ANZ Research

NZ Insight: The RBNZ's inflation expectations headache

22 March 2022

This is not personal advice nor financial advice about any product or service. It does not take into account your financial situation or goals. Please refer to the Important Notice.

Contact

Finn Robinson, Sharon Zollner or David Croy for more details.

The RBNZ's inflation expectations headache

Summary

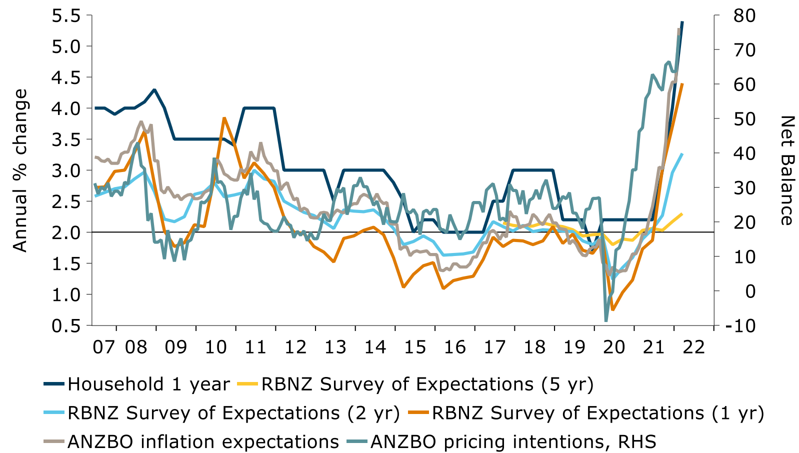
- Inflation expectations are a key driver of inflation. Having been a non-issue for decades, inflation is now very much in the headlines.
- History shows that inflation expectations can be self-fulfilling – if enough people expect higher inflation, then actual inflation will lift. Rising expectations can thus create a dangerous feedback loop by amplifying already too-strong inflation pressures.
- Inflation expectations in New Zealand have risen aggressively over the past year – and there's a real risk that recent price spikes could cause expectations to become unanchored from the RBNZ's 2% target for CPI inflation – especially as Omicron exacerbates already stretched domestic supply chains.
- The RBNZ already saw inflation expectations as the most significant risk in the February MPS, and now that risk of unanchored expectations is even stronger.
- This is a key reason why we think the RBNZ should hike the OCR aggressively by 50bps in both April *and* May. It will hurt, but its considerably better than what they would need to do to the economy if inflation expectations continue to spiral further in the wrong direction.

Introduction

Inflation expectations matter for monetary policy. In fact, it's hard to overstate how important it is for the RBNZ that agents in the economy believe inflation will be low and stable over the medium to long run. In essence, inflation expectations are a form of self-fulfilling prophecy. If people think inflation is going to be strong in the future, then they will likely put up their prices or demand higher wages now, in anticipation. If enough people do this, inflation will rise – and people may then revise up their expectations for inflation. You can see how such a feedback loop can quickly get out of hand, especially when it becomes a dominant theme in the media and in headlines.

Figure 1 highlights one of the more alarming features of the economic data over the past year - the synchronised surge in various measures of inflation expectations. Across businesses and households, expectations for inflation over the next year have risen steeply – and show no signs of slowing. In our latest Business Outlook survey, a net 74% of firms were expecting to put their prices up. Overall, 92% expected higher costs – and that number was 100% for agriculture and construction.

