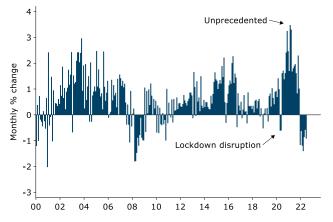
New Zealand Property Focus Hardening headwinds and soft landings

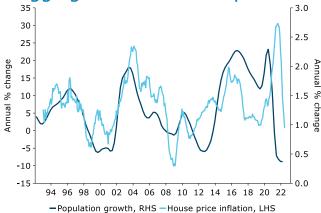


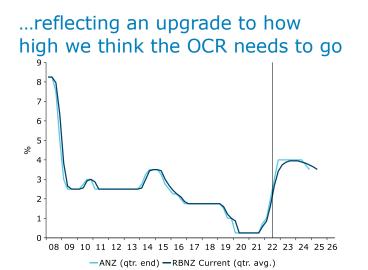


The housing market remains firmly in retreat, and it's still loosening



Slowing population growth is dragging on the demand pulse

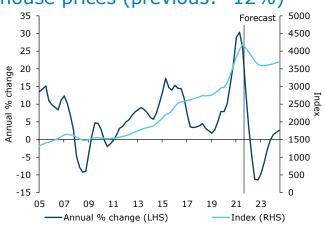




Slipping sales have pushed inventories to a 6-year high



We now expect a 15% fall in house prices (previous: -12%)



At least house prices to incomes show affordability is improving



Source: RBNZ, REINZ, Stats NZ, The Treasury, CoreLogic, Macrobond, Bloomberg, ICAP, ANZ Research This is not personal advice nor financial advice about any product or service. The opinions and research contained in this document are provided for information only, are intended to be general in nature and do not take into account your financial situation or goals. Please refer to the Important Notice.



Contact Sharon Zollr

Sharon Zollner or Miles Workman, for more details.

See page 10

INSIDE

At a glance	2
Housing Market Overview	4
Regional Housing Market Indicators	7
Mortgage Borrowing Strategy	8
Weekly Mortgage Repayment Table	9
Mortgage Rate Forecasts	9
Economic Forecasts	9
Important Notice	1:

ISSN 2624-0629

Publication date: 26 July 2022

Summary

Our monthly *Property Focus* publication provides an independent appraisal of recent developments in the residential property market.

Housing market overview

The NZ Q2 CPI figures suggest high underlying ("core") inflation may stick around longer than previously thought. And with the labour market still tightening (from already record-tight levels), the RBNZ has plenty of work to do in order to prevent a damaging wage-price spiral. We've added a further 0.5% points to our expectation for how high the OCR will need to go (now 4%), and that means higher mortgage rates – and more downward pressure on house prices – than otherwise. We've downgraded our house price forecast to reflect this, with a peak to trough decline of 15% now pencilled in (previously -12%). But forecasting uncertainty remains high. See our Market Overview.

Mortgage borrowing strategy

Floating mortgage rates have largely followed the OCR higher over the past month, up 45 basis points from our last edition. The average 1-year special rate offered by the major banks has been broadly stable, down 3 basis points to 5.33%. The 4- and 5-year rates are unchanged, but there has been some switching in the curve between 2 and 3 years: the 2-year is 16 basis points lower at 5.59%, while the 3-year is 15 basis points higher at 5.99%. With 136 basis points difference between the lowest point on the curve (6 months at 5.26%) and the highest (5 years at 6.62), the curve remains steeply upwardsloping, meaning fixing for longer is relatively expensive. However, that's not a recent development and the steepness is consistent with the broader risk that central banks (including the RBNZ) may need to be even more aggressive if inflation continues to surprise to the upside. See our Mortgage Borrowing Strategy.



Summary

The NZ Q2 CPI figures suggest high underlying ("core") inflation may stick around longer than previously thought. And with the labour market still tightening (from already record-tight levels), the RBNZ has plenty of work to do in order to prevent a damaging wage-price spiral. We've added a further 0.5% points to our expectation for how high the OCR will need to go (now 4%), and that means higher mortgage rates – and more downward pressure on house prices – than otherwise. We've downgraded our house price forecast to reflect this, with a peak to trough decline of 15% now pencilled in (previously -12%). But forecasting uncertainty remains high.

Are we (halfway) there yet?

