ANZ Research

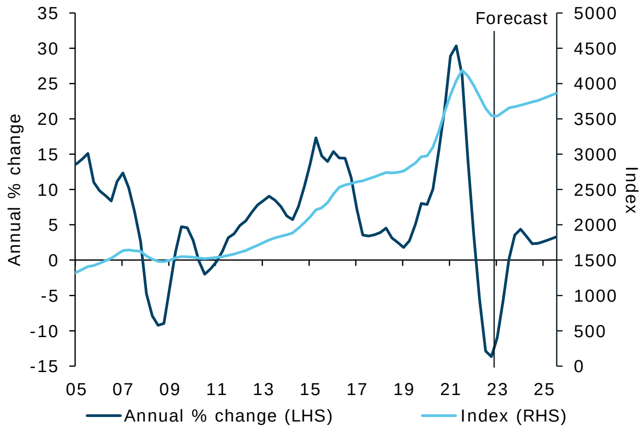
June 2023

New Zealand Property Focus

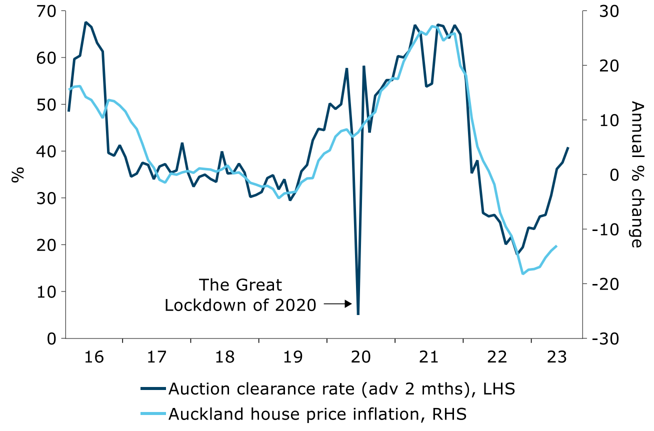
Sure to rise?

At a glance

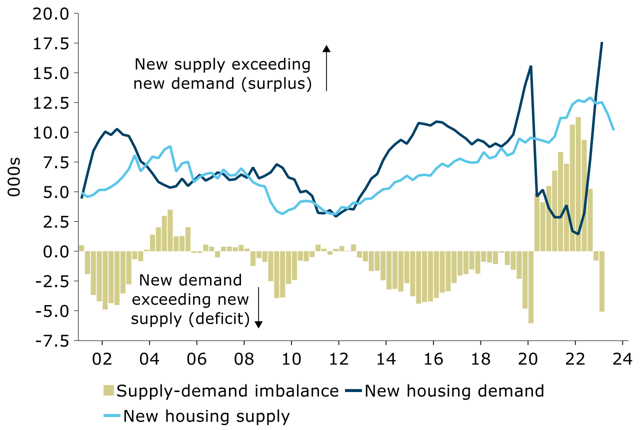
We expect a modest 3% lift in house prices in H2 before fading.



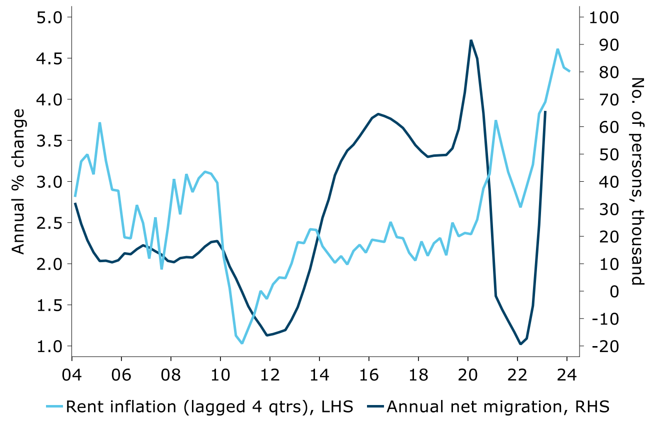
The Auckland cycle has turned particularly markedly.



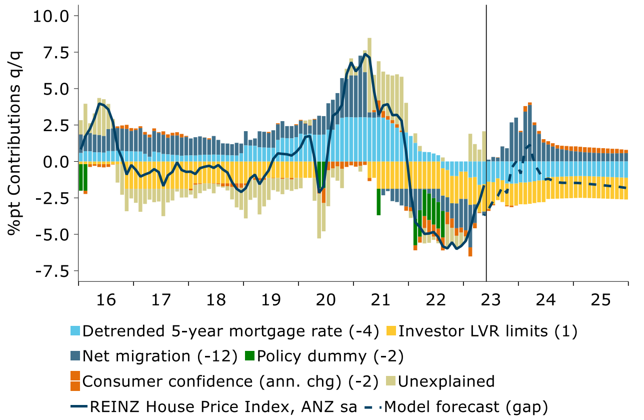
Strong migration is contributing to the housing deficit widening again, and...



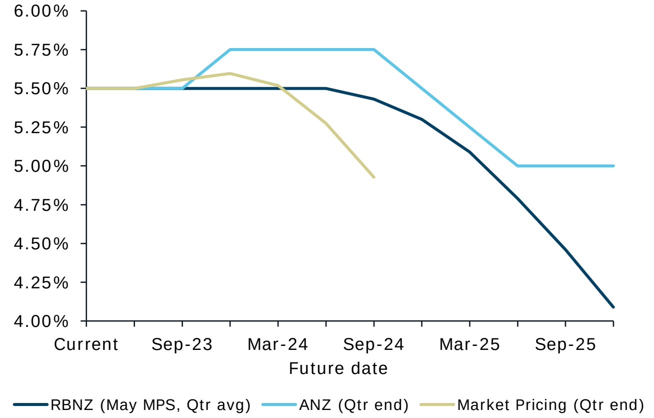
... is set to put upward pressure on rents.



The balance between headwinds and tailwinds is evolving...



...but at the end of the day, housing upside will be limited by RBNZ tolerance for it.



Source: REINZ, Stats NZ, Barfoot & Thompson, realestate.co.nz, Macrobond, ANZ Research

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Summary

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

Property Focus

The latest data supports our assessment that the housing market is indeed tightening, with house prices on the cusp of lifting. We are anticipating only a very mild pickup in house prices in the second half of the year, but currently the risks are looking tilted towards this being too conservative. Mortgage rates are higher, but household incomes are looking resilient, and net migration, while easing, is still startling. A quick look over the neighbour's fence suggests upward pressure on rents could result from the migration surge. While higher rents would boost property yields, all else equal, investors are likely to remain on the side-lines until the future of the tax deductibility policy and bright line tests is clearer. Macroprudential LVR restrictions also remain very tight for investors, and our modelling suggests these are very powerful. For now, a re-run of the 2020/21 property investor vs. first home buyer bun fight is looking exceedingly unlikely. See the Property Focus section.

Feature Article: What's driven house price inflation?

This month, we run a statistical analysis to try to disentangle the various drivers of house price inflation over the past 30 years. We find significant impacts from net migration, mortgage rates, consumer confidence, LVR restrictions, and a combination of policy changes including the introduction of the bright line test, the removal of interest deductibility on investment properties, CCCFA changes, and the COVID lockdown. Models are always as much art as science, and none should be taken as gospel. Sadly, they can't magically eliminate the problem of trying to work out causality when lots of stuff is going on at once – as has certainly been the case in recent years! But the analysis is helpful for looking at how the market may evolve from here. See this month's Feature Article.

