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Housing affordability in Aotearoa New Zealand: The importance of urban land supply, interest rates, and tax

Opening remarks delivered by Dominick Stephens, Deputy Secretary and Chief Economic Advisor, the Treasury

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Tēnā koutou, tēnā koutou, tēnā koutou katoa. Thanks very much for inviting me here today to give opening remarks at the Economic Policy Centre's Workshop on Housing Affordability, at the University of Auckland. I am very much looking forward to the cutting-edge research and discussion that we will engage in today.

The high price of housing, including rents, is one of the most important issues facing New Zealanders today. Access to affordable housing is a persistent long-term challenge that has far reaching consequences for wellbeing, inequality, homelessness, child poverty, financial stability, and the distribution of wealth. In 2020, New Zealand had the highest housing cost to disposable income ratio in the OECD. Despite that high base, over 2020 and 2021 New Zealand house prices rose 44%, a far bigger increase than was predicted.

It is critical that the Treasury, and the wider government, understands the housing market well. Just over a year ago the Treasury, the Reserve Bank and the Ministry of Housing and Urban Development formed the Housing Technical Working Group, a forum for experts from the three agencies to share knowledge and conduct joint research into the New Zealand housing system. Through the Housing Technical Working Group, recently the three agencies jointly published an "Assessment of the Housing System: with insights from the Hamilton-Waikato region."[1] I'll be drawing on that Assessment in my remarks today, and discussing some of the implications for policy.

[1] The full report is available at https://www.treasury.govt.nz/publications/information-release/assessment-housing-system-insights-hamilton-waikato-area

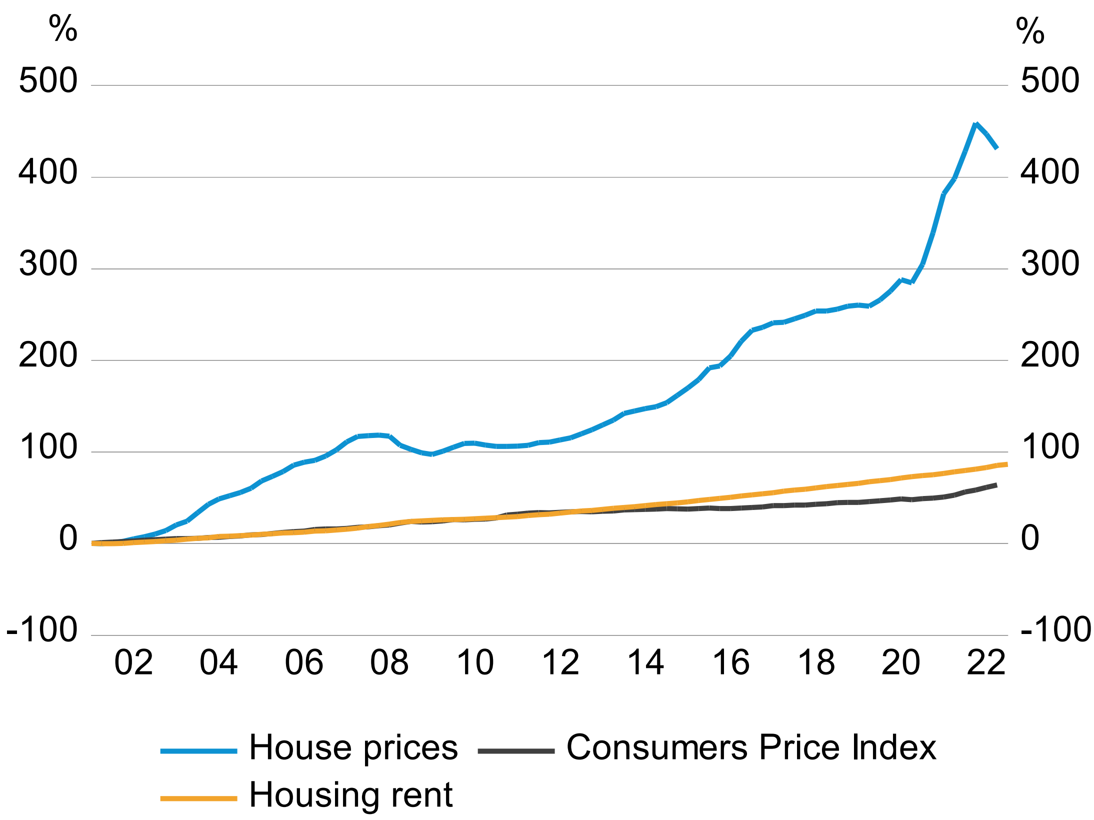
The key conclusion of our Assessment was that the main driver of rising house prices over the past twenty years has been a combination of a global decline in interest rates, constrained *land* availability, and the tax system.