The REINZ House Price Index (HPI) has fallen 6.6% from its peak in November 2021, with monthly declines ranging between -1.4% and -0.6% (figure 1, ANZ seasonal adjustment). Annual house price inflation in now running at +3.6% (on a three-month moving average basis); that's more than 25% pts slower than its recent peak. We think this measure will turn negative in August.

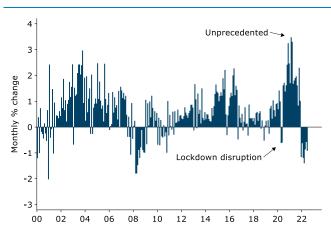
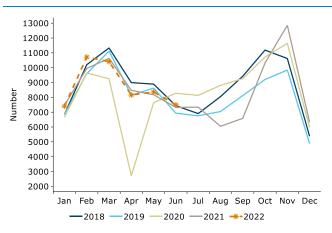


Figure 1. Monthly house price inflation (sa)

Meanwhile, indicators of market tightness continue to ease. New listings are back to their typical seasonal pattern (figure 2), but softening sales (figure 3) mean housing inventories are rising. Inventories are now at a 6-year high, and trending higher (figure 4). Unsurprisingly, the number of days it is taking to sell a house is also trending higher (figure 5, over page).

Combine slowing population growth (figure 6, over page), as negative net migration threatens to continue for a while yet, with a still-respectable level of residential investment (despite labour and materials shortages), and the resulting supplydemand balance suggests that when the market does find a floor, there could be significant limits to how much prices will lift again as the market recovers.

Figure 2. New listings each month



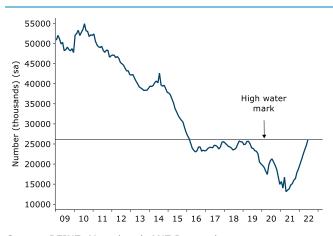
Source: RealEstate.co.nz, Macrobond, ANZ Research

Figure 3. House sales and prices



Source: REINZ, Macrobond, ANZ Research

Figure 4. Properties available for sale



Source: REINZ, Macrobond, ANZ Research

Source: REINZ, Macrobond, ANZ Research

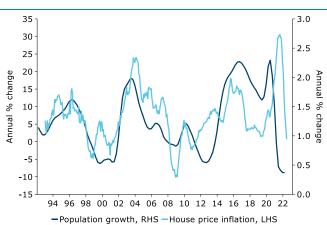


Figure 5. Number of days to sell a house



Source: REINZ, Macrobond, ANZ Research

Figure 6. Population growth and house prices



Source: Stats NZ, Macrobond, ANZ Research

All up, the suite of housing indicators we monitor is still very much on an easing trajectory, with no "floor" to speak of yet in sight. And it's not just the data telling us this; anecdotes from the coal face currently seem unified in suggesting the housing market is firmly in retreat.

That said, recent data hasn't been surprising us to the downside, relative to our forecasts. In fact, the average pace of monthly house price declines since November (around -1% per month), has been slightly smaller than the 1.1-1.2% declines we had pencilled in. Given the ridiculously high starting point for house prices, we'd say the correction to date has been relatively orderly. Meanwhile, however, headwinds to the medium-term outlook have only intensified of late, suggesting house price declines have further to go than we thought previously. And while we don't want to give the impression that we are able to accurately forecast the house price outlook to the nearest percentage point (no one has been able to consistently do that), we do need to acknowledge the higher interest rates outlook in our forecast.

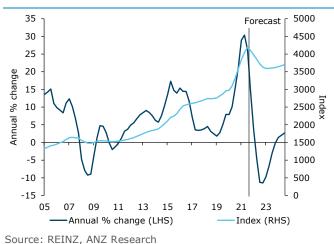
Higher OCR, lower house prices

It might sound a little strange, but the most important recent data for the housing market outlook was the Q2 CPI inflation release. That's because these data suggest underlying inflation pressures are stronger, and very likely more persistent, than we (or the RBNZ) previously thought. And with the labour market as tight as it currently is, and getting tighter, the pressure on the RBNZ to do more is intensifying. We now expect the RBNZ will continue to deliver 50bp hikes all the way to a peak of 4% by the end of the year. That's a full 50bps higher than our previous forecast OCR peak.

