



Australian Institute for Progress

Housing Affordability Index

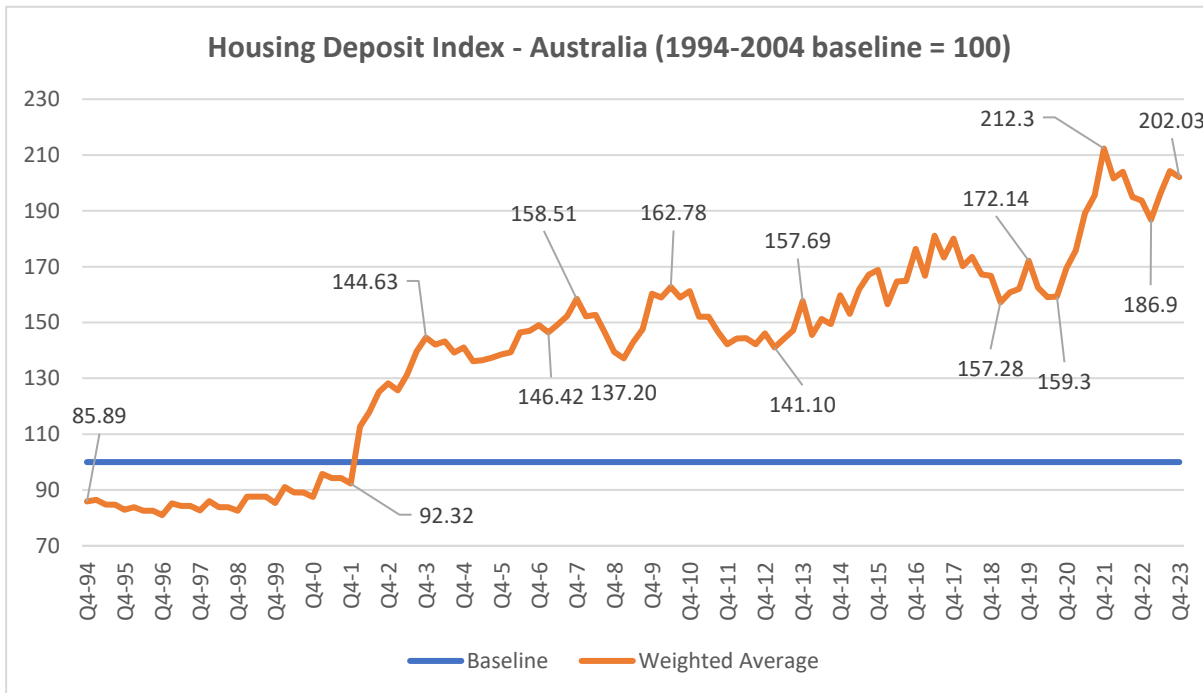
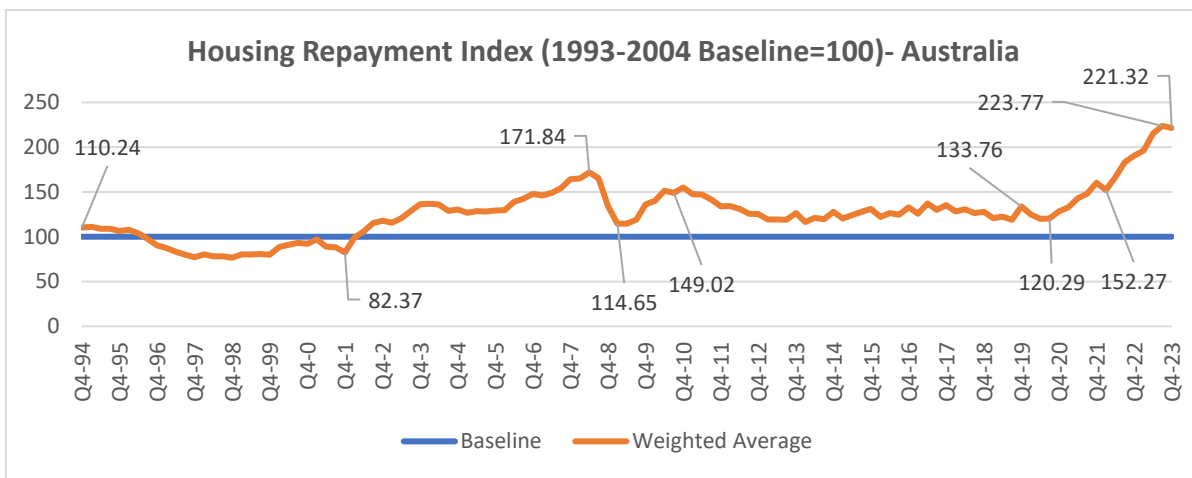
December Quarter, 2023
A Quarterly Review of Housing Affordability

www.aip.asn.au

The Australian Institute for Progress exists to advance the discussion, development and implementation of public policy for Australia's future, from its base in Brisbane. The future does not look after itself.

Highlights

- Average housing repayment affordability has reached a short plateau of record unaffordability at a figure of 221.32, a smidgin lower than the peak of 223.77 the previous quarter, but more than double the average of the 90s, and close to double the period from 2013 to 2020. The pain has been applied in only 4 years.
- The deposit index is slightly more affordable at 202.3, reflecting the fact there has been almost no overall house price increase since Q1 2021 (and in fact a decline to Q1 2023, but there is currently an uptick in prices, despite high interest rates).
- RBA cash rates were steady during the quarter, and in the course of events, this level of unaffordability would be expected to push prices down, but it seems that other pressures, principally immigration and building costs, are pushing in the other direction.
- The situation is not the same in each state, with Sydney, Canberra and Darwin seeing a slight increase in affordability.



Analysis

The Q4 2023 Australian housing market saw a small decrease in the Repayments Index as well as a small decrease in the Deposit Index. This means it was slightly easier to save for a property deposit and slightly easier to repay a mortgage. However, these indexes are at record levels of unaffordability, so for most purchasers, this will make negligible difference.

Aggregating across Australia, national housing repayments decreased by 2.46 index points, while deposit costs decreased by 2.30 points. Median house prices peaked in the fourth quarter of 2021 and have since plateaued, with a change of only 0.23% over the period between that quarter and the December quarter of 2023, the ABS's last reporting period.

Between Q3 2023 and Q4 2023, Sydney, Canberra, and Darwin all saw slight increases in affordability (a decrease in the index), while Melbourne remained the same. However, Brisbane, Adelaide, Hobart, and Perth became less affordable.

The most unaffordable cities in Australia are Hobart and Adelaide followed by Canberra and then Sydney. Brisbane and Melbourne are almost tied with each other, while Perth and Darwin are the most affordable.

Previous analysis has found that interest rates explain around 70% of house price movements. Interest rates began to rise in Q2 2022, although house prices peaked slightly earlier in Q4 2021. House prices initially responded by falling but have essentially regained that ground. Allowing for inflation, prices have fallen slightly in real terms. However, our index measures real ability to repay a loan, and that is at record levels in most states and territories.