That represents a shift in emphasis around how we are thinking about housing markets.

In recent years it has been common to connect the increase in house prices to New Zealand's undoubted dwelling shortage, with analysis sometimes focussing on either population growth or the construction industry. But there are important facts that challenge the idea that the dwelling shortage directly caused rising house prices.

First, house prices and rents have behaved very differently. In the Waikato region, over the twenty years to mid-2021 incomes rose 98%, rents rose 114%, and house prices rose 372%. The figures are similar for New Zealand at large. Rents have risen broadly in line with incomes, while house prices have risen by multiples more. If the dwelling shortage was the key underlying driver, both rents and prices should have risen in closer to equal measure.

Figure 1: Cumulative change in New Zealand house prices, rents and inflation



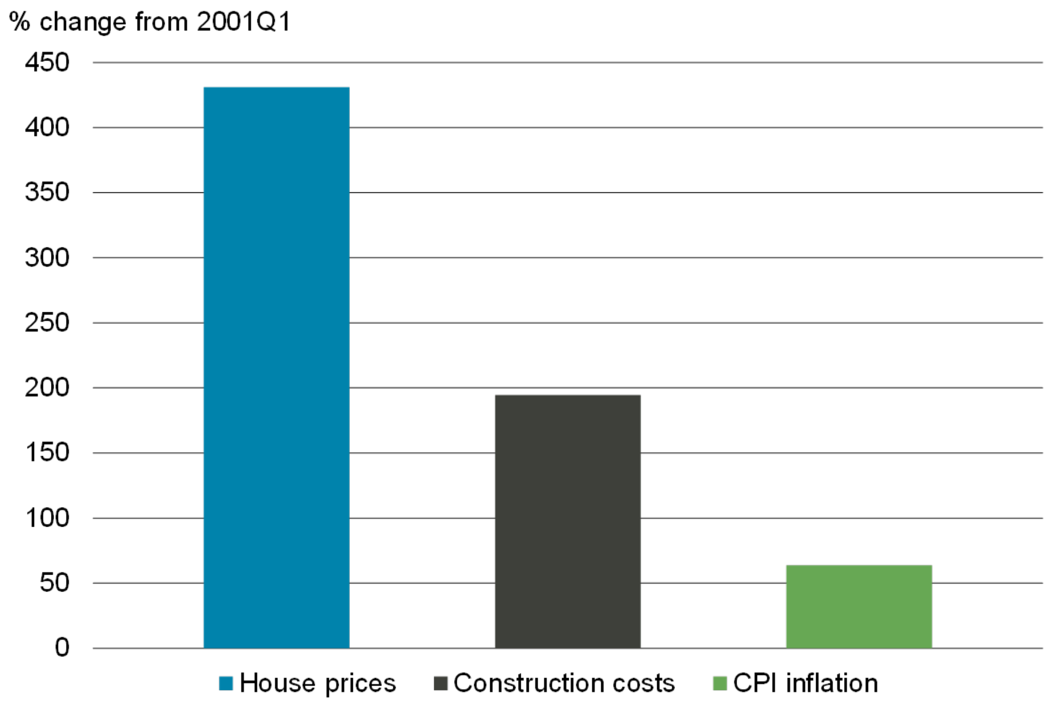
Sources: CoreLogic, REINZ, Stats NZ

Second, there is very little correspondence between *where* house prices have risen the most and the regions with the most population growth or the most acute housing shortages.

