ANZ Research

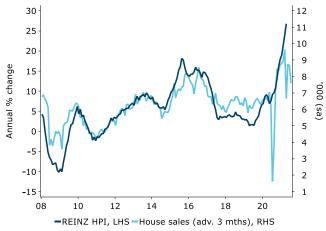
May 2021

New Zealand Property Focus Making headway (for now)

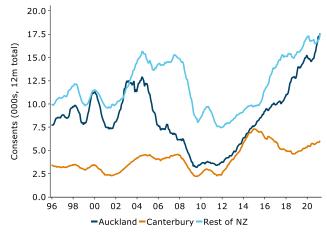


Signs of cooling?



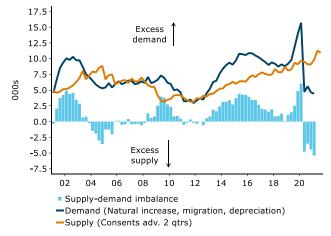


The pipeline is strong Record consents support housing supply



Catching up

The housing shortage is shrinking



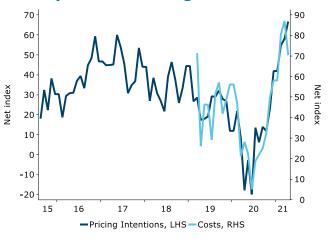
Prices to stabilise





Capacity constraints rising

Cost and price pressures may slow the delivery of new housing



But the shortage is large It could take 3-5 years to clear, even if borders remain closed

Housing shortage estimates (varying people per dwelling)

| Base | | People | e-per-dwell | ing | |
|------|---------|---------|-------------|--------|--------|
| year | 2.4 | 2.53* | 2.6 | 2.68* | 2.8 |
| 2001 | 130,000 | 100,000 | 90,000 | 70,000 | 60,000 |
| 2006 | 100,000 | 80,000 | 70,000 | 60,000 | 50,000 |
| 2012 | 80,000 | 60,000 | 60,000 | 50,000 | 40,000 |

*Note: 2.53 and 2.68 are the lowest and highest number of people per dwelling in the data, which starts in 1991 $\,$

Source: RBNZ, REINZ, Stats 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.

Housing market overview

The housing market certainly appears to have reacted to recent housing policy changes, with sales taking a dive and house price inflation slowing in April. However, the latter appears to be playing out a little more slowly than we initially assumed. Nonetheless, a moderation is in the pipeline (and in our forecast). Now that we are expecting OCR hikes from August 2022 (and subsequently higher mortgage rates), we also think a few months of falling house prices are likely. But while the risk of a sharper-than-expected price correction is significant, we do need to balance this with the fundamental issue that is the ongoing supply-demand imbalance. See our Market Overview.

Feature Article: Making headway (for now)

The closed border means the New Zealand housing market is in the rare position of being able to build enough houses to keep up with new demand. This month we explore a range of supply and demand indicators to gauge the severity of the current housing shortage and how this is likely to evolve in coming years. Overall, we sketch out a picture of a housing market whose fundamentals do not support the kind of sky-high price increases we saw over 2020. But at the same time, the construction industry is running into acute capacity pressures, which are driving up costs spectacularly and delaying the rollout of new housing. On net, it looks like New Zealand will be able to chip away at the housing shortage pretty quickly over 2021. But it's important to note that this progress is largely due to the border closure; as the largest source of demand for new housing has been completely shut off. This brief respite will not last unless serious changes to immigration policy are made. This month's Feature Article explores the housing shortage in more depth.

Mortgage borrowing strategy

Longer-term fixed mortgage rates have risen over the past month or so, but shorter-term rates are a touch lower. To date, falls in short-term rates have **benefitted many borrowers. However, fixing for 1 to 2 years doesn't offer** borrowers a great deal of time protection and that could start to become a worry if the RBNZ starts hiking the OCR in 2022, as we now expect them to do. Fixing for longer has cost more since the COVID-19 crisis started, and the 1year rate has generally been the cheapest. But ahead of likely increases in wholesale interest rates, which form the basis of mortgage rates, borrowers may be tempted to fix for longer. Breakeven analysis suggest it could be worth fixing for longer given our expectation that the OCR will rise next year.

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Summary

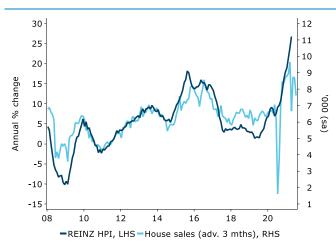
The housing market certainly appears to have reacted to recent housing policy changes, with sales taking a dive and house price inflation slowing in April. However, the latter appears to be playing out a little more slowly than we initially assumed. Nonetheless, a moderation is in the pipeline (and in our forecast). Now that we are expecting OCR hikes from August 2022 (and subsequently higher mortgage rates), we also think a few months of falling house prices are likely. But while the risk of a sharper-than-expected price correction is significant, we do need to balance this with the fundamental issue that is the ongoing supply-demand imbalance.

Slipping in April

The Government housing policy announcements on 23 March certainly added to the level of anticipation around data released for the month of April. While it is still early days, the data indicates the policy changes may be taking some heat out of the market. House sales declined 12.8% m/m, but were up a whopping 420% (not a typo) compared to April 2020. The latter figure might sound impressive, but it is largely lockdown-induced noise (something that's going to occur across many data over the coming months).