Figure 1. Selected inflation expectations measures



Source: Stats NZ, RBNZ, Macrobond, ANZ Research

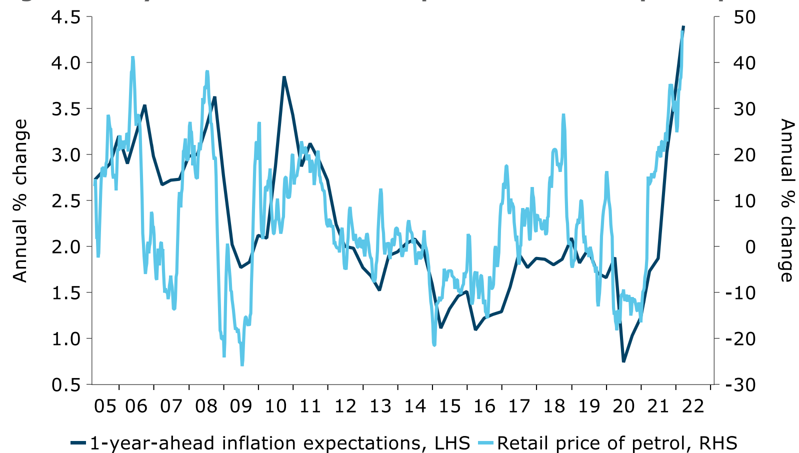
So are inflation expectations are starting to flirt with becoming unanchored from the RBNZ's 2% target midpoint? The horse, if it hasn't already bolted, is at least trotting at a fair clip and already a good way from where it's meant to be (although the RBNZ's longer-term measures are still close-ish to 2%, that reflects a very small, unusually well-informed group of 33 respondents). If expectations have or do become unanchored, the risk is that inflation starts to gain its own internal momentum, requiring much larger interest rate hikes – and a corresponding hole in growth and employment – in order to bring that momentum back down.

It's already looking like achieving a soft landing for the economy will be a challenging prospect for the RBNZ – but if inflation expectations detach from the 2% anchor, it will be nigh-on impossible.

What's driving inflation expectations?

So why have inflation expectations risen so aggressively? The immediate culprit most consumers would point to is petrol prices. A combination of global energy shortages, robust economic recoveries from COVID, and the Russian invasion of Ukraine have seen oil prices surge compared with the extreme lows seen in 2020, and this has shown up directly at the pump. Indeed, petrol prices correlate pretty well with the most significant movements in the 1-year inflation expectations measure from the RBNZ's Survey of Expectations (figure 2).

Figure 2. 1-year-ahead inflation expectations versus petrol price inflation

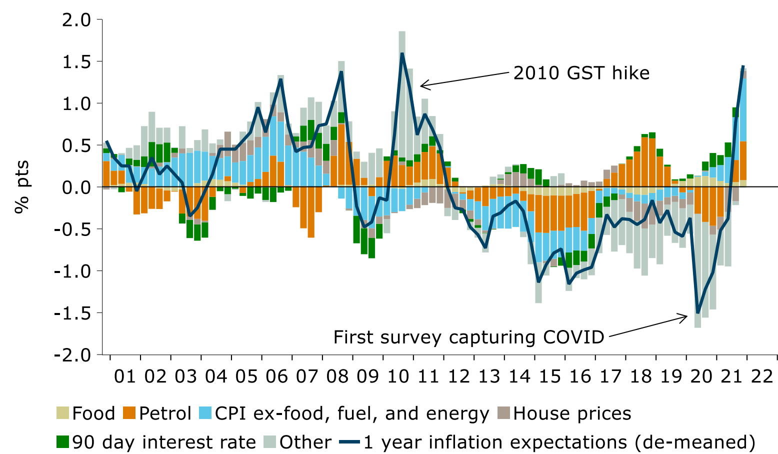


Source: RBNZ, MBIE, Macrobond, ANZ Research

To dig further into the drivers of inflation expectations, we started by seeing how significant key variables were at explaining the five measures of inflation expectations (the measures in figure 1, with the exception of 5-year-ahead, as this data series is too short). Not surprisingly, petrol prices were highly significant across all specifications. Food prices, wages, house prices, the output gap, and interest rates were also all significant – although the results were not as strong as for petrol prices.

Throwing variables into a model to see what sticks is one thing, but we also want to know how much of the historical variation in inflation expectations we can actually attribute to things like petrol prices. To do this, we pick on the 1-year-ahead measure from the RBNZ survey of expectations, and estimate a new model, which shows the historical contributions of key variables to changes in inflation expectations.[1] These results are shown in figure 3.