All else equal, (and looking through the ebbs and flows of wholesale rates markets), this means higherthan-otherwise mortgage rates, and therefore weaker-than-otherwise housing demand. Overall, we think our OCR call change is worth another 3%pts or so in terms of how much house prices are likely to fall, if it comes to pass, and are accordingly now forecasting a peak to trough decline of 15% (figure 7).

But as we've outlined numerous times before, house price forecasts are riddled with uncertainty at the best of times. Given the added degree of uncertainty around the economy right now, as interest rates go higher, inflation remains on a tear, and borders reopen, it's fair to say the housing market outlook could easily experience a sharper "correction" than we are forecasting. While a 15% fall in house prices may sound like a lot, it's coming off a circa 45% post-COVID gain. It can therefore be interpreted as very much a soft landing. Our forecast implies that prices will trough almost 25% above their prepandemic (December 2019) level. We continue to see significant downside risk to our forecast, but it would take a sharper deterioration in the labour market than we are expecting. The two are closely linked.





ANZ New Zealand Property Focus | July 2022



At least housing affordability is improving

From the perspective of how to go about improving housing affordability, a relatively soft landing in house prices combined with a labour market that's operating at its maximum sustainable level is about as good as it gets. It's not quick, but a rapid house price crash would take a lot of jobs with it, and thereby hit the income side of the affordability equation (with lots more ugly side-effects besides).

The tricky part for the RBNZ is laying the path for the labour market so it can travel from its current "too tight, too inflationary, not sustainable, and therefore susceptible to crash at some point" position to the Goldilocks zone. That's "maximum sustainable employment", defined by the RBNZ as "the highest use of labour resources that can be sustained over time without creating a sustained acceleration in inflation". And while that likely means a higher unemployment rate than currently, it also means less pressure on CPI inflation - which is currently well outpacing household income growth and sending households backwards in "real" terms. The challenge, of course, is to not oversteer, and send the labour market straight past Goldilocks and into a vat of cold, congealed porridge.

The ratio of house prices to household incomes is the best way to assess housing affordability, but there are a few different sources and cuts of the household income data that can feed into this calculation. We annualise median household weekly income, and grow this over the forecast horizon based on our forecast for hourly earnings.

We also have to move away from our preferred measure of house prices (the REINZ House Price Index (HPI), which is adjusted for the composition of houses sold) to the much more volatile median sale price, in order to get a sensible estimate. But as figure 8 shows, growth rates in the HPI and the median sale price do tend to trend together.

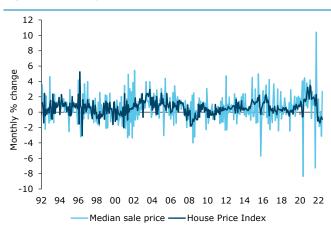


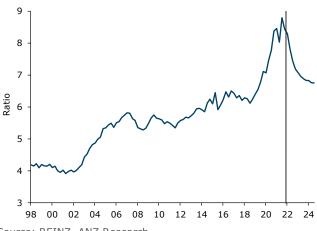
Figure 8. House price forecast

Regardless of the income or price measure you use, the change in the ratio tells much the same story: housing affordability deteriorated in the lead-up to the pandemic, but engaged the hyper-drive in the post-pandemic era. Fortunately, falling house prices and a tight labour market mean it's now on an improving trajectory. But how much will it improve?

Our forecast for a 15% fall in house prices alongside above-average growth in household incomes over the next couple of years (due to the tight labour market) sees the ratio of house prices to incomes dropping from a peak of almost 9 times income, to 6.75 times income by the end of the forecast. That's better, but still higher than the pre-pandemic read of around 6.5 times (which was already considered unaffordable).

There are obviously a huge number of variables on both the demand and supply side that will go into determining whether, and how, housing affordability continues to improve from there. But there's a pretty stark choice: house prices underperform relative to incomes over a long period (or more dramatically over a shorter period), or housing remains unaffordable for decades, with all the societal implications that brings.

Figure 9. Median house price to median household income



Source: REINZ, ANZ Research

All up, a housing market in retreat is a double-edged sword, depending on what side of the fence you sit: locked out, or hoping for a capital gain. It's particularly bitter for very recent first-home buyers who are seeing both their interest cost rise (on a high level of debt) and their house value drop below what they paid. But there are indirect economic implications of falling house prices too:

- lower demand for residential construction and durables consumption;
- lower demand for labour in the above industries;
- reduced household wealth and housing equity; and

Source: REINZ, ANZ Research



negative consumer and business sentiment implications.

