

NZ Insight: Inflation rotation

7 March 2023



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 or Sharon Zollner for more details.

Confused by acronyms or jargon? See a glossary [here](#).

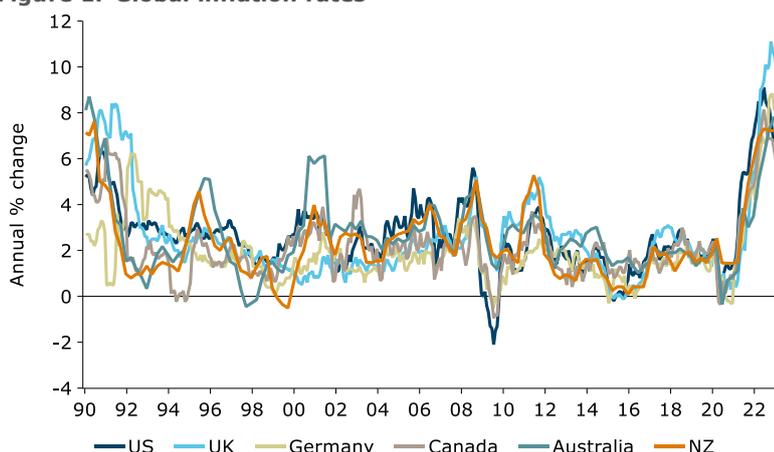
Inflation rotation

- Headline inflation appears to be peaking, both in New Zealand and around the world.
- However, with the inflation pulse rotating away from goods and towards sticky services prices, central banks' inflation fight is not over yet.
- The feedback loop between a tight labour market and rising services inflation will be a key determinant of how high the RBNZ (and other central banks) will lift interest rates, and when and if they will be able to then reduce them over the next few years.
- We continue to see the RBNZ hiking the OCR to a peak of 5.25% by May 2023, and holding it there until at least the end of 2024. But the tight labour market and uncertain cyclone impacts represent upside risks to the outlook for both inflation and the OCR.

All good?

The global inflation pulse appears – touch wood – to have peaked. While some countries are still experiencing rising inflation (eg Australia), key global economies like the US and euro area have seen headline inflation peak in recent months (figure 1). In New Zealand, we are still at the peak of our inflation cycle (which you'd have to say is looking more like a plateau, at this stage), and the impacts of Cyclone Gabrielle will likely see both near- and medium-term inflation pressures coming in **hotter than otherwise**. But inflation has at least stopped rising.

Figure 1. Global inflation rates



Source: BLS, ONS, DESTATIS, StatCan, ABS, Stats NZ, Macrobond, ANZ Research

The peak in headline inflation globally is an encouraging development after a series of pretty relentless upside surprises over the past two years. But central banks' campaign against inflation is far from over. One key reason for this is that there is a clear divide in the inflation dynamics of goods and services.

The (very welcome!) disinflation we are seeing globally is coming through the goods side of the equation. That includes items like cars, appliances, furniture, and fuel, a category that represented 62.6% of the New Zealand

CPI in June 2020.¹ Goods inflation tends to be more responsive to global commodity price developments, and tends to be more volatile generally than services inflation is.

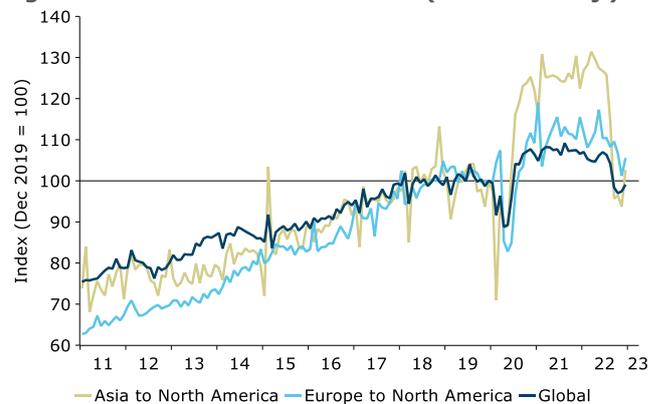
One reason we are seeing goods disinflation is that the intense disruptions triggered by the COVID-19 pandemic (including lockdowns and social-distancing requirements) have faded. Shipping costs have eased substantially relative to the highs seen over 2021 (figure 2). That’s partly down to less direct disruption to ports and the like, and partly an unwinding of the global ‘I can’t go on holiday so I’m getting a spa/car/sofa’ phenomenon. The unwinding of the inventory build-up that was seen in response to the shipping disruptions has also contributed to lower goods trade volumes (figure 3).