Figure 3. Drivers of 1-year-ahead inflation expectations (deviation from average)



Source: RBNZ, Stats NZ, REINZ, Macrobond, ANZ Research

We can immediately see that in historical context, petrol prices (orange bars) have had an impact on inflation expectations that is disproportionate to their weight in the CPI basket (less than 5%). Headline inflation excluding food, energy, and fuel (ie a common measure of 'core' inflation) is also a significant driver – and together these factors explain a large chunk of the historical movements in inflation expectations in New Zealand. The importance of headline inflation makes sense – many agents in the economy will account for what inflation was last quarter when forming their expectations. Nonetheless, this dynamic simply adds to the persistence of higher inflation and inflation expectations.

There are also important observations from what *can't* be explained by these two variables:

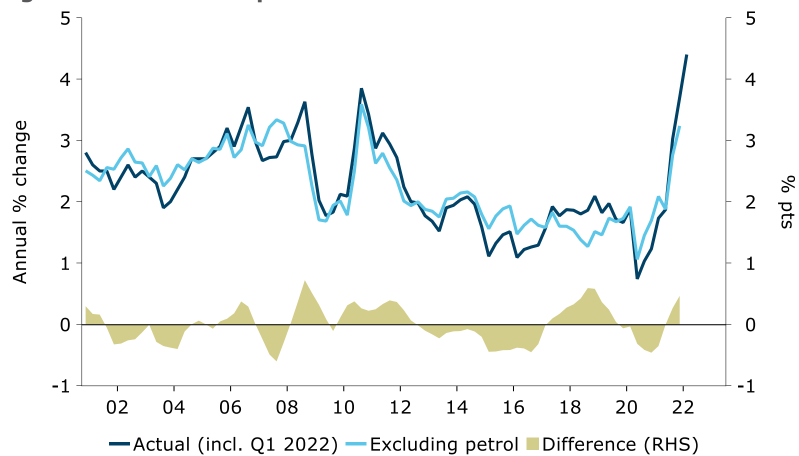
- The lift in GST from 12.5% to 15% in 2010 likely explains the surge in inflation expectations at this point.
- Petrol and headline inflation can't explain below-average inflation expectations over 2017-2019, possibly reflecting just how ingrained low inflation had become in expectations, even when actual inflation outcomes were rising.

[1] Modelling details: We estimate an SVAR (with coefficients estimated from 2000 to 2019 to avoid COVID volatility), and calculate the historical decomposition of the RBNZ 1 year inflation expectations measure. The VAR is recursively identified, which is easy to implement, but has well-documented limitations. However, the key results were invariant to different orderings of the VAR.

- Petrol and headline inflation also can't explain the sharp drop in inflation expectations at the onset of COVID. With the benefit of hindsight, that likely reflects the fact that forecasters here and overseas seriously overestimated how much inflation would actually drop – more than can be accounted for by the data (which is easier to say with the benefit of hindsight!).

Another way to see how important petrol prices are for inflation expectations is to calculate what inflation expectations would have looked like over history, without the impact of petrol. This is shown in figure 4. The counterfactual (light blue) shows that at times over the past two decades, inflation expectations could have been up to 0.5% pts higher or lower without the influence of petrol prices. The biggest marginal impact is likely to be right now, given the outsized moves in petrol prices recently (although we won't have the Stats NZ data for Q1 2022 for some time yet).

Figure 4. Inflation expectations counterfactual



Source: RBNZ, Stats NZ, REINZ, Macrobond, ANZ Research

The point of these exercises is to show that even though the RBNZ may usually have the leeway to look through things like petrol price shocks, it would be very risky to ignore the impacts they have on inflation expectations right now. The impacts are significant, and that matters when expectations are already so elevated. The Monetary Policy Committee will be particularly concerned about whether the national conversation about the rising cost of living will be the catalyst that kicks off the self-fulfilling prophecy of spiralling inflation expectations – making the cost of living that much worse.