Mortgage borrowing strategy

Mortgage rates were all higher on average in June, with the 1yr rate rising the most (0.23%pts). The increases came after the RBNZ's 25bp OCR hike, taking it to a post-GFC high of 5.5%. What happens next depends on how quickly inflation falls and the job market cools, and while the RBNZ has signalled that it thinks it has done enough, we think we'll see at least one more OCR hike before the cycle is over. RBNZ data shows that mortgage borrowers have started opting for higher short-term fixes like 6mths and 1yr in preference to lower, longer fixed like 3yrs, likely expecting rates to fall. But there is no guarantee they will fall, and indeed, if the RBNZ is forced to deliver another hike (or two), mortgage rates may rise further yet. Breakevens show that mortgage rates need to fall rapidly to make it cheaper in the long run to fix short and roll repeatedly as opposed to fixing for longer. The 3yr comes with an upfront guarantee of a lower rate (ie you're paying less from the get-go) and doesn't require rates to fall to work out cheaper in the long run. It also offers more certainty, which may appeal to some borrowers. See our Mortgage Borrowing Strategy.

Property Focus

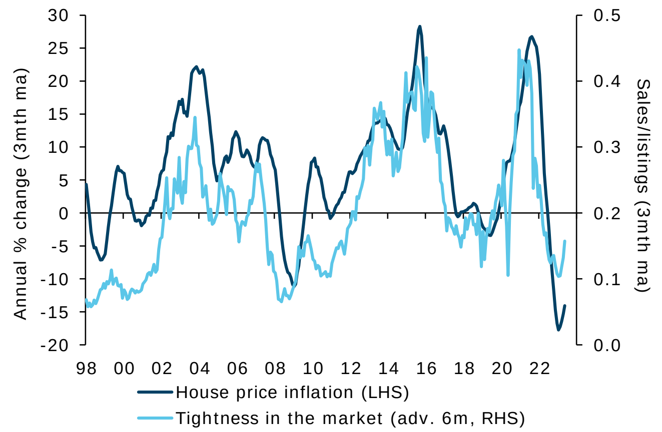
Summary

The latest data supports our assessment that the housing market is indeed tightening, with house prices on the cusp of lifting. We are anticipating only a very mild pickup in house prices in the second half of the year, but currently the risks are looking tilted towards this being too conservative. Mortgage rates are higher, but household incomes are looking resilient, and net migration, while easing, is still startling. A quick look over the neighbour's fence suggests upward pressure on rents could result from the migration surge. While higher rents would boost property yields, all else equal, investors are likely to remain on the side-lines until the future of the tax deductibility policy and bright line tests is clearer. Macroprudential LVR restrictions also remain very tight for investors, and our modelling (see page 9) suggests these are very powerful. For now, a re-run of the 2020/21 property investor vs. first home buyer bun fight is looking exceedingly unlikely.

Pickup evident in May

REINZ data for May confirmed our assessment that the housing market is strengthening. House sales lifted again, rising 2.1% m/m (sa), returning to May 2022 levels. Days to sell also declined to 47 (sa), well off the peak of 53 in February but still much slower than the average of around 36 days on market in the second half of the last decade. Increased sales and still-soft new listings saw inventories continue to decline in May, consistent with a market on a tightening trajectory. A tightening in the market is particularly clear in Auckland, where prices rose 0.2% m/m in May.

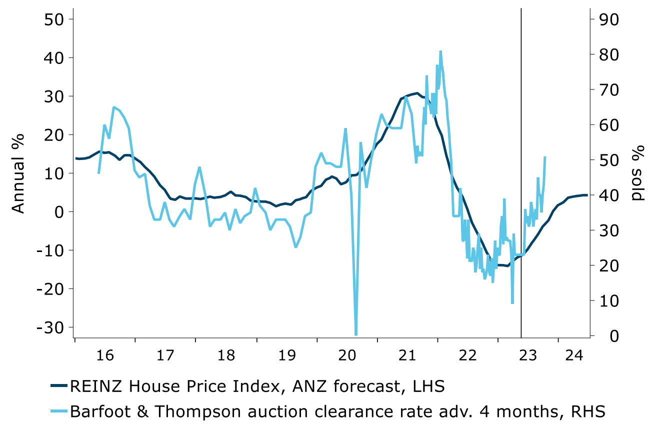
Figure 1. Auckland housing market



Source: Barfoot and Thompson, REINZ, ANZ Research

Auction clearance rates have also lifted sharply in Auckland, and even suggest further upside risk to our forecast that house prices at the national level will rise only around 3% in the second half of the year as a slowing economy and rising unemployment rate start to weigh, and expectations gradually come around to our view that the RBNZ will tighten again.

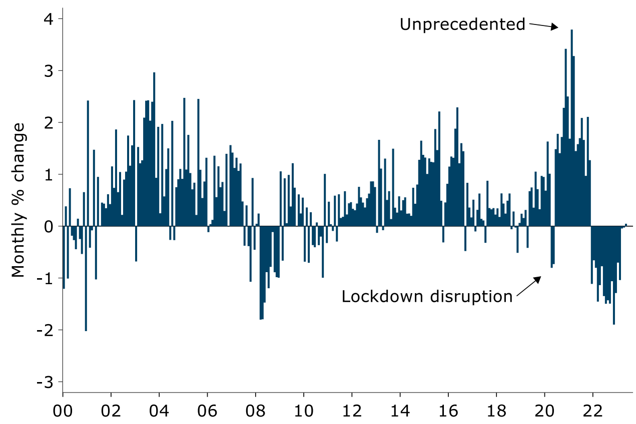
Figure 2. B&T Auction clearance rate vs ANZ HPI forecast



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

House prices appear to be on the cusp of lifting, with the national REINZ index flat for the second month in a row, after seasonal adjustment. May, in fact, technically marked the first month of positive growth since November 2021, albeit to two decimal places of spurious accuracy at 0.05% m/m! We are forecasting house prices to lift just over 3% across the second half of the year. While there are still plenty of headwinds facing the housing market, we expect the tailwinds will blow a little more strongly across the second half of the year.

Figure 3. House price index



Source: REINZ, Macrobond, ANZ Research

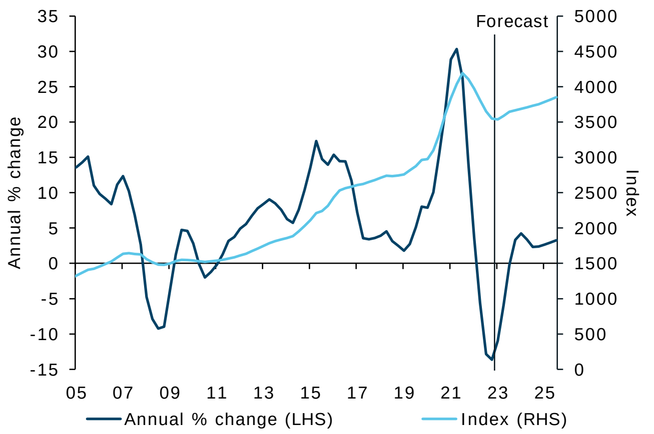
As we set out in last month's Property Focus, there are a number of tailwinds explaining the housing market's recent lift in momentum:

- the rapid surge in net migration;
- easing new supply growth (falling consents) contributing to a widening housing deficit; and
- the resilient labour market.

These currently appear to be blowing slightly more strongly than the headwinds from:

- relatively high mortgage rates hampering borrowing capacity;
- still-stretched affordability, with real house prices (relative to wages) only back to pre-COVID levels, despite a chunky 25% fall;
- An outlook for a weakening labour market, though it's not clear the person on the street has got this particular memo yet, with perceived job security consistently a bright spot in consumer financial resilience surveys.

Figure 4. House price forecast



Source: REINZ, ANZ Research

Let's look at how these headwinds and tailwinds have evolved with the recent dataflow.

