels of regulatory change, reviews and political scrutiny, including in NZ.

The pace and volume of change also expose BNZ 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 BNZ's control, and may not be harmonised across the jurisdictions in which BNZ conducts business or has some connection through being a member of the NAB Group.

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

Operationalising large volumes of regulatory change presents ongoing risks for BNZ. 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.

The NZ Government and its agencies, including the RBNZ and the Financial Markets Authority have supervisory oversight of BNZ, as does APRA, indirectly through its supervisory oversight of the NAB Group. BNZ expects a continued increase in regulatory focus on capital and liquidity requirements, macro-prudential tools, customer outcomes and other aspects of its business that may impose increased regulatory burdens. BNZ's failure to comply with applicable laws, regulations or codes of practice could result in the imposition of sanctions by agencies or compensatory action by affected persons, and could damage BNZ's reputation and financial performance and position.

BNZ is a registered bank under the Banking (Prudential Supervision) Act 1989 (**BPS Act**), which was previously named the Reserve Bank of New Zealand Act 1989, and is supervised by the RBNZ. BNZ is subject to conditions of registration imposed by the RBNZ (**Conditions of Registration**). The Conditions of Registration may be changed at any time and any changes may be beyond BNZ's control. If the RBNZ concluded that BNZ did not satisfy the Conditions of Registration, sanctions could be imposed on BNZ. These sanctions could include disclosure of the breach, increases in required levels of capital, fines, additional limitations on the conduct of BNZ's business and, in the case of a material breach or breaches, cancellation of BNZ's registration as a bank or a recommendation that BNZ be placed under statutory management. In addition, the RBNZ could require BNZ to take additional steps and incur additional expense to comply with the Conditions of Registration.

Inquiries and regulatory reviews impacting the financial services industry may be commissioned by the NZ Government, which, depending on its scope, findings and recommendations, may adversely impact BNZ.

Examples of specific reviews and regulatory reforms currently relevant to BNZ, and which present a potential material regulatory risk includes those set out below:

- The NZ Government has undertaken a comprehensive review of the RBNZ's legislative framework. Changes to the governance of, and accountability arrangements for, the RBNZ, have now been passed under the Reserve Bank of New Zealand Act 2021. Changes that relate to the regulation of deposit takers are provided for in a "Deposit Takers Bill", which was introduced to NZ Parliament in September 2022. The Deposit Takers Bill will create a single regulatory regime for all banks and NBDT institutions (such as building societies and finance companies). It will also introduce a new depositor compensation scheme funded by industry levies that will protect up to NZ$100,000 per depositor, per institution in the event of a failure and make changes to the NZ bank crisis resolution framework. Until the Deposit Takers Bill is enacted, the current regulatory framework for banks will continue under the BPS Act. It is expected that the Deposit Takers Bill will be enacted by mid-to-late 2023. Measures to implement the depositor compensation scheme will be prioritised to have the scheme operational in late 2024.

- The RBNZ has proposed the introduction of a broad executive accountability regime for directors and senior employees of banks, NBDT institutions and insurers, although the NZ Government has indicated that this work is currently on hold.

- The FMMA Act will create an oversight and licensing regime for regulating conduct in the banking, NBDT and insurance sectors. The FMMA Act is expected to come into force in early 2025.

- The RBNZ has commenced proof-of-concept design work for the development of a CBDC in NZ and is expected to continue its consultation on the potential form of this currency during the remainder of 2023. Depending on the final form of this digital currency, it may impose additional and significant regulatory and operational requirements on BNZ, and it also has the potential to disintermediate existing payment services.

- The RBNZ has finalised a framework for operationalising debt-to-income restrictions so that restrictions could be introduced in 2024, if required.

- 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, BNZ continues to proactively educate its customers about scams and further enhance its systems and processes to detect and protect customers and BNZ from scams and fraud. In this way, BNZ seeks to mitigate the risk to customers from scam or fraud activity that may be difficult for BNZ to anticipate or control. Although no government policy or position in relation to a contingent reimbursement scheme has been promulgated in NZ, BNZ's strategic planning and enhancement of systems and processes will also prepare it for potential 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 and incoming 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 reporting of disclosures similar to the Task Force on Climate-related Financial Disclosures in NZ from late 2024 via the Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021, 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.

There are a number of other ongoing or proposed regulatory changes and inquiries within NZ and globally that are relevant to BNZ such as 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, financial advice reforms, changes to financial benchmarks, liquidity reforms, consumer credit responsible lending and disclosure laws, derivatives reform, 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, tax reform and the development of a CDR.

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 BNZ's business, operations, structure, compliance costs or capital requirements, and ultimately its reputation, financial performance, or financial position.

BNZ may be exposed to losses if critical accounting judgements and estimates are subsequently found to be incorrect

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