	Deposit Index		Repayment Index	
Sydney	<i>201.80</i>	<i>-4.50</i>	<i>221.92</i>	<i>-4.90</i>
Melbourne	<i>185.40</i>	0.00	203.77	0.00
Brisbane	<i>185.90</i>	6.70	201.88	7.30
Adelaide	<i>222.70</i>	11.60	243.27	12.64
Hobart	<i>244.30</i>	3.00	265.02	3.25
Darwin	<i>135.00</i>	-5.20	145.93	-5.61
Canberra	<i>205.70</i>	-0.60	224.88	-0.69
Perth	<i>154.80</i>	10.50	168.90	11.43
Weighted Average	<i>202.00</i>	<i>-2.30</i>	<i>221.32</i>	<i>-2.46</i>

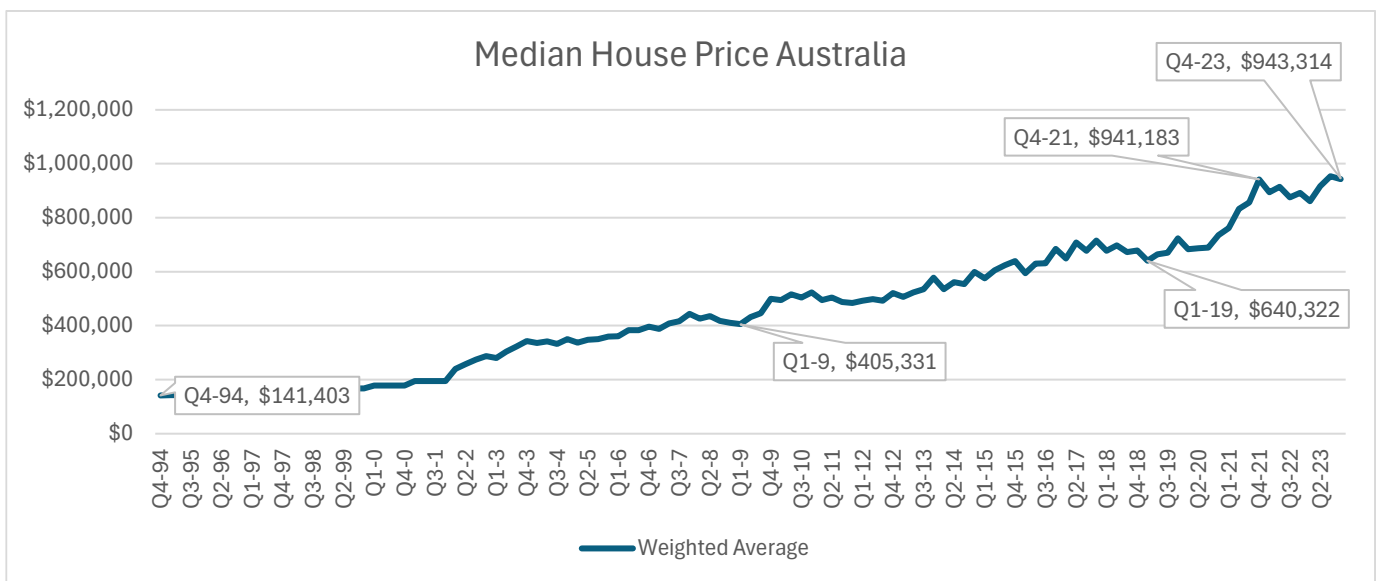
This month we’ve also looked at median house prices and longer-term trends. Our method of calculating the indices’ tends to obscure what is happening with house prices, even though they are an important part of the picture.

After the Global Financial Crisis, prices fell, and affordability was restored to a level similar to the average of the ‘90s. They bottomed out in the first quarter of 2009. Prices then gradually escalated until they peaked, on average, in the fourth quarter of 2021. The table below shows the variation in median house prices by state and territory since prices bottomed out in 2009 and their value in Q4 2023 (the latest ABS figures).

Median House Prices			
	Q1-09	Q4-23	% increase since Q1-09
Sydney	448000	1360000	204%
Melbourne	375000	840000	124%
Brisbane	400000	830000	108%
Adelaide	353500	760000	115%
Hobart	296500	701100	136%
Darwin	455000	585000	29%
Canberra	459500	980000	113%
Perth	439000	665000	51%
Weighted Average	405331	943314	133%

Investors in Sydney did extremely well, while there was virtually no growth in Darwin. Perth also experienced low growth. Hobart had the second highest growth, followed by Melbourne, with Canberra, Adelaide, and Brisbane all seeing a little more than double their previous values.

The graph below shows median house price movements since 1994, when our index starts. The rapid increase in the three years from 2019 to the end of 2021 was 46%, while prices rose only 58% in the 10 years before that, between Q1 2009 and Q1 2019. This rapid escalation was compounded from an affordability point of view by being combined with an unprecedentedly severe increase in interest rates.



From that period on prices have more or less plateaued. So, the major escalation in prices occurred before the current historically high rates of immigration. We are not arguing that immigration is irrelevant to the price increase, but the

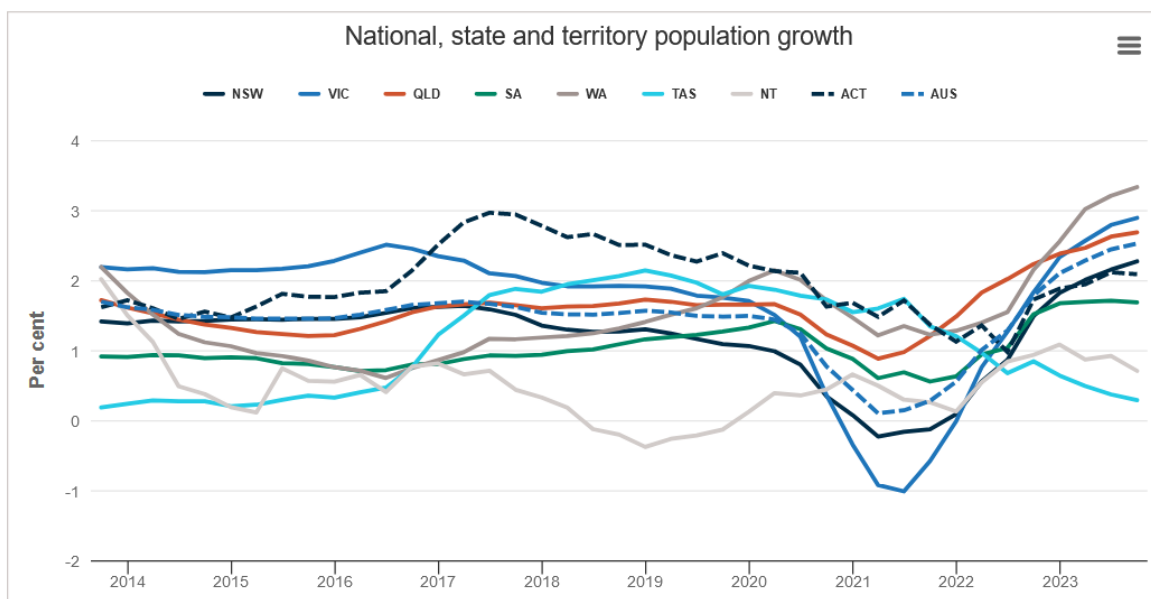
figures suggest they might be the reason that the RBA interest rate increases have not been enough to push house prices down.

The situation is more complicated by state for the period since Q1 2021.

Median House Prices			
	Q4-21	Q4-23	% increase since Q4-21
Sydney	1365000	1360000	-0.37%
Melbourne	941000	840000	-10.73%
Brisbane	750000	830000	10.67%
Adelaide	630000	760000	20.63%
Hobart	754000	701100	-7.02%
Darwin	600000	585000	-2.50%
Canberra	1040000	980000	-5.77%
Perth	558800	665000	19.01%
Weighted Average	941183	943314	0.23%

If you feel as though prices didn't draw breath in 2021, then that might be because you live in Adelaide, Perth or Brisbane, where they have risen by up to 20%. However, Melbourne, Hobart and Canberra have experienced falls of between 11% and 6%.

The kick in prices in Adelaide, Perth and Brisbane is possibly explained by population growth. The graph below, sourced from the Centre for Population¹ shows Western Australia with the highest growth in 2023, followed by Victoria, then Queensland, New South Wales, Australian Capital Territory and South Australia. However, both New South Wales and Victoria had negative growth during COVID, meaning there was slack to pick up, while Western Australia, Queensland and South Australia maintained positive population growth.