Mortgage rates: higher

Our house price inflation modelling in this month's Feature Article confirms the obvious: interest rates matter hugely for the housing market! The RBNZ will be relieved that the market has not rushed to price in imminent OCR cuts, following the unexpectedly chilled May MPS forecast implying that rate hikes are done. Financial markets tend to be impatient for the next thing, and there was risk that expectations would strengthen of the next move being a cut, and potentially sooner rather than later. Such an expectation would put downward pressure on wholesale interest rates, and thereby fixed mortgage rates. Those risks have as yet not materialised, however, with the market taking the RBNZ's forecasts at face value, with no chance of cuts priced in before April next year. That's supported mortgage rates; in fact, we've seen most banks moving their fixed rates slightly higher in the past few weeks.

While we continue to expect that the RBNZ will be back at the hiking table in November, we fully expect to look wrong before we are proven right. With the economy in a technical recession, and inflation expected to ease quite quickly in the near term, reflecting sizable base effects coming off, expectations of cuts could well strengthen in the coming months. But offshore developments matter too, and currently the global vibe is towards central banks having to do more than they thought.

Mortgage rates are certainly at high levels relative to recent years, but debt-servicing costs as a share of income are still relatively low. April data showed the average fixed mortgage rate was just 4.8%, so there's still plenty of tightening to come. That reflects the lagged impacts of monetary policy still working their way through. Over a quarter of the value of all outstanding mortgages is set to be refixed in the six months to November, and some of this will be coming off very low rates. The current low level of listings suggest that households aren't being driven by higher interest rates to sell *en masse*. This may reflect strong employment and wage growth helping households weather the storm.

Household incomes: proving resilient

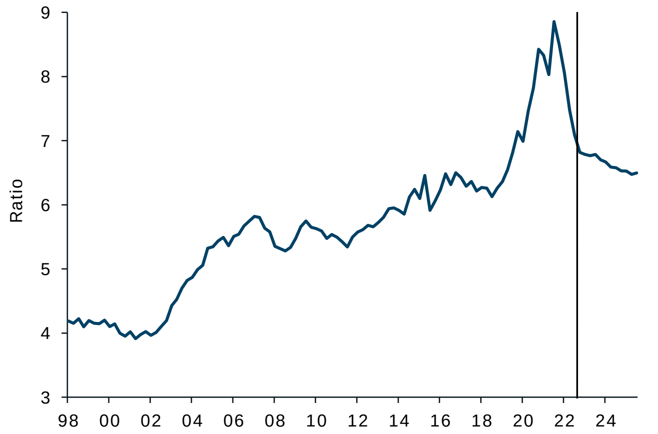
While high mortgage rates are certainly suppressing demand by sucking money out of debtors' pockets, household incomes have also grown strongly because of the tight labour market. Employment levels remain strong, with filled jobs rising 0.6% m/m in April alone, and employees are still (on average) seeing solid wage increases.

While we do expect to see the labour market loosen over the second half of the year, and lower wage growth as a result, we recently revised our forecasts to incorporate a slower rise in the unemployment rate than previously. We now see the unemployment rate now rises to 4.2% by the end of the year, rather than 4.4%. And labour supply improvements play more of a role in the loosening in the labour market than does weakness in labour demand, in our updated forecasts. We now expect employment levels to largely hold up, compared to our previous forecast of a contraction across the second half of the year. That's likely to support employees' perception of job security. That's great news, or course – but only as long as it doesn't mean that core inflation doesn't drop away as the RBNZ – and we – are forecasting, as that would mean the RBNZ has to get more aggressive with the OCR than the mild top-up we have in our forecast.

Despite resilient household incomes and a 16% fall in house prices, it's unfortunately still not that the case that New Zealand house prices are "affordable". While the house price to income ratio has fallen back to December 2019 levels (figure 5), meaning we've unwound the crazy COVID surge with very little blood on the floor, it shouldn't be forgotten that in late 2019 we were of course debating how to fix our appalling housing affordability problem.

And while house prices relative to incomes might be back where they were pre-COVID, higher mortgage rates mechanically reduce borrowing capacity. The upshot: it's still really hard to get onto the housing ladder. However, a stronger labour market is likely to add to confidence, especially with house prices likely to be unambiguously, albeit modestly, on the rise again soon.

Figure 5. House price to income ratio: ANZ forecast



Source: REINZ, ANZ Research

Net migration: cooling from nutty levels

Net migration inflows eased sharply to 5,800 in April as arrivals came off their peak while departures continued to track up. That's consistent with our assumption that we will see monthly net inflows reduce quickly as we move into winter. April's figure of 5,800 is still very strong (that's an annualised rate of nearly 70,000), and well above pre-COVID levels, but it's well off the peak inflows of over 13,000 seen in February and March, and provides an early indication that the massive surge we had seen in recent months is indeed fading as expected.

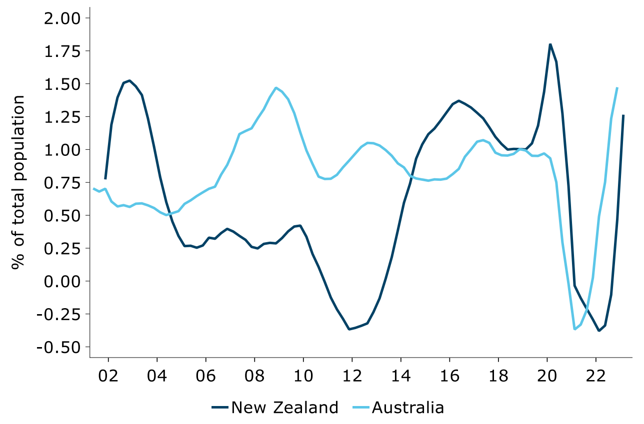
Even if it drops away quickly, the recent migration impulse is enormous, and we expect its impacts to be evident in the housing market across the second half the year. Our house price inflation model in our Feature article estimates it takes up to a year for net migration to have its maximum impact on house price inflation.

However, the composition of new migrants matters for which market they enter: the rental market or the house-buying market, and this is hard to gauge in real time. While over time higher rents may lead to an adjustment in house prices (ie a pickup in investor demand due to increasing yields, and relative price changes inducing renters to buy), this process will take some time.

A quick look over the neighbour's fence

While Australians might be looking at New Zealand to gauge the looming impact of tighter monetary policy, we can look to Australia to get an indication of the possible impact on the housing market of the recent surge in migration. Australia opened its borders before New Zealand, and has experienced an influx that is so far just slightly larger than New Zealand's, relative to the size of the population (figure 6).

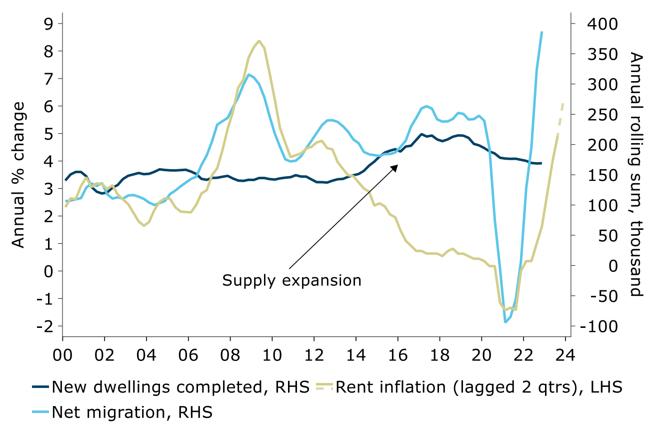
Figure 6. Annual net migration: Australia and NZ



Source: Stats NZ, ABS, Macrobond, ANZ Research

In Australia, rents have accelerated sharply. Rent price inflation reached 6.1% y/y in April as the surge in new demand from migrants hit at a time that new rental housing supply is easing. Migration is only one factor behind the surge in demand, with preferences changing across the pandemic due to lockdowns and possibly health concerns leading to smaller household sizes. The RBA estimated this shift in preference resulted in around 120,000 new households forming.