Figure 2: House price growth and population growth across New Zealand territorial authorities

Third, most of the increase in house prices has actually been an increase in the *land* component. The increase in the price of the dwellings upon land has been more modest.

Figure 3: House price growth vs construction cost growth, 2001 to 2022



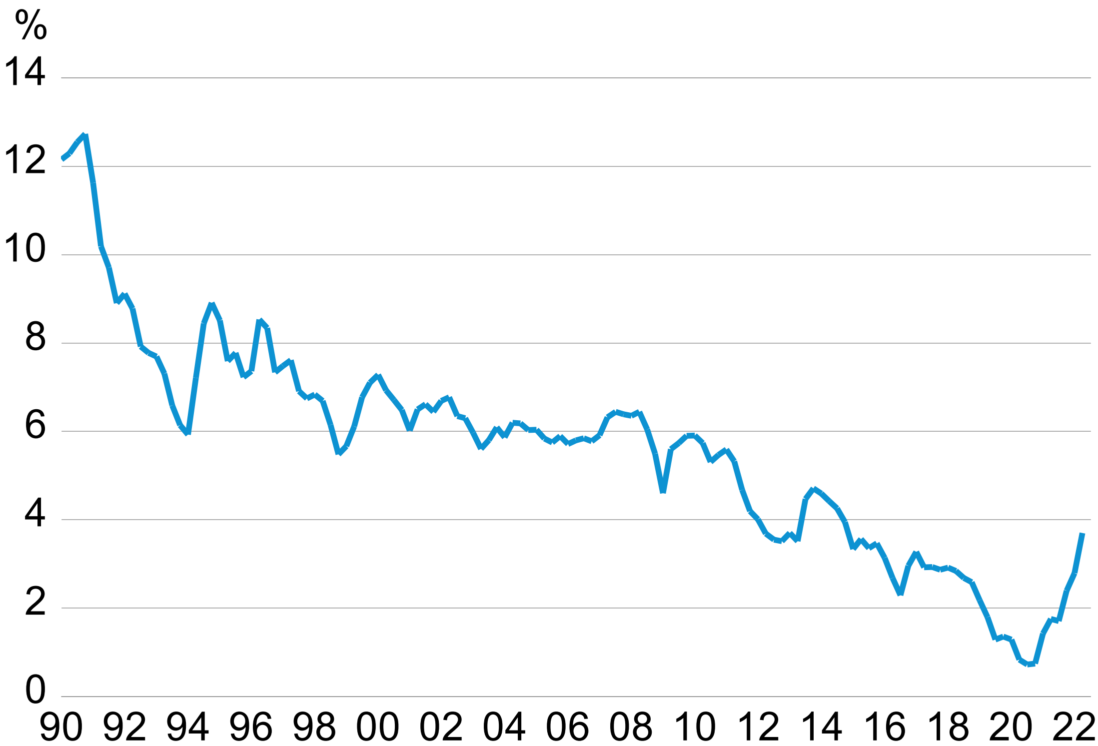
Sources: REINZ, Stats NZ

Finally, and most tellingly, house prices rose extremely rapidly in 2020 and 2021, despite low population growth and rapid construction activity at the time. House prices also rose rapidly in the early-2000s, before the housing shortage emerged.

The Housing Technical Working Group report did note that population growth and construction rates played a role in determining rents and prices at certain times and in certain places. But these weren't the main factors driving house prices much higher, nationwide, over a period of decades.

The main thing that has occurred over the past twenty years to drive house prices higher has been a large, global decline in interest rates that reduced the cost of servicing a mortgage in New Zealand. The fact that declining interest rates led to such a large increase in prices was down to the way New Zealand's land markets function. Specifically, if land markets had been more flexible, and urban land supply had been more responsive to demand, then house prices and rents would have risen by less when interest rates fell. The rise in prices was due to the decline in interest rates *in combination with* the restricted supply of urban land.

