

# NZ Insight: Our record breaking labour market

7 November 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 or Miles Workman for more details.

## Our record breaking labour market

### Introduction

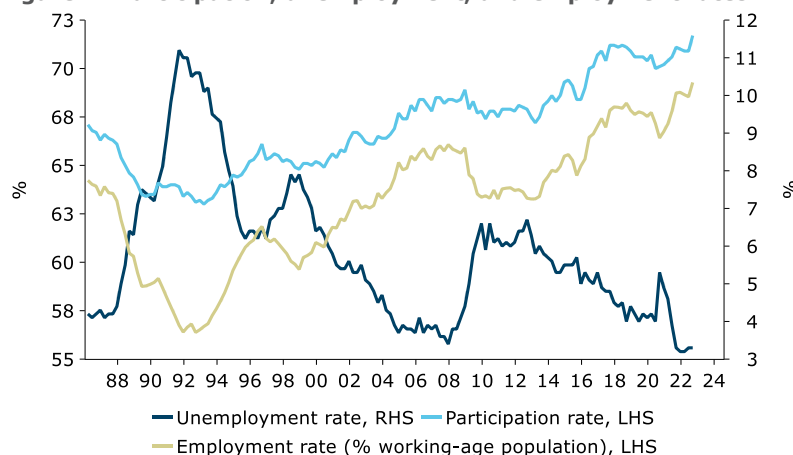
There are a lot of gloomy economic headlines out there at the moment, and that's not too surprising. Domestic inflation is way too high and still increasing, and the cure for this economic ailment – the RBNZ raising the OCR to a restrictive level to slow the economy, and likely keeping it high for some time – is not a pleasant process.

In this note we take a step back to look at some of the good news out there, by going through some of the key records that were broken by our labour market in the September quarter 2022. It's mixed news, to be fair, in that such a strong labour market means more persistent domestic inflation pressures and therefore higher interest rates than otherwise, with all the risks down the track that brings. And as a rule, the labour market does tell you more about where the economy has been than where it's going. But here and now, it means households – on average – are in a resilient position from a job security and income growth point of view as we head into 2023 and the economic headwinds start to intensify.

### The labour force and employment

The unemployment remained flat at 3.3% in the September quarter – an historically low level relative to the past four decades. And the only reason it didn't fall below 3% to what would have been a fresh record low (since the HLFS data started in 1986 Q1) was that the labour force participation rate surged to a new record high of 71.7%, likely due to a combination of push factors (the rising cost of living) and pull factors (firms luring people into the labour force with high wage offers). The jump in participation helped the employment rate lift to a record high of 69.3% (figure 1), with the number of people employed in New Zealand rising 1.3% q/q – pretty remarkable considering that a [record share of firms](#) are still reporting scarce labour as the primary constraint on output.

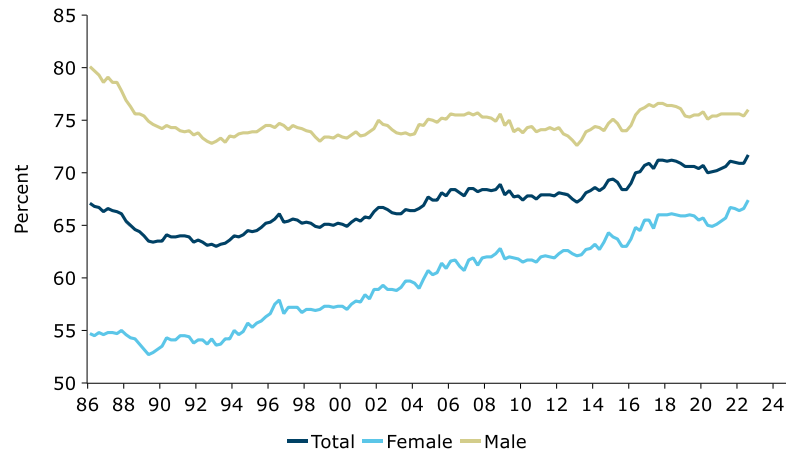
**Figure 1. Participation, unemployment, and employment rates**



Source: Stats NZ, Macrobond, ANZ Research

The female participation rate drove overall participation higher, reaching a new record high of 67.4% in September 2022, versus a low of just 52.7% in 1989 (figure 2).