Figure 2. Global shipping costs



Source: Baltic Exchange, Harper Petersen & Co., Shanghai Shipping Exchange, Macrobond, ANZ Research

Figure 3. Container trade volumes (ANZ seas. adj.)



Source: CTS, Bloomberg, Macrobond, ANZ Research

All this is helping to unwind some of the immense pressures that were put on global goods prices over the course of the pandemic. As a small open economy, this means that New Zealand should be importing less inflationary pressure from overseas as we head through 2023.

Doing central banks no service

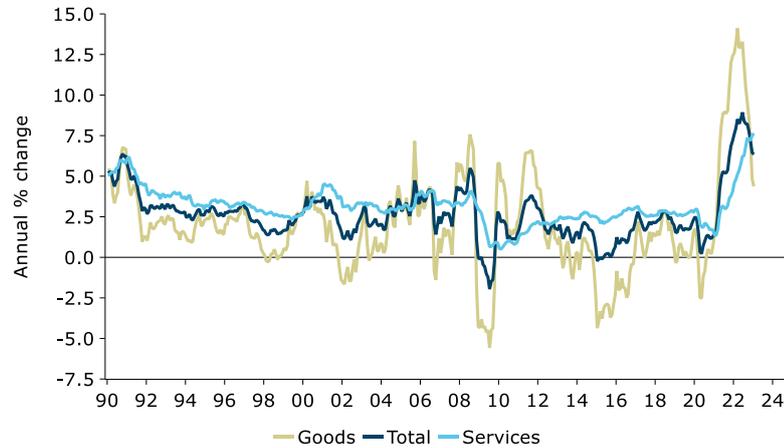
So far so ‘good’. But unfortunately, services inflation is now picking up the baton from goods. Examples of services prices include residential rents, hairdressing services, vehicle servicing and repairs, housekeeping charges, and real estate services. Given the importance of labour inputs in each of these examples, it’s not surprising that services inflation tends to be closely tied to domestic labour market conditions. In June 2020, services made up 37.4% of the New Zealand CPI.

The US is a key example of an economy that has seen headline inflation ease in recent months, but is now facing a persistent services inflation problem. CPI inflation in the US has fallen from a peak of 9.1% in June 2022 to a still-too-high 6.4% in January 2023. That’s a big drop. However, it’s clear from figure 4 that services inflation is becoming an increasing headache for the US Federal Reserve. And that’s partly a symptom of a labour market that is still running very hot, with unemployment at 3.4% (the lowest since 1969) and 1.9 job openings per unemployed person. Wage growth is elevated and workers are hard to find, and that’s driving services inflation higher.

¹ This is in contrast to the US, where services inflation makes up over 60% of the CPI basket. One big reason for the difference is that in New Zealand, home ownership costs (10% of the CPI basket) are measured in terms of the cost of constructing a house. This is classed as a good. In contrast, the US estimates the “implicit rent that owner occupants would have to pay if they were renting their homes, without furnishings or utilities”. This is a service.

This interaction between an overheated labour market and too-strong services inflation is a key reason why we expect the US Federal Reserve will lift the fed funds rate (FFR) to 5.5% by mid-2023 (currently 4.75%), and will only gradually cut the FFR back toward 4.5% by the end of 2024.

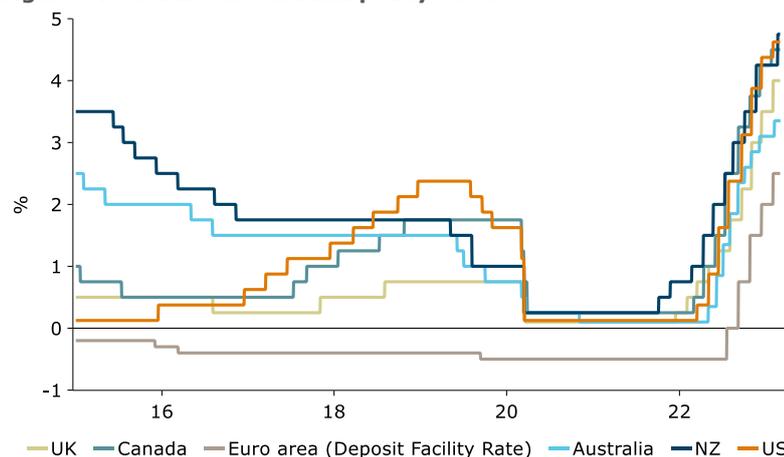
Figure 4. Goods and services inflation in the US