Figure 7. Rents and migration in Australia

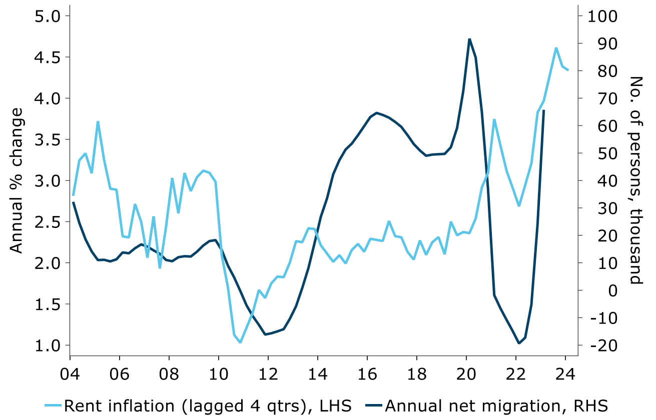


Source: ABS, Macrobond, ANZ Research

The relationship between rent inflation and migration appears to be strong in Australia, with rents picking up in previous migration cycles. However, last decade rent inflation declined despite strong net migration inflows. That likely reflects the large expansion in dwelling construction that occurred in the middle of the decade. In the current period, new supply has slowed, likely contributing to the surge in rents. Rental price inflation in Australia is expected to remain strong in coming years.

There are many parallels to draw to the New Zealand rental market. With a rapid surge in migration occurring at a time that new housing supply is easing, we expect to see rent inflation remain elevated next year. Strong household income growth is also likely underpinning the pickup in rents, enabling landlords to pass on higher costs.

Figure 8. Rents and migration in NZ

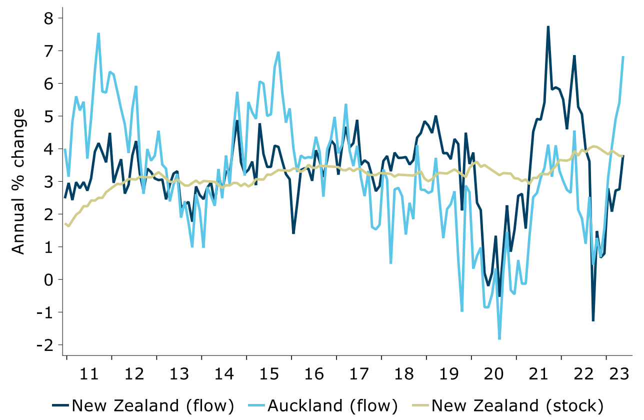


Source: Stats NZ, Macrobond, ANZ Research

In the New Zealand CPI, rent inflation is measured using tenancy data from across the past 8 years, which means the measure can take some time to reflect changes in current conditions. Compared to Australia, where the lags appear to be only around 6 months, increases in migration appear to take as long as 12-18 months to be evident in rent price increases in New Zealand.

While the official measure of rent prices in the CPI attempts to capture the average rent people are actually paying, and therefore, takes into account long lags, a sharp acceleration in rents is evident in higher-frequency measures. The monthly *flow* measure of rents, which captures changes in rents for new tenancies signed within the given month, has accelerated sharply from late last year (figure 9).

Figure 9. High frequency measures of rent inflation



Source: Stats NZ, Macrobond, ANZ Research

In Auckland, notably, rents for new tenancies are rising at 6.8% y/y, although some of that pickup may reflect the impacts of Cyclone Gabrielle. That will take some time to flow through to the stock measure, however, which tracks the CPI measure more closely. We expect to see pressure on rents build into 2024, which is one factor underpinning our expectation of more persistent non-tradable inflation than the RBNZ is anticipating.

Will higher rents feed back into higher house price inflation? There are two channels by which this could happen:

- More renters decide they may as well pay down a mortgage than pay sky-high rents;
- Property investors are enticed by higher yields.

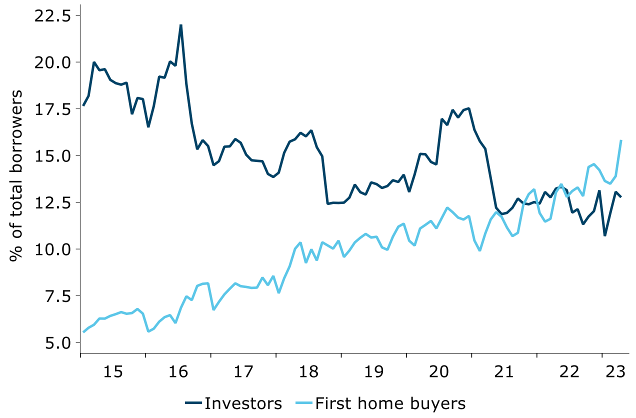
On the first-home buyer front, as noted, affordability is still very challenging, but anecdotal evidence from mortgage brokers is that there is some pent-up demand evident now that:

- LVR restrictions for owner-occupiers have been eased, with 15% rather than 10% of new lending now allowed to be at a loan-to-value ratio of more than 80%;
- the RBNZ has called time on OCR hikes; and
- most pundits are now forecasting house prices to start lifting again.

Overall, we expect a brief flurry, driving our expectation of a 3% lift in house prices in the second half of the year, before things peter out again.

What about investors? They remain firmly on the side lines for now. Figure 10 shows that investors' share of new residential lending has been trending down since 2016.

Figure 10. First home buyer and investor shares of new mortgage borrowers



*Share of total borrowers excluding business purposes

Source: RBNZ, Macrobond, ANZ Research

There are a number of reasons that investors might currently be wary, for all that house prices are widely expected to lift from here:

- RBNZ macroprudential restrictions on high-LVR lending for investors remain very tight, and our modelling suggests these are very powerful.
- Future rules around the deductibility of interest costs when calculating profit on an investment property for tax purposes, and the future settings for the bright line test, remain uncertain.
- Mortgage rates are still high, and rental yields in many areas are still unappealing, for all that nationwide property prices have fallen 16%.
- A general tilting of the regulatory playing field over recent years with a focus on tenants' rights and landlords' obligations may mean some would-be property investors now see rental properties as less appealing relative to more passive investments.

For now at least, a re-run of the 2020/21 investor vs. first home buyer bun fight that saw prices soar 30% in a year looks exceedingly unlikely.

Any forecaster has to acknowledge huge uncertainty around the outlook for house prices, given the rollercoaster of recent years. But at the end of the day, it's very unlikely that the RBNZ would tolerate the market ripping higher, given the starting point for CPI inflation and the perceived need for the economy and discretionary spending to slow. At some uncertain but undeniable threshold, upside for house prices simply morphs into upside for interest rates.

Housing market indicators for May 2023 (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	$716,624	-1.9	-0.2	-10.5	-2.4	134	+1%	61
Auckland	$996,863	-10.3	-1.0	-13.1	-0.9	1,609	+1%	46
Waikato	$742,125	-7.4	-3.5	-10.9	-2.1	517	+8%	52
Bay of Plenty	$798,051	-13.3	0.2	-12.2	-2.0	328	-3%	56
Gisborne	$599,778	-10.2	-0.1	-12.3	-2.4	21	-41%	41
Hawke's Bay	$670,307	-10.3	3.1	-12.3	-2.4	160	-16%	49
Manawatu-Whanganui	$539,746	-12.6	0.5	-12.3	-2.4	221	-11%	51
Taranaki	$549,205	-15.9	-5.6	-5.6	-0.6	113	-10%	51
Wellington	$786,418	-11.9	-0.9	-15.1	-1.7	621	+21%	50
Tasman, Nelson & Marlborough	$732,026	-5.7	-2.0			189	+7%	58
Canterbury	$654,460	-5.5	1.0	-5.5	0.2	799	-3%	41
Otago	$669,887	-7.1	-0.4	-5.1	0.8	341	+1%	53
West Coast	$359,689	-5.9	3.1	-7.2	-2.2	32	-20%	54
Southland	$435,765	-3.6	1.8	-7.2	-1.1	125	-4%	45
New Zealand	$781,483	-8.2	-0.2	-11.2	-1.0	5,179	+2%	47

Feature Article: What's driven house price inflation?