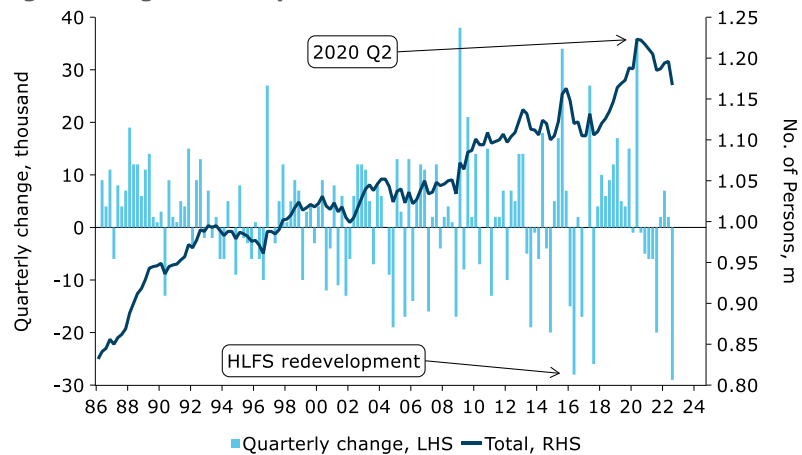
**Figure 2. Participation rates**



Source: Stats NZ, Macrobond, ANZ Research

Given the leap in the participation rate, it's probably no surprise that we saw the largest-ever quarterly decline in the number of people who are not in the labour force (figure 3). This is a stark contrast to other countries like the US, where significant shrinkage in the labour force in the wake of COVID is exacerbating labour shortages.

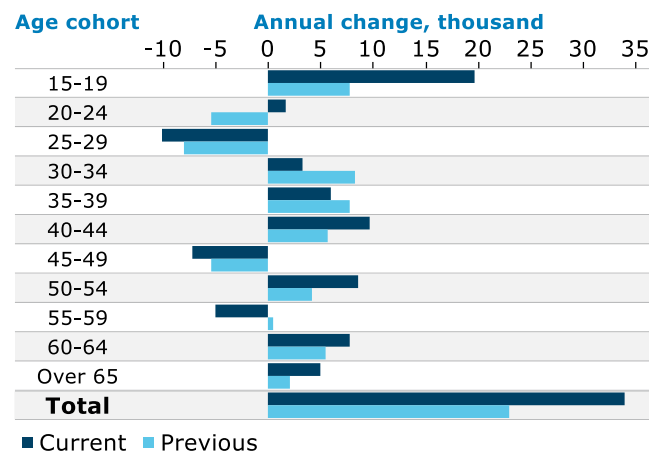
**Figure 3. Figure 3. People not in the labour force**



Source: Stats NZ, Macrobond, ANZ Research

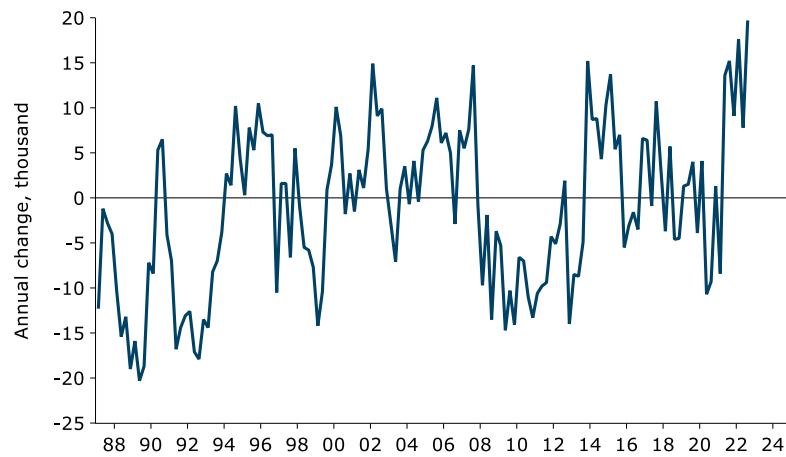
So where are all these new workers coming from? A big part of the answer is a 19.7k annual increase in the number of 15-19 year-olds in the labour force, representing by far the largest contribution to labour force growth of any age group in the year to September 2022 (figure 4). That's another record, by the way. We've never seen a larger increase in the size of the 15-19 year-old labour force (figure 5). It's important to note that this isn't necessarily all 'good' news. An after-school job for a few hours a week is one thing, but some of the higher participation in this age group probably represents people dropping out of education, and in many cases, this could be to supplement household income during this cost of living surge.