Source: Stats NZ, BLS, NZIER, Macrobond, ANZ Research

Central banks globally are entering a new stage of the hiking cycle. Having rapidly lifted rates to a level that is broadly considered to be contractionary (figure 5), many central banks have slowed the pace, as they enter the 'fine tuning' stage, as opposed to 'urgent catch-up'. But it remains highly uncertain how high interest rates need to be (and for how long) to ensure inflation returns to target. Goods disinflation is real, but for services inflation to fade, we need to see a realignment of labour demand with supply. This inflation rotation into services and away from goods will set the scene for monetary policy around the world as 2023 unfolds.

Figure 5. Global central bank policy rates

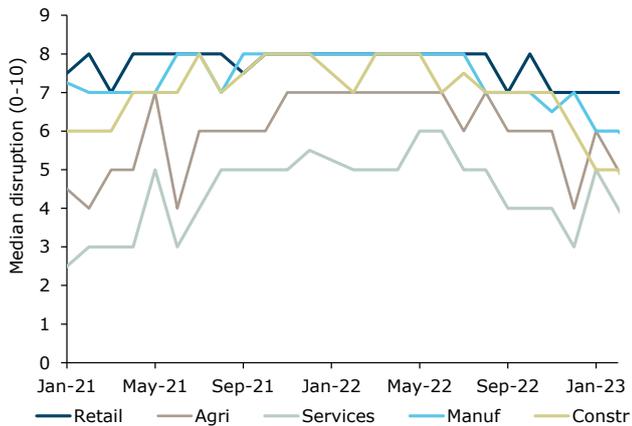


Source: BoE, RBA, RBNZ, Fed, ECB, BoC, Macrobond, ANZ Research

New Zealand is also doing the 'inflation rotation'

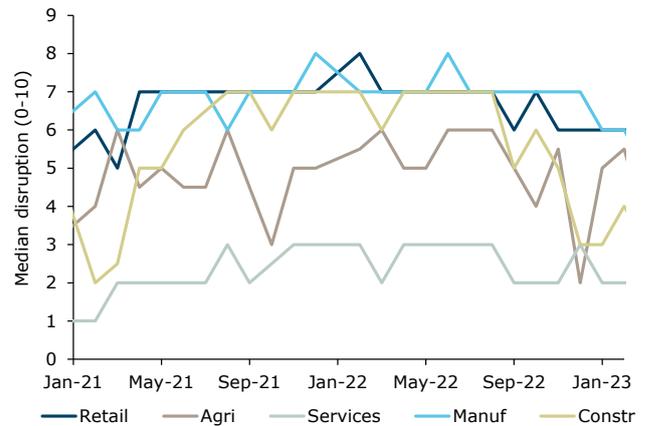
In New Zealand, domestic inflation developments are closely mirroring those seen overseas. Firstly, we've seen signs that the peak disruption to supply chains seen over 2021 is easing. Firms surveyed in our Business Outlook survey note that we have seen some improvements to inward and outward freight disruption (figures 6 and 7), although manufacturing and retail firms are yet to see a significant improvement.

Figure 6. Inward freight disruption in New Zealand



Source: ANZ Research

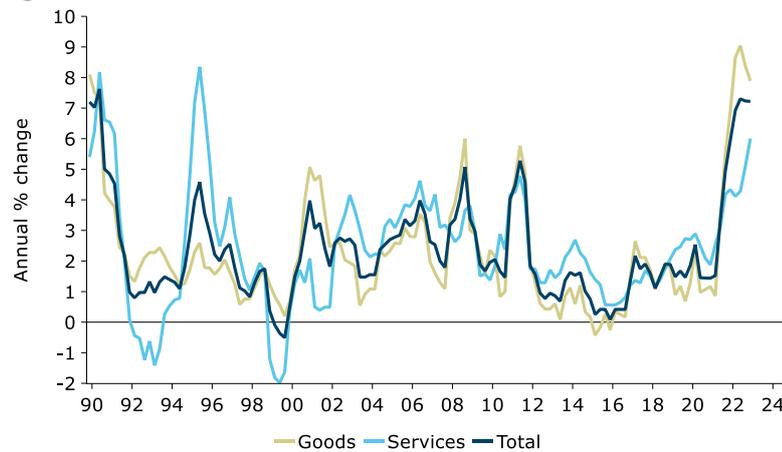
Figure 7. Outward freight disruption in New Zealand



