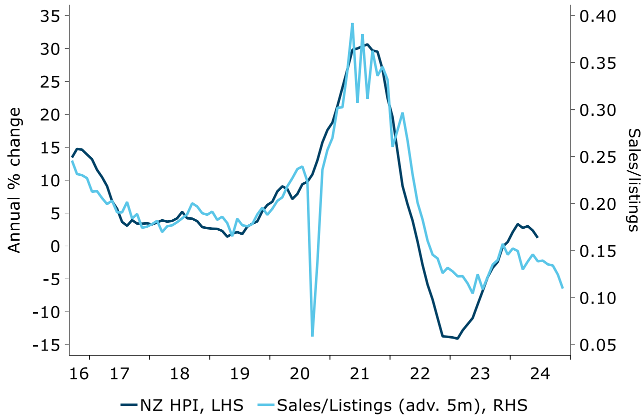
New Zealand Property Focus

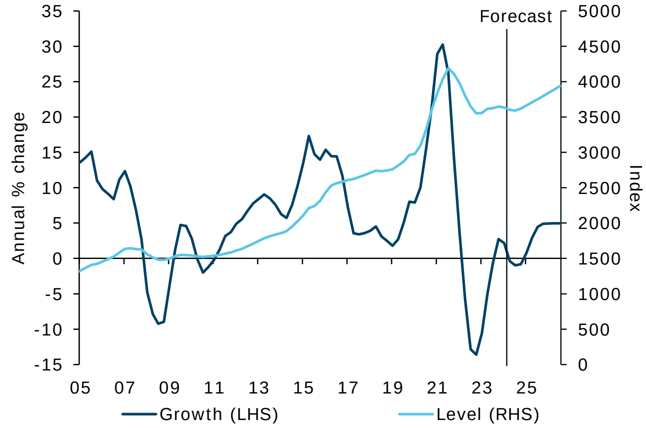
Crossing the Tasman

At a glance

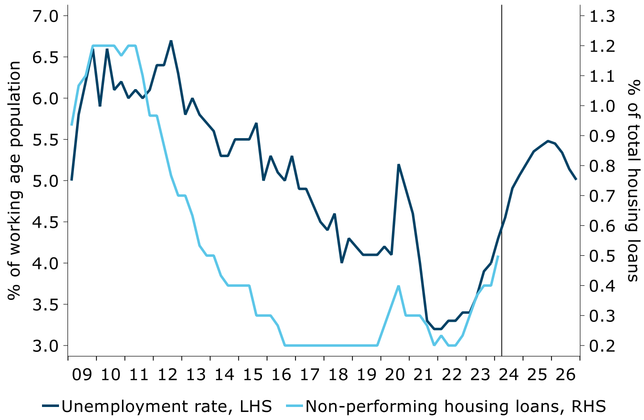
Relative supply and demand dynamics are pointing south.



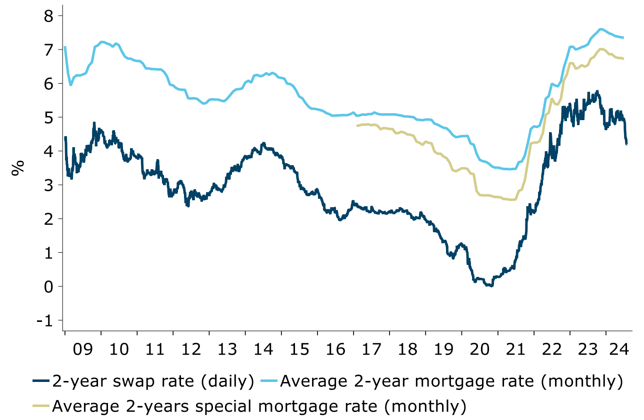
We now expect house prices to contract 1% over 2024...



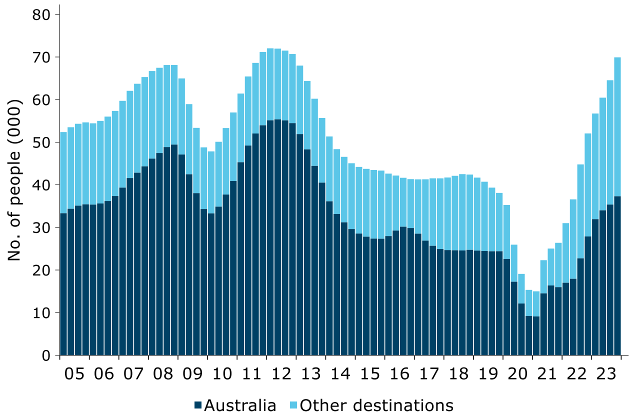
...as the labour market softens...



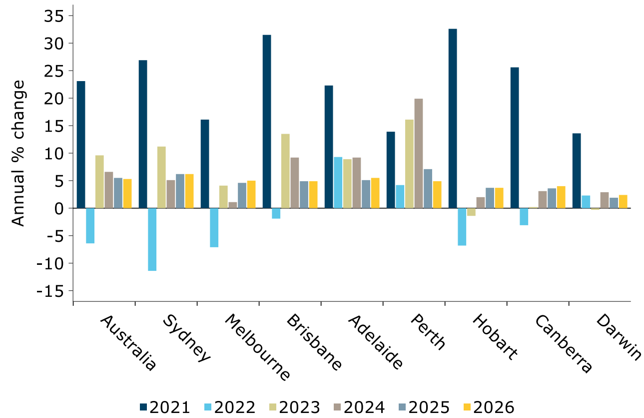
...despite falling interest rates.



As more kiwis make the move across the Tasman...



...we compare Australia's relatively robust housing market to NZ's.



Source: REINZ, Stats NZ, RBNZ, realestate.co.nz, RBA, CoreLogic Australia, Bloomberg, Macrobond, 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

Miles Workman, Sharon Zollner, or David Croy for more details.

See page 18

INSIDE

ISSN 2624-0629

Publication date: 30 July 2024

Summary

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

Property Focus

Economic data releases relating not only to the housing market but also the broader economy have been surprisingly weak over the past month or two. And that significantly raises the odds that the RBNZ has done enough to tame CPI inflation and can therefore start easing monetary conditions sooner than previously expected. We have brought forward our expectation for the first OCR cut to November (previously February), and would characterise risks as skewed to earlier than that, even. But when it comes to what this might mean for the housing outlook, it's important to remember the "why". Rates are expected to drop earlier because the economy is weaker than expected. And given there's still residual softness to flow through to the labour market, the subdued outlook for household incomes, job security, and accordingly, the appetite to borrow is likely to contain any near-term resurgence in house prices. Accordingly, we've downgraded our near-term house price forecast, and now expect a 1% contraction in prices over 2024 (previous: +1%). However, it's largely a timing story insofar as the weaker starting point means more scope for a recovery over 2025 as mortgage rates drop. See the Property Focus section.

Feature Article: Crossing the Tasman

New Zealand citizen departures to Australia are picking up sharply as the local economy underperforms. With so many kiwis jumping the ditch, it's worth asking what kind of housing market they might be jumping into. This month we open that can of worms to investigate that very question. While we don't get all the way to the bottom of the can (this is a feature article, not a book), we discover a few interesting differences. And in terms of the relative housing outlooks, it appears that Australian house price inflation is set to outpace that in New Zealand for a little while yet. See this month's Feature Article.

Mortgage Borrowing Strategy

Mortgage rates have fallen materially over the past month, taking 1yr rates (on average across the main banks) below 7%, and 2-5yr rates below 6.50%. These moves follow even larger moves in wholesale interest rates, which have been driven lower by financial market expectations of just over 200bp of OCR cuts by the end of 2025. Our OCR forecasts aren't quite as aggressive as that (we expect 200bp of cuts too, but starting in November rather than next month or in October, as markets are banking on), but either way, we are confident that wholesale rates will be much lower in a year's time. That's good news for borrowers, especially those who only fixed for 6 months or a year at their last rollover, or who have a legacy fixed rate rolling off soon. With larger falls in store, we think it still makes sense to consider fixing for a shorter period even though it costs a little more now, to save more money later. See our Mortgage Borrowing Strategy.

.

Property Focus

Summary

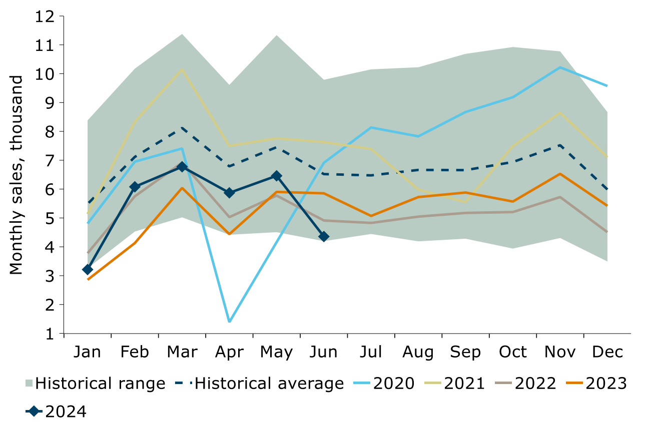
Economic data releases relating not only to the housing market but also the broader economy have been surprisingly weak over the past month or two. And that significantly raises the odds that the RBNZ has done enough to tame CPI inflation and can therefore start easing monetary conditions sooner than previously expected. We have brought forward our expectation for the first OCR cut to November (previously February), and would characterise risks as skewed to earlier than that, even. But when it comes to what this might mean for the housing outlook, it's important to remember the "why". Rates are expected to drop earlier because the economy is weaker than expected. And given there's still residual softness to flow through to the labour market, the subdued outlook for household incomes, job security, and accordingly, the appetite to borrow is likely to contain any near-term resurgence in house prices. Accordingly, we've downgraded our near-term house price forecast, and now expect a 1% contraction in prices over 2024 (previous: +1%). However, it's largely a timing story insofar as the weaker starting point means more scope for a recovery over 2025 as mortgage rates drop.