Summary

This month, we run a statistical analysis to try to disentangle the various drivers of house price inflation over the past 30 years. We find significant impacts from net migration, mortgage rates, consumer confidence, LVR restrictions, and a combination of policy changes including the introduction of the bright line test, the removal of interest deductibility on investment properties, CCCFA changes, and the COVID lockdown. Models are always as much art as science, and none should be taken as gospel. Sadly, they can't magically eliminate the problem of trying to work out causality when lots of stuff is going on at once – as has certainly been the case in recent years! But the analysis is helpful for looking at how the market may evolve from here. The overall profile for house price inflation predicted by the model is similar to our published forecast, with the recovery petering out before long. The model suggests the tailwind from migration is only just getting going, but that the headwind from higher mortgage rates also still has a long way to run. Let the battle commence.

In this article we analyse what's driven house price inflation over the past 30 years, and in the context of the results, discuss risks around the outlook.

First, a point about economic modelling. It's at least as much art as science. Estimates of both the size and significance of the impact of one factor can be thrown around hugely by choices about what else is included in the model. Over the COVID period in particular there was a heap of stuff going on, including some important policy changes that coincided (eg reintroduction of LVRs, changes to consumer finance legislation, and investor tax changes). We can never be sure what caused what. So don't take any model's estimates as gospel.

But the variables we include in our model here proved robust across a wide range of specifications, with sensibly signed coefficients, and credible lags. It's an honest attempt to work out what the drivers of house price inflation have been in recent decades.

We model the quarterly percent change in the REINZ house price index, with our own seasonal adjustment applied. Let's go through the drivers one by one.

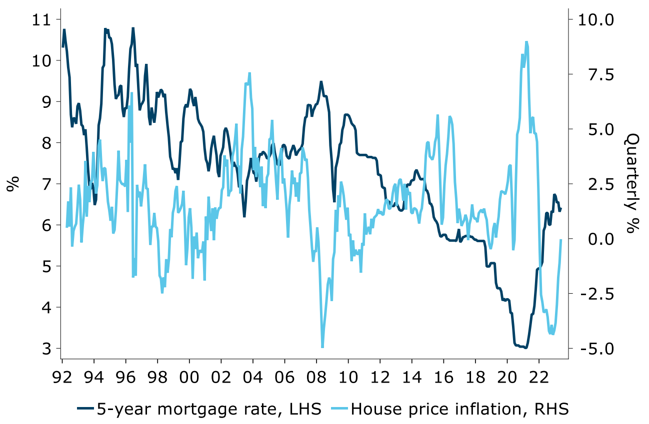
Mortgage rates

Mortgage rates must be included in any model trying to explain house prices! Higher mortgage rates directly mean that people can borrow less for a given income, and vice versa. How much people can borrow influences how much they can bid for a house, and thereby has a direct impact on house price inflation. Higher interest rates could also cause some owners to choose to sell up, taking heat out of the market.

We use the 5-year mortgage rate[1]. Although five years isn't a particularly popular term, it has the advantage of capturing expectations of where the broader interest rate suite is heading in a timely fashion.

There is evidence of a contemporaneous *positive* relationship between house prices and interest rates. But this is capturing the reverse causality: monetary policy tends to be tightened when the housing market is booming. So it's generally best to look at the lagged impact, ie what happens to house price inflation a few months after interest rates move. Figure 1 clearly demonstrates a negative relationship between the two variables in this context.

Figure 1. The 5-year mortgage rate & house price inflation



Source: RBNZ, REINZ, Macrobond, ANZ Research

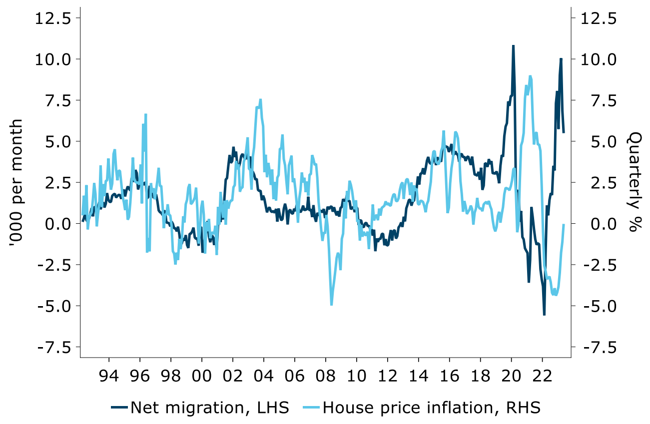
Net migration

Whether new arrivals rent or buy, they increase the physical demand for housing and therefore, all else equal, its value. The impact takes a while to feed through: the best fit in the model was after 12 months. Figure 2 shows that there has tended to be a broadly positive relationship over history.

It's possible the model is overstating the impact of the 2019/20 migration surge on 2020/21 house price inflation, given everything else that was going on at that time. We've got a good long data history, which should mitigate that risk, but if it is in fact 'blaming' migration too much (relative to some unobservable "truth"), it will correspondingly also overstate the likely future impact of the current migration surge.

[1] Backdated prior to Dec 2004 using the 5-year swap rate and an assumption of a constant spread. There's a downward trend in interest rates; we linearly detrend them in the model, but it doesn't make a great deal of difference to the results.

Figure 2. Net migration and house price inflation



Source: REINZ, Stats NZ, Macrobond, ANZ Research

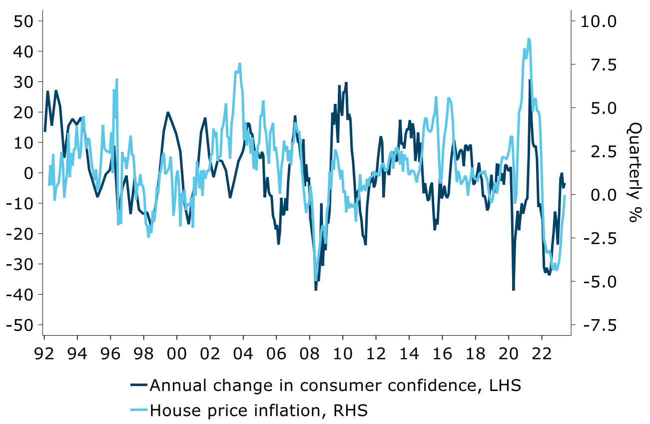
Consumer confidence

This variable is included to try to capture the 'vibe'. Animal spirits can be very important in the housing market and in consumer spending more generally. We use ANZ consumer confidence, backdated with Westpac's quarterly measure prior to 2004.

Including consumer confidence in a house price model is a tricky one, as the causality can run both ways: people may feel more confident if their house value is rising, introducing a degree of circularity. To get around this, we use the annual change in confidence. This will capture dramatic negative events, such as the Global Financial Crisis in 2008, and the uncertainty when COVID hit in early 2020, but is less likely to effectively be a proxy for lagged house price inflation via circular causality.

Figure 3 shows a positive correlation through much of the sample, though it has its hits and misses. But including it (with a lag of two months) improves the fit of the model substantially.