These suggest it might be hard to achieve consecutive years of solid household income growth while house prices are falling. But if we are in for a hard landing in both housing and the broader economy, the still-high starting point suggests housing has a lot further to fall than aggregate incomes likely will.

But it's also worth noting that if we do see a harder landing in housing than we (or the RBNZ) expect, there is no guarantee that this will be enough to take the pressure off core CPI inflation. That's because once CPI inflation really gets going, it can have persistent implications on wage and price setting behaviour, causing high inflation to linger. If that were to happen, the RBNZ's job will be harder, and they may need to continue hiking even as the housing market softens more than expected. The inflation data and outlook will remain a key variable of interest for the housing market for a while yet!

Housing market indicators for June 2022 (based on REINZ data seasonally adjusted by ANZ Research)

-		-				•		
	Med	ian house pr	ice	House pri	ice index	# of	Monthly	Average
	Level	Annual % change	3-mth % change	Annual % change	3-mth % change	monthly sales	% change	days to sell
Northland	\$718,702	0.0	-6.7	8.9	-2.3	148	-2%	46
Auckland	\$1,169,415	0.7	-3.6	-1.5	-3.8	1,718	+0%	43
Waikato	\$849,072	14.3	0.2	6.5	-0.7	512	+10%	41
Bay of Plenty	\$922,273	8.7	-0.8	3.1	-2.1	307	-5%	53
Gisborne	\$650,480	2.6	-1.4	-1.2	-2.7	31	-24%	38
Hawke's Bay	\$719,393	-1.1	-4.7	-1.2	-2.7	151	-10%	61
Manawatu-Whanganui	\$588,597	-0.8	-0.4	-3.0	-3.6	227	-7%	48
Taranaki	\$600,366	-0.2	-1.9	8.2	0.6	131	-13%	38
Wellington	\$869,206	-4.0	-3.5	-12.1	-7.0	461	-8%	48
Tasman, Nelson & Marlborough	\$813,619	11.0	2.4			184	+0%	41
Canterbury	\$703,656	22.1	1.4	15.3	-1.0	839	-3%	33
Otago	\$761,207	13.5	-4.9	4.9	0.3	329	-2%	46
West Coast	\$299,467	4.0	-0.3	3.4	-1.8	40	+67%	28
Southland	\$453,389	6.2	1.3	7.3	-1.4	114	-5%	37
New Zealand	\$867,154	4.6	-2.9	0.9	-2.9	5,181	-1%	41



This is not financial advice about any product or service. The opinions and research contained in this document are provided for information only, are intended to be general in nature and do not take into account your financial situation or goals. Please refer to the Important Notice.

Summary

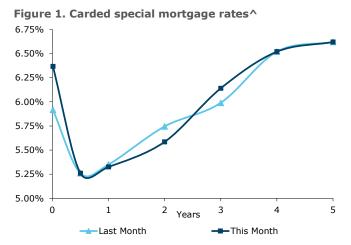
Floating mortgage rates have largely followed the OCR higher over the past month, up 45 basis points from our last edition. The average 1-year special rate offered by the major banks has been broadly stable, down 3 basis points to 5.33%. The 4- and 5-year rates are unchanged, but there has been some switching in the curve between 2 and 3 years: the 2-year is 16 basis points lower at 5.59%, while the 3-year is 15 basis points higher at 5.99%. With 136 basis points difference between the lowest point on the curve (6 months at 5.26%) and the highest (5 years at 6.62), the curve remains steeply upward-sloping, meaning fixing for longer is relatively expensive. However, that's not a recent development and the steepness is consistent with the broader risk that central banks (including the RBNZ) may need to be even more aggressive if inflation continues to surprise to the upside.

Compared to some of our recent editions, changes to average fixed mortgage rates offered by the "big-4" banks have been relatively benign this month. However, floating rates, being very heavily influenced by changes in the OCR, are up 45 basis points to 6.37%. This is clearly an "outsized" move for a single month, but it's also exactly what you'd expect to see when the RBNZ is hiking so aggressively - they lifted the OCR by 50 basis points in July. Broadly, however, the signalling from the RBNZ this month regarding how high they think they may need to take the OCR over the next few meetings was unchanged. That means it wasn't a catalyst for an adjustment in forward-looking wholesale ("swap") markets, off which fixed mortgage rates are priced. In other words, market pricing for how high the OCR will need to go has been relatively stable over the past month.