Chilly as

The REINZ house price index contracted 0.3% m/m in June, weaker than our expectation for a broadly flat print. Not only is the starting point for house prices weaker; indicators of market tightness have generally softened too:

- Sales fell to their second-lowest level for this time of year (in data going back to the early 1990s).

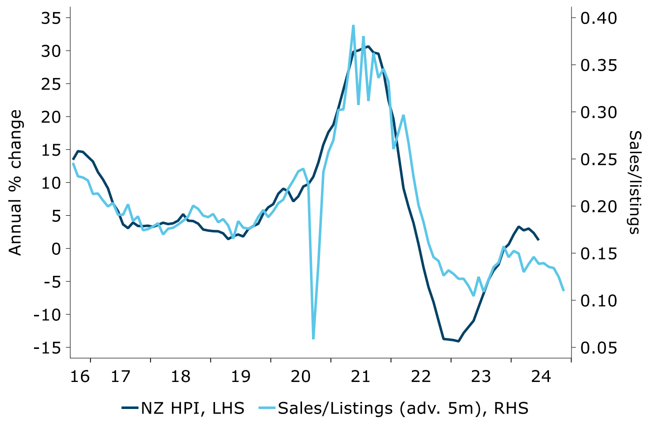
Figure 1. Unadjusted sales versus range from 1992



Source: REINZ, Macrobond, ANZ Research

- Combining that with new listings holding up, the sales-to-listings ratio drifted lower, suggesting weak price momentum will persist for the remainder of the year.

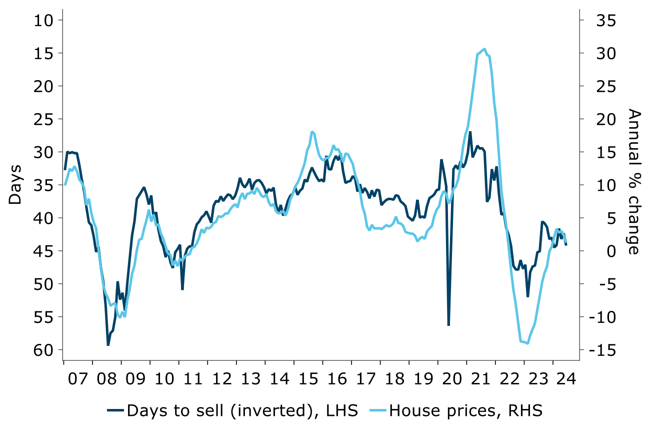
Figure 2. Sales to listings ratio



Source: REINZ, realestate.co.nz, Macrobond, ANZ Research

- The amount of time that properties are sitting on the market lifted by 2 days to 44, above historical average levels.

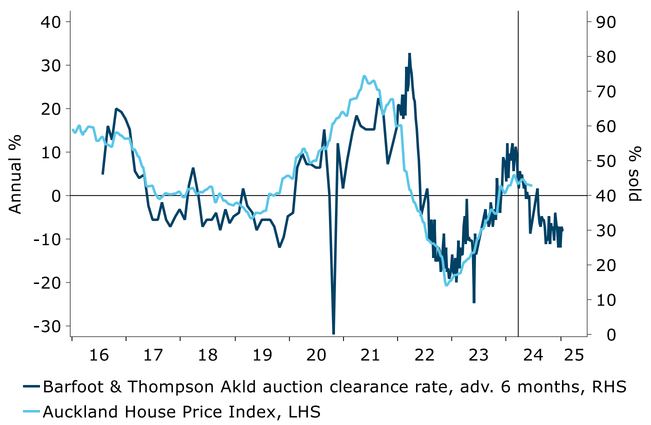
Figure 3. Days to sell and house price inflation



Source: REINZ, Macrobond, ANZ Research

- Auction clearance rates in Auckland suggest price momentum in our largest market is continuing to slip.

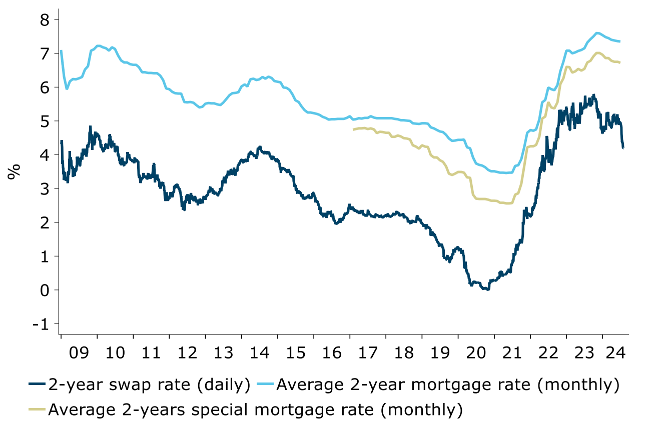
Figure 4. Auckland auction clearance rates and house prices



Source: REINZ, Barfoot & Thompson, interest.co.nz, Macrobond, ANZ Research

All in all, June housing data was very chilly, but there has also been a significant development this month that has the potential to provide some offset. The RBNZ's July Monetary Policy Review was seen as quite "dovish" by the market, causing wholesale swap rates and subsequently retail fixed mortgage rates to fall (see the Mortgage Borrower's Strategy section on page 16). Figure 5 shows the 2-year swap rate on a daily basis against the average 2-year mortgage rate data published by the RBNZ (note: the latter is lagged, coving up only until the end of June 2024).

Figure 5. 2-year swap rate vs 2-year mortgage



Source: RBNZ, Bloomberg, Macrobond, ANZ Research

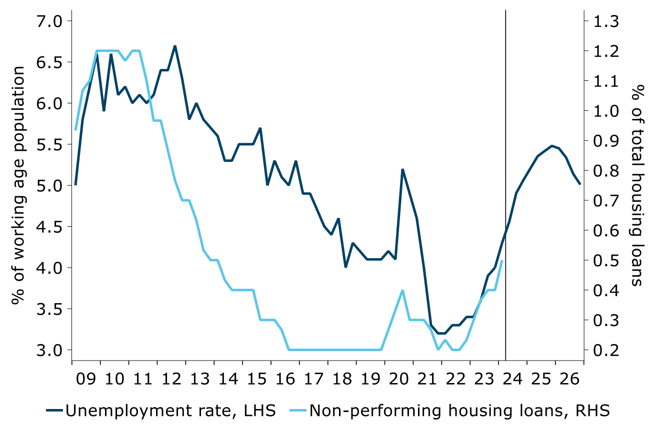
For our part, we also expect the RBNZ to start cutting the OCR earlier than previously thought. We are now pencilling in OCR cuts from November this year (previous: February 2025), and see the risks as skewed towards earlier (eg at the October Review) rather than later.

The catalyst for the change has been that timely economic data has deteriorated sharply of late, to a degree that suggests that risks around our GDP, labour market and therefore CPI inflation forecasts are skewed to the downside. In the past month alone:

- The June BNZ-Business NZ Performance of Manufacturing Index (PMI) fell 5.5 points further into contractionary territory, which suggests the slowdown in manufacturing is accelerating.
- The services equivalent (the PSI) has also fallen sharply, suggesting the downward momentum in broader activity has also started accelerating.
- Our consumer confidence survey is consistent with a very downbeat household sector that is watching its pennies and becoming more price sensitive, making it harder for firms to pass on cost increases and maintain their profit margins.
- Our Business Outlook corroborates that: firms are downbeat, and are in no mood to hire, offer large wage increases, nor invest.
- Job ads are telling the same story: they were down more than 8% m/m in June, with the number of applications per job continuing to rise.
- Meanwhile, monthly net migration figures for May fell sharply to a net inflow of 1,400 people, as departures pick up strongly. While these data are vulnerable to significant revision, they do suggest the migration cycle is turning faster than we or the RBNZ expected. And while the implications for CPI inflation are ambiguous (given migrants add to both demand and supply in the economy), the impacts on headline economic activity and housing demand are not. Big picture: the sharp turn in the migration cycle suggests New Zealand's economic performance versus other parts of the world is deteriorating rapidly – and it's not like other parts of the world are going gangbusters.
- Finally, as already discussed, the housing market appears to be drifting south (but certainly not falling off a cliff).

So, on the one hand, there appears to be a slightly brighter sliver of light at the end of the interest-rate tunnel, but on the other hand, the reason it's there is that the economy (and household sector) is looking a lot softer. This is the "be careful what you wish for" scenario that we've been flagging for quite some time (albeit in relatively modest form). And we think that on balance, the weaker economy is going to more than outweigh the impact of lower mortgage rates on house price momentum in the very near term.