Source: ANZ Research

Also mirroring the global picture, goods inflation in New Zealand has peaked (albeit not as convincingly as in the US, partly due to supply shocks to food production). Services inflation, however, has continued to build (figure 8). This really highlights the risk that even as the global inflation pulse starts to fade, domestically generated inflation and our super-tight labour market will keep the pressure on the RBNZ to remain tough on inflation.

Figure 8. Goods and services inflation in New Zealand

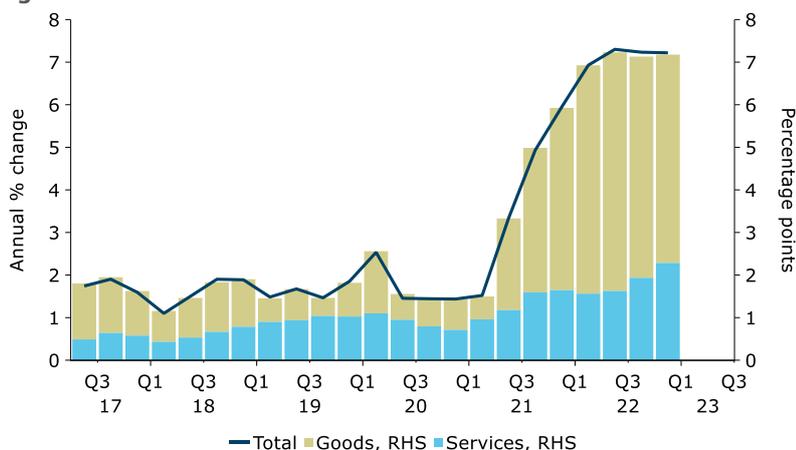


Source: Stats NZ, Macrobond, ANZ Research

Figure 9 (over) plots the contributions of goods and services prices to overall CPI inflation in New Zealand over the past few years. Clearly, goods inflation has dominated services since the COVID-19 pandemic started. That's no surprise, given that goods inflation encompasses construction costs, petrol prices, and most food prices – large CPI items that have all experienced substantial price increases.

But services prices are now contributing more than 2ppt to annual CPI inflation, and are showing no signs of slowing. Should that continue, we could see CPI inflation get 'stuck' above the RBNZ's 1-3% target band, even if goods inflation returns to historically average levels. It's on the RBNZ's radar: the February Monetary Policy Statement (MPS) noted "services sector prices have accounted for an increasing share of price growth in recent quarters".

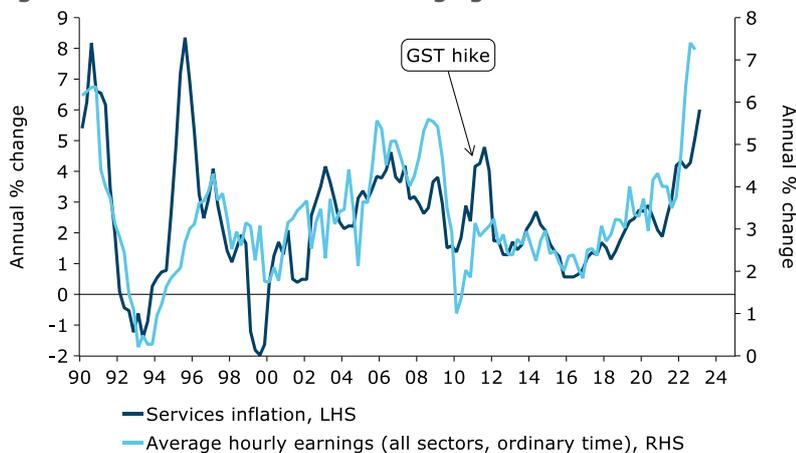
Figure 9. Goods and services contributions to CPI inflation



Source: Stats NZ, Macrobond, ANZ Research

Why might services inflation remain stubbornly high? One reason could be if the domestic labour market remains hot. Figure 10 highlights the close relationship between wage growth and services inflation. The causality in this relationship will run both ways (higher wages will see service providers raise prices, but higher prices will also influence wage demands). The interplay between services and wage inflation means that for this component of inflation to ease, we need to see demand and supply in the labour market become better aligned. Until this happens, we run the risk of seeing inflation remaining too high over the medium term (even if it eases from current levels).

