



Australian Institute for Progress

Housing Affordability Projections

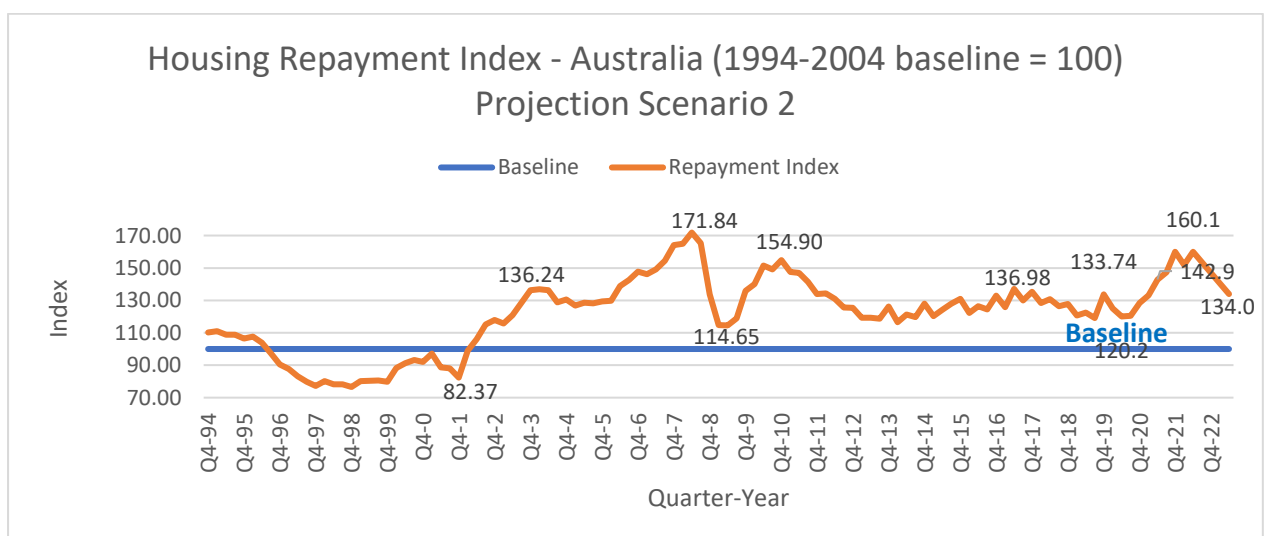
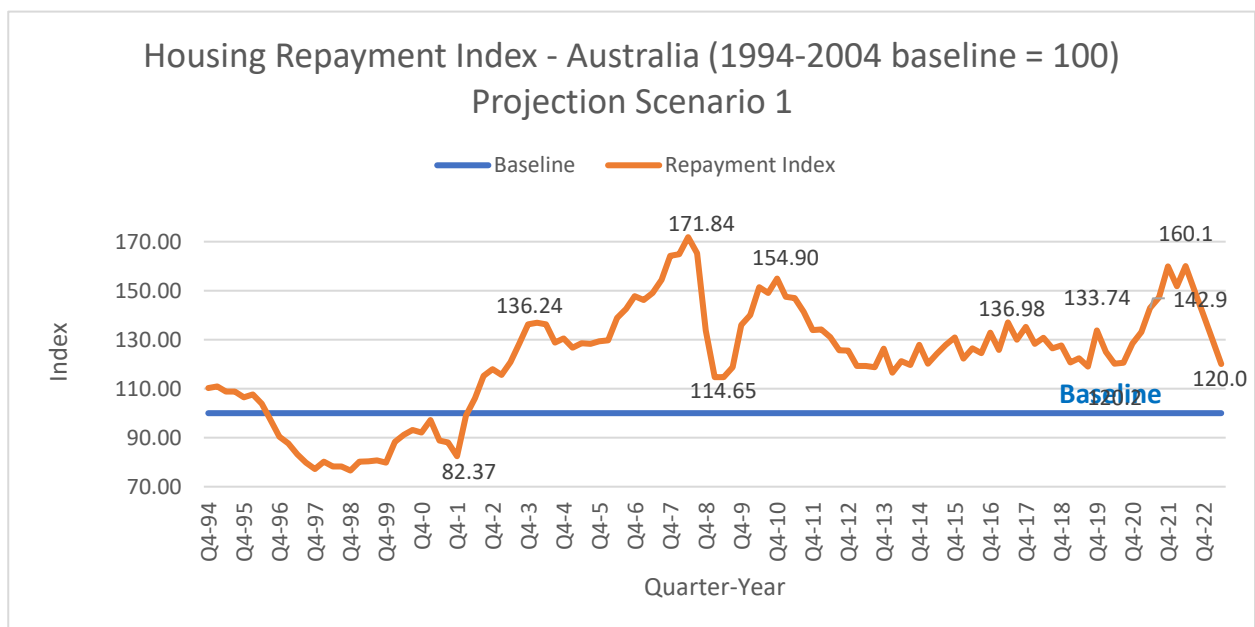
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Highlights

- The big four banks are predicting home lending rates between 5.86% and 6.61% for June next year.
- If housing affordability mirrors what happened after the house price peak of 2008 this suggests possible decreases in house prices of between -27% and -32% from where they were at the end of the June Quarter 2022.
- If housing affordability mirrors what happened after the house price peak of Q4 2010 this suggests possible decreases in house prices of between -18% and -24%.
- This is a projection, not a prediction, and may be confounded by rising rents, decreased construction activity, and increased immigration, or a combination of all three, maintaining price pressures and a plateau of unaffordability. In our estimation this would be socially devastating.



Analysis

The consensus is that interest rates still have some way to rise, with predictions by the big four banks of a variable lending rate peak between 5.86% (CBA) to 6.61% (WBC and ANZ) by somewhere around the middle of next year. The banks then predict more or less steady interest rates out until the end of 2024 at least.