Figure 3. Consumer confidence and house price inflation



Source: Roy Morgan, REINZ, Macrobond, ANZ Research

The loan-to-value ratio (LVR) restrictions

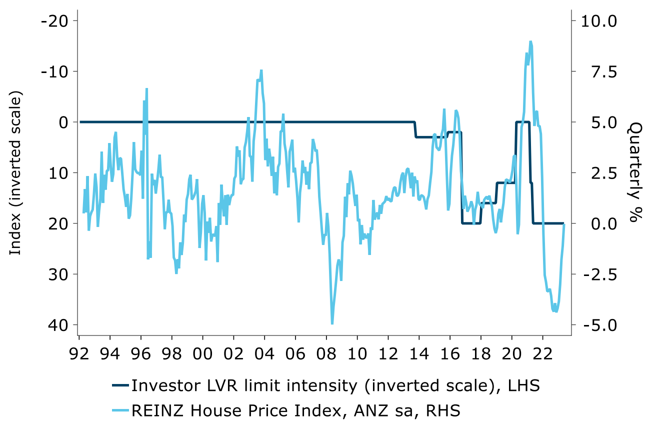
LVR restrictions were introduced by the RBNZ in 2014, as a macroprudential tool to support its financial stability mandate. The restrictions have been continuously tweaked through time as perceived system risks have waxed and waned. In order to introduce these restrictions into our model, we created a time series of the intensity of the indexes, using the share of new lending that was allowed to be "high" loan-to-value, and the threshold at which that limit kicked in. A decrease in either number amounts to more intense restrictions. Regional (Auckland) restrictions were ignored as these proved unsuccessful, merely encouraging Auckland-based investors to buy properties elsewhere, which spread the property boom rather than containing it. The restrictions were suspended for a year when COVID hit, but ended up being reinstated early due to a surge in investor lending.

When the restrictions were not in place, that of course didn't mean banks had unlimited appetite for risky lending. For unrestrained periods, the thresholds were set to a maximum of 25% of new lending being over 80% LVR (which is where the ratio sat in 2013 when the restrictions were first introduced). In practice, though, bank appetite for riskier lending varies through time.

Modelling suggests that the restrictions on investors have been very powerful. On the other hand, the impact of the owner occupier restrictions was not significant, so these weren't included in the model.

High-LVR lending restrictions were not introduced for the purpose of reining in house price inflation, but it makes sense that they would have a negative impact, by affecting how much people could borrow. The model estimated that tightening LVR restrictions for investors has a large negative impact on quarterly house price inflation very quickly.

Figure 4. LVR limit intensity and house price inflation



Source: RBNZ, Macrobond, ANZ Research

One-off 'policy shocks': the bright line test, CCCFA tweaks, interest deductibility and COVID lockdown

A bunch of policy changes happened over the estimation period that are essentially one-off 'shocks' to house price inflation. They could all be modelled separately, but this raises a risk of "over-fitting" (essentially, making life too easy for the model by allowing it to simply ascribe everything that happened at that moment to that one factor). We therefore pile four different policy developments into a simple "dummy" (on/off) variable that is set equal to 1 when the shock is deemed to be present and 0 elsewhere. It does force all the policy changes to have the same estimated impact, which is obviously pretty questionable. But this approach does have the advantage of erring on the side of caution in that if anything, it will tend to underestimate the impacts of these policy shocks, rather than overestimate them, which individual dummies would likely result in.

There are four shocks that we include in this way.

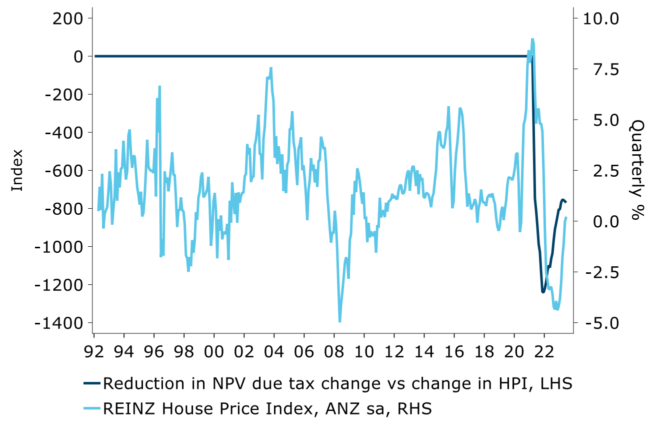
First, the "bright line test" was announced in the May 2015 Budget and came into force from 1 October. It made capital gains on investment property that was held for less than two years taxable income by default. We have included it in the model as a dummy variable set equal to 1 for three months starting from October 2015, and 0 elsewhere. While it's a 'permanent' shock to the investor value of housing, it should logically be a temporary shock to the rate of house price inflation.

Second, in December 2021 the Government introduced changes to the Credit Contracts and Consumer Finance Act 2003. The changes immediately threw a significant amount of sand in the mortgage machine, as lenders had to collect a much larger set of information from would-be borrowers. The law was later tweaked (July 2022, and again in May 2023) in order to reduce the unintended tightening of mortgage lending credit conditions. The dummy is set to 1 from the policy's introduction until the first set of tweaks in July 2022 (7 months) and 0 elsewhere.

Third, in March 2021 the Government changed the rules around the taxation of investment properties, removing the deductibility of interest costs on new purchases (with a phase-in for existing properties, but here we focus on the immediate impact on potential buyers, for whom there was no phase-in). Although this is a 'permanent' change (though that itself is uncertain, given different political parties' intentions) it will have again amounted to a temporary shock to house price inflation.

We experimented with more sophisticated ways of putting this policy change into the model, including calculating the reduction in the net present value of a property investment with and without the tax change over time and comparing this to the actual evolution of house prices (figure 5). But because there was so much going on around that time (including the tightening of LVR rules), it was difficult to obtain sensible estimates of its effect. So in the end, we just piled it into our catch-all 'shock' dummy.

Figure 5. Tax policy change and house price inflation

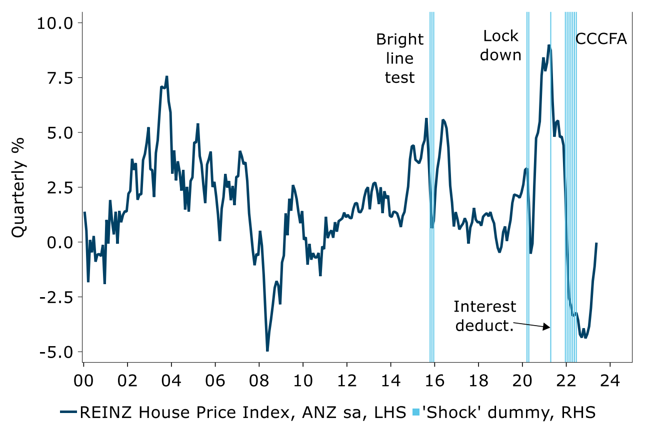


Source: REINZ, Stats NZ, Macrobond, ANZ Research

Finally, when the economy first went into COVID lockdown in March 2020, housing market turnover ground to a halt for a couple of months. In following lockdowns real estate firms had processes in place to prevent meaningful interruptions to market activity, so in effect the first lockdown was a one-off shock to market functioning – as well as confidence to some extent.

Figure 6 shows the resulting all-in dummy variable versus house price inflation.

Figure 6. Policy shocks and house price inflation



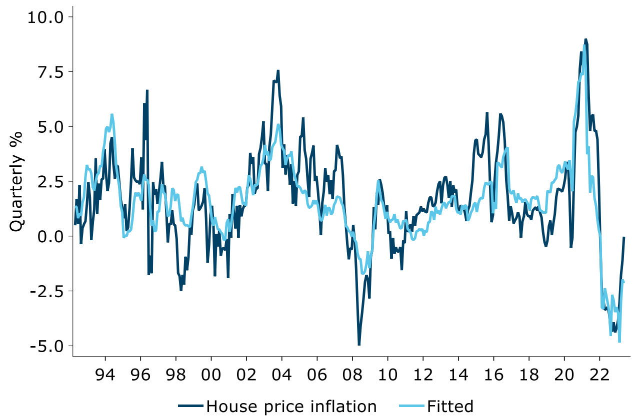
Source: REINZ, Macrobond, ANZ Research

Feature Article: What's driven house price inflation?