Looking through the noise, the fall in sales represents a precursor to weaker house price momentum over coming months (figure 1). But that does appear to be happening a little more slowly than we previously anticipated. House prices lifted 1.7% m/m in April – a decent slowing from March's 2.8% m/m lift, but still a little stronger than we were expecting and well above its post-1992 historical average pace of 0.6% m/m.

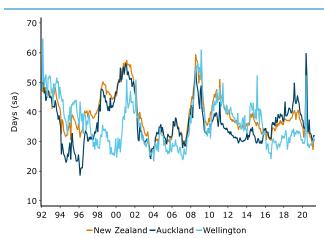




Source: REINZ, Macrobond, ANZ Research

It's not just sales that suggest housing momentum is turning. Days to sell have ticked up from recent lows, though are still well below their historical average (figure 2). That's a sign that the supply-demand balance certainly hasn't flipped on its head, but is at least moving in the right direction. The key thing going forward will be whether the impacts of recent policy changes turn out to be transitory or have a more meaningful impact on housing momentum.

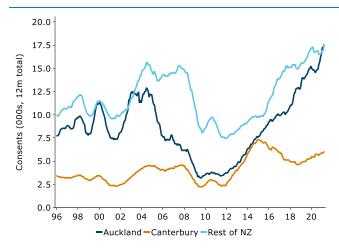
Figure 2. Days to sell



Source: REINZ, Macrobond

For the record, we continue to expect a significant moderation in house price inflation is on the cards over 2021. Credit and affordability constraints are biting, mortgage rates appear to have bottomed out, loan-to-value ratio restrictions are back and bigger than before, building consents are at historical highs (figure 3), and population growth is being severely curtailed by the border closure. In other words, the demand pulse is probably close to peaking, and supply is catching up (**although there's** still a long way to go - see our Feature).







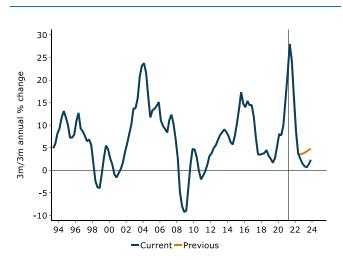
Turning to our house price forecasts, we have baked the stronger starting point into our house price forecast, but we still expect housing momentum to slow significantly **over 2021. Further out, we've made**



some downwards revisions to the house price outlook (figure 4).

This revision is due to the change to our OCR forecast, published last week. Come August 2022, we think there will be enough certainty in the data flow for the RBNZ to feel comfortable raising the OCR. But reflecting the balance of risks and lingering uncertainty we've pencilled in a relatively gentle pace of tightening, with our OCR forecast reaching just 1.25% by the end of 2023 (versus 0.25% at the moment).

Figure 4. House price forecast



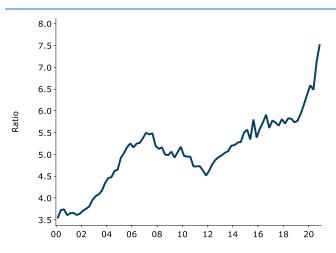
Source: REINZ, Macrobond, ANZ Research

The higher OCR is expected to be fully passed through to mortgage rates. With mortgage rates being such an important driver of house prices (especially when prices are so high relative to incomes), we expect this to result in a decent headwind for house prices. But with the fundamentals (ie supply-demand imbalance) expected to remain **supportive for prices for a long while yet, we're not** expecting a significant bout of house price falls.

It is worth noting that a fundamental shortage of housing does not preclude house price falls. Given the high starting point for house prices relative to incomes, it is entirely possible that the economy could find itself in a place where a significant number of people intend to buy a house but are not in a position to pay the going price for one, or conclude **that it isn't the best time to do so.** House prices can undershoot fundamentals just as easily as they can overshoot. All up, we've downgraded our house price outlook over 2022-2023 to reflect the impact of higher interest rates. We expect that annual house price inflation, on a 3-month moving-average basis, will drop from a peak of 28% in Q2 2021, to just 0.6% in Q2 2023. Thereafter, we see house price inflation accelerating a little (with open borders supporting demand via stronger population growth) but remaining well below its historical annual pace (post 1993) of around 7%. We just don't see credit and affordability constraints abating enough to let the market take off again.

Our forecast outlook attempts to centralise both the numerous upside and downside risks surrounding the market at present. But centralising housing risks is always a big call. Upside risks (ie a little more momentum than we expect) are high-probability-lowimpact, while downside risks (associated with a broad income shock, recent policy changes, and the high starting point) might be less likely to eventuate but could have a much larger impact. With prices to incomes already looking very stretched (Figure 5), the impacts of an income shock such as a rise in unemployment could be very material indeed particularly since the ability of monetary policy to ease the debt-servicing load on those who have experienced an unfortunate change of circumstances would be extremely limited.