We, on the other hand, have revised up our expectation for how high the OCR will peak. We now expect 50 basis point hikes by the RBNZ at every meeting from here to November – that's an additional 50 basis points overall that'll see the OCR peak at 4% in November (previous forecast peak: 3.5%).

Last month, reflecting the fact that our previous forecast for a peak OCR of 3.5% was a decent clip below market pricing, we were able to offer some consolation to borrowers in that the market looked a little overcooked, suggesting there was less scope for significant further rate increases. However, with our updated, higher OCR call, risks are now looking more balanced. That said, stepping back to consider the more extreme risks around the rates outlook (ie more than 50 basis points or so), we find ourselves in the same boat we've been in for some time now. On the one hand, economic activity indicators are looking wobblier by the month, suggesting that the economy could be heading for a hard landing that would see labour demand weaken, taking the inflation pulse and the need for more OCR hikes down with it. But on the other hand, inflation indicators continue to surprise to the upside, and if the RBNZ doesn't get on top of this soon, high inflation may become a more persistent and damaging feature of the economy, necessitating even more aggressive hikes further down the track. Rightly, the RBNZ is more concerned with the risk of inflation spiralling out of control right now. But with monetary policy clearly working, it's hard to see this risk dominating forever.

As has been the case for a while now, while the ship to lock in low sailed a long time ago, some borrowers may still feel that despite the steep mortgage curve, it's worth paying a bit more for certainty in what's ultimately a very uncertain economic backdrop. Conversely, the materialisation of deflationary hardlanding risks could see borrowers regretting that decision in short order. Table 1 outlines the various break-evens (ie where rates would have to be in the future to make fixing today a neutral decision from a pure cost perspective), and is a good starting point for anyone looking to weigh up the risks.





	Breakevens for 20%+ equity borrowers									
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs					
Floating	6.37%									
6 months	5.26%	5.39%	6.21%	5.48%	6.97%					
1 year	5.33%	5.80%	5.85%	6.23%	7.25%					
2 years	5.59%	6.01%	6.55%	6.86%	7.46%					
3 years	6.14%	6.51%	6.92%	7.05%	7.31%					
4 years	6.52%	6.73%	6.94%							
5 years	6.62% #Average of "big four" banks									

^ Average of carded rates from ANZ, ASB, BNZ and Westpac.

Source: interest.co.nz, ANZ Research

Key forecasts

Weekly mortgage repayments table (based on 25-year term)

Mortgage Rate (%)														
	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	7.75
200	256	263	270	276	283	290	297	304	311	319	326	333	341	348
250	320	329	337	345	354	363	371	380	389	398	407	417	426	435
300	385	394	404	415	425	435	446	456	467	478	489	500	511	522
350	449	460	472	484	496	508	520	532	545	558	570	583	596	610
400	513	526	539	553	566	580	594	608	623	637	652	667	682	697
(000 \$ 500	577	592	607	622	637	653	669	684	701	717	733	750	767	784
0 \$ 500	641	657	674	691	708	725	743	761	778	797	815	833	852	871
Size Size	705	723	741	760	779	798	817	837	856	876	896	917	937	958
ല്ല 600	769	789	809	829	850	870	891	913	934	956	978	1,000	1,022	1,045
Mortga Mortga Mortga	833	854	876	898	920	943	966	989	1,012	1,036	1,059	1,083	1,108	1,132
o ⊻ 700	897	920	944	967	991	1,015	1,040	1,065	1,090	1,115	1,141	1,167	1,193	1,219
750	961	986	1,011	1,036	1,062	1,088	1,114	1,141	1,168	1,195	1,222	1,250	1,278	1,306
800	1,025	1,052	1,078	1,105	1,133	1,160	1,188	1,217	1,246	1,274	1,304	1,333	1,363	1,393
850	1,089	1,117	1,146	1,174	1,204	1,233	1,263	1,293	1,323	1,354	1,385	1,417	1,448	1,480
900	1,154	1,183	1,213	1,244	1,274	1,306	1,337	1,369	1,401	1,434	1,467	1,500	1,534	1,567
950	1,218	1,249	1,281	1,313	1,345	1,378	1,411	1,445	1,479	1,513	1,548	1,583	1,619	1,655
1000	1,282	1,315	1,348	1,382	1,416	1,451	1,486	1,521	1,557	1,593	1,630	1,667	1,704	1,742