**Figure 4. Annual change in labour force size by age group**



Source: Stats NZ, Macrobond, ANZ Research

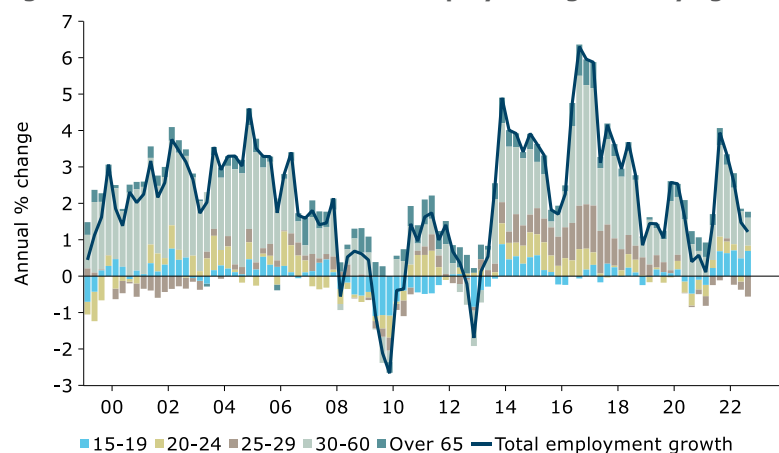
**Figure 5. Annual change in 15-19 year-old labour force**



Source: Stats NZ, Macrobond, ANZ Research

We can see how this record surge in youth labour force participation is flowing into stronger employment in figure 6. Of the 1.2% increase in employment in the year to September 2022, 0.7ppt came from the 15-19 age cohort. Interestingly, the 25-29 year-old age group is now a drag on employment numbers, with the working-age population for this group falling rapidly over the past two years, after peaking in early 2020. A lack of immigration, and many young Kiwis heading off on their OEs after two years of border closure, means this dynamic is unlikely to change any time soon, putting further pressure on other parts of the labour force.

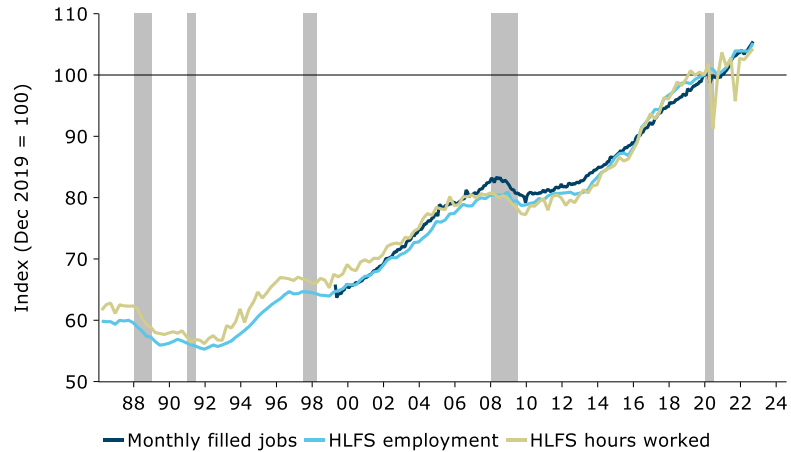
**Figure 6. Contributions to annual employment growth by age cohort**



Source: Stats NZ, Macrobond, ANZ Research

Aggregate measures of employment, filled jobs, and total hours worked are all now at record highs, bouncing back impressively from nearly three years of lockdowns, the border closure, and general disruption from COVID (figure 7). The rapid recovery in the labour market compared to the deep, drawn-out declines seen during previous economic downturns is striking – and was a key reason for the widespread underestimation of looming domestic inflation pressures.