Figure 4: New Zealand 10-year Government Bond Rate



Source: RBNZ

Such a large decline in interest rates was always going to lead to an increase in demand to own property, driving prices higher initially. But according to economic theories that assume abundant land supply, over time that initial price rise should have incentivised a larger housing supply response, causing prices to retreat and rents to fall below their initial levels relative to income. This did not fully happen in New Zealand, because in practice land supply has been restricted. Due to restrictions to land supply, much of the global decline in interest rates was instead capitalised into the price of scarce urban land. As land prices rose there was little change in the margin between the price of bare land and the price of land with a house. This meant there was less incentive to build new houses, and less of a supply response. The initial price rise caused by lower interest rates persisted, and the longer-run retreat in prices and decline in rents did not materialise.

The nub is that the flexibility or inflexibility of urban land supply matters for the way housing markets work. When urban land supply is extremely inflexible, financial factors like interest rates, inflation and taxes will affect the *purchase price of land*. When urban land is highly abundant, financial factors will ultimately affect rents, while house prices are tied to the shadow price of non-urban land, a location premium for land located closer to city centres or other amenities, plus the cost of constructing dwellings.[2] Reality lies somewhere between these two extremes, but in our assessment New Zealand land markets lie closer to the inflexible end of the spectrum.

The most obvious policy solution to all of this is to try to improve the flexibility and responsiveness of urban land supply in New Zealand.

Land supply refers to the ease of obtaining space for urban intensification (building up) or expansion (building out). It can be impeded by factors such as zoning regulations, the availability of infrastructure, the effectiveness of transport networks, and natural geography.

Actions that could increase urban land supply relate to urban planning, infrastructure provision, transport networks, and local public governance. These actions need to address urban development nationally. If one city was to “go it alone” and free up urban land supply without similar action in other cities, the result could be population movement between cities rather than house price change. For example, our Assessment found that Hamilton house prices and rents were heavily influenced by Auckland.

There are already a range of reforms underway that have the potential to free up urban land supply in New Zealand, including changes to the resource management and planning system. Future secondary legislation as a part of the reforms could require more proactive planning for much larger city populations; setting aside land for infrastructure corridors early; and enabling more intensive land use subject to natural environmental and infrastructure capacity.

Work is also underway on multiple fronts to improve the funding, financing, and supply of urban development infrastructure. A National Policy Statement on Urban Development has been issued with an objective for planning decisions that improve housing affordability by supporting competitive land and development markets.

Medium density residential standards were enforced by an Act of Parliament in late 2021, allowing for greater urban intensification across New Zealand.

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[2] For more on the importance of urban land supply for the functioning of the housing market see these two presentations by Chris Parker:

Parker, Chris (2021) *AMM modelling of uncompetitive urban land markets*, Presentation to NZAE conference 23 June 2021, www.treasury.govt.nz/publications/research-and-commentary/rangitaki-blog/treasury-presentations-2021-nz-association-economists-conference

Parker, Chris (2022) *A new Henry George Theorem for NZ’s urban policy needs*, Presentation to NZAE conference 29 June 2022, www.nzaeconference.co.nz/programme-day-1

These actions are likely to change the effective availability of urban land in New Zealand. However, this issue has been decades in the making, so fundamentally shifting the dial on urban land supply will be a long-run game. One of the Housing Technical Working Group's next projects is to develop metrics of effective urban land supply in New Zealand, with the ultimate goal of assessing the extent to which land supply could be freed up through various policy levers. But it seems unlikely that the textbook ideal of *perfectly flexible* urban land supply can ever be reached. Many constraints on land supply could be difficult to fully address, and others exist for good reasons, such as supporting New Zealand's response to climate change or preserving heritage and green spaces.

It behoves us to recognise that the New Zealand housing market may never behave in line with urban economics theories that assume perfectly flexible land supply. There will always be some degree of constraint on urban land supply and this carries a range of important implications.

1 Interest rates affect house prices more than housing supply and rents.

In the current New Zealand context, interest rates have a strong and lasting impact on house prices. This is useful information for forecasters. For example, at Treasury we have strengthened the link between interest rates and house prices in our economic forecasting model.