We have seen oil and petrol prices retrace some their largest gains over the past few weeks, but uncertainty about where to from here could hardly be higher, making it difficult for the Reserve Bank to assume the best.

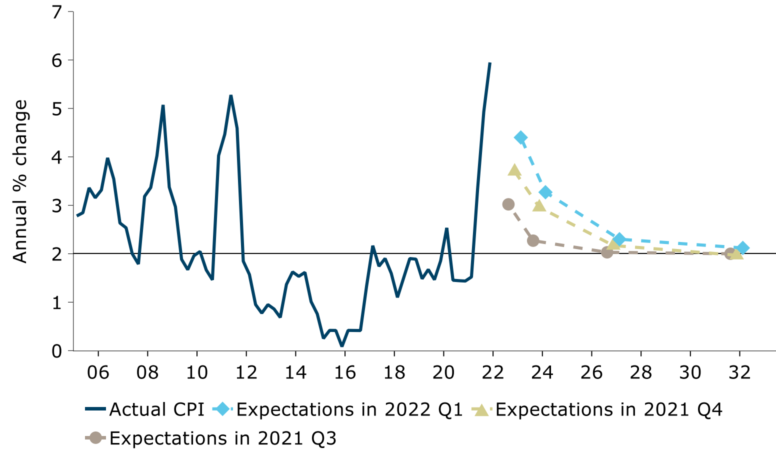
Monetary Policy Implications (ie the expectations headache)

The Monetary Policy Committee was clearly very concerned about inflation expectations at the February MPS, highlighting that for "many members", the choice between a 25 or 50bp OCR hike was "finely balanced". One of the most important sentences in the Record of Meeting was this:

> "… the Committee applied their least regrets framework, noting that the most significant risk to be avoided at present was longer-term inflation expectations rising above the target and becoming embedded in future price setting."

That risk has increased significantly since then. The 5- and 10-year ahead measures are still within cooee of the 2% midpoint of the RBNZ's target range, but they continue to move in the wrong direction, despite a significant increase in the slope and peak of the RBNZ's forecast OCR track over the past six months (figure 5).

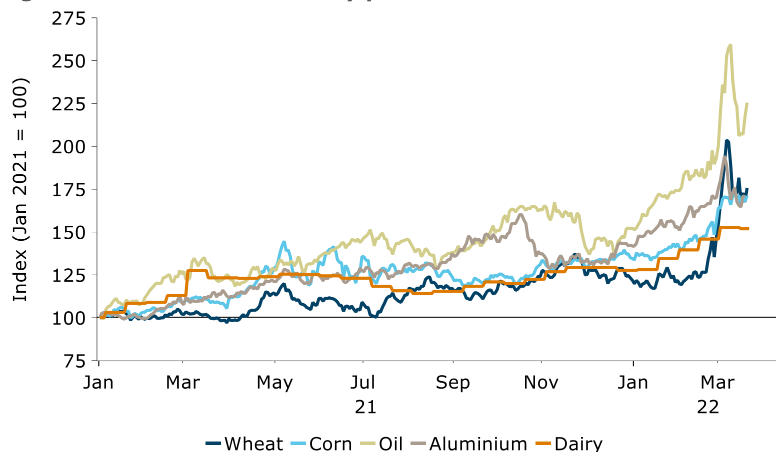
Figure 5. RBNZ inflation expectations 'curve'



Source: Stats NZ, RBNZ, Macrobond, ANZ Research

And that was before Russia's invasion of Ukraine, which triggered a massive spike in commodity prices that dominated the news cycle, and even saw the Government announce a temporary cut to fuel tax, among other measures. Commodity prices have eased back from their highs over the first few weeks of the invasion, but they're still well up and you'd have to say they're still trending higher. Even dairy prices, which have seen one of the smaller increases, are still over 50% higher than at the start of 2021 (figure 6).