We measure our repayment affordability index using median house prices and calculating the ratio of repayments to average weekly earnings and expressing it as a percentage of the average for the first 10 years of the time series. We measure our deposit affordability index by calculating the ratio of an average 20% deposit to average weekly earnings and expressing it as a percentage of the average figure for the first 10 years of the time series. National figures are based on using a weighted average of the 8 most populous cities in Australia, weighted by the number of established housing transfers in each city for each quarter.



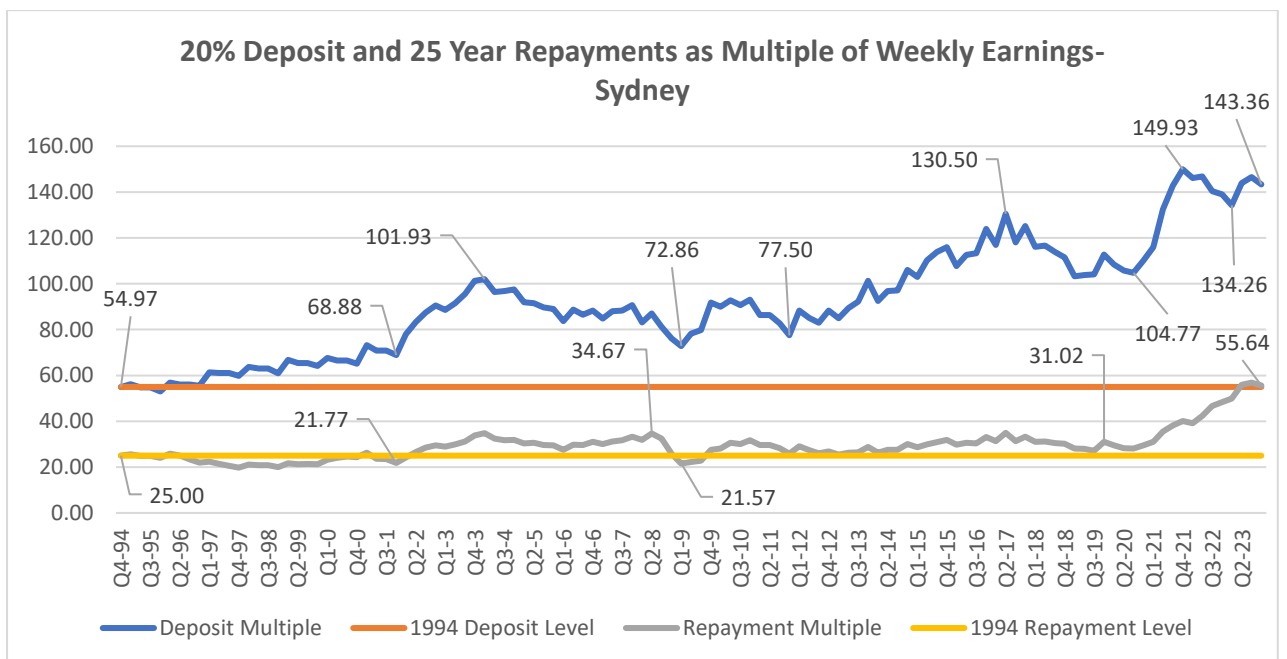
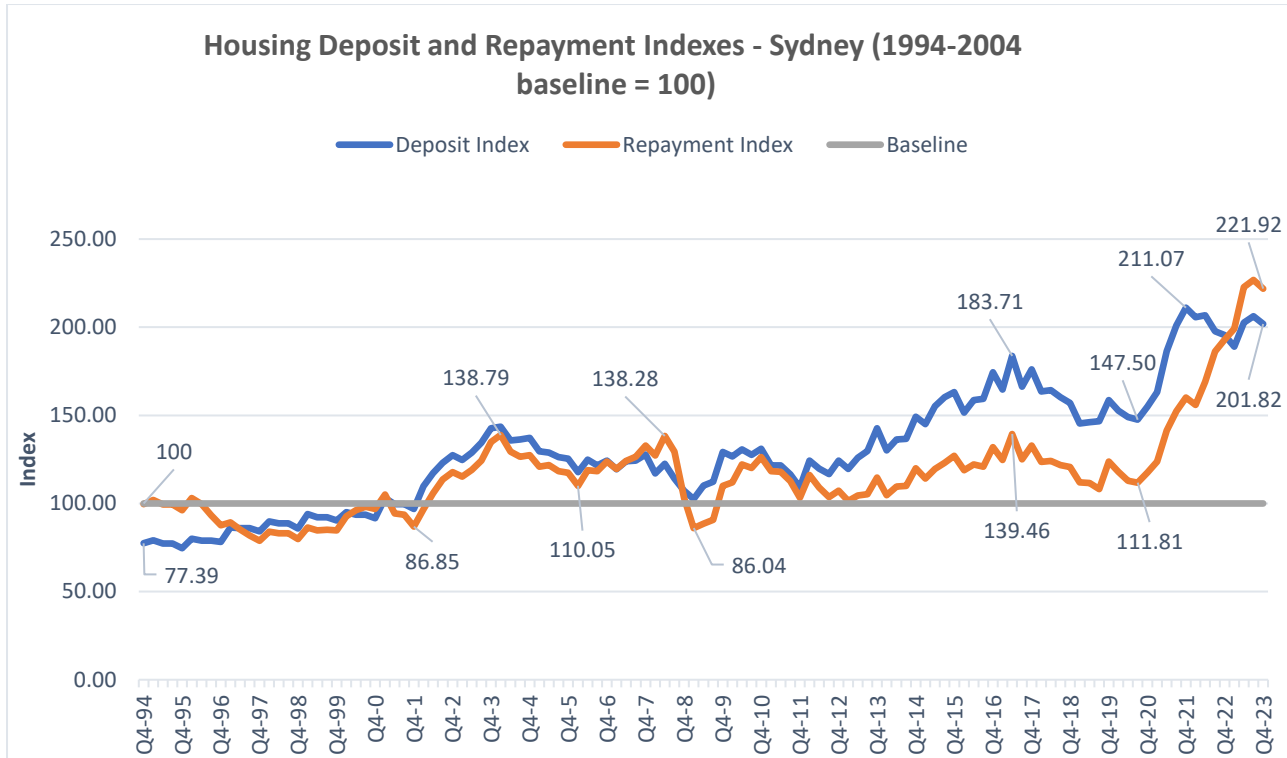
Graham Young
Executive Director
Australian Institute for Progress