**Figure 7. Filled jobs, employment, and hours worked (relative to December 2019)**



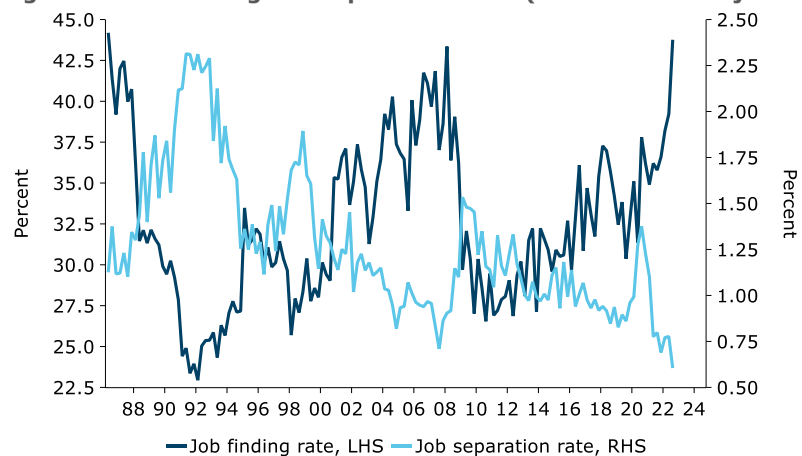
Source: Stats NZ, Macrobond, ANZ Research

Note: Grey shading represents recessions in New Zealand.

## Job finding and separations

Changing tack slightly, we can look at the probability of someone losing their job (the job-separation rate), and the probability of an unemployed person finding work (the job-finding rate). The job-separation rate fell to a record low of just 0.6% in the September quarter, meaning that on this measure at least, job security has never been higher (figure 8). The job-finding rate didn't quite pip Q2 1986's record of 44.2%, but it came in a close second place, with 43.8% of unemployed people in Q2 finding jobs in Q3 (but inflows into unemployment, which happen even in a very tight labour market, mean that overall unemployment numbers remained broadly flat).

**Figure 8. Job-finding and separation rates (ANZ seasonal adjustment)**

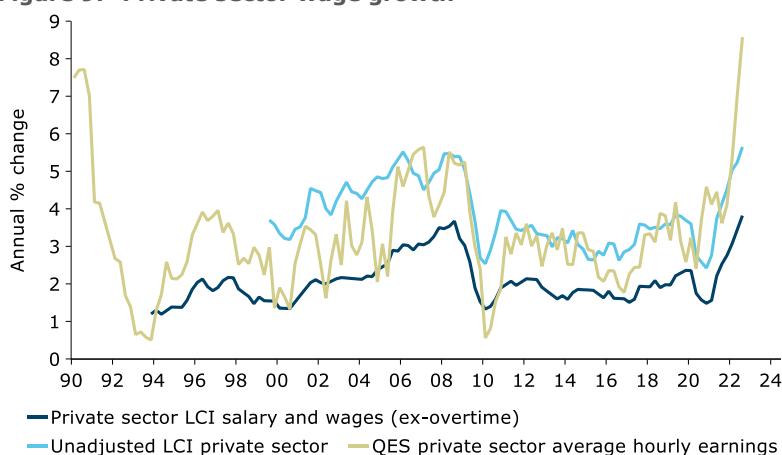


Source: Stats NZ, Macrobond, ANZ Research

## Wage growth

Given the amount of records set by the labour market data, it will come as little surprise that measures of annual private sector wage growth also hit fresh highs in Q3 (in data going back to the 1990s). Private sector average hourly earnings lifted a whopping 8.6% y/y – comfortably outpacing the 7.2% lift in consumer prices over that period (figure 9). And while a lot of that 8.6% gain is gobbled up by inflation, it does still mean that Kiwi households on average are clawing back ‘real’ spending power from the inflation gremlin. We [now anticipate](#) private sector average hourly earnings growth will peak above 9% y/y in coming months. Income growth at the lower end of the income scale is looking likely to be higher than average, based on some recent pay settlements. That’s definitely the way you want it to skew in terms of helping households through the cost of living shock.

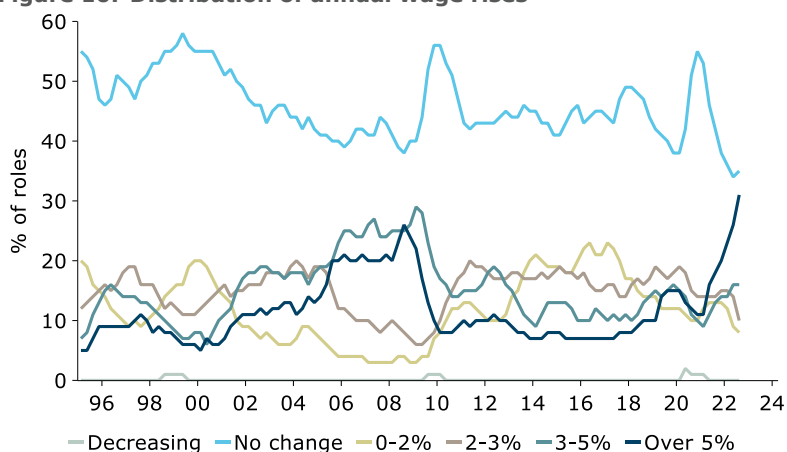
**Figure 9. Private sector wage growth**