Figure 6. Unemployment rate and non-performing loans



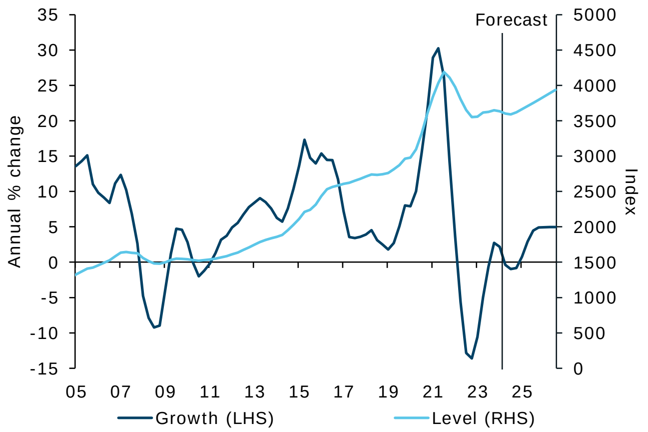
Source: RBNZ, Stats NZ, Macrobond, ANZ Research

Demonstrating that point, figure 6 shows the unemployment rate (including our forecast) alongside data from the RBNZ showing the share of non-performing housing loans. Clearly, things are not as bad out there as they were following the Global Financial Crisis, but these data do suggest more and more households are struggling to pay the mortgage as the labour market cools. All else equal, that suggests there will be a degree of reluctant house sales occurring because household income has taken a hit, and that could be driving growth in the supply of houses available for sale well before lower mortgage rates have time to start turning the tide on the demand side.

House price forecast downgraded, again

Reflecting the weaker starting point and weakness in the forward indicators, we have downgraded our house price forecast for 2024 a little further, and now expect a 1% y/y contraction by year-end, as opposed to a 1% rise. And some forward indicators suggest the balance of risks to this outlook remain skewed to weaker.

Figure 7. House price forecast



Source: REINZ, ANZ Research

Beyond 2024, we continue to see scope for house prices to recover, and have pencilled in a slightly sharper rebound in 2025 (+4.5% y/y vs 4% previously). We continue to see house price inflation stabilising at around 5% y/y over 2026, a bit below the 2010-2020 average of around 6.5% y/y and the 2000-2010 average of 7.5% y/y. But given house prices relative to incomes have continued to trend higher over the past few decades, the potential for house price inflation to persistently outpace household income growth appears limited. That is, affordability constraints are likely to limit upside potential for house prices, particularly now we are returning to a more normal inflation environment.

Housing market indicators for June 2024 (based on REINZ data seasonally adjusted by ANZ Research)

	Median house price			House price index		Sales		Average days to sell
	Level	Annual % change	3-mth % change	Annual % change	3-mth % change	# of monthly sales	Monthly % change	
Northland	$642,562	-8.7	-8.8	-2.4	-2.0	170	+11%	66
Auckland	$1,044,274	4.6	0.5	0.4	-1.2	1,380	-18%	45
Waikato	$730,824	-2.3	-2.4	-0.4	-1.0	495	-13%	52
Bay of Plenty	$779,478	-6.3	1.9	-1.6	-1.1	315	-12%	57
Gisborne	$623,888	6.5	6.7	1.8	0.5	29	-33%	48
Hawke's Bay	$676,159	-3.0	-3.3	1.8	0.5	184	+21%	47
Manawatu-Whanganui	$538,265	-1.2	1.7	1.4	0.0	226	-15%	46
Taranaki	$633,512	10.2	3.2	0.5	-0.9	133	-1%	37
Wellington	$794,152	1.8	0.6	1.4	-0.6	533	-9%	45
Tasman, Nelson & Marlborough	$666,487	-4.9	-4.6			166	-3%	47
Canterbury	$692,511	4.9	0.8	4.1	0.7	818	-19%	36
Otago	$640,197	-4.0	-3.7	6.1	0.8	308	-1%	39
West Coast	$316,582	-17.2	9.8	1.1	0.1	21	-57%	46
Southland	$443,936	3.8	1.3	3.8	1.5	112	-14%	37
New Zealand	$770,659	-1.3	-1.4	1.2	-0.4	4,861	-13%	44

Feature Article: Crossing the Tasman

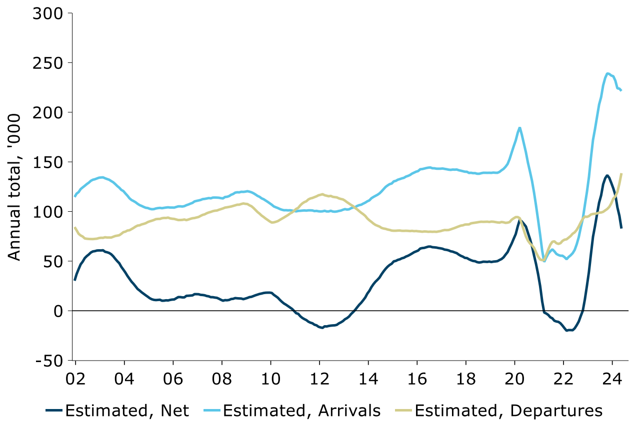
Summary

New Zealand citizen departures to Australia are picking up sharply as the local economy underperforms. With so many kiwis jumping the ditch, it's worth asking what kind of housing market they might be jumping into. This month we open that can of worms to investigate that very question. While we don't get all the way to the bottom of the can (this is a feature article, not a book), we discover a few interesting differences. And in terms of the relative housing outlooks, it appears that Australian house price inflation is set to outpace that in New Zealand for a little while yet.

Crossing the Tasman

New Zealand's high (but easing) net migration inflows net out near-record levels of arrivals with record-breaking levels of annual departures (in data that goes back a little over 20 years).

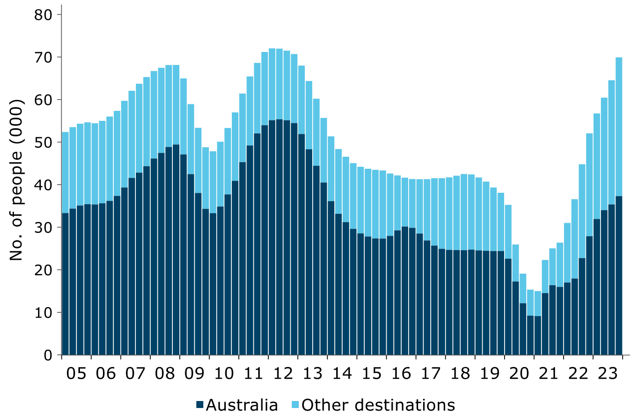
Figure 1. Net migration



Source: Stats NZ, Macrobond, ANZ Research

Of the almost 140k departures in the year to May, a little more than 85k were NZ citizens, and of those, more than half appear to be moving to Australia. That's well above pre-pandemic levels (figure 2), but still shy of the levels seen in 2011-12 when Australia's mining employment boom was in full swing.

Figure 2. New Zealand citizen long-term departures



Source: Stats NZ, ABS, Macrobond, ANZ Research

With so many Kiwis crossing the ditch, this month we look at the housing market they are landing in. Is it a case of out of the frying pan into the fire? We compare New Zealand's post-pandemic housing experience to Australia's and discuss some of the key differences between the two markets, as well as the relative outlooks.

But before we get stuck in, it's worth noting that the intricacies of local housing markets will always complicate cross-country comparisons. There are lots of differences between the New Zealand and Australian markets that could impact how they are likely to respond to changing economic conditions:

- Tax settings: At the federal level, Australia has a capital gains tax, where main residences are generally exempt. Stamp duties are also applicable at the time of purchase but vary between states and sometimes with the price paid. Conversely, New Zealand has the bright-line test, which is a "lite" version of a capital gains tax that's only applicable for particular property types bought and sold within a certain timeframe (currently two years). It's a short-term speculator tax.
- Credit markets, including banking regulation, bank risk appetite, and funding structure: This covers everything from how banks are funded, their credit ratings, capital requirements, and how this, and more, influences where credit gets allocated across the economy.
- Macroprudential policy: housing markets on both sides of the Tasman are impacted by a range of macroprudential policy tools implemented by the RBNZ and APRA in their respective economies.

- Zoning, planning and red tape: This is an extremely complex topic, with plenty of regional variation by local council. But ultimately, it's a key determinant to how responsive new housing supply is relative to demand.
- Economic structure: demographics, labour mobility (which is likely a function of housing affordability between cities), household income dynamics, capital intensity, productivity and technological adoption - basically, all the resource endowments and economic structures that determine how rich or poor an economy is and how income is divvied up.
- Culture, animal spirits, and opportunity costs: Is housing viewed as a good investment relative to others? How do short and long-run market expectations vary?

In addition to all of that, varying data sources and methodologies can also add a considerable degree of uncertainty to cross-country comparisons. Where available, we have used comparable data concepts. However, in most cases the data are produced by local providers, and there will therefore inevitably be some differences in collection methods.

Covering all the nuance in the differences between the two markets is outside the scope of this feature article. Accordingly, we limit our focus to the post-pandemic housing market experience in each country and only skim the surface of some of the more structural differences.