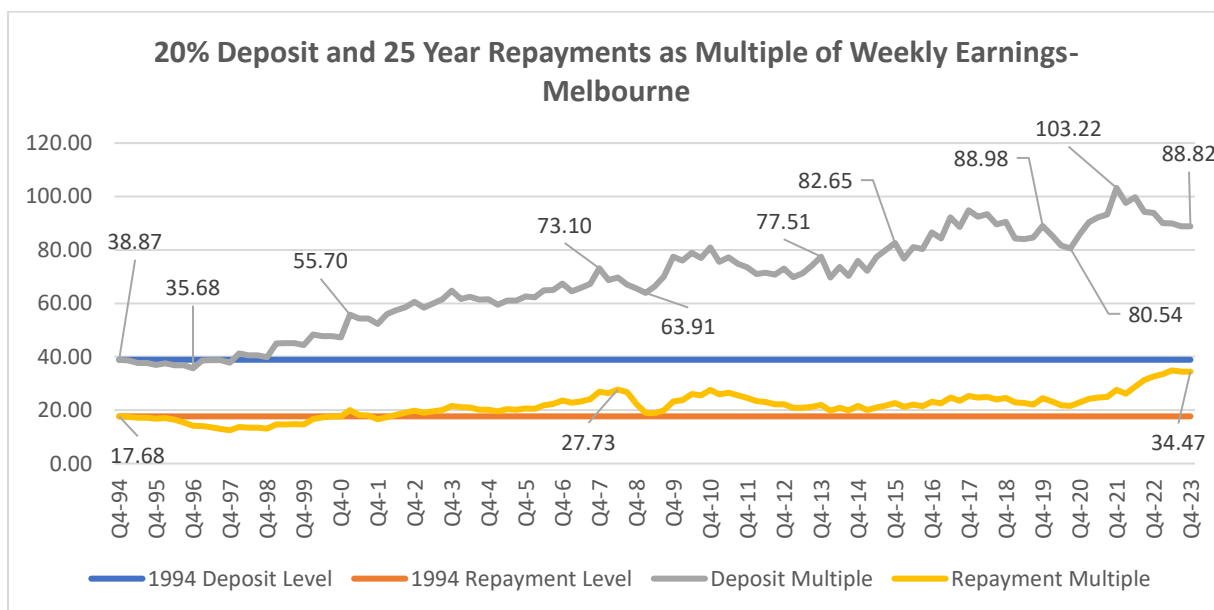
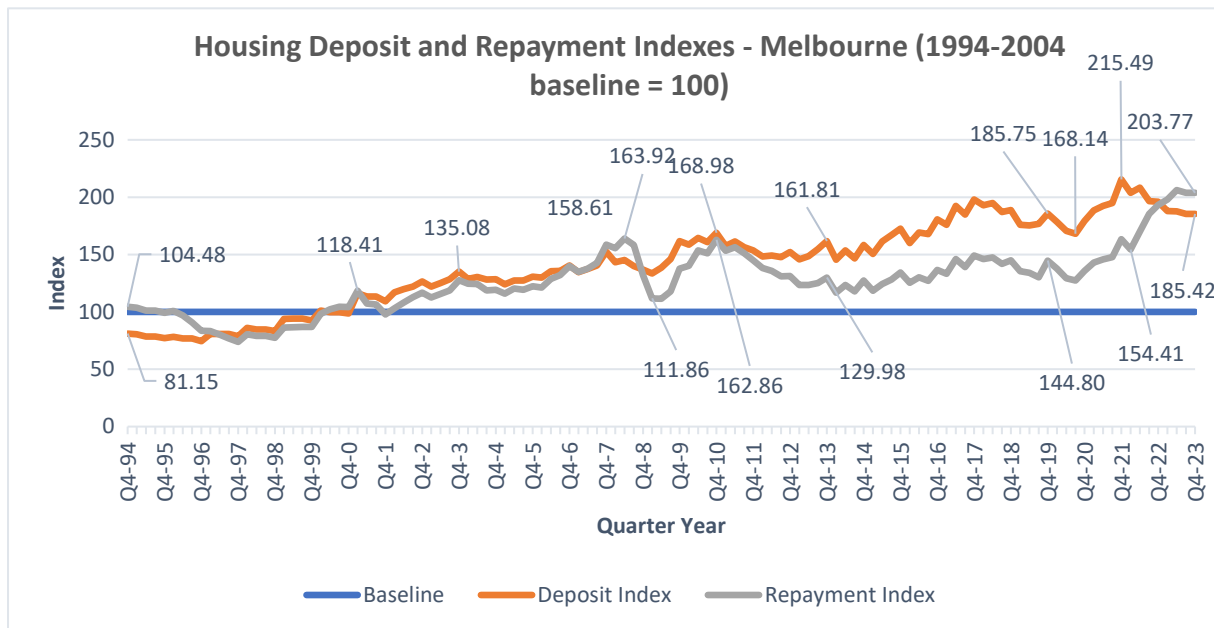
Manasbi Poudel
Economic Researcher
Australian Institute for Progress

Deposit and Repayment Costs by State

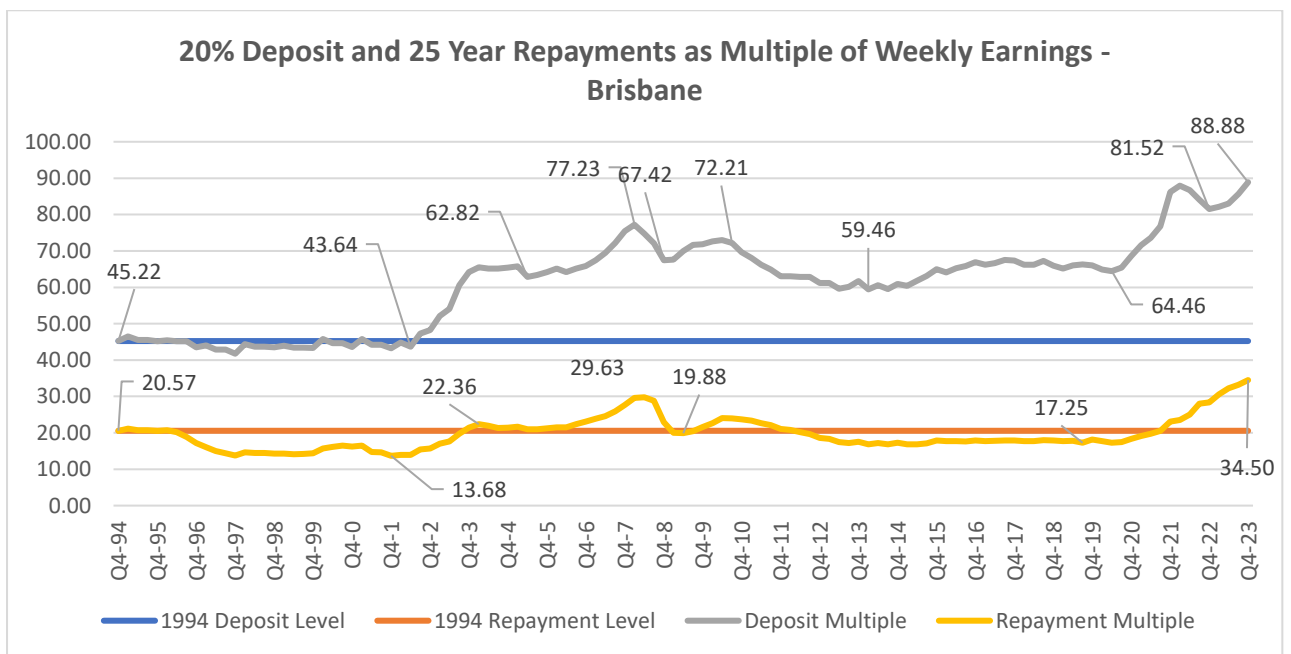
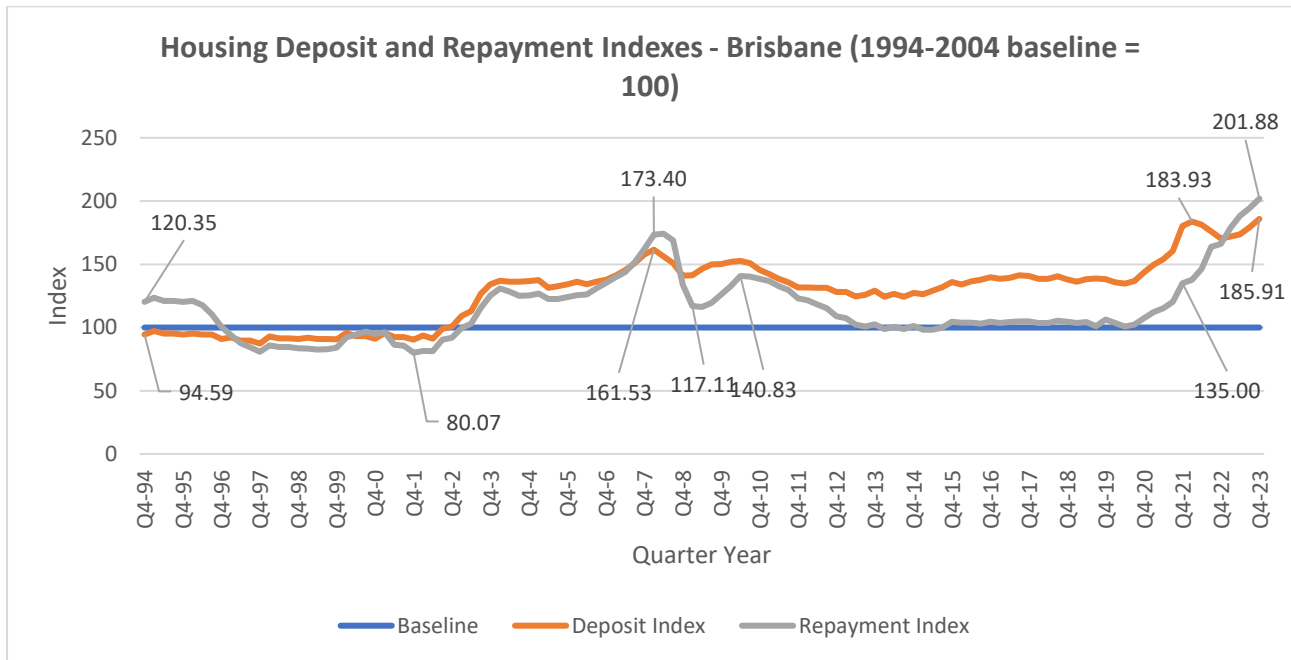
Sydney