Putting it all together

Putting everything into the model, we get a pretty good historical fit, as shown in figure 7.

Figure 7. Actual and modelled house price inflation



Source: REINZ, Macrobond, ANZ Research

The model (estimated from 1999 to now) explains a little under 60% of the total variation in quarterly house price inflation over the period. All the variables are statistically significant[2].

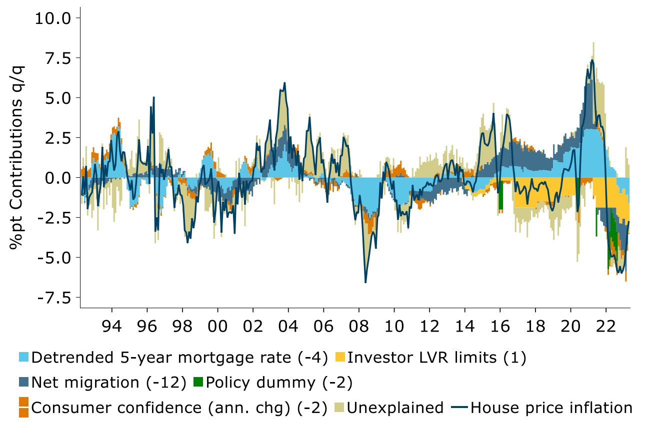
Variable	Lag (months)	Impact
Net migration	12	Positive
Annual change in consumer confidence	2	Positive
Detrended 5yr mortgage rate	4	Negative
Investor LVR limit intensity	1	Negative
Policy shocks	1	Negative

Figure 7 above shows that the model tends to underestimate the degree to which house price inflation falls in recessions (1998, 2008), and also can't explain the lift in 2015. The latter was an unusual situation, in that very low CPI inflation meant that the OCR was being cut despite house price inflation lifting to an 8-year high, with net migration also very strong.

But overall, the model does a good job of capturing the broad cycles, including the most recent one.

Putting the model into 'gap' terms (deviations from averages or in some cases, such as the mortgage rate, the linear trend) means we can chart the relative contributions of the factors estimated to have driven house price inflation. A decomposition is shown in figure 8.

Figure 8. Model breakdown of house price inflation



Source: REINZ, Macrobond, ANZ Research

What does the decomposition suggest?

- Interest rates (light blue) have a big impact. Their estimated positive impact on house price inflation turned negative in the second half of last year.
- Net migration (dark blue) has a large impact on the house price cycle too. The dramatic experience of closing the border provides an interesting case study of it abruptly flipping from a tailwind to a headwind.
- The model suggests that LVR lending restrictions (yellow) have been powerful, dampening housing price inflation significantly since late 2016 onwards, with their suspension in 2020 taking off the handbrake to some extent.
- The change in consumer confidence (orange) is a less important driver, but it helps explain price weakness in recessions. It's estimated to have been a negative for house price inflation in the past 18 months.
- The various policy shocks (green) are estimated to have taken quite a lot of heat out of house price inflation at times, particularly over recent years.

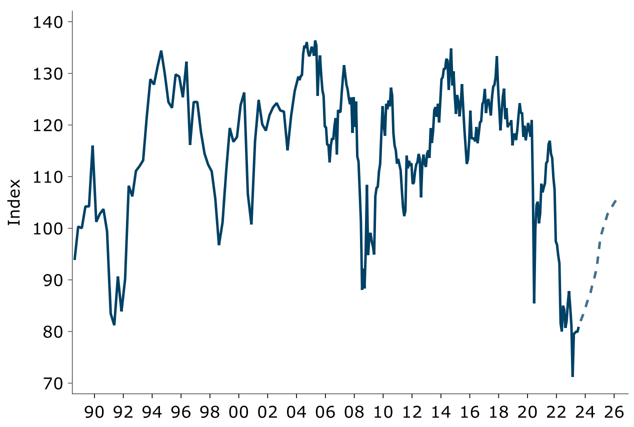
While quarterly house price inflation is currently still negative, it has clearly turned higher. The model captures this turn, though not fully (the 'unexplained' part has flipped positive). The impact of the sharp turnaround in net migration is just starting to make an entrance in the very last month of this model's estimation period. A year is a long estimated lag time for the effects of net migration to start to show up; perhaps we are in fact seeing the start of it more quickly than the model expects.

[2] Technically, serially correlated errors mean significance is overstated. But the reported significance level is well <1%.

Where to from here for house prices?

In order to generate house price forecasts from the model, we need forecasts of everything that's in it. We have forecasts of mortgage rates and migration. Policy is simply assumed to be unchanged at current settings. Consumer confidence is trickier; we don't forecast it. However, it's related to unemployment and inflation, and we can use our forecasts of those to put together an assumption consistent with our outlook for those, as below. It doesn't tend to have a big impact in any case, compared to interest rates, migration and policy settings.

Figure 9. Consumer confidence: modelled using unemployment and inflation

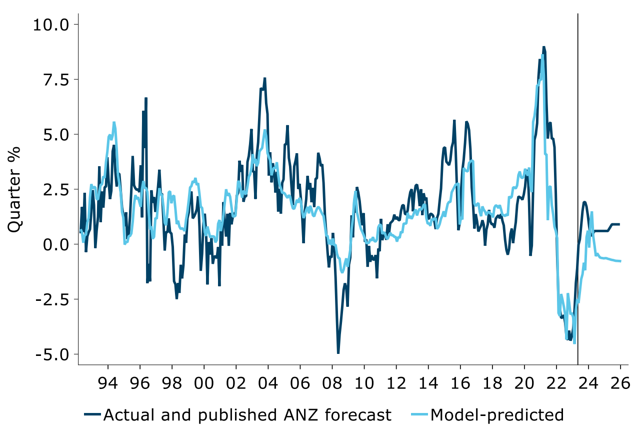


Source: Roy Morgan, Macrobond, ANZ Research

Putting all the forecast inputs into the model, it spits out the forecast for real house price inflation shown in figure 10.

The model also sees quarterly house price deflation popping its head above zero before petering out this year. The profile is quite similar to our published forecasts.

Figure 10. Model forecast versus ANZ forecast

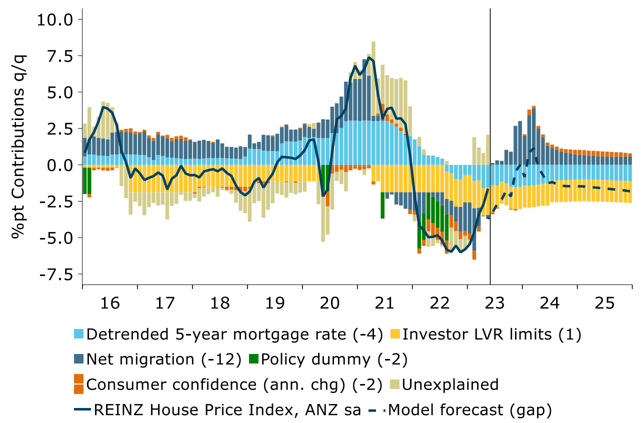


Source: REINZ, Macrobond, ANZ Research

Over 2025 the model predicts small falls in house prices rather than small increases – but it is of course worth noting that this estimate is subject to not only the uncertainty about the estimated impacts of all the variables, but also the forecasts of them. Given all that, we'd characterise the overall trajectory as "broadly consistent" with our published view.

As before, we can look at what is driving the model's forecast, using our gap-model estimates. Figure 11 shows the breakdown.

Figure 11. Model forecast decomposition



Source: REINZ, Macrobond, ANZ Research

The decomposition suggests that:

- The tailwind for housing from net migration is just getting started, and will peak in the first half of next year.
- Interest rates will be a headwind for housing prices for another couple of years, given we are not forecasting any meaningful changes in rates from here.
- Based on our forecast of rising unemployment but falling inflation, consumer confidence is anticipated to flip to a mild tailwind eventually.
- The investor LVR limits are assumed to remain at their current settings, which are contractionary.
- Any policy changes that affect the availability of credit or the investor value of housing are likely to have a significant impact on the market.