But beyond that, the policy implications are limited. It is the average level of interest rates over time that matter for house prices, and there is little New Zealand can do to influence that without risking damage to the wider economy. Interest rates fell globally over the past twenty years for deep fundamental reasons including returns on investment, propensities to save, and risk tolerance among global investors and savers. New Zealand could have done little more to stand in the way of that global trend than King Canute could have done to stop the tide. Persistently attempting to keep New Zealand interest rates at a level inconsistent with the global trend would have led to runaway inflation or deflation in New Zealand, with very serious macroeconomic and social consequences. [3]

That said, the short-term ups and downs in mortgage rates do matter for the housing market. As we have witnessed over the past couple of years, transitory changes in mortgage rates can have transitory impacts on house prices.

2 Tax changes affect house prices more than housing supply or rents.

The second important implication of restricted urban land supply is that it affects the way the tax system impacts housing markets. We know that houses are currently income tax advantaged in New Zealand relative to many other forms of investment, due partly to our lack of a comprehensive capital gains tax. At times there has been concern that a change to those tax arrangements could affect housing supply and rents. This would be the case if land supply was abundant. But as I have discussed today, the more restricted the supply of land, the more that changes to the tax system will be capitalised into the value of urban land, rather than affecting housing supply or rents. Our Assessment concluded that tax distortions have added significantly to the price of scarce urban land in New Zealand.
In the current context, reducing these tax distortions would make land cheaper, and would have less effect on rents or housing supply. Indeed, last year's change to the tax treatment of some investment properties may have influenced urban property values.

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[3] For more on monetary policy and house prices, see the speech by Paul Conway, Reserve Bank Chief Economist on 30 June 2022, www.rbnz.govt.nz/hub/publications/speech/2022/speech2022-06-30

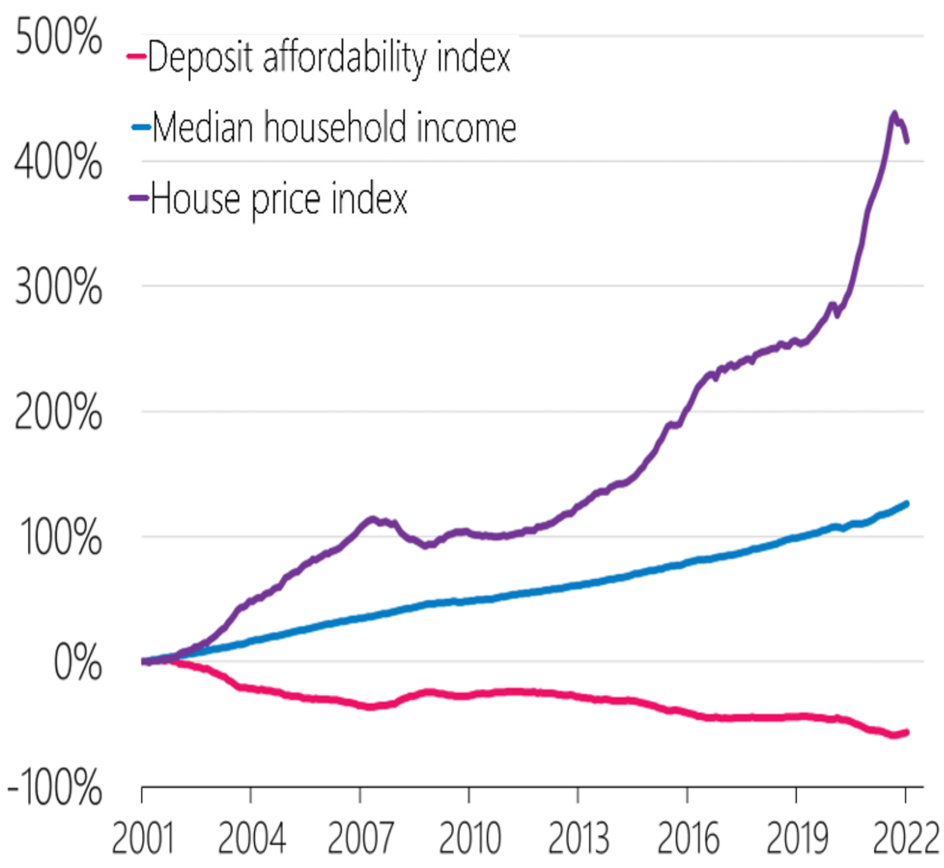
3 Inflation influences house prices.