Figure 5. House price to income ratio



Source: REINZ, Statistics NZ, ANZ Research, Macrobond



Housing market indicators for April 2021 (based on REINZ data seasonally adjusted by ANZ Research)

| | Med | ian house pr | ice | House pri | ice index | # of | Monthly | Average |
|------------------------------|-------------|--------------------|-------------------|--------------------|-------------------|------------------|-------------|-----------------|
| | Level | Annual % change | 3-mth % change | Annual % change | 3-mth % change | monthly sales | % change | days to sell |
| Northland | \$671,449 | 49.1 | 6.9 | 22.2 | 7.4 | 223 | (-10%) | 39 |
| Auckland | \$1,105,317 | 21.2 | 7.3 | 24.5 | 7.6 | 2,773 | (-20%) | 32 |
| Waikato | \$724,183 | 37.8 | 8.4 | 30.6 | 9.1 | 799 | (-11%) | 31 |
| Bay of Plenty | \$804,012 | 27.2 | 11.0 | 26.7 | 7.8 | 494 | (-3%) | 32 |
| Gisborne | \$702,796 | 72.4 | 15.8 | | | 40 | (-17%) | 35 |
| Hawke's Bay | \$762,587 | 17.3 | 8.1 | 36.9 | 9.7 | 223 | (-5%) | 28 |
| Manawatu-Whanganui | \$574,642 | 46.4 | 8.0 | 36.5 | 9.8 | 336 | (-12%) | 26 |
| Taranaki | \$536,054 | 42.5 | 5.9 | 32.7 | 9.0 | 177 | (-2%) | 22 |
| Wellington | \$862,370 | 19.1 | 6.3 | 34.3 | 10.2 | 749 | (-1%) | 30 |
| Tasman, Nelson & Marlborough | \$724,142 | 16.4 | 4.9 | | | 222 | (+7%) | 28 |
| Canterbury | \$566,451 | 22.1 | 6.9 | 26.9 | 7.8 | 1,137 | (-10%) | 28 |
| Otago | \$705,593 | 59.0 | 8.2 | 16.5 | 5.7 | 330 | (-22%) | 33 |
| West Coast | \$284,109 | 26.5 | 9.7 | 22.9 | 8.2 | 53 | (-25%) | 34 |
| Southland | \$404,848 | 30.6 | 5.7 | 19.5 | 7.1 | 158 | (-13%) | 22 |
| New Zealand | \$795,646 | 19.0 | 6.7 | 26.8 | 8.1 | 7,656 | (-13%) | 30 |



Summary

The closed border means the New Zealand housing market is in the rare position of being able to build enough houses to keep up with new demand. This month we explore a range of supply and demand indicators to gauge the severity of the current housing shortage, and how it is likely to evolve in coming years. Overall, we sketch out a picture of a housing market whose fundamentals do not support the kind of sky-high price increases we saw over 2020. But at the same time, the construction industry is running into acute capacity pressures, which are driving up costs spectacularly and delaying the rollout of new housing. On net, it looks like New Zealand will be able to chip away at the housing shortage pretty quickly over 2021, but it's important to note that this progress is largely due to the border closure; without net immigration, the largest source of demand for new housing has been completely shut off. But this brief respite won't last unless serious changes to immigration policy are made.

Tracking the housing shortage

It's widely accepted that New Zealand's housing affordability issues fundamentally stem from a lack of responsiveness of housing supply. Over the past decade, demand for housing has soared, while supply has lagged well behind. For many, this has eroded the Kiwi dream of home ownership, with the homeownership rate slipping from a peak of 73.8% in 1991 to 64.5% in 2018.

Along with the impacts of interest rate changes and housing policies, how demand for new housing evolves relative to supply will be a key driver of the housing cycle moving forward. While estimates of New Zealand's housing stock shortfall are highly uncertain (just small alterations to key assumptions cause significant variation), we can keep tabs on the supplydemand imbalance from a flows perspective relatively easily. That is, we can determine with reasonable certainty whether housing shortages are getting better or worse.

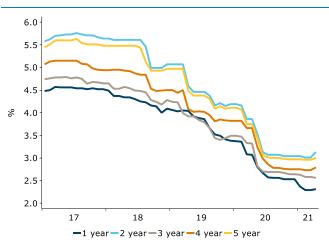
This month we outline a series of indicators that do this very thing. And for good measure, we offer a range of estimates for the housing shortfall – all of which suggest we'll need to be building full steam ahead for a long while yet. While uncertainties around shortfall estimates mean we won't know exactly when we've built enough houses, we can at least tell if we're making progress. This exercise is also useful for highlighting key uncertainties (eg immigration policy) that could throw a spanner in the works.

Right now, with borders closed and construction booming, **these measures show that we're making** good progress towards eroding the supply shortfall. But the border w**on't** stay closed forever.

Housing demand

First, we will loosely class some indicators as measures of demand for housing. One of the most obvious of these is mortgage rates. Bottom line: the lower the mortgage rate, the less money is required to service each dollar you borrow, and the more likely it is that **you'll offer a higher price for a house. And** because there **isn't an abundance of houses to buy** (and supply is slow moving), small changes in mortgage rates can have a very powerful effect on house prices.

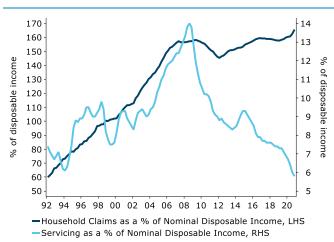




Source: RBNZ, Macrobond

However, we think interest rates have bottomed out for now. And with OCR hikes pencilled in for August **2022, we're expecting** mortgage rates to start lifting in the not-too-distant future. This should see demand for houses fall significantly – with prices so high, even a small rise in mortgage rates will significantly increase the debt-servicing cost of buying a house, as well as making repayments much harder to afford.