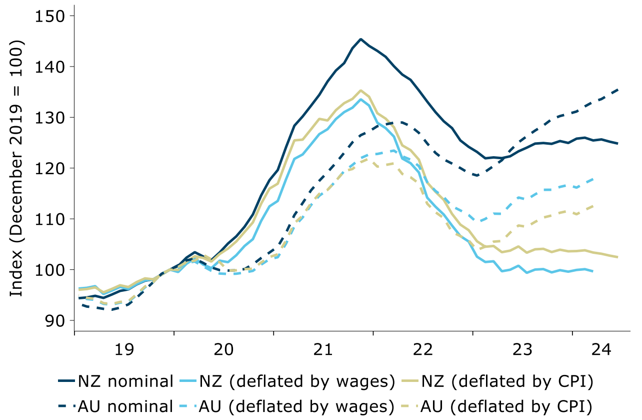
The post-pandemic experience

New Zealand's post-pandemic housing cycle was one for the history books. As it turns out, lockdowns did not end the economic cycle, as we, the RBNZ, and the Government thought they would at the time. And with a robust household sector (thanks in no small part to unemployment hitting unsustainably low levels), low mortgage rates, an easing in LVR restrictions, and a healthy dose of animal spirits (in this case fear of missing out) the housing market went bananas.

The REINZ house price index lifted around 45% between 2020-2021, and the price shift relative to both other prices in the economy and household incomes suggested the party couldn't go on forever. From their November 2021 peak, nominal house prices went into what we described at the time as a relatively orderly decline as monetary conditions tightened, falling 16% by February 2023, and since then (to June 2024) lifting by a modest 2.5%. Relative to many other prices in the economy, such as the CPI and wages (which have been growing this whole time), the fall in *real* house prices has practically taken things back to pre-pandemic levels.

In Australia, house price inflation started to accelerate about six months after New Zealand, with prices lifting by less (around 30% between December 2019 and mid-2022), but also then falling by less as monetary conditions tightened (down around 8% from their initial peak to early 2023). From early this year, divergence between the two economies has been characterised by house price momentum in Australia looking relatively robust, while price momentum in New Zealand has been traveling broadly sideways.

Figure 3. Nominal and real house prices (NZ vs AU)

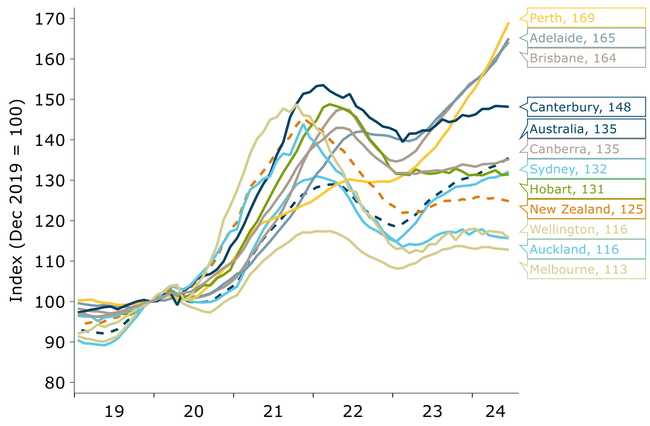


Source: REINZ, Stats NZ, ABS, CoreLogic, Macrobond, ANZ Research

As things stand currently, nominal house prices in New Zealand are around 25% above their pre-pandemic level, but measures of "real" house prices are roughly back to where they were (the wage-adjusted measure is almost bang on December 2019 levels, and the CPI-adjusted measure is about 2.5% higher). In Australia, nominal house prices are currently around 35% above their pre-pandemic level, and real prices are higher too (wage adjusted: +18%; CPI adjusted: +12%).

While there's always an element of regional divergence underlying the national-level housing cycle, the current situation is interesting. Figure 4 shows current house price momentum is substantially more diverse across the Australian capital cities compared to New Zealand's major cities. Perth, Adelaide and Brisbane prices are continuing to grow fairly robustly, Hobart and Melbourne prices have lost some momentum, and Sydney is somewhere in the middle. In New Zealand, momentum in Auckland and Wellington is soft, while prices in Canterbury are plateauing.

Figure 4. Main city house price inflation

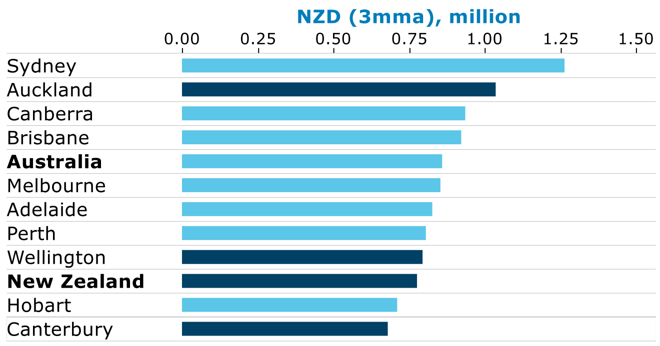


Source: REINZ, CoreLogic, Macrobond, ANZ Research

Compared to pre-pandemic levels (late 2019), nominal house prices in Perth (+69%), Adelaide (+65%) and Brisbane (+64%) are significantly higher. As we show in the following section, this reflects their relatively low starting point going into the pandemic. Conversely, house prices in Melbourne (+13%), Auckland (+16%) and Wellington (+16%) haven't eclipsed their pre-pandemic level by nearly as much, and it's probably no coincidence that these were some of the pricier cities before the pandemic. Interestingly, Wellington prices were among the first to really take off following the pandemic, possibly due to its proximity to all that fiscal stimulus. It's also interesting that despite Sydney's relatively high house prices prior to the pandemic, current house price momentum remains only slightly below that of the national-level index.

While house price indices are useful for gauging price momentum (as they tend to be less volatile and adjust for compositional changes in the market), their information content is limited. For example, a house price index won't tell us how much more or less money a buyer will need if they are moving from Auckland to Sydney or from Wellington to Canberra. Figure 5 shows the median sale price in these cities in NZD terms. Sydney is by far the most expensive, while Canterbury is the cheapest.

Figure 5. Median house price in NZD



Source: REINZ, CoreLogic, Macrobond, ANZ Research

As a rule of thumb, right now median prices are about 12.5% higher in Australia in NZD terms, but there is plenty of divergence between major cities. As table 1 shows, selling at the median level in Auckland and buying at the median level in Sydney you'll need to come up with an extra NZD230k or so. Selling in Canterbury and buying in Sydney would require almost an extra NZD600k. Going the other way would leave our hypothetical mover with a bit of cash to buy a new car or perhaps choose to have a smaller mortgage, which would likely be appropriate given relative average incomes tend to diverge between cities in a similar way to house prices.

Table 1. Median price gap between cities (June 2024)

from\to (000)	Sydney	Auckland	Canberra	Brisbane	Melbourne	Adelaide	Perth	Wellington	Hobart	Canterbury
Sydney	$0	$232	$328	$340	$423	$440	$452	$500	$574	$590
Auckland	-$232	$0	$96	$108	$191	$208	$219	$268	$341	$358
Canberra	-$328	-$96	$0	$12	$95	$112	$123	$172	$245	$262
Brisbane	-$340	-$108	-$12	$0	$83	$100	$111	$160	$234	$250
Melbourne	-$423	-$191	-$95	-$83	$0	$17	$28	$77	$150	$167
Adelaide	-$440	-$208	-$112	-$100	-$17	$0	$12	$60	$134	$150
Perth	-$452	-$219	-$123	-$111	-$28	-$12	$0	$49	$122	$139
Wellington	-$500	-$268	-$172	-$160	-$77	-$60	-$49	$0	$73	$90
Hobart	-$574	-$341	-$245	-$234	-$150	-$134	-$122	-$73	$0	$17
Canterbury	-$590	-$358	-$262	-$250	-$167	-$150	-$139	-$90	-$17	$0

Source: REINZ, CoreLogic Australia

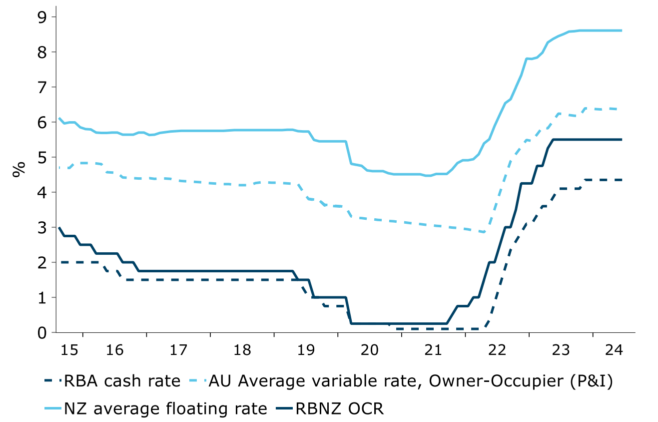
Drivers of house prices

Explaining the recent divergence between the two housing markets is no easy feat, particularly at the regional level, so we now put our regional lens aside and focus on nationwide comparisons.

The most logical place to start is mortgage rates. In response to the pandemic and lockdown measures, both the RBA and RBNZ slashed their policy rates, with the OCR held at 0.25% until late 2021, and the RBA's cash rate held at 0.1% until Q2 2022. Mortgage rates followed suit, and given both economies maintained relatively robust labour markets, this had obvious implications for housing demand. The RBNZ also suspended its LVR restrictions, which contributed to investor demand for property by easing credit conditions.

However, CPI inflation in both economies started to accelerate rapidly, and by Q2 2023 the OCR had been lifted to 5.5%, and by Q4 2023 the RBA had hiked to 4.35%.