Source: Stats NZ, Macrobond, ANZ Research

Illustrating the degree of wage pressure that’s currently in the economy, the share of roles experiencing a larger-than-5% pay rise hit a new record high of 31% in Q3 (figure 10). Over the past year, we’ve seen a drop in the share of jobs seeing no change in wages, and in those receiving a smaller raise of 0-3%.

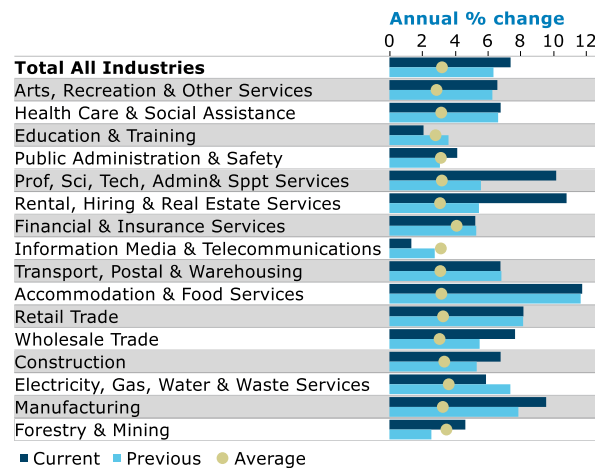
**Figure 10. Distribution of annual wage rises**



Source: Stats NZ, Macrobond, ANZ Research

Looking at average hourly earnings growth across industries, it’s also clear how broad-based strong wage growth is (figure 11). All but two industries have above-average wage growth, and the standout is accommodation and food services, up 12% y/y in Q3, versus the historical average of 3.2% y/y.

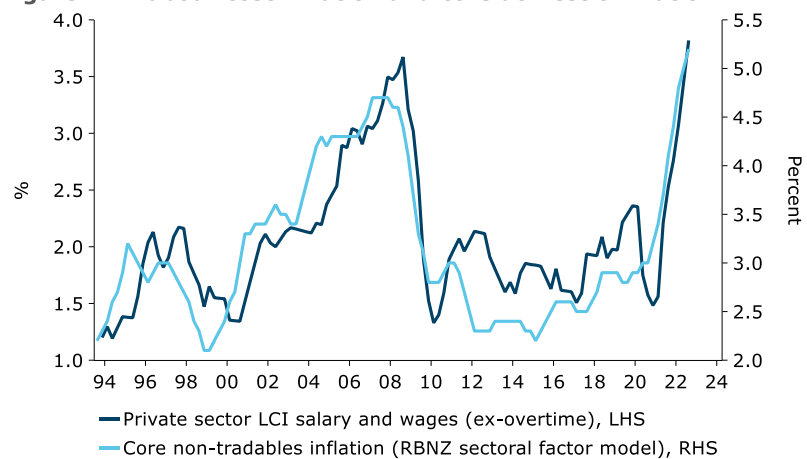
**Figure 11. Wage growth by industry (including private and public sector workers)**



Source: Stats NZ, Macrobond, ANZ Research

Of course, we wouldn't be economists if we didn't get our 'other hand' out and also highlight some of the challenges that can emerge from such an extremely tight labour market. The record wage gains that households are seeing are a fair and genuine reflection of current labour market dynamics (not to mentioned being a massive relief for those who have been watching their real incomes being eroded by inflation). But, steeply rising wages absent a commensurate rise in productivity are a challenge for firms to manage without passing on some of the cost, and are likely to see domestic core inflation pressures being stronger and more persistent than otherwise. That means there's a risk these large wage gains may not buy as much extra purchasing power as hoped. Figure 12 plots the close relationship between private sector labour cost inflation and the RBNZ's estimate of core non-tradables, which also hit a record in Q3. The causality runs both ways between wages and core inflation.