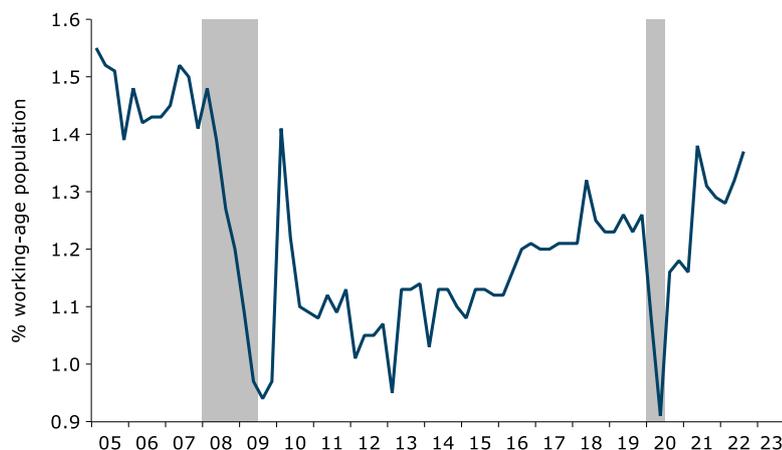
Figure 10. Services inflation and wage growth



Source: Stats NZ, Macrobond, ANZ Research

The RBNZ did a deeper dive into labour market dynamics in the February MPS. Job-to-job movements have increased sharply (especially versus the post-GFC period – figure 11). Previous RBNZ research has shown that job switchers tend to receive **significantly larger** wage increases. Not surprisingly, it has also been shown that job-to-job transitions **significantly outperform** standard measures of labour market slack (like the unemployment rate) when it comes to predicting wage growth and domestic inflation in New Zealand. The data only go up to September 2022, but they highlight that with demand running far in excess of supply, churn in the labour market has increased significantly, helping to send wage pressures to fresh record highs in the second half of 2022.

Figure 11. Job to job transitions

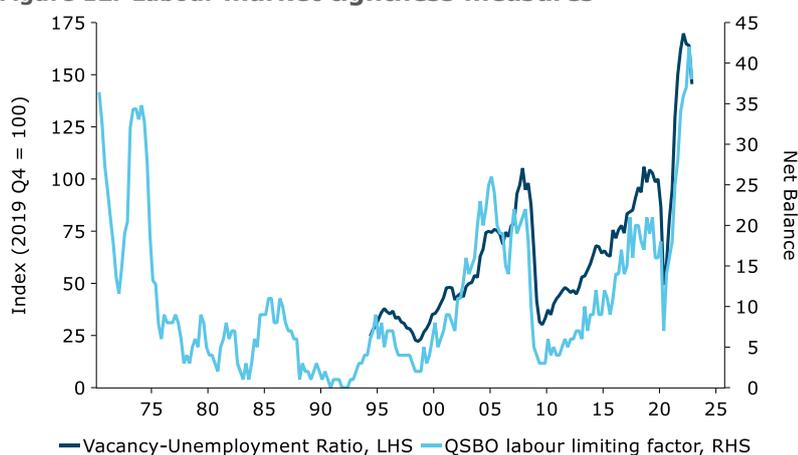


Source: RBNZ, Stats NZ, Macrobond, ANZ Research

Note: Grey shading indicates recessions in New Zealand

Until recently it was looking like the gap between labour demand and labour supply was starting to close. Labour market indicators had slowed in the final months of 2022, after what seemed like unstoppable momentum over the past few years (figure 12). The share of firms reporting that shortages of labour are the main factor limiting production has flattened off (albeit at extremes), while job vacancies are now falling relative to the number of unemployed people. However, both of these measures are still extremely elevated by historical standards, and far beyond levels seen at the end of 2019, when the RBNZ assessed the labour market was at or even slightly above maximum sustainable employment. And, as we discussed in an [Insight note](#) last week, labour market indicators over January and February 2023 point to the labour market getting something of a second wind.