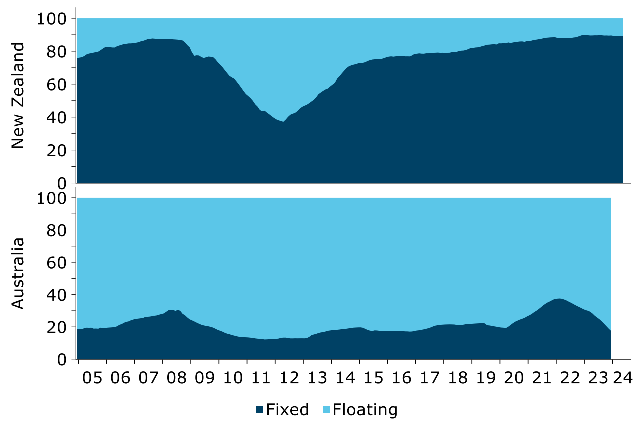
Figure 6. Floating mortgage and policy rates



Source: RBA, RBNZ, Macrobond, ANZ Research

Accordingly, the cost of servicing a mortgage changed abruptly. However, given Australia has a much larger share of its home loans on a floating rate than New Zealand (a little over 80% as at the end of 2023 vs around 10% in New Zealand), Australian households felt the change in policy stance sooner. That's despite Australia experiencing a "wave" of fixing from late 2020 which led to the fixed share almost doubling from 20% pre-pandemic to almost 40% by 2022. Since then, the share of fixed loans in Australia has returned to around 20%.

Figure 7. Percent of fixed vs floating mortgages

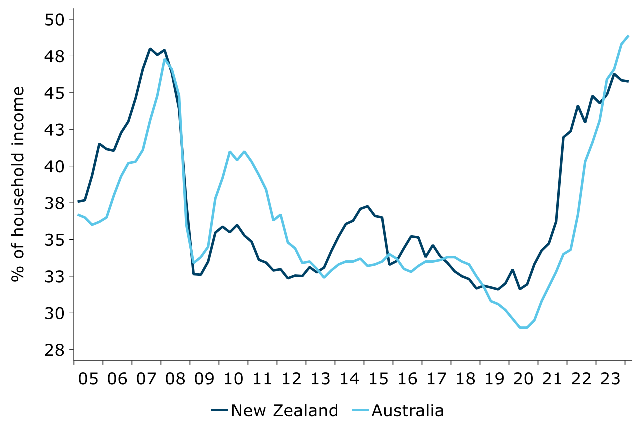


Source: RBA, APRA, RBNZ, Macrobond, ANZ Research

To compare what the change in mortgage rates did to mortgage serviceability for a new home loan, we need to account for these differences (note: changes in house prices and household income also impact this calculation, but have moved at a much slower pace than interest rates over the past couple of years). Figure 8 shows the share of income required to service a new loan assuming local economy characteristics:

- A loan based on the median sale price and assuming a 20% deposit,
- The average 1-year fixed rate for a Kiwi borrower and the average discounted variable rate for an Aussie,
- Principal and interest payments over a 25-year term expressed as a share of median household income.

Figure 8. Servicing a new mortgage



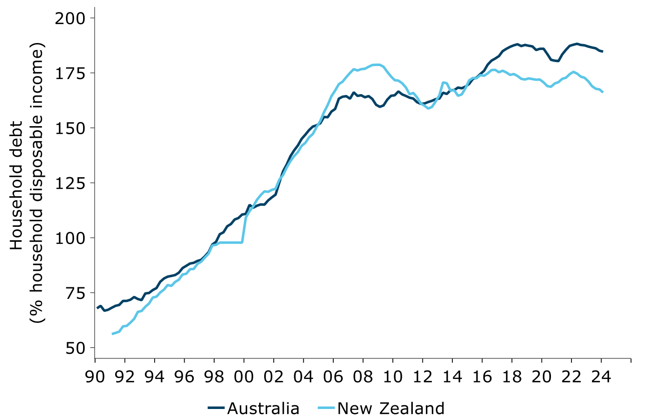
Source: CoreLogic Australia, ANU, REINZ, Stats NZ, Macrobond, ANZ Research

Interestingly, this comparison suggests the lift in income required to service a new mortgage in Australia was even sharper than in New Zealand.

Also, while New Zealand's serviceability had begun to plateau at an elevated level by the end of 2023, Australia's was still rising – driven by rising house prices, as opposed to mortgage rates and incomes. But overall, the fact that house prices have continued to rise in Australia suggests that Australian borrowers have been a little less deterred by higher rates than their New Zealand counterparts.

It's also worth noting that Australian households are more indebted than New Zealand households (figure 9). As shown in figure 6, this is likely in part explained by the fact that mortgage rates have tended to be a little lower in Australia. However, this also suggests Australians with existing debt will feel the squeeze a little more for each basis point of tightening delivered by the RBA.

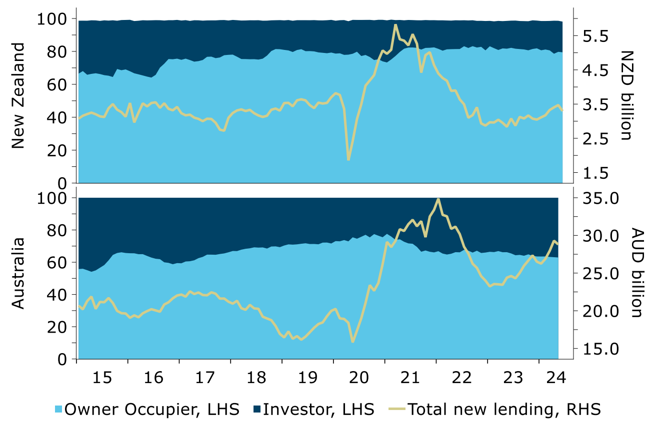
Figure 9. Household debt



Source: Stats NZ, RBA, Macrobond, ANZ Research

However, the composition of new lending is also a little different between the two economies. Investors account for around twice the share of new lending in Australia (37% of total new lending as of May 2024) than in New Zealand (around 19%, figure 10). And that leaves owner occupiers making up a relatively larger share of new lending in New Zealand. Could that be making a difference to overall housing demand?

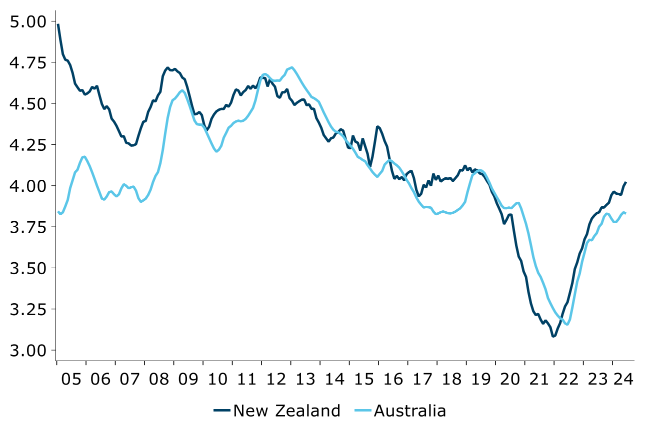
Figure 10. New lending by borrower type



Source: RBNZ, ABS, Macrobond, ANZ Research

The relative skew towards investor lending in Australia makes their rental market arguably more important for assessing overall debt serviceability and housing demand. However, we find little evidence in relative rental yields to suggest the two markets are fundamentally different from this perspective (figure 11). In fact, by our calculations, rental yields in New Zealand are marginally higher than they are in Australia.

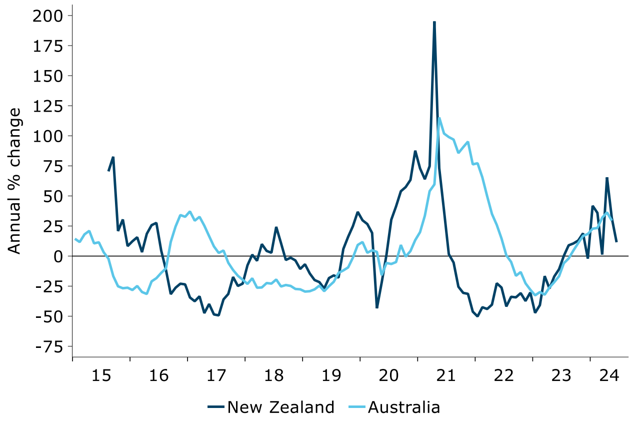
Figure 11. Rental yields



Source: REINZ, NZ Tenancy Service, CoreLogic Australia, Macrobond, ANZ Research

But if you squint really hard at figure 10, you can see that the investor share of lending in both markets has in fact been edging higher as rental yields in both markets lift. Figure 12 shows that growth in investor lending has been on a similar path in both markets since early 2023, but given Australia's larger investor market, the impact on overall housing credit growth will be twice as large in Australia. In other words, these data suggest that at least some of the recent divergence between momentum in the New Zealand and Australian housing markets is being driven by investors.

Figure 12. Investor lending



Source: RBNZ, ABS, Macrobond, ANZ Research

Migration cycles are important for housing demand too, and both New Zealand and Australia are currently experiencing large net migration inflows. Figure 13 shows that as a share of the total population, New Zealand's migration-induced population bump peaked marginally higher, but may be turning a little faster. Should New Zealand's migration cycle continue to turn south at a sharper rate than Australia's (which would be consistent with the relative economic performance of both economies), the impulse from net migration inflows to housing demand could be looking much weaker this side of the ditch by year end.