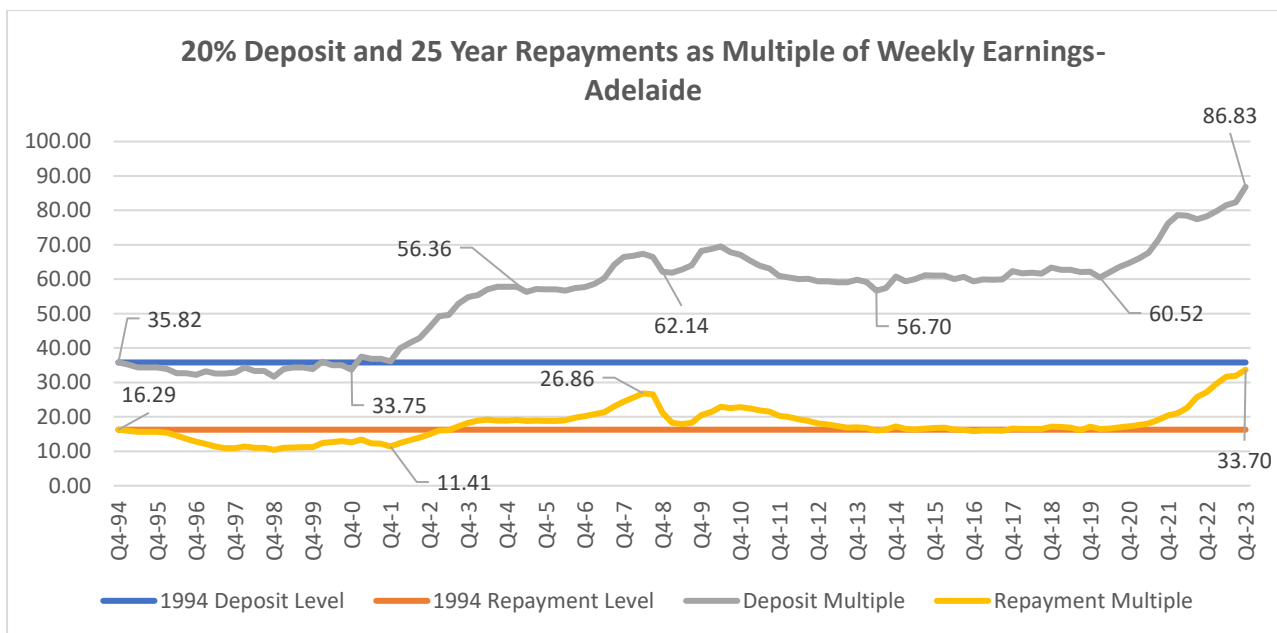
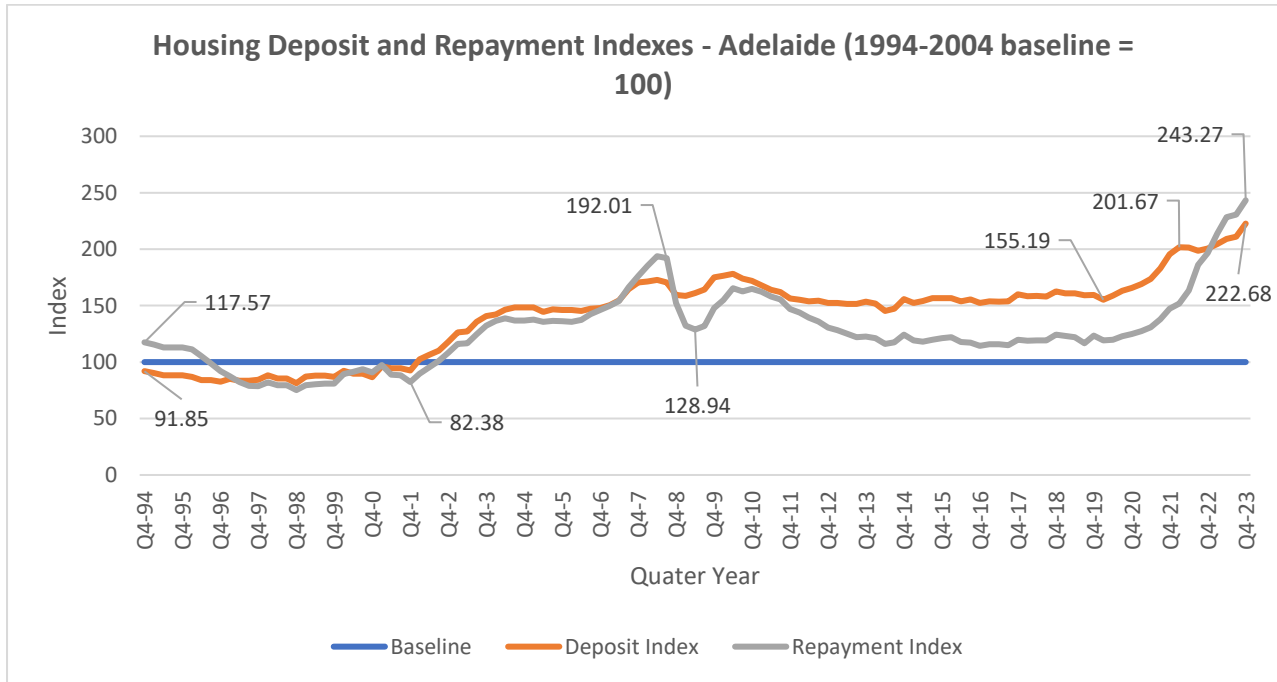
Melbourne



