

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

Miles Workman for more details.

States of the world

Summary

- Clearly, economic conditions are far from normal. Inflation is moon-bound and a significant share of the economy is operating under strict health restrictions.
- We've learnt a lot about economic resilience (supported by fiscal and monetary stimulus) over the past 18 months or so, but that doesn't mean everything will go to plan over the next 18 months.
- With so much distortion out there, diagnosing the future path for the economy is no easy task. There is ample scope for a policy mistake by the RBNZ and/or the Government should they fail to recognise the state of the world we are heading for in a timely manner.
- We present three scenarios that show just how different the potential paths for the economy could be compared to our central forecast. In this environment, nuance across a broad range of economic indicators is perhaps more important than their individual headline reads.

Ways to be wrong

Our [central economic outlook](#) is based on a number of key assumptions that, at the current juncture, represent what we deem to currently be the single most likely outcomes for aspects of the economy. They're all entirely reasonable and defensible, but any of them could easily be wrong, and the chance of them all being exactly right is infinitesimal. For example, we assume that:

- Policy makers will be able to smoothly guide the economy towards a more sustainable growth path without disruption. That is, asset prices and other distortions haven't gone far enough for boom-bust risks to materialise. For example, we assume that NZ housing and construction, China's property sector, global equity prices, speculative crypto currency markets – and any and all of the potentially systemic financial market risks that follow from those – all manage to hold it together. In other words, we're not forecasting a financial crisis or a recession, even though we're very likely to see one at some point down the line.
- Economic restrictions necessitated by the Delta outbreak will not have lasting impacts on aggregate economic momentum. That is, both the demand and supply sides of the economy will recover (over the longer run) to a similar steady-state path as before – albeit probably getting there at different speeds.
- 2022 (or possibly 2023) will be the year of normalisation in the demand pulse and COVID-induced supply constraints. The way things are heading, it looks like even mid-2022 could be an optimistic assumption for global supply bottlenecks to be worked through.
- COVID-19 hasn't brought about an end to the structurally-lower global interest rate environment that has characterised the last decade. And we also assume that medium-term inflation expectations show their grit and remain anchored even as inflation approaches 6% y/y.

So far, the timely indicators generally corroborate these views. Global markets have had some wobbles, but equities continue to hit new highs. Business sentiment has been remarkably robust. The wonders of capitalism will eventually resolve most global supply-chain issues, albeit not quickly. And while business and household inflation expectations are up sharply, it's primarily the nearer-term expectations that have done the moving, and it's not unreasonable to assume they'll run out of steam now interest rates are rising.

But it's still very early days, and if we (and most every other economist for that matter) is wrong about the medium-term state of the world that we're actually heading towards, well, we could be in for a wild ride as markets (and policy settings) adjust.

Recent data flow certainly suggests OCR hikes are needed urgently, and we've pencilled in a path to [2% by August 2022](#). But depending on the medium-term state of the world, the OCR may need to go much higher – or alternatively, much lower – than this.

- Has stagflation (weak growth, high inflation) returned from the dead? In a worrying sign, ABBA has released a new single.
- Or will the supply side of the global economy bounce back strongly alongside still-solid demand? That's the dream scenario, boosting activity but containing medium-term inflation pressure.
- Or will both supply and demand overcorrect, with the demand pulse waning just as the productive capacity of the global economy recovers, seeing the globe and NZ evolve into a deflationary environment?

This note illustrates what the world might look like under these three potential scenarios. Unfortunately, it's very difficult to know at this point what state of the world we are currently heading towards, and the appropriate policy prescription varies wildly.

Three scenarios

The scenarios presented below are by no means an exhaustive set of possibilities regarding what may come to pass. But they have been chosen to represent some of the more extreme paths the economy may be on.

Scenario 1. Stagflation (high inflation, weak growth)

Stagflation is the worst of all worlds. Consumer prices rise at pace, hitting low-income earners hardest. Wages rise fast too, but real income growth (ie income growth less inflation) remains very weak (if not negative), meaning households are not getting ahead. Luck plays a larger role in real wealth creation and destruction. Economic activity stagnates, as capacity limits are hit and the uncertain economic environment – including about the level of future prices and real interest rates – causes businesses to defer or cancel investment and employment plans. The economy's productive capacity is at a standstill (or even shrinking).

Stagflation events are primarily supply-side driven. Inputs into the production process (eg oil, coal, semi-conductors, labour) become scarce, pushing production costs up, and driving cost-push inflation. If it's persistent, inflation pressures build and the risk grows that this becomes self-fulfilling as inflation expectations move higher. Regulating wages higher in response (or indexing wages to inflation) to try to fix real wages will only exacerbate the problem. So too would expansionary fiscal settings, which add to demand and would achieve little more than higher-than-otherwise prices and interest rates, if the economy just can't deliver.