Figure 12. Labour market tightness measures

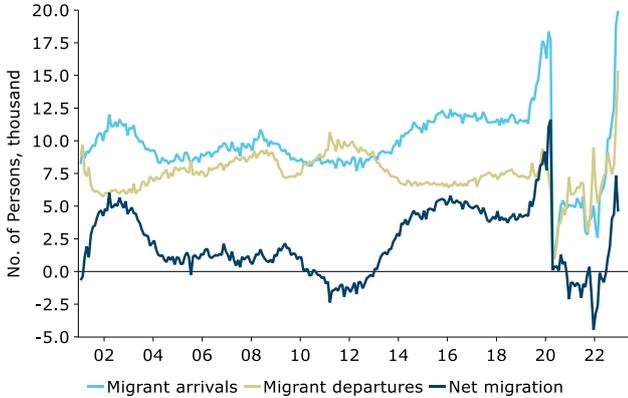


Source: Stats NZ, NZIER, Macrobond, ANZ Research

The spectacular increase in net migration in recent months does point to an improvement in the availability of workers, which should ease some of the logjam in the labour market (figure 13). Some caution is warranted when looking at recent net migration data, as the data are subject to significant revisions. However, even if the migration pulse isn't quite as strong as the initial data suggest, it still represents a massive increase in labour supply relative to the past few years of closed borders. This seems likely to have been a big driver of the lift in filled jobs seen in January (figure 14). To the

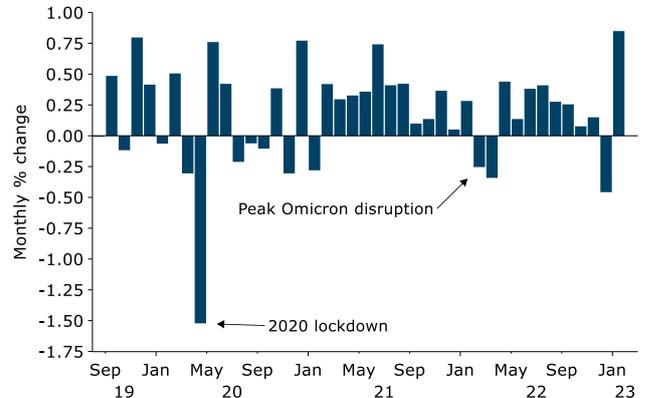
extent the employment lift has been driven by availability of workers, it shouldn't be particularly inflationary. But if it also represents a lift in labour demand, it could be. Add it to the (already large) 'wait and see' pile.

Figure 13. Monthly net migration



Source: Stats NZ, Macrobond, ANZ Research

Figure 14. Monthly filled jobs



Source: Stats NZ, Macrobond, ANZ Research

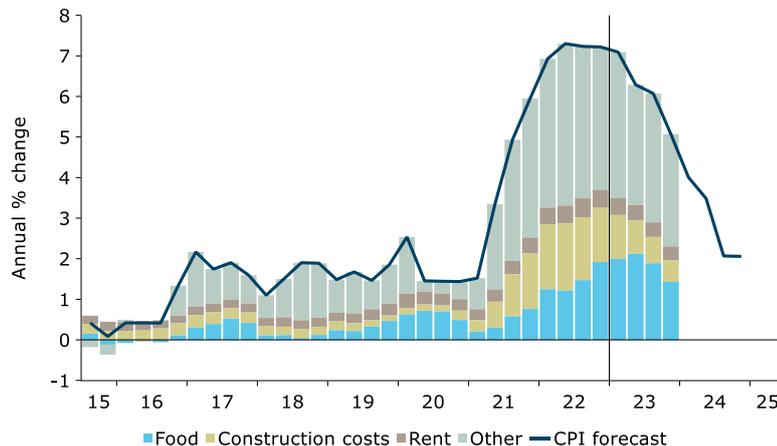
Monetary policy implications

The evolution of labour market pressures over 2023 will be key for understanding the likely path of interest rates over the next few years. Should the labour market remain tight, despite the RBNZ's rapid rate hikes and high levels of net migration, it would be difficult to see the RBNZ feeling comfortable easing up on the hawkishness much any time soon. Feedback loops between wage growth and the cost-of-living have the potential to see inflation remain high without making the average worker any better off in real terms.