Mortgage rate projections (historic rates are special rates; projections based on ANZ's wholesale rate forecasts)

		Actual		Projections						
Interest rates	Dec-21	Mar-22	Mar-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Floating Mortgage Rate	4.9	5.1	5.9	6.9	8.0	8.1	8.1	8.1	8.1	8.1
1-Yr Fixed Mortgage Rate	3.6	3.9	5.1	5.5	5.6	5.6	5.6	5.5	5.4	5.3
2-Yr Fixed Mortgage Rate	4.3	4.5	5.6	5.6	5.8	5.6	5.5	5.4	5.4	5.3
5-Yr Fixed Mortgage Rate	4.9	5.1	6.3	6.8	6.4	6.2	6.1	6.0	6.0	5.9

Source: RBNZ, ANZ Research

Economic forecasts

		Actual		Forecasts						
Economic indicators	Sep-21	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23
GDP (Annual % Chg)	-0.2	3.1	1.2	0.3	4.8	2.7	3.4	2.0	1.7	1.0
CPI Inflation (Annual % Chg)	4.9	5.9	6.9	7.3(a)	7.0	6.4	5.3	4.4	3.3	2.8
Unemployment Rate (%)	3.3	3.2	3.2	2.9	2.9	2.9	3.0	3.2	3.3	3.4
House Prices (Quarter % Chg)	5.3	3.7	-2.3	-2.9	-3.2	-3.5	-2.5	-1.0	0.1	0.2
House Prices (Annual % Chg)	30.4	26.2	14.1	3.6	-4.7	-11.3	-11.4	-9.7	-6.6	-3.1
Interest rates	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24

Interest rates	Dec-21	Mar-22	Jun-22	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24
Official Cash Rate	0.75	1.00	2.00	3.00	4.00	4.00	4.00	4.00	4.00	4.00
90-Day Bank Bill Rate	0.97	1.61	2.86	3.93	4.10	4.10	4.10	4.10	4.10	4.10
10-Year Bond	2.39	3.22	3.86	4.25	4.00	4.00	3.75	3.75	3.75	3.75

Source: ANZ Research, Statistics NZ, RBNZ, REINZ



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



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



Miles Workman Senior Economist

Macroeconomic forecast coordinator, fiscal policy, economic risk assessment and credit developments.

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

Follow ANZ Research @ANZ_Research (global)



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



Finn Robinson Economist

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

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

Last updated: 22 June 2022

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

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

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

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

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

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

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

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

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

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

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

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

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

Country/region specific information: Unless stated otherwise, this document is distributed by Australia and New Zealand Banking Group Limited (ANZ).

Australia. ANZ holds an Australian Financial Services licence no. 234527. For a copy of ANZ's Financial Services Guide please click here or request from your ANZ point of contact.

Brazil. This document is distributed on a cross border basis and only following request by the recipient.

Brunei, India, Japan, Kuwait, Malaysia, Switzerland, Taiwan. This document is distributed in each of these jurisdictions by ANZ on a cross-border basis.

Cambodia. The information contained in this document is confidential and is provided solely for your use upon your request. This does not constitute or form part of an offer or solicitation of any offer to engage services, nor should it or any part of it form the basis of, or be relied in any connection with, any contract or commitment whatsoever. ANZ does not have a licence to undertake banking operations or securities business or similar business, in Cambodia. By requesting financial services from ANZ, you agree, represent and warrant that you are engaging our services wholly outside of Cambodia and subject to the laws of the contract governing the terms of our engagement.

Canada. This document is general information only 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. **India**. If this document is received in India, only you (the specified recipient) may print it provided that before doing so, you specify on it your name and place of printing.

Macau. Click here to read the disclaimer for all jurisdictions in Mandarin. 溴门. 点击此处阅读所有司法管辖区的免责声明的中文版。 Myanmar. This document is intended to be general and part of ANZ's customer service and marketing activities when implementing its functions as a licensed bank. This document is not Securities Investment Advice (as that term is defined in the Myanmar Securities Transaction Law 2013).

New Zealand. This material is for information purposes only and is not financial advice about any product or service. We recommend seeking financial advice about your financial situation and goals before acquiring or disposing of (or not acquiring or disposing of) a financial product.