In this scenario, we assume the NZ and global economies are much more supply constrained (and for longer) than anticipated. The economy's productive capacity is artificially constrained by prolonged health restrictions that make labour less efficient and scarcer. Resources therefore remain stretched despite weakening demand and activity. Labour costs (wages) follow inflation higher, as distortions in the labour market (ie skills mismatches and the regulated floor in the minimum wage), mean market forces (lower employment) doesn't result in lower wage pressures.

The policy prescription in the case of a stagflation event is not straightforward. Tighter monetary policy will not fix the supply shock (ie remove health restrictions or speed up shipping containers). But it will better align demand with supply, albeit at a lower level of activity and employment than had the shock not occurred. Further, an aggressive monetary policy stance will signal a readiness to act, hopefully preventing long-run inflation expectations spiking and undoing hard-won inflation-targeting credibility.

Nonetheless, even if the 'right' policy stance in this scenario is theoretically clear, it'll hurt. It'll cost jobs. And it'll thereby be political. And households at the bottom of the income distribution will be affected the most, as those locked out of the labour market face rapidly rising living costs. For firms, the pressure to keep up with cost increases (input prices, including wages) is immense and profit margins will be very squeezed. But if the RBNZ doesn't respond quickly enough, rising inflation expectations could mean rates eventually have to go even higher than otherwise.

If we end up in in this world, it wouldn't be easy to get out. Not only would it probably be a global phenomenon; raising rates and putting the boot into an already-suffering economy would inevitably be unpopular and political. And another challenge is accurately diagnosing the risk of inflation expectations becoming unanchored before it's already happened. The past six months has certainly highlighted how challenging forecasting inflation itself is, let alone what's going on in people's heads.

In this scenario, persistently strong inflation, rising inflation expectations, and strong wage growth (despite weakening unemployment) would mean the RBNZ is forced to lift the OCR more aggressively, and to a higher terminal rate. In our illustrative example, the OCR reaches 4% by mid-2023. All the while, GDP goes nowhere fast, heavily indebted households and firms have a particularly tough time as interest rates rise, and the unemployment rate lifts towards 6%.

That's not appealing. Minimising the risk of this scenario unfolding is a key reason the RBNZ will plough ahead with rate rises right through COVID uncertainty. It's made it clear that until the evidence shows we're looking at a net negative demand shock (ie a disinflationary situation), uncertainty is not sufficient reason to not get on with hiking.

Scenario 2. Best case: a solid recovery in domestic and global supply alongside an unwavering demand pulse

This scenario is about the most optimistic state of the world we can think of. It's also the most aligned with our actual published forecasts, though with plenty of sugar on top. High vaccination rates (globally and in NZ) and other medical advancements (possibly alongside mutations that make COVID-19 less deadly) mean less pressure on the health system and allow for a faster removal of restrictions. Generally, supply-side constraints (labour and goods) are alleviated faster and by more than we anticipate. This would imply that global shipping issues and scarcity of primary and intermediate goods are quickly resolved; labour mobility normalises (as health

restrictions are no longer required); and labour productivity recovers (as social distancing measures are no longer required). The lower health risk means there is also less hesitancy among workers to take front-line jobs.

Things are a little rosier on the demand side too. Employment growth is stronger, as mismatching issues resolve as borders open. Real wage growth is stronger (firms' productivity is better so they can absorb a higher labour cost). Business and household confidence hums along at respectable levels, and a slowing housing market does not destabilise that.

Globally, the removal of health restrictions mean households' spending choices become a lot less constrained than they have been these past 18 months or so. That brings things like international travel (tourism) back into the fold faster than we're currently assuming. This substitution of spending from goods towards services alleviates pressure on goods-producing industries and shipping, and allows idle economic resource (such as hotels, airplanes, tourist attractions, and the labour associated with that) to be fully utilised once more.

Inflation is similar to our central forecast in this scenario, but the mix is different. There is less cost-push inflation (driven by supply shortages) and more demand-pull domestic inflation associated with the stronger labour market.

Strong demand alongside the heady rebound on the supply side sees GDP well above our forecast. Stronger employment growth sees the unemployment rate around 3.5% for a time despite higher labour force participation.

Stronger household income growth (via higher employment and wages), means the neutral OCR is a little higher in this world. The RBNZ needs to keep hiking a little longer to keep the economy on a sustainable growth path (ie higher rates are needed to achieve a similar path for debt servicing as a share of income). The OCR reaches 2.5% by the end of 2022 – 50 basis points higher than our central expectation.