As the inflation pulse shifts towards services, that interaction between the labour market and services inflation will become increasingly important for the RBNZ (and its international peers).

The devastating impacts of Cyclone Gabrielle are another complicating factor for the RBNZ. While the full cost of this disaster will not be known for some time, it's clearly going to be inflationary both in the near and medium term. The very items in the CPI which were expected to help drive disinflation over 2023 (construction costs, food prices, and rents – figure 15) now face significant upside risks due to immediate cyclone impacts (at least at a regional level), as well as what's looking like a significant and lengthy repair job to houses and infrastructure.

Figure 15. Contributions to CPI inflation forecast



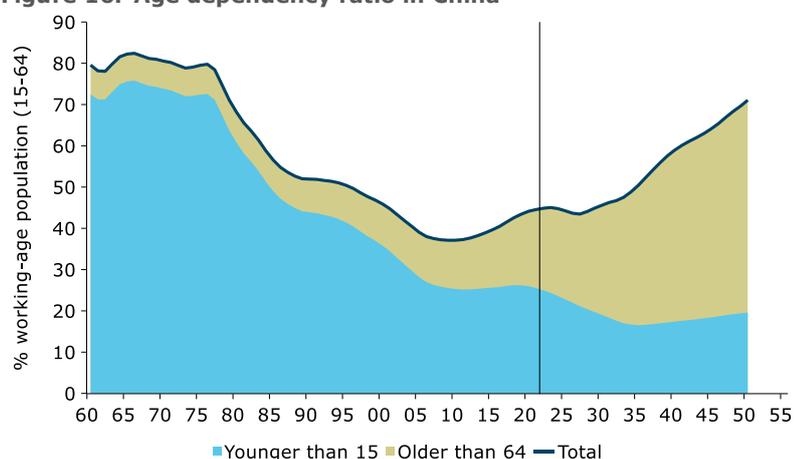
Source: Stats NZ, Macrobond, ANZ Research

Goods inflation could yet make a comeback

While global goods inflation is currently easing, it could make an unwelcome return for a number of reasons.

- China has now abandoned its zero-COVID policy, which should provide some support for global commodity prices as Chinese consumer demand recovers. It's good for New Zealand export prices too, but that would reinforce rather than offset any inflation impacts.
- Geopolitical tensions have been a particularly important driver of global markets since Russia's invasion of Ukraine a year ago. The prices of key inputs to production, including energy and fertiliser, have been buffeted by geopolitical headlines, and may continue to be. That's the kind of thing central banks would normally 'look through', but it's harder to do that when you're already in a high inflation environment.
- Trends towards 'near-shoring' and 'friend-shoring' of supply chains also have the potential to drive goods prices higher, as countries seek to make supply chains more resilient to disruption. The pandemic was already driving movement towards 'just-in-case' rather than 'just-in-time', and simmering global tensions may entrench that trend. Supply chain resilience does have a cost in terms of day-to-day efficiency (and therefore prices).
- Climate change is an ongoing challenge for central banks focused on price stability. The mitigation of climate impacts and the reinforcement of global infrastructure will be resource intensive and expensive. Meanwhile, the impacts of a warmer and more volatile atmosphere will continue to add to food supply disruptions. As a net exporter of food, New Zealand is at least on the right side of this from a national income point of view. But it's still inflationary (and not a 'good news' story).
- While slow burn, demographics are also not working in our favour. China's workforce is already shrinking, down by more than 41 million over the past three years to 733.5 million in 2022. The World Bank estimates that the age dependency ratio (the ratio of people younger than 15 and older than 64, relative to the 15-64 year-old working-age population) could rise to over 70% by the end of the 2050s, versus 44.5% in 2021 (figure 16). That's one of the more extreme cases, but many countries are now experiencing demographic challenges. There are countries with more favourable demographic profiles (eg India), but again, reworking supply chains typically isn't cheap or fast.