Figure 13. Annual migration share of total population

Source: Stats NZ, ABS, Macrobond, ANZ Research

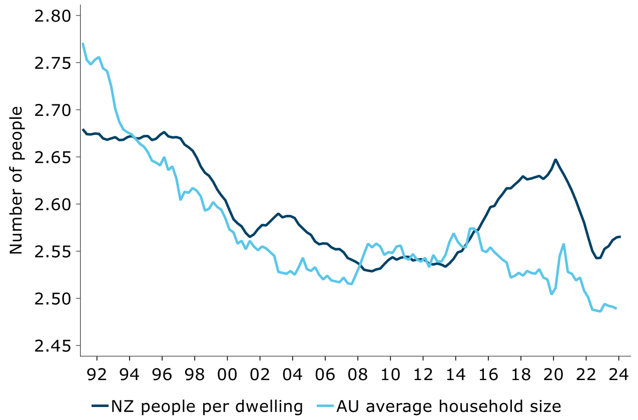
That said, we can't really discuss population-driven demand without weighing that against changes in housing supply.

Let's start by looking at the number of people per dwelling, or as they call it in the lucky country, "average household size". As at Q4 2023, there was an average of 2.49 people in each household in Australia. In New Zealand, that number is 2.56.

Between 2014 and just before we closed our borders for the pandemic, New Zealand was squeezing more and more people into each dwelling, suggesting the supply of housing was not keeping pace with demand. Then, we closed our borders, overstimulated the economy and the housing market, and residential construction activity went into hyperdrive. Combined with slower population growth at the time, that gave Kiwis slightly shorter average bathroom queues in the morning (albeit with less room to practise the dance moves given decreasing average new-build house sizes). Since then, the migration flood gates have been opened once again, and new dwelling construction has been contracting (more on this later), suggesting the more recent uptrend in people per dwelling in New Zealand could continue a while longer.

Australia, on the other hand, has seen a relatively steady decline in people per dwelling over the past few years. That might have something to do with both affordability and construction, which we touch on later.

Figure 14. People per dwelling/household size



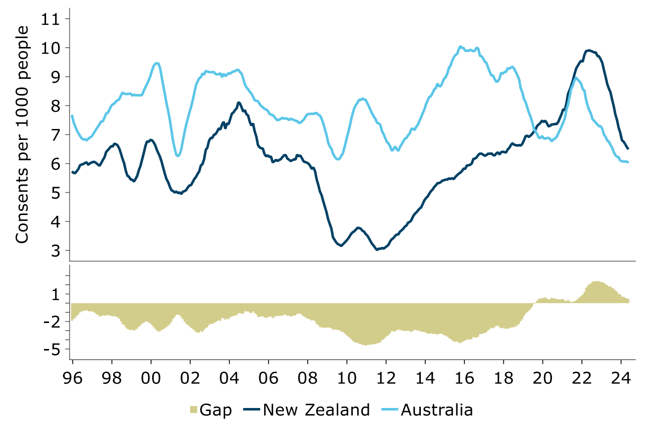
Source: Stats NZ, ABS, RBA, Macrobond, ANZ Research

At face value, the 0.07pt gap in people per dwelling may not sound like much, but let's assume for a minute that Australia's average household size suddenly jumped to match New Zealand's. The resident population of Australia is a touch under 27 million people, so if we forced them to snuggle up as much as their Kiwi counterparts, that would free up almost 300k dwellings, which is about two years' worth of Australia's historical average construction activity. In other words, whether enough houses are being built to prevent significant supply-demand imbalance in the longer run depends heavily on average household size. The more this trends lower, the more residential construction activity is required to maintain balance and contain prices (all else equal).

Construction

Speaking of construction, New Zealand's relatively larger swing in house prices has also been associated with a larger swing in consenting activity. Figure 15 shows that it's typical for Australia to issue more dwelling consents per capita than New Zealand. However, for the first time in data going back to 1996, the post-pandemic experience has been different, with New Zealand issuing more consents per capita than Australia. In part, New Zealand's recent upswing in consenting activity has been associated with an increasing share of multi-unit dwellings (particularly Auckland).

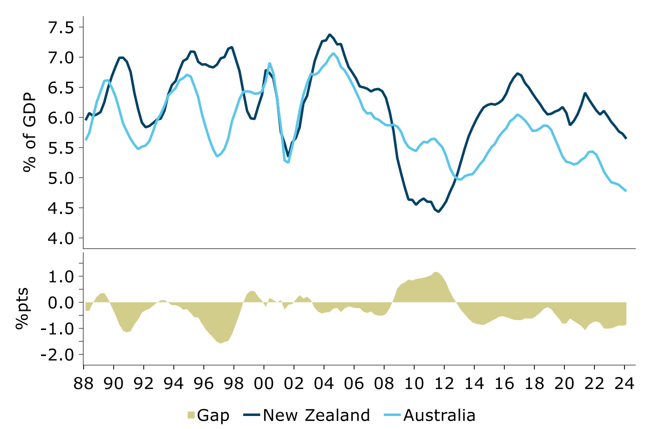
Figure 15. Residential dwelling consents per capita



Source: Stats NZ, ABS, Macrobond, ANZ Research

In terms of residential building activity as a share of the economy, New Zealand clearly suffered a deeper downturn than Australia following the Global Financial Crisis, but rebuilding following the Canterbury earthquakes, and greater housing intensification following the Auckland Unitary Plan and rules around medium-density development has seen residential investment as a share of GDP in New Zealand outstrip that in Australia over the past decade.

Figure 16. Real residential investment share of GDP

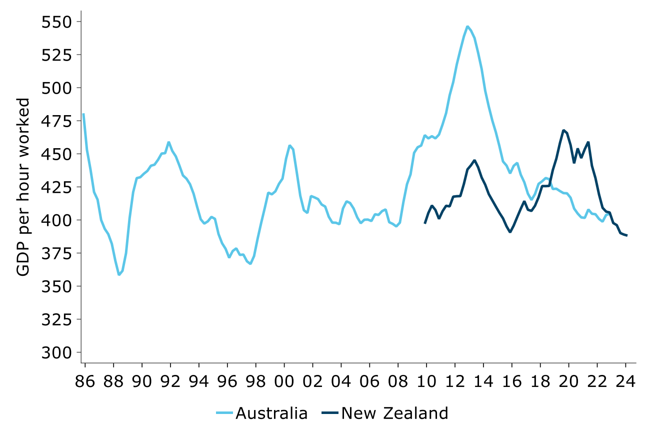


Source: Stats NZ, ABS, Macrobond, ANZ Research

That said, it's worth noting that Australia enjoys much larger GDP per capita than New Zealand, meaning despite the fact that residential investment is a larger share of the economy in New Zealand, it's lower on a per person basis (consistent with consents per capita). In other words, it uses a smaller proportion of Australia's total economic resource to build more dwellings per person.

That begs the question, is the Australian construction sector more productive than New Zealand's? To really get into the weeds of this question is beyond the scope of this feature, but figure 17 suggests that implied labour productivity in Australia's construction industry (expressed in NZD) is no higher than in New Zealand (note this includes non-residential construction). That implies that Australia's relatively smaller residential construction share of GDP is more likely to be a reflection of the relative size of the economy than a productivity story.

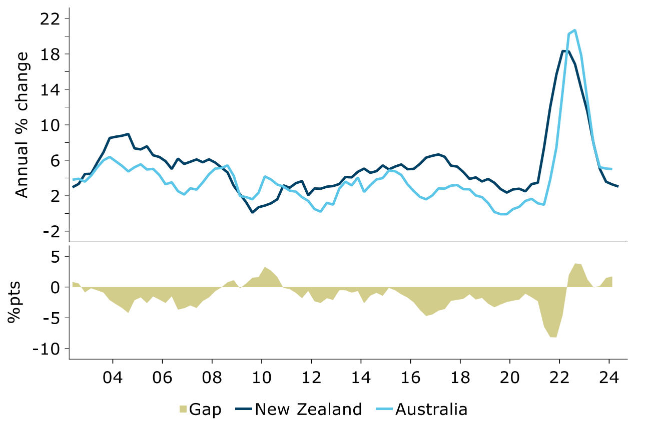
Figure 17. Construction output per hour worked



Source: Stats NZ, ABS, Macrobond, ANZ Research

Comparisons of relative construction cycles wouldn't be complete without taking a look at construction costs. Using the CPI measure suggests New Zealand has typically experienced higher construction cost inflation in recent years, and that while our post-pandemic surge peaked a little lower, it started earlier and was a bit slower to come down. In level terms, between Q4 2019 (pre-pandemic) and Q2 2024 the cost of building a new house as defined in the NZ CPI (the cost of building a house excluding the land) lifted almost 44%. In Australia, it's up about 37% as of Q1 2024.