Important notice

Oman. ANZ neither has a registered business presence nor a representative office in Oman and does not undertake banking business or provide financial services in Oman. Consequently ANZ is not regulated by either the Central Bank of Oman or Oman's Capital Market Authority. The information contained in this document is for discussion purposes only and neither constitutes an offer of securities in Oman as contemplated by the Commercial Companies Law of Oman (Royal Decree 4/74) or the Capital Market Law of Oman (Royal Decree 80/98), nor does it constitute an offer to sell, or the solicitation of any offer to buy non-Omani securities in Oman as contemplated by Article 139 of the Executive Regulations to the Capital Market Law (issued vide CMA Decision 1/2009). ANZ does not solicit business in Oman and the only circumstances in which ANZ sends information or material describing financial products or financial services to recipients in Oman, is where such information or material has been requested from ANZ and the recipient understands, acknowledges and agrees that this document has not been approved by the CBO, the CMA or any other regulatory body or authority in Oman. ANZ does not market, offer, sell or distribute any financial or investment products or services in Oman and no subscription to any securities, products or financial services may or will be consummated within Oman. Nothing contained in this document is intended to constitute Omani investment, legal, tax, accounting or other professional advice.

People's Republic of China (PRC). This document may be distributed by either ANZ or Australia and New Zealand Bank (China) Company Limited (ANZ China). Recipients must comply with all applicable laws and regulations of PRC, including any prohibitions on speculative transactions and CNY/CNH arbitrage trading. If this document is distributed by ANZ or an Affiliate (other than ANZ China), the following statement and the text below is applicable: No action has been taken by ANZ or any affiliate which would permit a public offering of any products or services of such an entity or distribution or re-distribution of this document in the PRC. Accordingly, the products and services of such entities are not being offered or sold within the PRC by means of this document or any other document. This document may not be distributed, re-distributed or published in the PRC, except under circumstances that will result in compliance with any applicable laws and regulations. If and when the material accompanying this document relates to the products and/or services of ANZ China, the following statement and the text below is applicable: This document is distributed by ANZ China in the Mainland of the PRC. Peru. The information contained in this document has not been, and will not be, registered with or approved by the Peruvian Superintendency of the Securities Market (Superintendencia del Mercado de Valores, SMV) or the Lima Stock Exchange (Bolsa de Valores de Lima, BVL) or under the Peruvian Securities Market Law (Legislative Decree 6 861), and will not be subject to Peruvian laws applicable to public offerings in Peru. To the extent this information refers to any securities or interests, it should be noted the securities or interests may not be offered or sold in Peru, except if (i) such securities or interests were previously registered with the Peruvian Superintendency of the Securities Market, or (ii) such offering is considered a private offering in Peru under the securities laws and regulation of Peru. Qatar. This document has not been, and will not be:

- lodged or registered with, or reviewed or approved by, the Qatar Central Bank (QCB), the Qatar Financial Centre (QFC) Authority, QFC Regulatory Authority or any other authority in the State of Qatar (Qatar); or
- authorised or licensed for distribution in Qatar, and the information contained in this document does not, and is not intended to, constitute a public offer or other invitation in respect of securities in Qatar or the QFC.
- The financial products or services described in this document have not been, and will not be:
- registered with the QCB, QFC Authority, QFC Regulatory Authority or any other governmental authority in Qatar; or
- authorised or licensed for offering, marketing, issue or sale, directly or indirectly, in Qatar.

Accordingly, the financial products or services described in this document are not being, and will not be, offered, issued or sold in Qatar, and this document is not being, and will not be, distributed in Qatar. The offering, marketing, issue and sale of the financial products or services described in this document and distribution of this document is being made in, and is subject to the laws, regulations and rules of, jurisdictions outside of Qatar and the QFC. Recipients of this document must abide by this restriction and not distribute this document in breach of this restriction. This document is being sent/issued to a limited number of institutional and/or sophisticated investors (i) upon their request and confirmation that they understand the statements above; and (ii) on the condition that it will not be provided to any person other than the original recipient, and is not for general circulation and may not be reproduced or used for any other purpose. **Singapore.** This document is distributed in Singapore by ANZ solely for the information of "accredited investors", "expert investors" or (as the case may be) "institutional investors" (each term as defined in the Securities and Futures Act Cap. 289 of Singapore). ANZ is licensed in Singapore under the Banking Act Cap. 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**). 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". 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 are available for mus 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