In the New Zealand context, the average level of inflation also has a bearing on house values. All else equal, a higher average rate of inflation would tend to mean higher *nominal* capital gains on average over time, which are often untaxed. Thus high inflation tends to accentuate the tax advantage of investments that yield capital gain, such as urban property. In user cost models, the average expected rate of inflation has a strong influence on housing valuations.

4 High house prices and low interest rates affect *deposit affordability* more than mortgage affordability or rent affordability.

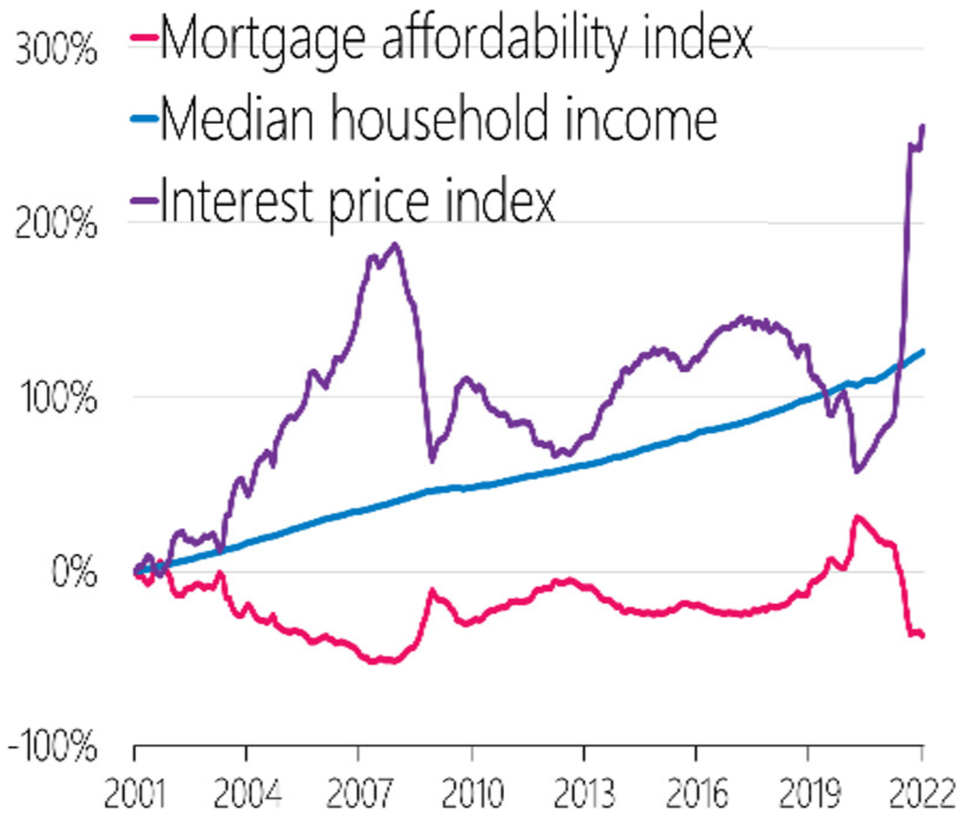
The combination of lower interest rates and high house prices affects *deposit affordability* more than mortgage affordability or rent affordability. House prices have risen much faster than incomes in recent decades, and a key consequence has been that the affordability of the deposit required for a mortgage loan is now much worse than it was. By comparison, mortgage affordability has waxed and waned over time, but has not trended in either direction. Mortgage affordability measures the cost of interest payments on a mortgage over a typical property compared to incomes. The dichotomy between deposit affordability and mortgage affordability should focus policy on the key social issue arising from lower interest rates and higher house prices – people who could otherwise afford to own their own home are locked out because it is harder to muster a deposit.