Figure 18. Construction cost inflation



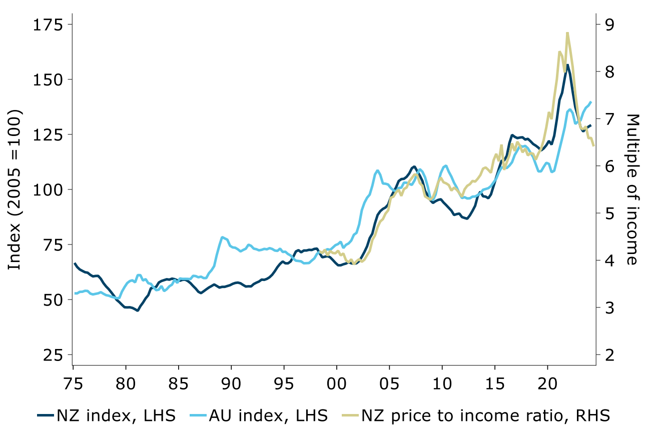
Source: Stats NZ, ABS, Macrobond, ANZ Research

Affordability

Turning to housing affordability, we've already covered the cost of servicing a new mortgage, noting that in Australia the share of income required is a touch higher than in New Zealand. But what about other affordability measures?

Here we look at Dallas Fed indexes of house prices as a multiple of incomes for both countries. This data tracks our calculations for house prices to incomes in New Zealand since the mid-1990s, but provides a lot more history than the housing data we typically use. It shows that while New Zealand's current house price to income ratio of around 6.5 times income is well below late-2021 levels (almost 9), it is still not affordable by historical standards. Go back to 1980s, when interest rates were much higher and rugby shorts were much shorter, and you only needed around three times income to buy a house. Australia's long-term trend of deteriorating affordability isn't very different.

Figure 19. House prices to income



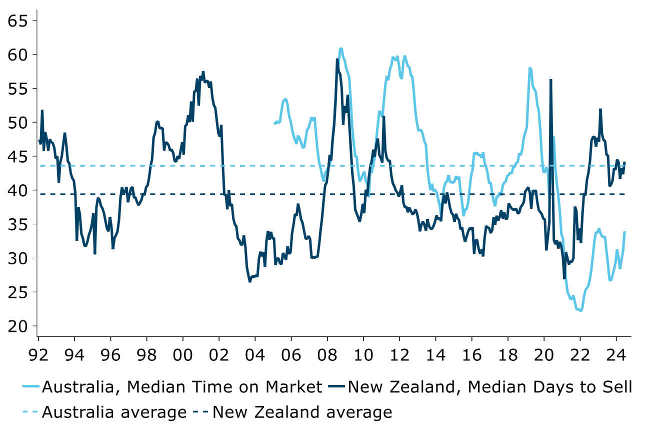
Source: Stats NZ, Dallas Fed, Macrobond, ANZ Research

More recently, New Zealand houses appear to have become slightly more affordable than Australia's as measured by house prices to income multiples, but the overall level remains nothing to celebrate.

Outlook and summary

As discussed, recent house price momentum has been a little stronger across the ditch than in New Zealand of late, and it's likely that this dynamic will persist for a little while yet. That's certainly the signal we're seeing in market tightness indicators such as auction clearance rates and the length of time it is taking to sell a property relative to its long-run average (figure 20).

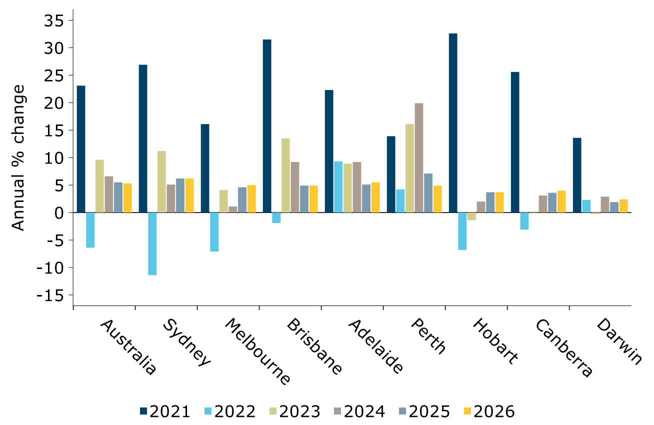
Figure 20. Length of time on the market



Source: CoreLogic Australia, REINZ, Macrobond, ANZ Research

Looking forward, our expectation is that house prices in New Zealand will contract 1% over 2024, lift 4.5% over 2025, and rise 5% over 2026. That's considerably weaker than our forecast for Australia of 6.6%, 5.5% and 5.3% respectively.

Figure 21. House price forecasts for Australia



Source: CoreLogic Australia (historical), Macrobond, ANZ Research (forecasts)

Bringing it all together:

- House price momentum in Australia is currently on a stronger trajectory than in New Zealand, despite a slightly sharper rise in the share of income required to service a new loan. Australia's relative outperformance is expected to continue for a little while yet.
- In terms of price levels, there is plenty of divergence by main city, with Sydney and Auckland taking first and second place respectively at the pricier end of the spectrum (but still with around a $230k gap), and Canterbury and Hobart much closer at the lower end, with just a $17k gap in NZD terms.
- Australia has a significantly larger share of floating loans than New Zealand, and about double the share of investor lending.
- Credit data also suggest that at least some of the recent divergence in price momentum between the New Zealand and Australian markets is being driven by investors.
- Consents per capita tend to be higher in Australia, but New Zealand has in recent years pulled ahead on this metric.
- While on average over the past decade building cost inflation has run slightly hotter in New Zealand than Australia, the opposite is currently true.
- While some of these differences could be explained by relative productivity in the building industry, evidence from an output per worker perspective doesn't really support this (although there is a lot more to measuring productivity than this *partial* measure).
- More consenting per capita appears to have facilitated Australia's lower average ratio of people per dwelling, which has a material bearing on fundamental supply vs demand calculations.
- And lastly, housing affordability measured by prices relative to incomes has deteriorated significantly on both sides of the Tasman over the past 40 years or so. But right now, the New Zealand wide measures are marginally more affordable than in Australia.

Touching on the risk profile around the relative housing outlooks, near-term risks to New Zealand's housing outlook appear skewed to the downside (despite our recent forecast downgrade). However, the signal from recent housing indicators and other economic data such as PMIs, PSI, job ads and business and consumer surveys also raises the odds that the RBNZ will be able to ease monetary conditions sooner than otherwise. If so, that would provide at least a partial offset to the impact a softening labour market is having on household incomes and appetite to participate in the housing market.

On the other hand, risks around Australia's CPI outlook are skewed more to the upside, representing upside risks to their interest rate outlook, and all else equal, downside risks to their housing outlook.

All in all, while there are a number of differences between the two housing markets, there are similarities too. When it comes to prices, a straight New Zealand vs Australia lens may not be appropriate given how much divergence there is between cities. That is, for all those Kiwis jumping over the ditch, their housing experience is really going to vary depending on which part of Australia they land in. And for those who are selling up in New Zealand to buy in Australia, what they can afford may be largely determined by which part of New Zealand they are leaving (and selling) from.

Mortgage borrowing strategy

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

Mortgage rates have fallen materially over the past month, taking 1yr rates (on average across the main banks) below 7%, and 2-5yr rates below 6.50%. These moves follow even larger moves in wholesale interest rates, which have been driven lower by financial market expectations of just over 200bp of OCR cuts by the end of 2025. Our OCR forecasts aren't quite as aggressive as that (we expect 200bp of cuts too, but starting in November rather than next month or in October, as markets are banking on), but either way, we are confident that wholesale rates will be much lower in a year's time. That's good news for borrowers, especially those who only fixed for 6 months or a year at their last rollover, or who have a legacy fixed rate rolling off soon. With larger falls in store, we think it still makes sense to consider fixing for a shorter period even though it costs a little more now, to save more money later.

The falls in mortgage rates seen over the past month have been material, with rates for some tenors falling by almost as much this month as they previously had in total since last November. To illustrate, we note that RBNZ data shows that 1yr and 2yr rates peaked at 7.30% and 7.01% in November. By June, they had fallen to 7.06% and 6.72% respectively, but this month alone, they have fallen to 6.85% and 6.49%, to be down 45 and 52bp from their respective highs.

Based on our new OCR forecast (200bp of cuts from November) which is a key driver of our wholesale swap rate forecasts, we expect further mortgage rate falls in coming months. These falls aren't expected to take mortgage rates back to lows seen during COVID, but based on where we see wholesale rates going, we think it's reasonable to expect mortgage rates in the low-5s in 2025. That's not a guarantee. Like all forecasts, there are caveats: things seldom pan out exactly as expected, and a surprise may come along. It's also worth noting that financial markets are banking on earlier/larger/more OCR cuts that we are forecasting, which does bring with it the risk of an upside correction in wholesale rates. Still, barring any unexpected surprises, we think it's reasonable to expect mortgage rate falls of that sort of magnitude between now and about the end of 2025.

We'd *always* suggest there's merit in spreading your risk over several terms, but where to put the biggest chunk? Given that outlook, we think it still makes sense to consider fixing for shorter rather than longer periods on the view that paying a little more now will be worth it in the long run if rates continue to fall, ultimately compensating you, hopefully plus some. That strategy has paid off for several months now and is likely to be appealing to borrowers who believe that mortgage rates are likely to continue falling.