Figure 6. Selected commodity prices



Source: GlobalDairyTrade, Bloomberg, Macrobond, ANZ Research

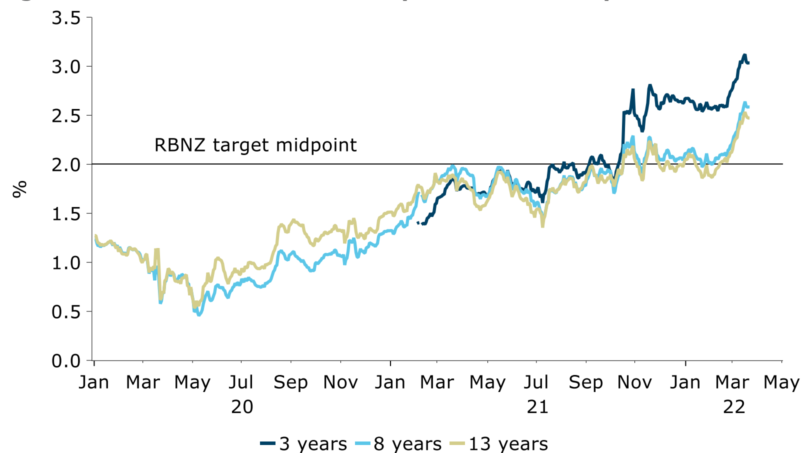
In many respects, the damage to inflation expectations may already be done. We'll have to wait for the next couple of months of survey data to find out. But the news has been saturated with coverage of the cost of living and rising fuel prices, and Google searches for inflation in New Zealand have gone vertical.

We can also calculate market-based measures of inflation expectations from the spread between nominal and inflation-indexed New Zealand government bonds. While these have some limitations due to the illiquidity of the market, they are very timely – and of note, have risen rapidly of late. At the moment, they imply that markets expect inflation to:

- average about 3% over the next 3 years (based on 2025 bond);
- average over 2½% over the next 8 years (based on 2030 bond); and
- average about 2½% over the next 13 years (based on 2035 bond).

Our sense is that while illiquidity might affect the level of observed expectations in the market, it shouldn't unduly affect the direction of travel, given that illiquidity has always been a factor. And that direction of movement is not consistent with inflation getting back to target at a pace that would be acceptable for the RBNZ (figure 7).

Figure 7. New Zealand market implied inflation expectations



Source: Bloomberg, Macrobond, ANZ Research

So for the RBNZ, the evolution of price pressures and inflation expectations since the February MPS means that they need to move aggressively to defend the inflation target from rising expectations. And that won't be good for growth. It's increasingly looking like the first half of 2022 will be pretty soggy in terms of 'real' economic growth, given surging cost pressures and ongoing COVID disruption. In fact, we've recently downgraded our outlook for GDP growth. But the RBNZ needs to bring surging inflation under control, so they need to keep on hiking interest rates even as economic activity struggles.

That might sound callous if you're a struggling businesses owner or mortgage holder. It won't be easy, and the pain won't be felt equally - just as the benefits of falling interest rates were not evenly shared. But at the end of the day, we know that letting inflation get out of control would be more harmful, requiring even more aggressive OCR hikes than the two 50bp hikes we're calling for. Inflation isn't just going to go away by itself – and the global forces which held inflation down in the post-GFC decade are taking a hiatus (whether that's permanent or temporary remains to be seen, but is a moot point for the RBNZ as regards its near-term decisions).

If there's one thing that economic history has taught us, it's that spiralling inflation is devastating for economies, and the people within. The labour market is the tightest it's been on the official record – and the best way for the RBNZ to support ongoing strength in employment is to restore price stability. As Fed Chair Powell put it last week when justifying the Fed's rate hike: "Without price stability, you really can't have a sustained period of maximum employment," Powell said. "The plan is to restore price stability while also sustaining a strong labor market. That is our intention and we believe we can do that. But we have to restore price stability."