We looked at past history of our affordability index to gauge what effect these interest rate increases might have on house prices. Previous episodes of unaffordability over the 28 years of our index have been solved by the Reserve Bank lowering interest rates in the first instant. The price peak in 2007/8 saw the variable standard home loan rate decline from a peak of 9.62% to 5.76% by April 2009, a fall of 40% (see Reference 4). In 2010 rates had risen to 7.79% and then fell back to 5.93% within 3 years, providing a more gradual improvement in affordability.

Our index measures the ability over time of Australians to afford a mortgage. It takes three factors into account – wages, interest rates, and house prices. Interest rates have limited room to fall. They are around historical norms at the moment; international interest rates are high; and inflation is above the RBA's target. That leaves house prices and wages as the variables that can change to improve affordability.

We have adjusted wages to take account of the RBA projections, but they make only a small difference. Leaving prices as the only variable that can make a significant difference to housing affordability.

These projections assume that unaffordability fluctuates with strong sharp peaks and generally longer, more persistent troughs, and that it is a borrower's ability to afford a home loan that tends to drive those peaks and troughs. However, there appears to have been a step change between 1994-2004, where the average of the index was 100, to the almost 20-year period between 2004 and now, where the average of the index has been 133 (with lows around 120 and highs up to 172).

Normally we produce a Repayments Affordability Index and a Deposit Affordability Index for each capital city, as well as one for Australia. We have not run these scenarios for each state, as each can be quite different. We have also not produced figures based on deposit affordability. Lower housing prices make it easier to save for a deposit, but the amount that a home owner has to pay on their mortgage each month is a much stronger determinant of what they can afford.

We assume that something similar to the status quo of the last 20 years will be at least maintained, going forward. (It would actually be beneficial if we could take affordability back to the 1994-2004 period, but that seems unlikely at the moment.)

After 2008 the affordability index fell to 114.65 from 171.84 (an improvement of 33%), before bouncing in 2010, and then falling back to a band within 116 to 134 before starting to rise again in 2021 to the present peak.

Our first scenario assumes that affordability increases in a similar way to how it did in 2008/2009, and we model what house prices at the end of the second quarter 2022 would need to be to produce an affordability repayment index figure of 120 using the high and low interest rate projections.

Our second scenario assumes a more gradual recovery, similar to what occurred after 2010. In that period, where the index peak was 154.90, similar to today's 160.1, the index went down to 134 over the next 12 months (and ultimately to 118.77 over 37 months, an improvement of 23%).

Scenario 1 yields a range of house price falls from Q2 2022 to Q2 2023 of between -27% and -32%. Scenario 2 yields a range of house prices falls over the same period of -18% to -24%.

The model does not take account of rental costs (which can stimulate demand for home ownership if rents are close to mortgage repayment costs), housing scarcity, or population growth (including by migration). It also doesn't attempt to model regulatory impediments. These all have an effect on the potential demand for housing, and therefore its potential cost. As rents are rising, housing availability low population growth increasing (partly due to immigration again), and construction moderating, it is possible that there will be another step change in unaffordability creating a new, less affordable, normal.

Methodology

Since the majority of Australian's rely on a mixture of debt and equity to purchase real estate, it is necessary to analyse housing affordability based on the cost of deposits and repayments. To reflect the real experience of home buyers, rather than just the increase in capital values, we model the cost of notional deposits and house repayments between Q4:1994 and Q1:2022 across Australia's eight most populous cities.

For the mortgage structure, we assume a 20% home deposit as well as monthly payments and daily compounding over a 25-year mortgage period. We calculate the average owner-occupier home loan rate over a given quarter, providing us with an estimate for the mortgage rate over the following 25-year loan period. In addition to using the median residential price for a given capital city, we also use average weekly earnings reported on the state level.

To calculate the repayment multiplier, we take the total yearly payment for a principal interest loan divided by the average weekly earnings for a given city and quarter. To calculate the deposit multiplier, we instead divide the cost of a deposit by average weekly earnings. Using the deposit/repayment weekly multiplier values, we use a city's average deposit/repayment weekly multiplier over the period Q4:1994 to Q4:2004 as the baseline for that city's index (with the baseline indexed to 100). Using the deposit/repayment weekly multiplier values, we use a city's average deposit/repayment weekly multiplier over the period Q4:1994 to Q4:2004 as the baseline for that city's index (with the baseline indexed to 100).

We use the number of housing transfers for Australia's 8 most populous cities in order to create a weighted national average for the relevant statistics (ie average weekly wage, median house prices) included in this paper. Note that due to the limited housing data available, we take the national average to be the simple average of the for the years prior to Q1:2002.

The datasets used within this model include: ABS 6302 Average Weekly Earnings, ABS 6412 Residential Property Prices Indexes for post-2002 median capital city house prices, table 1 of Abelson 2003 for pre-2002 median house prices, and RBA F5 Indicator Lending Rates for owner-occupier variable standard housing loan rates – taking the average rate over the months in a given quarter.



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References

1. Abelson, Peter; Chung, Demi. (2004). *Housing Prices in Australia: 1970 to 2003*. Published by The University of Sydney. Obtained via: https://www.researchgate.net/publication/5165791_Housing_Prices_in_Australia_-_1970_to_2003
2. ABS. (March 2022 series). *Total Value of Dwellings*. Obtained via: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/total-value-dwellings/latest-release>
3. ABS 6302. (November 2021 series). *Average Weekly Earnings: Australia*. Obtained via: <https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/average-weekly-earnings-australia/latest-release>
4. RBA F05. (April 2022 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>
5. <https://www.ratecity.com.au/home-loans/mortgage-news/high-will-rates-go-here-experts-think-rba-cash-rate>