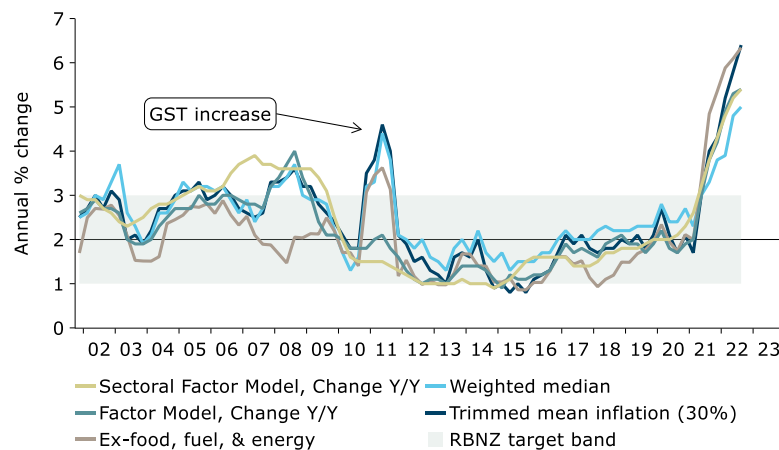
**Figure 12. Labour cost inflation and core domestic inflation**



Source: Stats NZ, RBNZ, Macrobond, ANZ Research

With core inflation measures also at record levels and showing no signs of turning around any time soon, the cost of living pressure that households are facing is likely to remain intense for some time yet (figure 13). And the RBNZ has no choice but to add to those pressures for indebted households by raising interest rates further.

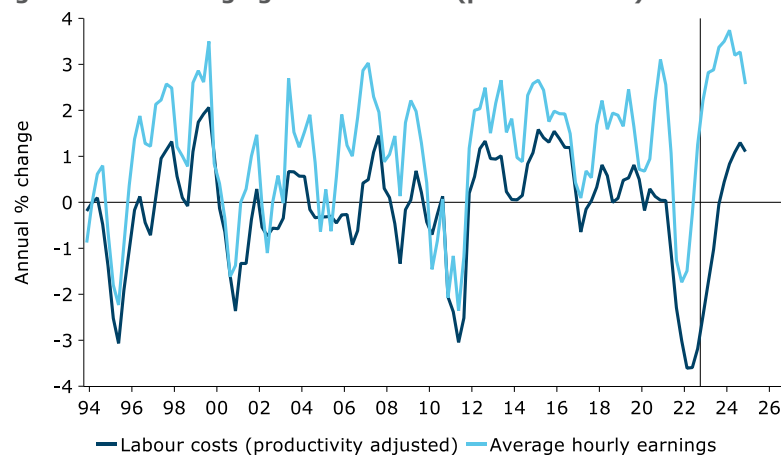
**Figure 13. Core inflation measures**



Source: Stats NZ, RBNZ, Macrobond, ANZ Research

But to finish on a positive note, private sector average hourly earnings are growing much faster than inflation, up 1.3% y/y on an inflation-adjusted basis in September (figure 14). And our forecast for a steady decline in CPI inflation from Q2's peak of 7.3%, if realised, implies real wage growth numbers will improve from here, possibly hitting a record high in early 2024. Just as wages lagged inflation on the way up, they are likely to lag inflation on the way down, giving households the chance to improve their real purchasing power after several years of seeing it eroded by too-high inflation.

**Figure 14. Real wage growth forecast (private sector)**



Source: Stats NZ, Macrobond, ANZ Research

While this note has focused on a more positive feature of New Zealand's current economic environment, that's not to suggest that things are 'easy' out there. Households aren't all 'average'. There's a distribution of wage outcomes, a distribution of wealth and a distribution of debt. Our economy is going to go through a tough time, especially over 2023 (as if the past few years haven't been difficult enough!). The Reserve Bank is battling to bring inflation down from unsustainably high levels, and while it's really important that they do this for the long-term health of the domestic economy and labour market, the bitter medicine of higher interest rates is still going to be a challenge for many households (especially heavily indebted ones) to endure. But our extraordinarily strong labour market means households are, on average, starting from a good place when it comes to income growth and job security.



## 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](mailto:sharon.zollner@anz.com)

General enquiries:  
[research@anz.com](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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](mailto: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.

**Brunel, 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](http://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](mailto:nzeconomics@anz.com), <http://www.anz.co.nz>