In short: the focus has shifted firmly from the near-term growth outlook to the long game. And that's where anchoring inflation expectations is key.

Contact us

Meet the team

We welcome your questions and feedback. Click here for more information about our team.

Sharon Zollner
Chief Economist

Follow Sharon on Twitter
@sharon_zollner

Telephone: +64 27 664 3554
Email: sharon.zollner@anz.com

General enquiries:
research@anz.com

Follow ANZ Research
@ANZ_Research (global)

David Croy
Senior Strategist

Market developments, interest rates, FX, unconventional monetary policy, liaison with market participants.

Telephone: +64 4 576 1022
Email: david.croy@anz.com

Susan Kilsby
Agricultural Economist

Primary industry developments and outlook, structural change and regulation, liaison with industry.

Telephone: +64 21 633 469
Email: susan.kilsby@anz.com

Miles Workman
Senior Economist

Macroeconomic forecast co-ordinator, fiscal policy, economic risk assessment and credit developments.

Telephone: +64 21 661 792
Email: miles.workman@anz.com

Finn Robinson
Economist

Macroeconomic forecasting, economic developments, labour market dynamics, inflation and monetary policy.

Telephone: +64 21 629 553
Email: finn.robinson@anz.com

Kyle Uerata
Economic Statistician

Economic statistics, ANZ proprietary data (including ANZ Business Outlook), data capability and infrastructure.

Telephone: +64 21 633 894
Email: kyle.uerata@anz.com

Natalie Denne
PA / Desktop Publisher

Business management, general enquiries, mailing lists, publications, chief economist's diary.

Telephone: +64 21 253 6808
Email: natalie.denne@anz.com

Important notice

Last updated: 28 February 2022

This document (which may be in the form of text, image, video or audio) is intended for ANZ's Institutional, Markets and Private Banking clients. It should not be forwarded, copied or distributed. The opinions and research contained in this document are (a) not personal advice nor financial advice about any product or service; (b) provided for information only; and (c) intended to be general in nature and does not take into account your financial situation or goals.

This document may be restricted by law in certain jurisdictions. Persons who receive this document must inform themselves about and observe all relevant restrictions.

Disclaimer for all jurisdictions: This document is prepared and distributed in your country/region by either: Australia and New Zealand Banking Group Limited (ABN11 005 357 522) (**ANZ**); or its relevant subsidiary or branch (each, an **Affiliate**), as appropriate or as set out below.

This document is distributed on the basis that it is only for the information of the specified recipient or permitted user of the relevant website (**recipients**).

This document is solely for informational purposes and nothing contained within is intended to be an invitation, solicitation or offer by ANZ to sell, or buy, receive or provide any product or service, or to participate in a particular trading strategy.

Distribution of this document to you is only as may be permissible by the laws of your jurisdiction, and is not directed to or intended for distribution or use by recipients resident or located in jurisdictions where its use or distribution would be contrary to those laws or regulations, or in jurisdictions where ANZ would be subject to additional licensing or registration requirements. Further, the products and services mentioned in this document may not be available in all countries.

ANZ in no way provides any financial, legal, taxation or investment advice to you in connection with any product or service discussed in this document. Before making any investment decision, recipients should seek independent financial, legal, tax and other relevant advice having regard to their particular circumstances.

Whilst care has been taken in the preparation of this document and the information contained within is believed to be accurate, ANZ does not represent or warrant the accuracy or completeness of the information Further, ANZ does not accept any responsibility to inform you of any matter that subsequently comes to its notice, which may affect the accuracy of the information in this document.

Preparation of this document and the opinions expressed in it may involve material elements of subjective judgement and analysis. Unless specifically stated otherwise: they are current on the date of this document and are subject to change without notice; and, all price information is indicative only. Any opinions expressed in this document are subject to change at any time without notice.