Figure 2: Debt serviceability and household indebtedness



Source: Stats NZ, Macrobond, ANZ Research

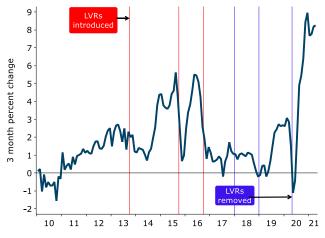


Serviceability and debt levels matter for housing demand, and are closely related to mortgage rates. **What's fascinating about the New Zealand housing** market is that even though prices have skyrocketed compared to income growth and debt levels are now higher than ever, the cost of servicing a mortgage has actually *declined* as a share of disposable income, due to the decline in mortgage rates over the past decade (figure 2). However, given that we expect mortgage rates to rise in coming years, servicing a mortgage is about to get more expensive, making very large mortgages a lot less palatable for both borrowers and lenders.

Macroprudential policy can also influence housing demand by simply slowing down mortgage borrowing at high loan to value ratios (LVRs). Changes to the LVR policy are shown in figure 3, with red indicating a tightening, and blue indicating a loosening of the restrictions. LVR restrictions act as speed limits on the housing market, severely curtailing the amount of risky lending that can take place and potentially taking many buyers out of the market.

LVRs were suspended for 12 months in April 2020, in the midst of lockdown when house price falls were widely expected. They have since been reinstated, and on 1 May 2021, were further tightened. This tightening was particularly targeted at investors, for whom only 5% of new lending can be at LVRs of more than 60%. Restrictions are also in place for owner-occupiers, for whom only 20% of new lending can be at LVRs over 80%. **Banks' own lending policies** (such as interest rates used for serviceability tests) also influence the supply of housing credit, but are harder to capture empirically.





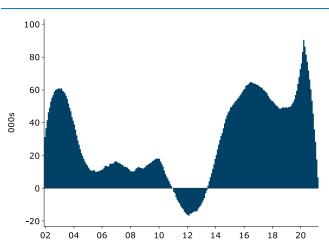
Source: REINZ, RBNZ, Macrobond, ANZ Research

Tax and other government policy settings are also a powerful tool, and one that has recently been used to take the heat out of the market and skew the demand pulse towards first home buyers – see last month's Property Focus for more.

A final financial factor that can influence demand for houses is rent. When weekly rents are high, owning your own home is more financially attractive, so demand for owner-occupied property increases. At the same time, an increase in rents makes investing in a rental property more appealing too (all else equal). On the flipside, any increase in rents makes it harder for renters to make ends meet. We've been pleasantly surprised by how restrained rent rises have been so far this year, but it's still early days.

Stepping back from financial variables, the most fundamental driver of housing demand is simply how many people are in the country. While housing is often viewed as a retirement savings/investment vehicle in New Zealand, **it's important to remember** that shelter is also an essential good (alongside food and water!). Net immigration to New Zealand was extremely strong over the 2010s, with annual net migration not falling below 40,000 from 2014 until the borders closed in 2020 (figure 4).

Figure 4: Annual net migration



Source: Stats NZ, Macrobond, ANZ Research

With tens of thousands of people moving to New Zealand each year over the second half of the 2010s, we also needed to be building tens of thousands of homes just to keep the housing shortfall from rapidly accelerating. As we'll see, the number of new dwellings built over this time was woefully below what was needed to keep up. It's no coincidence that New Zealand experienced the combination of (relatively) low building activity and strong net migration alongside rapid house price growth in the 2010s.

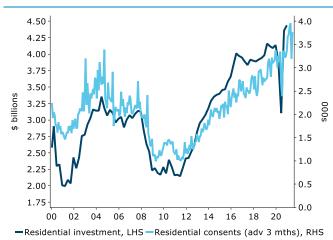


So what's the demand picture for housing from here? Overall, the fundamentals of the housing market point to a significant softening in housing demand over coming quarters. With population growth slowing, macroprudential policy tightening, recent Government policies making it tougher for investors, interest rates bottoming out, and affordability constraints biting, it's difficult to envisage demand maintaining the kind of momentum that we saw over 2020. That said, there's still room for animal spirits and fear of missing out to see demand continue to run in the opposite direction to the fundamentals for a while yet.

Housing supply

Of course, demand is only one side of the market – we also need to analyse what's happening to the supply of housing. A timely indicator for this is the number of new dwellings that are being consented each month. These tend to be a leading indicator for how much residential activity takes place, since you need to get a consent before you can start building a house (figure 5).



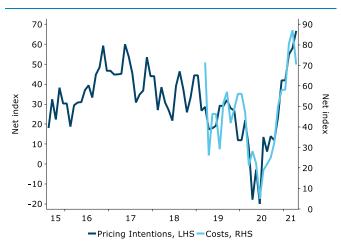


Source: Stats NZ, Macrobond, ANZ Research

One issue at the moment is that while there's a lot of work getting consented, it's very difficult (and expensive) to find both the people and the materials to get the job done. So to get a fuller picture of the state of supply in the housing market, it makes sense examine measures of capacity pressure in the construction sector. These do not paint a pretty picture, with indicators from our ANZ Business **Outlook pointing to a highly constrained sector that's** seeing a lot of cost and price pressures (figure 6).