Scenario 3. A deflationary picture over the medium term

This scenario assumes global and domestic supply constraints resolve over 2022 and beyond a little more quickly than we expect. However, there is more economic scarring from this crisis than the current data show. A rather fragile underlying demand pulse is revealed after the fiscal impulse fades and higher interest rates bite (NZ fixed mortgage rates have lifted around 100-150 basis points from their recent lows). House prices fall meaningfully (30%, for the sake of argument)¹ as [higher rates and the lengthy list of policy-induced headwinds](#) come to a head. Construction employment and activity go along for the ride. The housing downturn brings about an economy-wide crisis of confidence, with households tightening their belts and firms deferring their investment and employment plans.

Globally, the situation isn't too flash either. Equity markets wobble as rates initially rise, hurting confidence. NZ's terms of trade slips, which alongside rising regulatory costs, dents profitability, investment, and employment. While borders eventually reopen to vaccinated tourists, demand doesn't prove strong. The initial bump to tourism in 2022 helps stave off a deep recession, but slipping domestic momentum dominates. The economy enters recession in H2 2022.

¹ The peak to trough fall in house prices during the GFC was around 11%. That wiped out almost 1.5 years of house price gains. We assume a similar number of monthly gains are erased, implying around a 30% decline from current levels.

In the very near term, however, supply disruptions keep inflation elevated, and that muddies the water for the RBNZ's response – they are still worried about inflation expectations getting out of hand. That is, the Bank doesn't know if we're in a potentially destabilising stagflation world, or if we're staring down the barrel of a net demand shock that will take care of inflation on its own. It isn't until mid-2022 that it becomes clear that the housing contraction has momentum and that demand and employment are going the wrong way.

"Persistently" strong inflation turns out to be more transitory than assumed. Tradable prices fall in the second half of 2022 as global shipping costs normalise and commodity prices dip. The "payback" from recent price rises causes annual inflation to trough at just 0.2% y/y by early 2023. Non-tradable inflation weakens as wage growth eases and the unemployment rate rises above 6%. This quickly takes the wind out of the sails of inflation expectations.

Aggressive monetary accommodation is needed to shore up demand in a deleveraging environment, and the OCR bottoms out at -0.25% in late 2022.

Figure 1. GDP

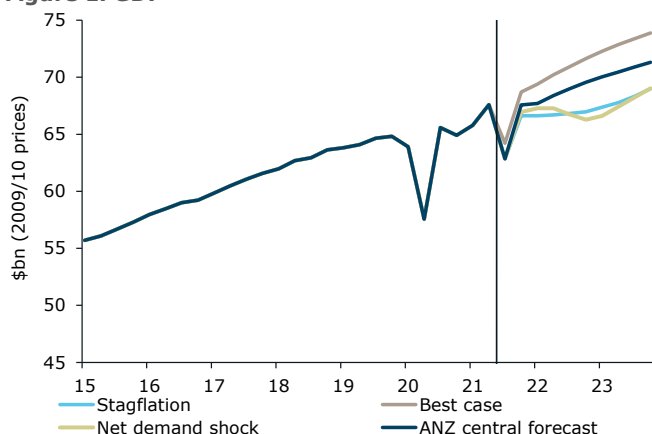


Figure 2. CPI inflation

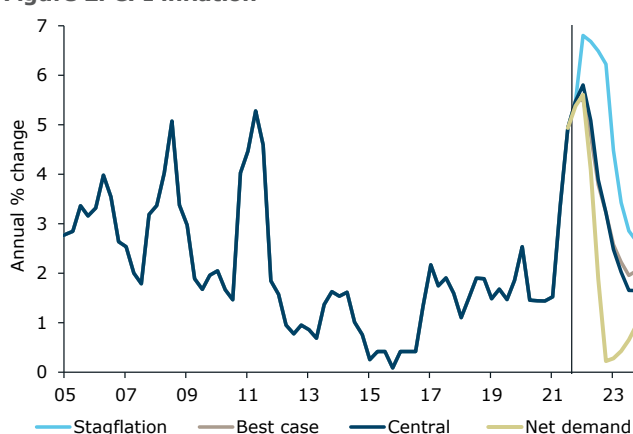


Figure 3. Unemployment rate



Figure 4. OCR



Source: Statistics NZ, RBNZ, ANZ Research

Balancing up the risks

Watch the 6 o'clock news and take a trip to the supermarket (and perhaps the petrol station) and you might be convinced that stagflation is already here. After all, consumer prices rose 2.2% q/q in Q3 and GDP is expected to contract around 7% q/q! But one quarter of GDP falling and inflation rising does not stagflation make. And we're expecting a relatively sharp rebound in GDP as health restrictions ease, though the timing of that is uncertain.

So what's working for and against the odds of stagflation?