ANZ does not guarantee the performance of any product mentioned in this document. All investments entail a risk and may result in both profits and losses. Past performance is not necessarily an indicator of future performance. The products and services described in this document may not be suitable for all investors, and transacting in these products or services may be considered risky.

ANZ expressly disclaims any responsibility and shall not be liable for any loss, damage, claim, liability, proceedings, cost or expense (Liability) arising directly or indirectly and whether in tort (including negligence), contract, equity or otherwise out of or in connection with this document to the extent permissible under relevant law. Please note, the contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

ANZ and its Affiliates may have an interest in the subject matter of this document. They may receive fees from customers for dealing in the products or services described in this document, and their staff and introducers of business may share in such fees or remuneration that may be influenced by total sales, at all times received and/or apportioned in accordance with local regulatory requirements. Further, they or their customers may have or have had interests or long or short positions in the products or services described in this document, and may at any time make purchases and/or sales in them as principal or agent, as well as act (or have acted) as a market maker in such products. This document is published in accordance with ANZ's policies on conflicts of interest and ANZ maintains appropriate information barriers to control the flow of information between businesses within it and its Affiliates.

Your ANZ point of contact can assist with any questions about this document including for further information on these disclosures of interest.

Country/region specific information: Unless stated otherwise, this document is distributed by Australia and New Zealand Banking Group Limited (**ANZ**).
Australia. ANZ holds an Australian Financial Services licence no. 234527. For a copy of ANZ's Financial Services Guide please click here or request from your ANZ point of contact.
Brazil. This document is distributed on a cross border basis and only following request by the recipient.
Brunei, India, Japan, Kuwait, Malaysia, Switzerland, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.
Cambodia. The information contained in this document is confidential and is provided solely for your use upon your request. This does not constitute or form part of an offer or solicitation of any offer to engage services, nor should it or any part of it form the basis of, or be relied in any connection with, any contract or commitment whatsoever. ANZ does not have a licence to undertake banking operations or securities business or similar business, in Cambodia. By requesting financial services from ANZ, you agree, represent and warrant that you are engaging our services wholly outside of Cambodia and subject to the laws of the contract governing the terms of our engagement.
Chile. You understand and agree that ANZ Banking Group Limited is not regulated by Chilean Authorities and that the provision of this document is not subject to any Chilean supervision and is not guaranteed by any regulatory or governmental agency in Chile.
Fiji. For Fiji regulatory purposes, this document and any views and recommendations are not to be deemed as investment advice. Fiji investors must seek licensed professional advice should they wish to make any investment in relation to this document.
Hong Kong. This document is issued or distributed in Hong Kong by the Hong Kong branch of ANZ, which is registered at the Hong Kong Monetary Authority to conduct Type 1 (dealing in securities), Type 4 (advising on securities) and Type 6 (advising on corporate finance) regulated activities. The contents of this document have not been reviewed by any regulatory authority in Hong Kong.
India. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

Macau. Click here to read the disclaimer for all jurisdictions in Mandarin. **澳门.** 点击此处阅读所有司法管辖区的免责声明的中文版。

Myanmar. This document is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This document is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013).
New Zealand. This material is for information purposes only and is not financial advice about any product or service. We recommend seeking financial advice about your financial situation and goals before acquiring or disposing of (or not acquiring or disposing of) a financial product.

Oman. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and the recipient understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advice.
People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (**ANZ China**). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC.
Peru. The information contained in this document has not been, and will not be, registered with or approved by the Peruvian Superintendency of the Securities Market (Superintendencia del Mercado de Valores, **SMV**) or the Lima Stock Exchange (Bolsa de Valores de Lima, **BVL**) or under the Peruvian Securities Market Law (Legislative Decree 6 861), and will not be subject to Peruvian laws applicable to public offerings in Peru. To the extent this information refers to any securities or interests, it should be noted the securities or interests may not be offered or sold in Peru, except if (i) such securities or interests were previously registered with the Peruvian Superintendency of the Securities Market, or (ii) such offering is considered a private offering in Peru under the securities laws and regulation of Peru.
Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank (**QCB**), the Qatar Financial Centre (**QFC**) Authority, QFC Regulatory Authority or any other authority in the State of Qatar (**Qatar**); or
- authorised or licensed for distribution in Qatar, and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC.