These pressures are coming from a few places. Firstly, it's become difficult and expensive to find the raw materials needed to build houses. COVID has disrupted international supply chains and driven up the price of raw materials such as timber, and this is adding both time and cost to building projects. Secondly, even if you can source the resources needed to build, it's become a serious challenge getting enough people into the industry to actually build houses at the planned rate. With the border closed, and the domestic labour market significantly tighter than anyone expected it would be a year ago, available and suitably skilled workers are very challenging to find.

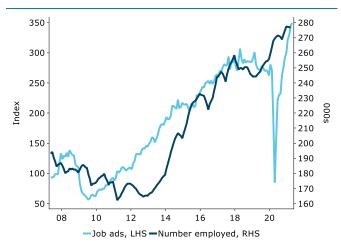




Source: Macrobond, ANZ Research

The figure below shows record job ads being posted by the construction sector, as well as pretty solid increases in employment, even over 2020. But anecdotes of severe labour shortages, as well as evidence from business surveys, suggest that hiring levels have nonetheless not kept up with the demand that's coming from the huge pipeline of residential construction activity.

Figure 7: Construction sector job ads and employment



Source: Stats NZ, MBIE, Macrobond, ANZ Research

The supply side of the housing market is definitely in a bind. There's still a lot of work in the pipeline that needs to be completed, but increasingly expensive and scarce inputs mean that the sector is struggling



to meet currently high levels of demand. These supply issues are unlikely to be resolved as long as the border remains closed, and COVID plays havoc with international commodity prices and supply chains. Project delays could cause cash-flow issues for firms that complicate the picture further.

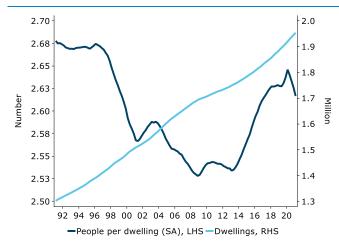
Making a market: Housing supply and demand

So far we've explored indicators of both supply and demand in the housing market. Now it's time to bring the two together and see how the housing supply shortfall is tracking. Housing demand is likely to fade in coming quarters, but so too is supply, which is running into capacity constraints. How to quantify these two offsetting forces?

One way to approach this is to think about the total housing stock in New Zealand, and how this needs to change to accommodate additional demand from population growth (including via net migration).

Figure 8 shows the number of dwellings currently in New Zealand, as well as the average number of people per dwelling. We can see that the number of dwellings has actually been rising pretty steadily in recent years. However, the number of people per dwelling has also spiked since 2014, which can reasonably be interpreted as a sign that construction activity did not manage to keep pace with population growth turbocharged by high net migration.





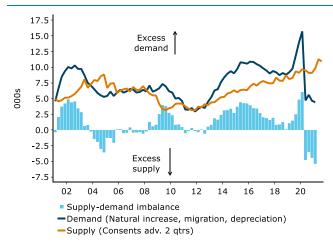
Source: Stats NZ, Macrobond, ANZ Research

If the number of new dwellings does not keep pace with demand, then we will see the housing shortage worsen. From a population point of view, the number of new houses that is needed each quarter will be equal to the increase in the population (weighted by number of people per dwelling), and an allowance for any depreciation in the housing stock. The supply of houses will then be equal to how many consented houses get completed each quarter. If we subtract the supply of new dwellings (proxied by lags of dwelling consents, **since we don't have completions** data) from the number of new houses needed each quarter, then we can get a rough estimate for how quickly the housing supply shortage is shrinking each quarter (figure 9).

This simple framework does not account for who owns the properties, what incentives they have, and how these might be impacted by regulatory changes (for example the extra compliance burden from healthy homes initiatives, or tilting the scale between **landlords' and renters' rights). Rather it's a simple** estimate of how many new houses are needed each quarter, versus how many are being built. The estimate also does not account for whether the current housing stock is actually located in places where demand for housing is high (to some extent, an increase in working-from-home could mitigate this matching problem).

Over the mid-2010s, there was a prolonged period where housing demand ran well ahead of supply. With the construction sector still recovering from the Global Financial Crisis and the resulting loss of capacity, and net migration increasing sharply, growth in the stock of dwellings lagged far behind demand for new housing. The Christchurch earthquakes also tragically exacerbated the situation by destroying many peop**le's houses.**

Figure 9: Housing supply-demand imbalance



Source: Stats NZ, Macrobond, ANZ Research

In recent quarters, it looks like housing supply has finally started to significantly outstrip demand for the first time since the mid-2000s. However, if we look at figure 9, we can see that a large fall in populationdriven demand is largely to blame, which can be pinned on the border closure. While the border remains closed, ongoing strong building activity will rapidly shrink the housing shortage (and this is one reason for our expectation that house price inflation will slow **to a snail's pace** by the end of 2022).



The big uncertainty here is net migration. If previous immigration policies are restored once the border opens, then demand is likely to take off again. It's very unlikely that the construction sector will be able to keep up, eroding any progress we've made in addressing the shortage. The Government has directed the Productivity Commission to look into immigration settings, but right now we have no details on any potential policy changes, and immigration remains a big unknown for the outlook for the housing shortage. But we can say for sure that to sustainably improve housing affordability from a fundamentals point of view, either immigration policy needs to change, or serious gains in the responsiveness of housing supply need to be generated (or both).