Figure 16. Age dependency ratio in China



Source: World Bank, Macrobond, ANZ Research

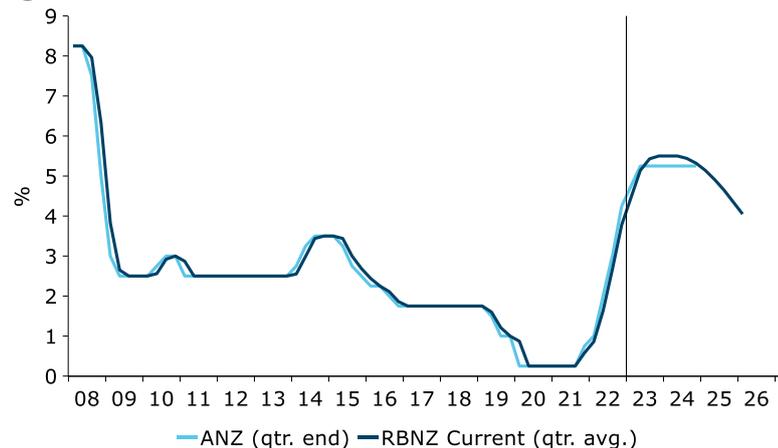
In short, while it's not unreasonable to assume ongoing goods disinflation, it's not a given, and to some extent does feel like a bit of a best-case scenario. Any combination of the factors listed above could arrest the downtrend in goods inflation, kicking off second round impacts via inflation expectations, and see global inflation pressures remaining stuck at high levels. It's another reason why central banks can't rest easy just yet.

Pulling it together

Combine a sticky services inflation pulse, with the risk of stubbornly high goods inflation due to the cyclone or a renewed round of global goods inflation, and it's worryingly easy to imagine overall CPI inflation remaining above the RBNZ's 1-3% target range over the next few years.

All up, we are clearly not out of the inflation woods yet. The relentless upside surprises of 2021 and 2022 are hopefully over. But it's a long journey from 7.2% inflation back to the 2% midpoint of the RBNZ's target band. And there are already significant bumps in that road. All of this points to the risk that interest rates will remain high for longer than markets currently anticipate. We therefore continue to expect the RBNZ will hike the OCR to a peak of 5.25% by May 2023, before holding rates at this level until at least the end of 2024 (figure 17).

Figure 17. ANZ OCR forecast



Source: RBNZ, Macrobond, ANZ Research

As discussed in our latest [Quarterly Economic Outlook](#), there are plausible scenarios in which the OCR ends up significantly higher or lower than our baseline forecast. However, with global economic momentum picking up again in early 2023, the labour market still beyond maximum sustainable employment, and Cyclone Gabrielle posing further upside risk to domestic inflation pressures, it's fair to say that we see the risks being tilted firmly towards the OCR being lifted higher than our current expectation of a 5.25% peak.

That's not to suggest the risks are one-sided. Monetary policy acts with a lag, and its impact on the housing and construction sector is just getting going. The spill-over impacts of this could be larger than we are reckoning on. Globally, the end of the era of practically-free and certainly easy money is unlikely to be all smooth sailing, and that could at some point make a more abrupt and deep hole in demand than expected. But assuming the wheels stay on, we do see the risks as tilted towards inflation not falling either as fast or as far (or both) as we and the RBNZ are forecasting, which is pretty much a straight line back to 2%. Real life tends to get in the way of tidy stories like that.



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 9 357 4094
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: 1 September 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. No securities are being offered or sold in Brazil under this document, and no securities have been and will not be registered with the Securities Commission - CVM.

Brunei, 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.

Canada. This document is general information only, is intended for institutional use only – not retail, and is not meant to be tailored to the needs and circumstances of any recipient. In addition, this document is not intended to be an offer or solicitation to purchase or sell any security or other financial instrument or to employ a specific investment strategy.

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. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice.

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.

Israel. ANZ is not a holder of a licence granted in Israel pursuant to the Regulation of Investment Advising, Investment Marketing and Portfolio Management Law, 1995 ("Investment Advice Law") and does not hold the insurance coverage required of a licensee pursuant to the Investment Advice Law. This publication has been prepared exclusively for Qualified Clients as such term is defined in the First Schedule to the Investment Advice Law. As a prerequisite to the receipt of a copy of this publication a recipient will be required to provide confirmation and evidence that it is a Qualified Client. Nothing in this publication should be considered Investment Advice or Investment Marketing as defined in the Investment Advice Law. Recipients are encouraged to seek competent investment advice from a locally licensed investment adviser prior to making any investment.

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).

Important notice

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 (**CBO**) or Oman's Capital Market Authority (**CMA**). 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. So, 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>