The financial products or services described in this document have not been, and will not be:

- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose.
Singapore. This document is distributed in Singapore by ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 19 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act Cap. 100 of Singapore. In respect of any matters arising from, or in connection with, the distribution of this document in Singapore, please speak to your usual ANZ contact in Singapore.
United Arab Emirates (UAE). This document is distributed in the UAE or the Dubai International Financial Centre (**DIFC**) (as applicable) by ANZ. This document does not, and is not intended to constitute: (a) an offer of securities anywhere in the UAE; (b) the carrying on or engagement in banking, financial and/or investment consultation business in the UAE under the rules and regulations made by the Central Bank of the UAE, the Emirates Securities and Commodities Authority or the UAE Ministry of Economy; (c) an offer of securities within the meaning of the Dubai International Financial Centre Markets Law (DIFCML) No. 12 of 2004; and (d) a financial promotion, as defined under the DIFCML No. 1 of 200. ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**) ANZ DIFC Branch is regulated by the Dubai Financial Services Authority (**DFSA**). The financial products or services described in this document are only available to persons who qualify as "Professional Clients" or "Market Counterparty" in accordance with the provisions of the DFSA rules.
United Kingdom. This document is distributed in the United Kingdom by Australia and New Zealand Banking Group Limited (**ANZ**) solely for the information of persons who would come within the Financial Conduct Authority (**FCA**) definition of "eligible counterparty" or "professional client". It is not intended for and must not be distributed to any person who would come within the FCA definition of "retail client". Nothing here excludes or restricts any duty or liability to a customer which ANZ may have under the UK Financial Services and Markets Act 2000 or under the regulatory system as defined in the Rules of the Prudential Regulation Authority (**PRA**) and the FCA. ANZ considers this document to constitute an Acceptable Minor Non-Monetary Benefits (**AMNMB**) under the relevant inducement rules of the FCA. ANZ is authorised in the United Kingdom by the PRA and is subject to regulation by the FCA and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request.
United States. Except where this is a FX-related document, this document is distributed in the United States by ANZ Securities, Inc. (**ANZ SI**) which is a member of the Financial Regulatory Authority (**FINRA**) (www.finra.org) and registered with the SEC. ANZSI's address is 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 9160 Fax: +1 212 801 9163). ANZSI accepts responsibility for its content. Information on any securities referred to in this document may be obtained from ANZSI upon request. This document or material is intended for institutional use only – not retail. If you are an institutional customer wishing to effect transactions in any securities referred to in this document you must contact ANZSI, not its affiliates. ANZSI is authorised as a broker-dealer only for institutional customers, not for US Persons (as "US person" is defined in Regulation S under the US Securities Act of 1933, as amended) who are individuals. If you have registered to use our website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use our website by unsubscribing or should notify the sender and you should not act on the contents of this document in any way. Non-U.S. analysts may not be associated persons of ANZSI and therefore may not be subject to FINRA Rule 2242 restrictions on communications with the subject company, public appearances and trading securities held by the analysts. Where this is a FX-related document, it is distributed in the United States by ANZ's New York Branch, which is also located at 277 Park Avenue, 31st Floor, New York, NY 10172, USA (Tel: +1 212 801 916 0 Fax: +1 212 801 9163).
Vietnam. This document is distributed in Vietnam by ANZ or ANZ Bank (Vietnam) Limited, a subsidiary of ANZ.

This document has been prepared by ANZ Bank New Zealand Limited, Level 26, 23-29 Albert Street, Auckland 1010, New Zealand, Ph 64-9-357 4094, e-mail nzeconomics@anz.com, http://www.anz.co.nz