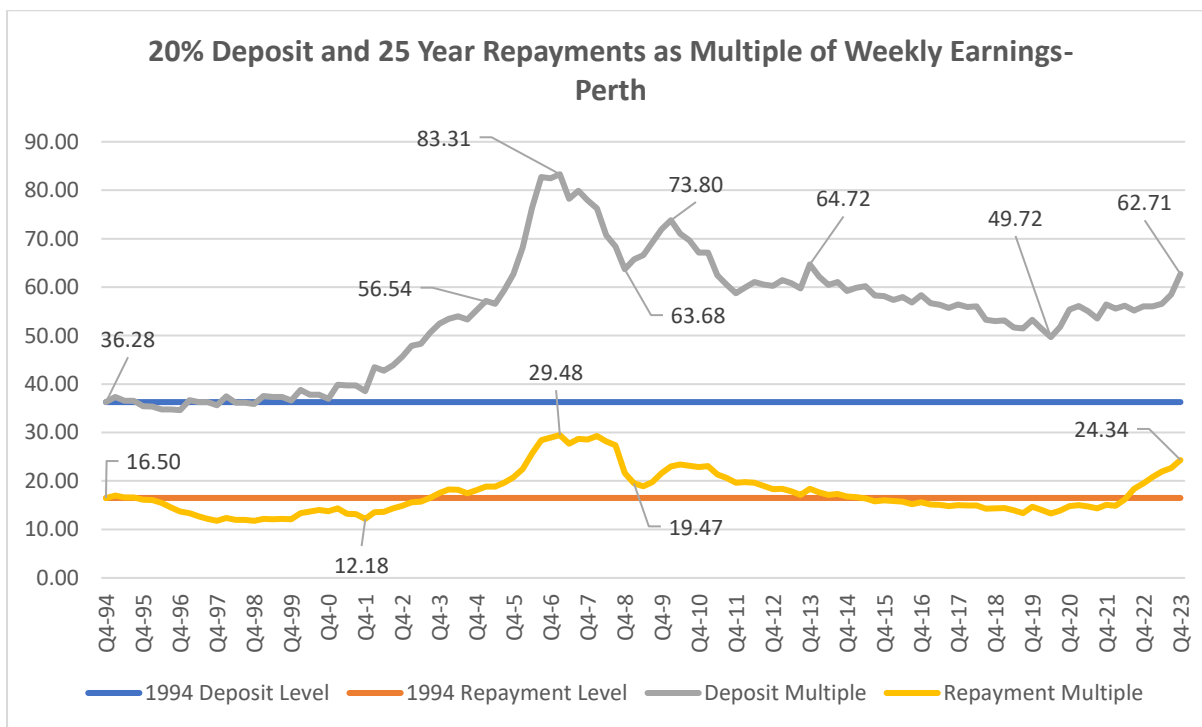
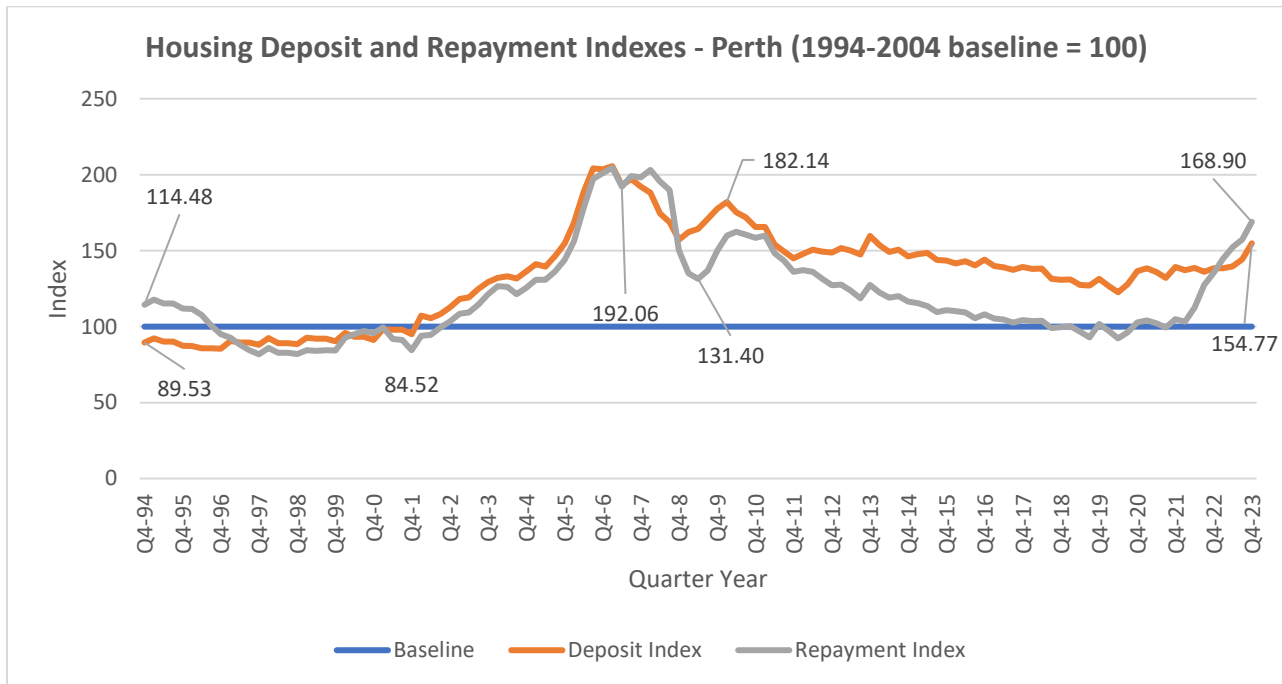
Brisbane



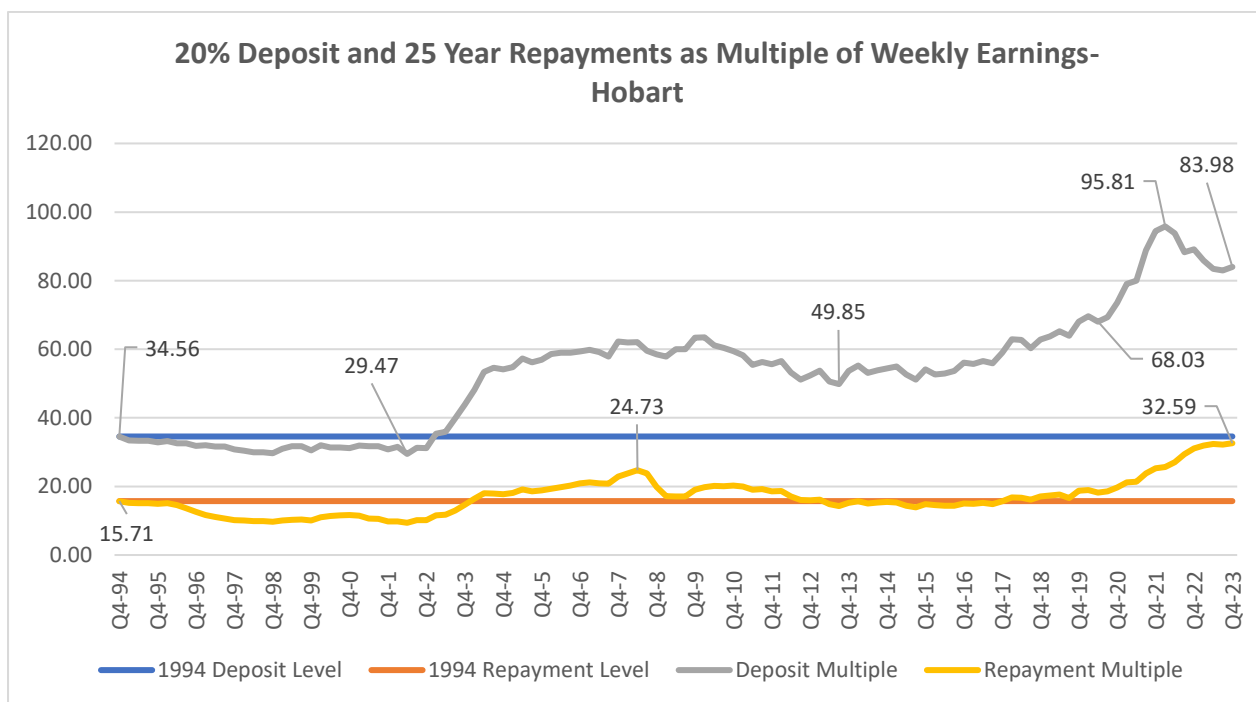
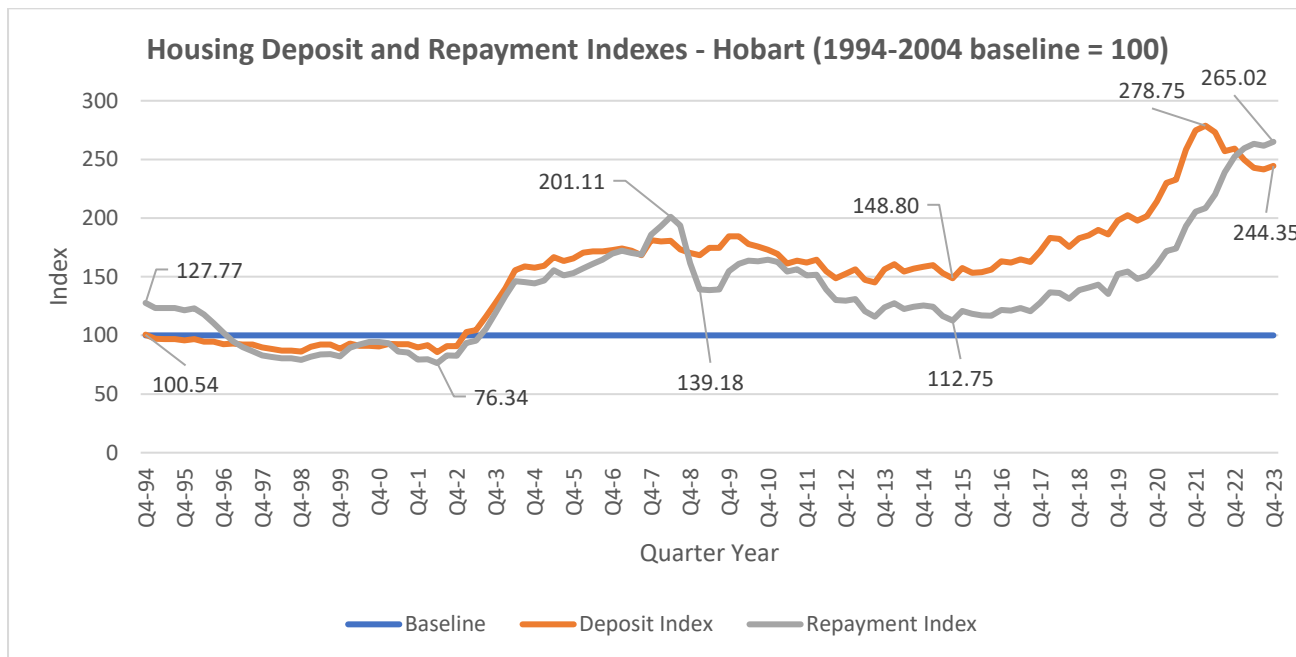
Adelaide