So how big is the supply shortage?

It's not possible to get a precise answer to this question, but analysts are always having a crack at it. Using the above framework, we can make some rough estimates, and show how sensitive these estimates are to different assumptions. Key assumptions include:

- The base year when the market is deemed to be at equilibrium which we use as our starting point for calculating the cumulative shortage.
- The optimal number of people per dwelling.
- The rate at which the existing housing stock depreciates (think of this as trying to account for the newly consented dwellings that will replace older rundown ones).

Unfortunately, we'll never know exactly what number of houses would be consistent with a housing shortage of zero – there are simply too many moving parts. But, we can take a base year for when we think the supply-demand balance was broadly stable, and work out the cumulative shortage in houses since then. For our central estimate here, we choose 2006 for the base year, as new housing supply was reliably keeping up with demand over this time – and quarterly house price inflation had slowed to 1.5-3%, versus a peak of around 7.5% in 2004.¹

Table 1 presents a range of estimates of the current housing undersupply, flexing both the number of people per dwelling (which fluctuated between 2.5-2.7 since the 1990s) and the base year. This assumes a depreciation rate of approximately 0.4% per year. Table 2 presents another set of estimates where we allow the quarterly deprecation rate to vary from 0.06-0.14%, and assume 2.6 people per dwelling. The depreciation assumption is very uncertain. The IRD allows non-residential property to be depreciated at a rate of 2% for tax purposes (and it was 0% from 2011 until the 2020-2021 income year). Our central assumption for the depreciation rate on the residential housing stock is around 0.4% (annualised) - lower than for non-residential. We think that's reasonable - non-residential buildings probably have more wear and tear. However, it's pretty uncertain, especially since we're trying to capture old dwellings being replaced with our depreciation assumption, so we've illustrated how sensitive our central estimate is to varying the depreciation rate.

Table 1. Housing shortage estimates(varying people per dwelling)

| Base | | People | e-per-dwell | ing | |
|------|---------|---------|-------------|--------|--------|
| year | 2.4 | 2.53* | 2.6 | 2.68* | 2.8 |
| 2001 | 130,000 | 100,000 | 90,000 | 70,000 | 60,000 |
| 2006 | 100,000 | 80,000 | 70,000 | 60,000 | 50,000 |
| 2012 | 80,000 | 60,000 | 60,000 | 50,000 | 40,000 |

*Note: 2.53 and 2.68 are the lowest and highest number of people per dwelling in the data, which starts in 1991.

Table 2. Housing shortage estimates(varying depreciation rate)

| Base | | Depr | eciation ra | te | |
|------|--------|--------|-------------|---------|---------|
| year | 0.06% | 0.08% | 0.10% | 0.12% | 0.14% |
| 2001 | 30,000 | 60,000 | 90,000 | 120,000 | 140,000 |
| 2006 | 30,000 | 50,000 | 70,000 | 90,000 | 120,000 |
| 2012 | 30,000 | 40,000 | 60,000 | 70,000 | 80,000 |

Source: ANZ Research

This analysis presents a plausible range for the housing shortfall of between 30k and 140k. But for our central estimate (where we assume 2.6 people per dwelling, an annualised depreciation rate of 0.4%, and a base year of 2006), we'd say New Zealand is about 70k houses short compared with 2006. Figure 9 showed that, with the border closed, we're currently reducing the housing shortage by around 5000 houses per quarter. That means, depending on the ability of the construction sector to meet demand, it could take another 3-5 years just to clear the housing shortage that's accumulated since 2006 (assuming we haven't underestimated how many houses are needed). In practice it will take much longer, because the border can't remain closed forever, and there are also serious question marks

¹ Yet another **uncertainty that our analysis doesn't capture is** any shifts in the composition of new dwelling consents. For **example, if there's a shift towards apartment buildings, this** could see the housing shortage be eroded much faster per consent issued. This is ano**ther reason why it's so hard to pin** down the size of the housing shortage in New Zealand.



around the construction sector's ability to deliver the record-high number of dwellings that have been consented this year, given materials shortages and labour supply constraints.

Overall, taking both the supply and demand pictures together, it looks like the housing market will be able to make progress at resolving the supply shortfall, particularly over the rest of 2021. This should contribute to the moderation in house price inflation **we're assuming** (see Market Overview). However, construction sector capacity constraints mean it could take longer than expected to clear the backlog. And unless immigration settings are refined (or planning and zoning laws are changed), we could see the housing supply shortage open up again in coming years.

Looking forward, the indicators covered in this article will allow us to monitor the housing deficit closely as we move through 2021. We'll report on and refine these indicators periodically, especially if we see new trends emerging. But for now, there's plenty of building to be done, and the fundamentals look set to keep price levels elevated relative to incomes for a long while yet.

However, the existence of a housing shortage, even a large one, should in no way be interpreted as **meaning that house prices can't fall (particularly from** this hair-raising starting point relative to incomes), or that developers might find themselves unable to sell units at a price that covers their costs. House prices can deviate from fundamentals for prolonged periods, in both directions.