Figure 5: New Zealand Deposit Affordability Index



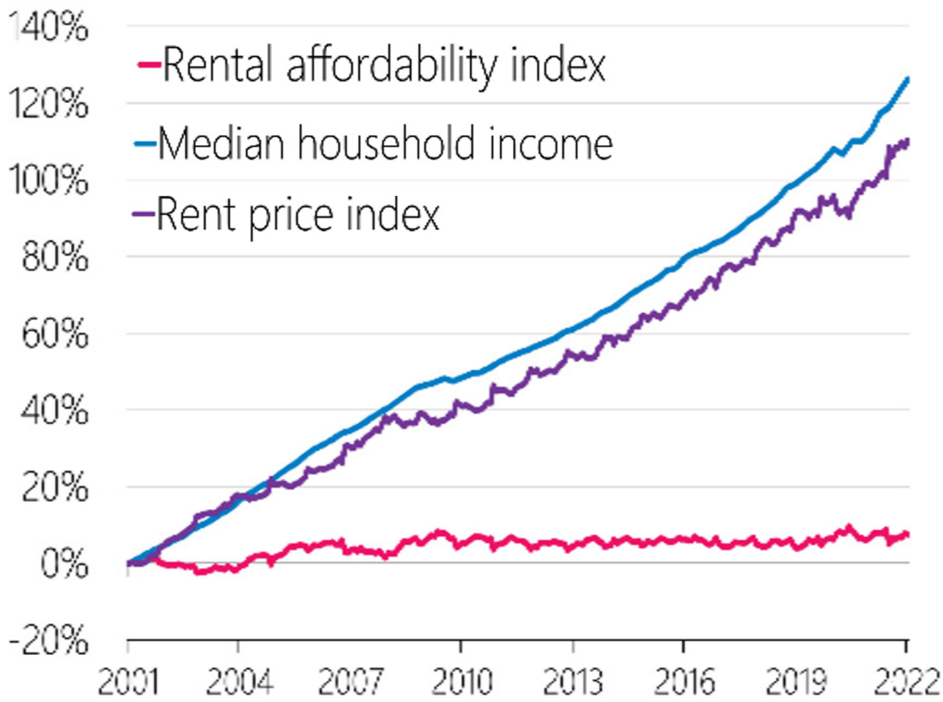
Sources: Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development estimates, Stats NZ, Tenancy Bonds, and CoreLogic

Figure 6: New Zealand Mortgage Affordability Index



Sources: Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development estimates, Stats NZ, Tenancy Bonds, and CoreLogic

Figure 7: New Zealand Rent Affordability Index



Sources: Te Tūāpapa Kura Kāinga Ministry of Housing and Urban Development estimates, Stats NZ, Tenancy Bonds, and CoreLogic

As already mentioned, rents have remained fairly constant relative to median incomes over the past two decades in New Zealand, meaning relatively stable national rent affordability (at poor levels by international standards). However, rents have risen sharply at some times and in some places. Rents are very important for the wellbeing of many New Zealanders, and there will always be a role for government provision of social housing support for parts of the population.

I'd like to turn briefly to the outlook for house prices. A key point of this speech is that New Zealand house prices will continue to be influenced by uncertain and uncontrollable global trends in interest rates, among other factors. This makes the long run outlook for house prices uncertain. But the near-term outlook is for further decline in house prices. Over the past year interest rates have increased very sharply across the curve, and by more than previously expected. The consequence has been a decline in house prices of 8% so far, and we expect further decline to come. Last year's changes to tax rules for property investors are another source of downward pressure. And the aforementioned resource management and urban planning reforms should exert a downward influence on both house prices and rents over a longer timeframe.

To sum up, urban land supply matters. Freeing it up will help with affordability. And the reality that urban land is not ubiquitous has important implications for housing market researchers, forecasters, and policymakers.

Housing affordability is crucial for wellbeing. That is why the research being presented today so important, and so timely. Best wishes for a productive and successful workshop.

Piki te kaha
Piki te ora
Piki te wairua
Hui ē, tāiki ē!