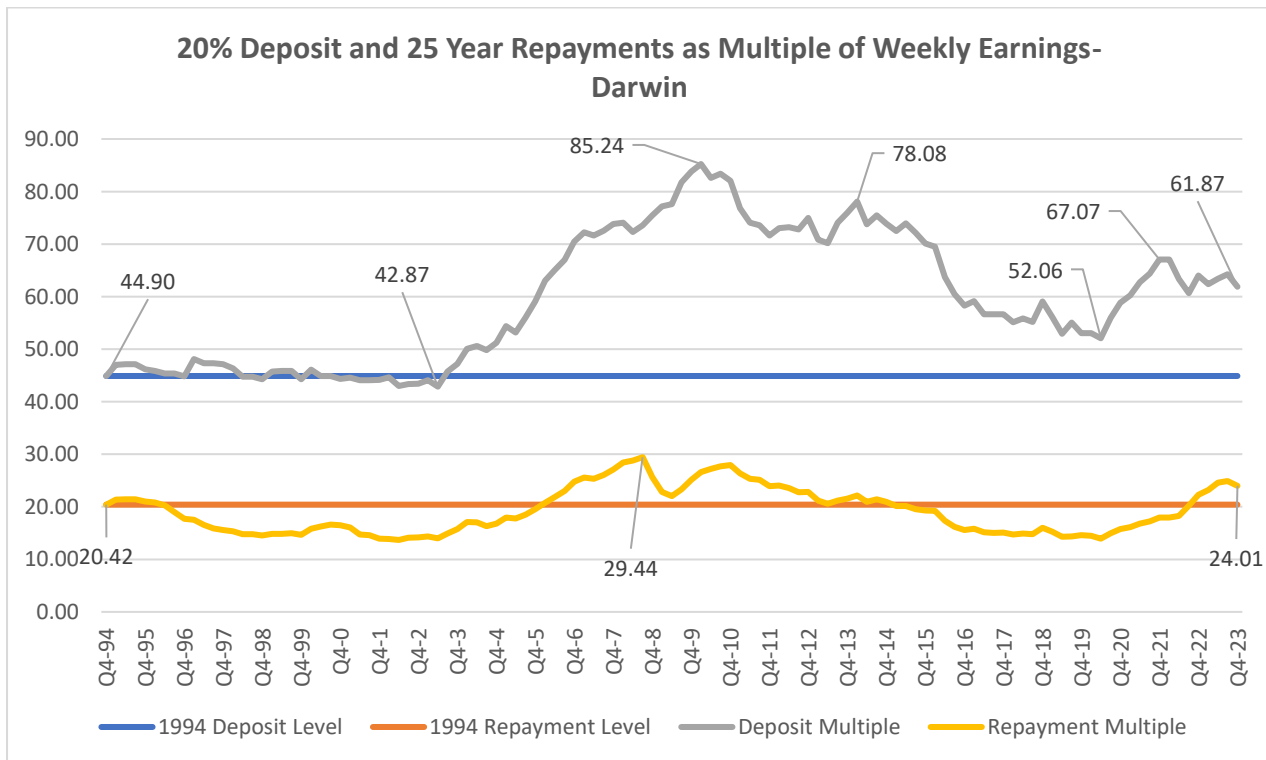
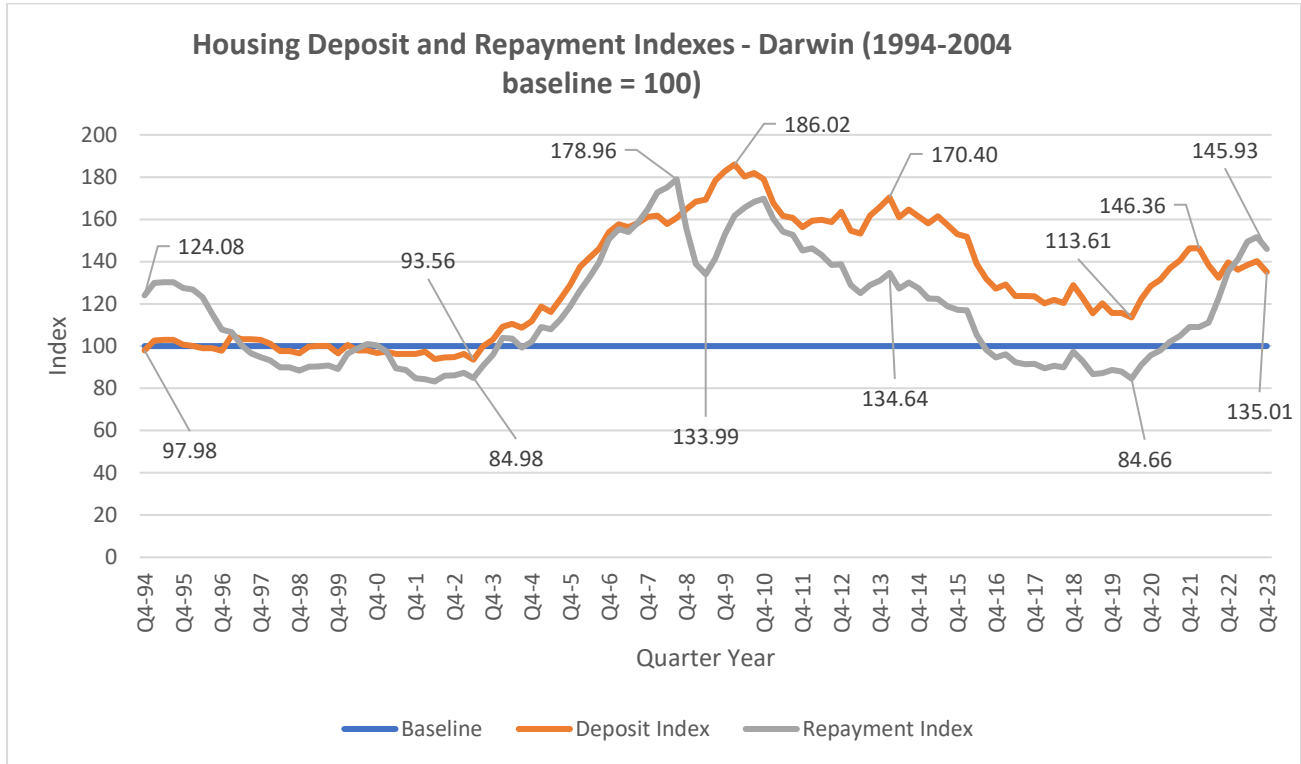
Perth