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Summary

Longer-term fixed mortgage rates have risen over the past month or so, but shorter-term rates are a touch lower. To date, falls in short-term rates have benefitted many borrowers. However, fixing for 1 to 2 years **doesn't offer borrowers a great deal of time** protection and that could start to become a worry if the RBNZ starts hiking the OCR in 2022, as we now expect them to do. Fixing for longer has cost more since the COVID-19 crisis started, and the 1-year rate has generally been the cheapest. But ahead of likely increases in wholesale interest rates, which form the basis of mortgage rates, borrowers may be tempted to fix for longer. Breakeven analysis suggest that it could be worthwhile fixing for longer given our expectation that the OCR will rise next year.

Our view

Mortgage rates have started moving again, having held steady for some months. The moves haven't been big and the overall picture has been one of shorter-term rates falling and longer-term rates rising. The mechanical consequence of the steeper mortgage borrowing curve is that it has increased the cost of time certainty. The move up has been led by a rise in global long-term interest rates feeding into local long-term wholesale rates, which has put upward pressure on longer-term mortgage rates. We expect this broad trend to continue over coming months, with more pressure on longer-term rates than shorter-term ones.

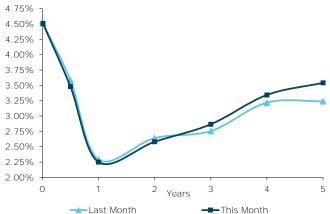
As such, it is likely that the lows are in for wholesale interest rates – and by association, mortgage rates. **And although we aren't** likely to see short-term mortgage rates rise by much – if at all – until the OCR rises, longer-term rates look set to continue rising gradually. That being the case, is it worth fixing for a bit longer? As mortgage rates have fallen in recent years, many borrowers have benefitted from fixing for short terms (which have tended to be the cheaper terms). That strategy has certainly paid off, especially over the past year, which saw mortgage rates fall to all-time lows.

How things will actually pan out is highly uncertain, but we are guided by our OCR forecasts. We expect the RBNZ to lift the OCR in August 2022, and to eventually deliver four 25bp hikes by the end of 2023. Given how far down the track that is, the exact timing and sequencing of hikes is unknowable. But the key message is that we do think hikes are coming. So what does our OCR forecast imply for mortgage rates? As noted earlier, with the first hike not due for 15 months, 6-month and 1-year mortgage rates are likely to be fairly steady. But as we inch closer to the first hike, and financial markets become confident of the start date, 2 to 5-year wholesale rates will start rising, taking mortgage rates with them.

A glass-half-full interpretation of this would be to stay calm, fix for 1-year and enjoy low rates for a little longer. However, a glass-half-empty view would be to **start worrying, because a year isn't long and it will** probably only get more expensive from here. We see merit in both views. However, because we see interest **rates rising, we'd** reframe the question: what is a reasonable premium to pay for certainty?

Breakeven analysis can help. We know the 1-year rate is the cheapest, but it could be more expensive to refix in a year. So, should you go longer? Is it worth paying 0.62% more to fix for 3 years? As our table shows, the breakeven 1-year rate in 1 year's time is 2.91%, and in 2 years' time it is 3.44%. If you fix for 3 years, that's a bit like saying that you think there is a better-than-even chance that the 1-year rate will rise from 2.25% to 2.91% to 3.44% over the next 1 and 2 years. That's 1.19% over 2 years, but during that time, we expect the OCR to rise by 1%. 1.19% is a touch more than 1%, but it isn't far off, and being fixed for 3 years does bring certainty, which many people value.







| | | Breakevens for 20%+ equity borrowers | | | | | | | | | | |
|----------|---------|--------------------------------------|------------|---------------|----------|--|--|--|--|--|--|--|
| Term | Current | in 6mths | in 1yr | in 18mths | in 2 yrs | | | | | | | |
| Floating | 4.51% | | | | | | | | | | | |
| 6 months | 3.48% | 1.02% | 2.75% | 3.08% | 3.29% | | | | | | | |
| 1 year | 2.25% | 1.88% | 2.91% | 3.18% | 3.44% | | | | | | | |
| 2 years | 2.58% | 2.53% | 3.17% | 3.62% | 4.11% | | | | | | | |
| 3 years | 2.87% | 3.04% | 3.71% | 3.95% | 4.18% | | | | | | | |
| 4 years | 3.34% | 3.44% | 3.86% | | | | | | | | | |
| 5 years | 3.54% | #Av | erage of " | big four" bar | nks | | | | | | | |