Overall, the model suggests the balance of headwinds and tailwinds is going to continue to move in the tailwinds' favour – but only enough to stop the housing market going backwards quite so quickly.

Mortgage borrowing strategy

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Summary

Mortgage rates were all higher on average in June, with the 1yr rate rising the most (0.23%pts). The increases came after the RBNZ's 25bp OCR hike, taking it to a post-GFC high of 5.5%. What happens next depends on how quickly inflation falls and the job market cools, and while the RBNZ has signalled that it thinks it has done enough, we think we'll see at least one more OCR hike before the cycle is over. RBNZ data shows that mortgage borrowers have started opting for higher short-term fixes like 6mths and 1yr in preference to lower, longer fixed like 3yrs, likely expecting rates to fall. But there is no guarantee they will fall, and indeed, if the RBNZ is forced to deliver another hike (or two), mortgage rates may rise further yet. Breakevens show that mortgage rates need to fall rapidly to make it cheaper in the long run to fix short and roll repeatedly as opposed to fixing for longer. The 3yr comes with an upfront guarantee of a lower rate (ie you're paying less from the get-go) and doesn't require rates to fall to work out cheaper in the long run. It also offers more certainty, which may appeal to some borrowers.

Mortgage rates all edged up a touch in June, with the moves seen following a rise in the OCR and wholesale interest rates here and abroad. Of note, while the OCR has risen 525bps since the end of 2021 (rising from 0.25% to 5.50%), the cheapest rate published in table 1 in this publication has risen by a much smaller 415bps (from 2.19% to 6.34%). That reflects a combination of both narrower lending margins and a change in the shape of the wholesale yield curve, which is now very much inverted. For example, as we go to print, the 1yr swap rate is 5.79%, but the 3yr swap rate is 5.02%. This has made the mortgage curve inverted too.

This is important, as wholesale yield curves are only inverted because markets believe the RBNZ is done hiking and will be easing relatively soon. For its part, the RBNZ has said something similar, noting in the May Monetary Policy Statement (MPS) that it expects to leave the OCR on hold for at least a year. Although it is projecting cuts in late 2024, they are highly conditional on inflation getting back to target.

So we find ourselves in a situation where markets and yield curves (via implied forward rates, or breakevens) are telling us that rates will fall soon, and the trick for borrowers is to figure out whether what's priced in is too low or too high. If rates fall faster than implied by breakevens, you're better fixing for a shorter period and rolling repeatedly. If they fall more slowly, a longer fix will work out cheaper. According to the old fable, a bird in the hand is worth two in the bush. This is what's going on here in terms of lower long-term rates versus higher short-term rates, and the hope that rates fall in the future. Fix for longer and get a lower rate; or fix for shorter and hope rates fall. It's a tough call, but on balance, we see merit in the former, or a mix of both if you want to hedge your bets.

As our breakeven table shows, fixing for 3yrs now at 6.34% will cost you the same as fixing for 1yr at 7.01% and rolling for a year at 6.08% in year 2 and 5.94% in year 3. Those are rapid falls, especially with the RBNZ saying it's not cutting till Q3, and that being conditional on falling inflation. Of course it might happen – but the point is that it *must* happen for shorter-term fixes to work out cheaper. Choosing 3yrs now is already cheaper, and is of course more certain, which may appeal to some borrowers.

But it isn't just the "bird in the hand" argument (which essentially says take what you can get when you can get it) behind our view that borrowers might want to consider fixing at least some debt for longer. We also think it's premature to say that the RBNZ is done with hikes. Without doubt, growth is slowing and there are pockets of real weakness in the economy (and technically we have been in a shallow recession). Inflation is also falling, but we don't think it's falling quickly enough, especially in the service sector, and of course, house prices look like they have bottomed out and will rise in H2. In short, we think we'll be lucky if we don't see at least one more OCR hike eventually as core inflation pressures prove a bit stubborn.

Figure 1. Carded special mortgage rates^

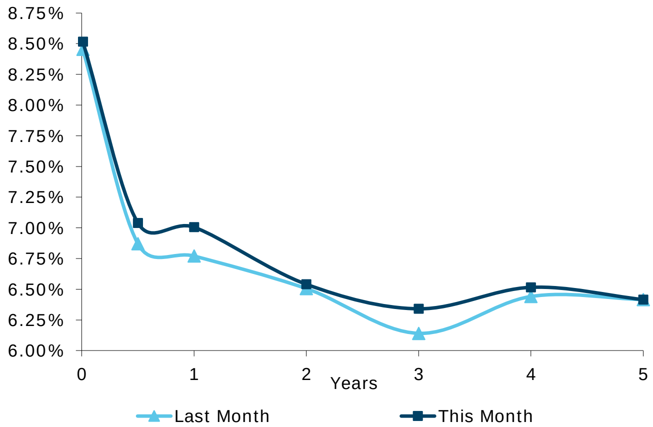

Table 1. Special Mortgage Rates

		Breakevens for 20%+ equity borrowers			
Term	Current	in 6mths	in 1yr	in 18mths	in 2 yrs
Floating	8.52%				
6 months	7.04%	6.97%	6.24%	5.91%	6.04%
1 year	7.01%	6.61%	6.08%	5.98%	5.94%
2 years	6.54%	6.29%	6.01%	6.19%	6.49%
3 years	6.34%	6.33%	6.35%	6.32%	6.33%
4 years	6.52%	6.39%	6.27%		
5 years	6.42%	#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 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	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Floating Mortgage Rate	6.7	7.8	8.0	8.5	8.5	8.8	8.8	8.8	8.8	8.5
1-Yr Fixed Mortgage Rate	5.2	6.4	6.5	7.0	7.1	7.1	6.9	6.6	6.3	6.0
2-Yr Fixed Mortgage Rate	5.6	6.6	6.5	6.5	6.6	6.3	6.1	5.9	5.6	5.5
3-Yr Fixed Mortgage Rate	5.7	6.7	6.6	6.3	6.3	6.2	6.0	5.8	5.6	5.5
5-Yr Fixed Mortgage Rate	6.0	6.8	6.6	6.4	6.7	6.5	6.2	6.0	5.9	5.9

Source: RBNZ, ANZ Research

Economic forecasts

	Actual			Forecasts						
Economic indicators	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
GDP (Annual % Chg)	6.6	2.3	2.2	1.1	-0.5	0.0	0.4	0.3	0.7	1.2
CPI Inflation (Annual % Chg)	7.2	7.2	6.7	5.9	5.6	5.2	4.8	4.5	3.4	2.9
Unemployment Rate (%)	3.3	3.4	3.4	3.5	3.9	4.2	4.5	4.7	4.8	4.9
House Prices (Quarter % Chg)	-4.0	-4.2	-2.9	-0.3	1.4	1.6	0.5	0.6	0.6	0.6
House Prices (Annual % Chg)	-5.6	-12.8	-13.6	-11.0	-5.9	-0.2	3.3	4.2	3.4	2.3

Interest rates	Sep-22	Dec-22	Mar-23	Jun-23	Sep-23	Dec-23	Mar-24	Jun-24	Sep-24	Dec-24
Official Cash Rate	3.00	4.25	4.75	5.50	5.50	5.75	5.75	5.75	5.75	5.50
90-Day Bank Bill Rate	3.85	4.65	5.23	5.60	5.77	5.85	5.85	5.85	5.68	5.43
10-Year Bond	4.30	4.47	4.20	4.60	4.75	4.50	4.25	4.00	4.00	4.00

Source: ANZ Research, Statistics NZ, RBNZ, REINZ

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