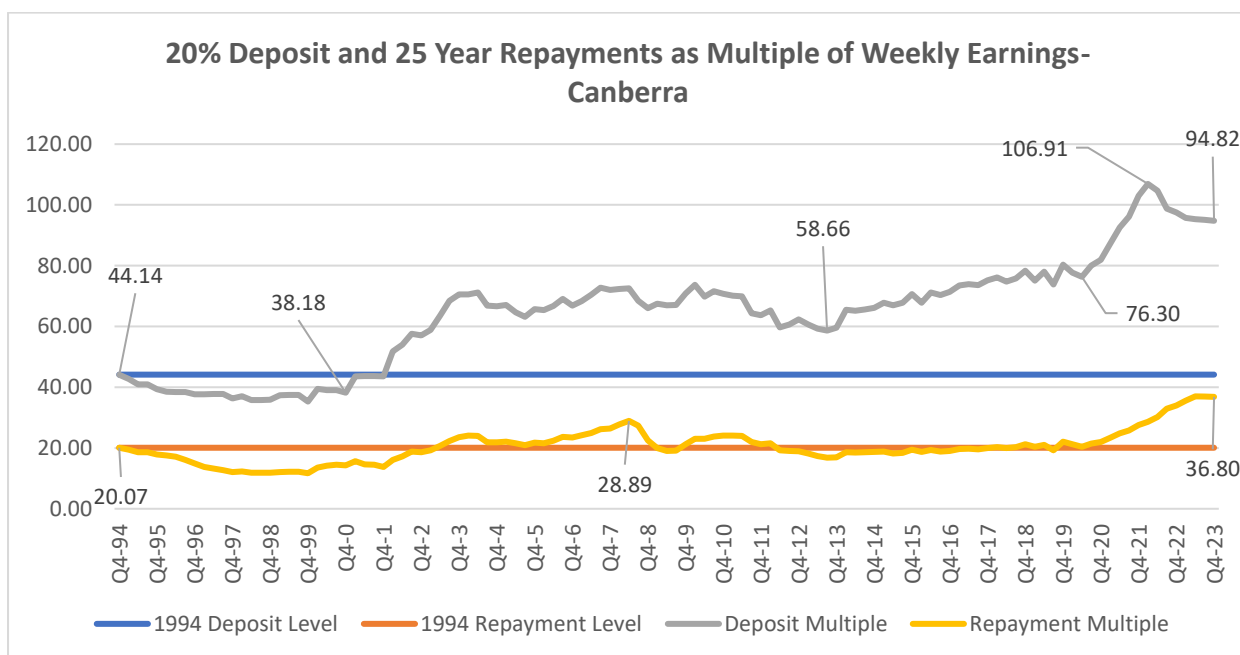
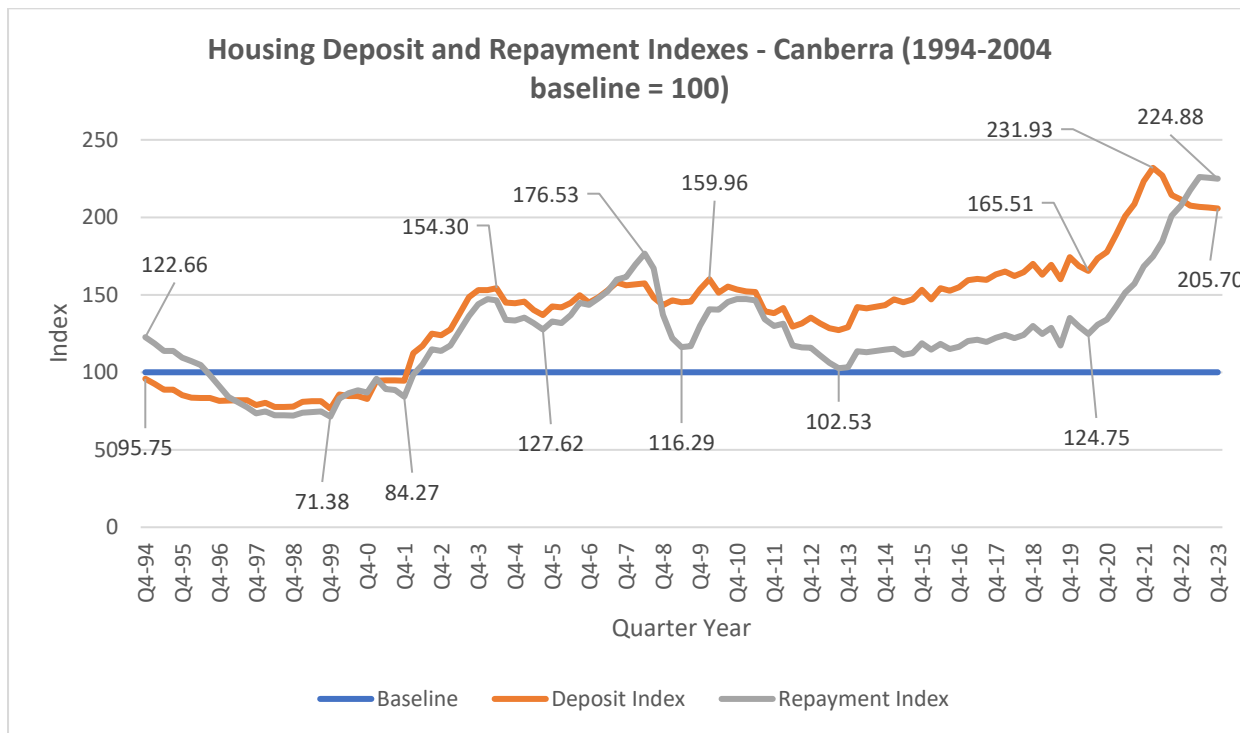
Hobart



Darwin



Canberra



Methodology

Since the majority of Australians 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 Q3:2023 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 and divide it by the average weekly earnings for a given city and quarter. To calculate the deposit multiplier, we 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).

We use the number of housing transfers for Australia's 8 most populous cities to create a weighted national average for the relevant statistics (i.e., 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 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 each quarter.

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 2023 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 2023 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 2023 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>.

ⁱ <https://population.gov.au/data-and-forecasts/key-data-releases/national-state-and-territory-population-september-2023>