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

Source: interest.co.nz, ANZ Research



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

| 2 | 5 5 | | | × 1 | | 5 | · · · · · · | | | | | | | |
|--------------|------|-------|-------|-------|-------|-------|-------------|-------|-------|-------|-------|-------|-------|-------|
| | | | | | | Morto | gage Rate | e (%) | | | | | | |
| | 2.00 | 2.25 | 2.50 | 2.75 | 3.00 | 3.25 | 3.50 | 3.75 | 4.00 | 4.25 | 4.50 | 4.75 | 5.00 | 5.25 |
| 200 | 196 | 201 | 207 | 213 | 219 | 225 | 231 | 237 | 243 | 250 | 256 | 263 | 270 | 276 |
| 250 | 244 | 251 | 259 | 266 | 273 | 281 | 289 | 296 | 304 | 312 | 320 | 329 | 337 | 345 |
| 300 | 293 | 302 | 310 | 319 | 328 | 337 | 346 | 356 | 365 | 375 | 385 | 394 | 404 | 415 |
| 350 | 342 | 352 | 362 | 372 | 383 | 393 | 404 | 415 | 426 | 437 | 449 | 460 | 472 | 484 |
| ÷ 400 | 391 | 402 | 414 | 426 | 437 | 450 | 462 | 474 | 487 | 500 | 513 | 526 | 539 | 553 |
| 450 | 440 | 453 | 466 | 479 | 492 | 506 | 520 | 534 | 548 | 562 | 577 | 592 | 607 | 622 |
| ₹ 500 | 489 | 503 | 517 | 532 | 547 | 562 | 577 | 593 | 609 | 625 | 641 | 657 | 674 | 691 |
| 550 U | 538 | 553 | 569 | 585 | 601 | 618 | 635 | 652 | 669 | 687 | 705 | 723 | 741 | 760 |
| g 600 | 587 | 604 | 621 | 638 | 656 | 674 | 693 | 711 | 730 | 750 | 769 | 789 | 809 | 829 |
| £ 650 | 635 | 654 | 673 | 692 | 711 | 730 | 750 | 771 | 791 | 812 | 833 | 854 | 876 | 898 |
| t 700 | 684 | 704 | 724 | 745 | 766 | 787 | 808 | 830 | 852 | 874 | 897 | 920 | 944 | 967 |
| 2 750 | 733 | 754 | 776 | 798 | 820 | 843 | 866 | 889 | 913 | 937 | 961 | 986 | 1,011 | 1,036 |
| 800 | 782 | 805 | 828 | 851 | 875 | 899 | 924 | 948 | 974 | 999 | 1,025 | 1,052 | 1,078 | 1,105 |
| 850 | 831 | 855 | 879 | 904 | 930 | 955 | 981 | 1,008 | 1,035 | 1,062 | 1,089 | 1,117 | 1,146 | 1,174 |
| 900 | 880 | 905 | 931 | 958 | 984 | 1,011 | 1,039 | 1,067 | 1,095 | 1,124 | 1,154 | 1,183 | 1,213 | 1,244 |
| 950 | 929 | 956 | 983 | 1,011 | 1,039 | 1,068 | 1,097 | 1,126 | 1,156 | 1,187 | 1,218 | 1,249 | 1,281 | 1,313 |
| 1000 | 978 | 1,006 | 1,035 | 1,064 | 1,094 | 1,124 | 1,154 | 1,186 | 1,217 | 1,249 | 1,282 | 1,315 | 1,348 | 1,382 |
| | | | | | | | | | | | | | | |

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

| | | Actual | | Projections | | | | | | |
|--------------------------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|
| Interest rates | Sep-20 | Dec-20 | Mar-21 | Jun-21 | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 |
| Floating Mortgage Rate | 4.6 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.5 | 4.8 | 5.0 |
| 1-Yr Fixed Mortgage Rate | 2.6 | 2.5 | 2.3 | 2.3 | 2.4 | 2.4 | 2.4 | 2.6 | 2.8 | 2.9 |
| 2-Yr Fixed Mortgage Rate | 2.7 | 2.6 | 2.6 | 2.7 | 2.7 | 2.8 | 2.8 | 3.0 | 3.2 | 3.3 |
| 5-Yr Fixed Mortgage Rate | 3.1 | 3.0 | 3.0 | 3.4 | 3.5 | 3.6 | 3.6 | 3.8 | 4.0 | 4.1 |

Source: RBNZ, ANZ Research

Economic forecasts

| | | Actual | | | Forecasts | | | | | |
|------------------------------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|--------|
| Economic indicators | Jun-20 | Sep-20 | Dec-20 | Mar-21 | Jun-21 | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 |
| GDP (Annual % Chg) | -11.4 | 0.2 | -0.9 | 0.3 | 13.3 | 0.0 | 1.8 | 3.3 | 3.6 | 4.0 |
| CPI Inflation (Annual % Chg) | 1.5 | 1.4 | 1.4 | 1.5(a) | 2.5 | 2.4 | 2.0 | 1.6 | 1.6 | 1.6 |
| Unemployment Rate (%) | 4.0 | 5.3 | 4.9 | 4.7(a) | 4.7 | 4.7 | 4.7 | 4.6 | 4.4 | 4.2 |
| House Prices (Quarter % Chg) | 0.0 | 4.2 | 7.9 | 7.9 | 5.5 | 1.2 | 0.9 | 0.9 | 0.7 | 0.0 |
| House Prices (Annual % Chg) | 7.8 | 10.0 | 15.7 | 21.3 | 28.0 | 24.3 | 16.2 | 8.7 | 3.7 | 2.5 |

| Interest rates | Sep-20 | Dec-20 | Mar-21 | Jun-21 | Sep-21 | Dec-21 | Mar-22 | Jun-22 | Sep-22 | Dec-22 |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Official Cash Rate | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | 0.50 | 0.75 |
| 90-Day Bank Bill Rate | 0.31 | 0.27 | 0.35 | 0.37 | 0.40 | 0.40 | 0.40 | 0.57 | 0.82 | 0.90 |
| 10-Year Bond | 0.50 | 0.99 | 1.81 | 2.05 | 2.15 | 2.40 | 2.50 | 2.75 | 2.85 | 2.85 |

Source: ANZ Research, Statistics NZ, RBNZ, REINZ

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