The question is, how short? We think breakevens are helpful, as they show how far rates need to fall by over a given horizon for fixing for a particular period to prove cheaper in the long run. Consider, for example, the choice between 1yr and 2yrs. As our table shows, if the 1yr rate falls below 6.13% in a year's time, back-to-back 1yr fixes will end up being cheaper than a single 2yr fix at 6.49%. While 6.85% to 6.13% is a big fall, we are forecasting the OCR to be 125bp lower (at 4.25%) by this time next year, which is an even bigger fall. The 6mth is also worth considering – especially if you think there's a chance the RBNZ cuts by more than 25bp this year, with the 6mth/6mth breakeven only 37bp below the current 6mth rate.

As noted earlier, surprises do come along, and we wouldn't take anything for granted (and nor are we guaranteeing anything). Right now, at many banks, the cheapest rate is a longer-term one (often 3yrs or longer), and the difference between the cheapest fixed rate and the most expensive (generally the 6mth) is in some cases more than 100bp. That's not to be scoffed at, and for those who don't want to pay more now or value certainty, locking in for longer at a known lower rate has merit and may be appealing.

Figure 1. Carded special mortgage rates^

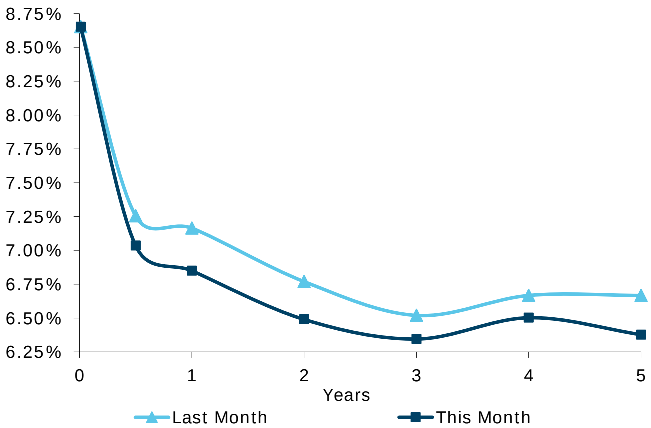


Table 1. Special Mortgage Rates#

		Breakevens for 20%+ equity borrowers			
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs
Floating	8.65%				
6 months	7.04%	6.67%	6.31%	5.95%	6.13%
1 year	6.85%	6.49%	6.13%	6.04%	6.06%
2 years	6.49%	6.26%	6.09%	6.24%	6.52%
3 years	6.35%	6.32%	6.39%	6.33%	6.30%
4 years	6.50%	6.37%	6.26%		
5 years	6.38%	#Average of "big four" banks			

Source: interest.co.nz, ANZ Research.

Key forecasts

Weekly mortgage repayments table (based on 30-year term)

Mortgage Size ($000)	Mortgage Rate (%)													
	5.50	5.75	6.00	6.25	6.50	6.75	7.00	7.25	7.50	7.75	8.00	8.25	8.50	8.75
200	262	269	277	284	292	299	307	315	323	330	338	347	355	363
250	327	336	346	355	364	374	384	393	403	413	423	433	443	454
300	393	404	415	426	437	449	460	472	484	496	508	520	532	544
350	458	471	484	497	510	524	537	551	564	578	592	606	621	635
400	524	538	553	568	583	598	614	629	645	661	677	693	709	726
450	589	606	622	639	656	673	690	708	726	744	762	780	798	816
500	655	673	691	710	729	748	767	787	806	826	846	866	887	907
550	720	740	760	781	802	823	844	865	887	909	931	953	975	998
600	786	807	830	852	875	897	921	944	968	991	1,015	1,040	1,064	1,089
650	851	875	899	923	947	972	997	1,023	1,048	1,074	1,100	1,126	1,153	1,179
700	917	942	968	994	1,020	1,047	1,074	1,101	1,129	1,157	1,185	1,213	1,241	1,270
750	982	1,009	1,037	1,065	1,093	1,122	1,151	1,180	1,209	1,239	1,269	1,299	1,330	1,361
800	1,048	1,077	1,106	1,136	1,166	1,197	1,227	1,259	1,290	1,322	1,354	1,386	1,419	1,452
850	1,113	1,144	1,175	1,207	1,239	1,271	1,304	1,337	1,371	1,404	1,438	1,473	1,507	1,542
900	1,178	1,211	1,244	1,278	1,312	1,346	1,381	1,416	1,451	1,487	1,523	1,559	1,596	1,633
950	1,244	1,278	1,313	1,349	1,385	1,421	1,458	1,495	1,532	1,570	1,608	1,646	1,685	1,724
1000	1,309	1,346	1,383	1,420	1,458	1,496	1,534	1,573	1,613	1,652	1,692	1,733	1,773	1,814

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

	Actual			Projections						
Interest rates	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26
Floating Mortgage Rate	8.6	8.6	8.6	8.6	8.4	8.1	7.6	7.1	6.6	6.6
1-Yr Fixed Mortgage Rate	7.3	7.2	7.1	6.6	6.0	5.6	5.3	5.2	5.2	5.2
2-Yr Fixed Mortgage Rate	7.0	6.8	6.7	6.3	5.7	5.5	5.4	5.3	5.3	5.3
3-Yr Fixed Mortgage Rate	6.8	6.6	6.5	6.2	5.7	5.5	5.4	5.4	5.4	5.4
5-Yr Fixed Mortgage Rate	6.7	6.5	6.4	6.2	5.7	5.5	5.4	5.4	5.4	5.4

Source: RBNZ, ANZ Research

Economic forecasts

	Actual			Forecasts						
Economic indicators	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25
GDP (Annual % Chg)	-0.6	-0.2	0.3	-0.3	0.2	0.5	0.6	1.1	1.4	1.8
CPI Inflation (Annual % Chg)	5.6	4.7	4.0	3.3(a)	2.6	2.4	2.1	2.4	2.1	2.0
Unemployment Rate (%)	3.9	4.0	4.3	4.6	4.9	5.1	5.2	5.4	5.4	5.5
House Prices (Quarter % Chg)	1.7	0.3	0.6	-0.4(a)	-0.9	-0.3	0.8	1.2	1.2	1.2
House Prices (Annual % Chg)	-5.0	-0.7	2.7	2.2(a)	-0.4	-1.0	-0.8	0.8	2.9	4.5

Interest rates	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24	Mar-25	Jun-25	Sep-25	Dec-25	Mar-26
Official Cash Rate	5.50	5.50	5.50	5.50	5.25	5.00	4.50	4.00	3.50	3.50
90-Day Bank Bill Rate	5.64	5.64	5.64	5.38	5.18	4.68	4.18	3.68	3.60	3.60
10-Year Bond	4.32	4.56	4.56	4.50	4.25	4.25	4.25	4.25	4.50	4.50

Source: ANZ Research, Statistics NZ, RBNZ, REINZ

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, economic developments, GDP and activity dynamics, fiscal and monetary policy.

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

Henry Russell
Economist

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

Telephone: +64 21 629 553
Email: henry.russell@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

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

Important notice

Last updated: 20 February 2024

The opinions and research contained in this document (in the form of text, image, video or audio) are (a) not personal financial advice nor financial advice about any product or service; (b) provided for information only; and (c) general in nature and do not take into account your financial situation or goals.

This document may be restricted by law in certain jurisdictions. Recipients must observe all relevant restrictions.

Disclaimer for all jurisdictions: This document is prepared by ANZ Bank New Zealand Limited (ANZ Centre, 23-29 Albert Street, Auckland 1010, New Zealand). This document is distributed in your country/region by Australia and New Zealand Banking Group Limited (ABN11 005 357 522) (ANZ), a company incorporated in Australia or (if otherwise stated), by its subsidiary or branch (herein collectively referred to as ANZ Group). The views expressed in it are those of ANZ Economics and Markets Research, an independent research team of ANZ Bank New Zealand Limited.

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 in it is intended to be an invitation, solicitation or offer by ANZ Group 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 Group would be subject to additional licensing or registration requirements. Further, any products and services mentioned in this document may not be available in all countries.

ANZ Group in no way provides any personal 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 and made on reasonable grounds on the date it was published, ANZ Group does not represent or warrant the accuracy or completeness of the information. Further, ANZ Group 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.

This document may contain forward looking statements or opinions including statements regarding our intent, belief or current expectations regarding economic and market conditions, financial instruments and credit markets. Such statements are usually predictive in character, may not be accurate once the future becomes known and should not be relied upon when making investment decisions. Past performance is not a reliable indicator of future performance. ANZ does not accept any responsibility to inform you of any revisions to these forward-looking statements to reflect events or circumstances occurring after the date of 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 Group 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. Any 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 Group 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. The contents of this document have not been reviewed by any regulatory body or authority in any jurisdiction.

ANZ Group may have an interest in the subject matter of this document. They may receive fees from customers for dealing in any 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 any 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 Group's policies on conflicts of interest and ANZ Group maintains appropriate information barriers to control the flow of information between businesses within the group.

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

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 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.

Important notice

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).

New Zealand. This document is distributed in New Zealand by ANZ Bank New Zealand Limited. The material is for information purposes only and is not financial advice about any product or service. We recommend you seek 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. To the extent that this document contains any statements of opinion and/or recommendations related to an investment product or class of investment product (as defined in the Financial Advisers Act 2001), 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 2001 of Singapore). ANZ is licensed in Singapore under the Banking Act 1970 of Singapore and is exempted from holding a financial adviser's licence under Section 23(1)(a) of the Financial Advisers Act 2001 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.

Important notice

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". 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.