In the stagflation corner:

- Climate change is, on balance, likely to prove a stagflationary shock. Much-needed environmental regulation will increase production costs and therefore prices, while climate events such as drought and flooding are already eroding productive capacity and activity, in food particularly.
- COVID-19 is far from over, and it's possible that mutations outpace medical advancements for years to come. That would mean the global labour productivity and mobility shock does not dissipate any time soon.
- While central banks still have their credibility and their independence, the lines between fiscal and monetary policy have been blurred in the world of unconventional monetary policy. And a solid dose of inflation has proven a popular historical fix for too-high nominal sovereign debt – arguably the situation in an alarmingly high proportion of the G10, and one which will become more noticeable as debt-servicing costs rise.

In the anti-stagflation corner:

- Vaccination rates are rising, and borders are reopening. There is plenty of idle and inefficiently deployed resource in the global economy waiting for restrictions to ease and demand to return. It might not be a return to the pre-COVID situation, but it'll be a lot less wonky than now.
- The fiscal impulse has been very large, but by definition cannot continue in perpetuity without government debt exploding. Fiscal consolidation is needed to provide headroom for the next economic crisis, and when that happens, some of the froth will be taken out of the demand pulse.

Regarding the third scenario, a net demand shock, this would likely occur on the back of the materialisation of one (or more) of the tail-end risks we keep drumming on about (eg housing hard landing, global asset valuations and debt) but which have a sufficiently low probability so as to not be centralised into our forecasts. But if they were to happen, they'd be game-changers.

Always on the lookout

As the above scenarios demonstrate, diagnosing the current and future state of the economy is no simple matter. The world just isn't as black and white as some might like to think, and there may not be a hard line between a stagflation world and our central outlook, or a net demand shock and our forecast. Risks can materialise that balance against one another, meaning we end up in some kind of in-between state. And luck is going to have a large say in where we end up, eg the evolution of the virus.

But all that said, there's lots to be on the lookout for, in order to gauge what's coming.

Tradable price signals are perhaps the easiest data to monitor, given hotly traded commodity markets and well-publicised shipping costs. Regarding the self-fulfilling component of inflation, we think the RBNZ's survey of inflation expectations is unlikely to show longer run (2+ years) expectations becoming extremely unanchored any time soon. The 40 or so forecasters (such as ourselves) who fill in the RBNZ survey are unlikely to adopt a view that the RBNZ will make successive policy mistakes and/or abandon its inflation target. Rather, we can assume inflation will be close to 2% over the medium term, but the exact path for the OCR to achieve this is more of a moving feast. Given this target-correcting tendency in the RBNZ measure, it might also pay to keep a close eye on households' and firms' longer-run inflation expectations, particularly if these continue to lift for a prolonged period (ie into 2022) alongside inflation and wages, and despite rising interest rates.

On the activity and demand side, our Business Outlook has served us well to this point, and has been consistent with the robust employment and high inflation outcomes of late. We'll continue to keep a very close eye on that, as well as confirmation in the monthly filled jobs data that the labour market is holding it together.

Housing is where we currently see a lot of downside risk to the domestic demand pulse, so we need to keep close tabs on the current moderation underway there. But for this to really drag on broader economic momentum it'll need to deliver a blow to confidence too. The REINZ housing data is relatively timely, but we'll likely hear noises "through the grape vine" ahead of a significant deterioration. And consumers' willingness to buy a major household item is really important. Households spent like there was no tomorrow between the two great lockdowns, but a resumption of that is far from a given.

All up, like the GFC, the Asian Financial Crisis, and the Great Depression, the COVID crisis will be one for the history books. But hopefully, learnings about the appropriate macroeconomic policy responses (whatever ends up being required), and financial market risk mitigation (eg macroprudential policy) limits the medium-term fallout. And whatever happens, New Zealand remains better placed than many to cope with it:

- We were able to keep COVID out and suppressed until a large proportion of the population was vaccinated;
- We sell food, the relative price of which has been increasing for more than a decade and is likely to continue to do so;
- We have robust institutions, a credible central bank, strong corporate balance sheets, and still-low government debt in an international comparison.



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: 15 October 2021

This document 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 or request from your ANZ point of contact.

Brazil, 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 ANZ Research is not subject to any Chilean supervision and is not guaranteed by any regulatory or governmental agency in Chile.

European Economic Area (EEA): United Kingdom. ANZ is authorised in the United Kingdom by the Prudential Regulation Authority (**PRA**) and is subject to regulation by the Financial Conduct Authority (**FCA**) and limited regulation by the PRA. Details about the extent of our regulation by the PRA are available from us on request. 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 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 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.

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 publication 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 publication have not been reviewed by any regulatory authority in Hong Kong.



Important notice

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.

Myanmar. This publication is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This publication 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.

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 the Singapore branch of 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 publication 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 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 this website or have otherwise received this document and are a US Person who is an individual: to avoid loss, you should cease to use this 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: 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 an 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 9160 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>