



Australian Institute for Progress

Housing Affordability Index

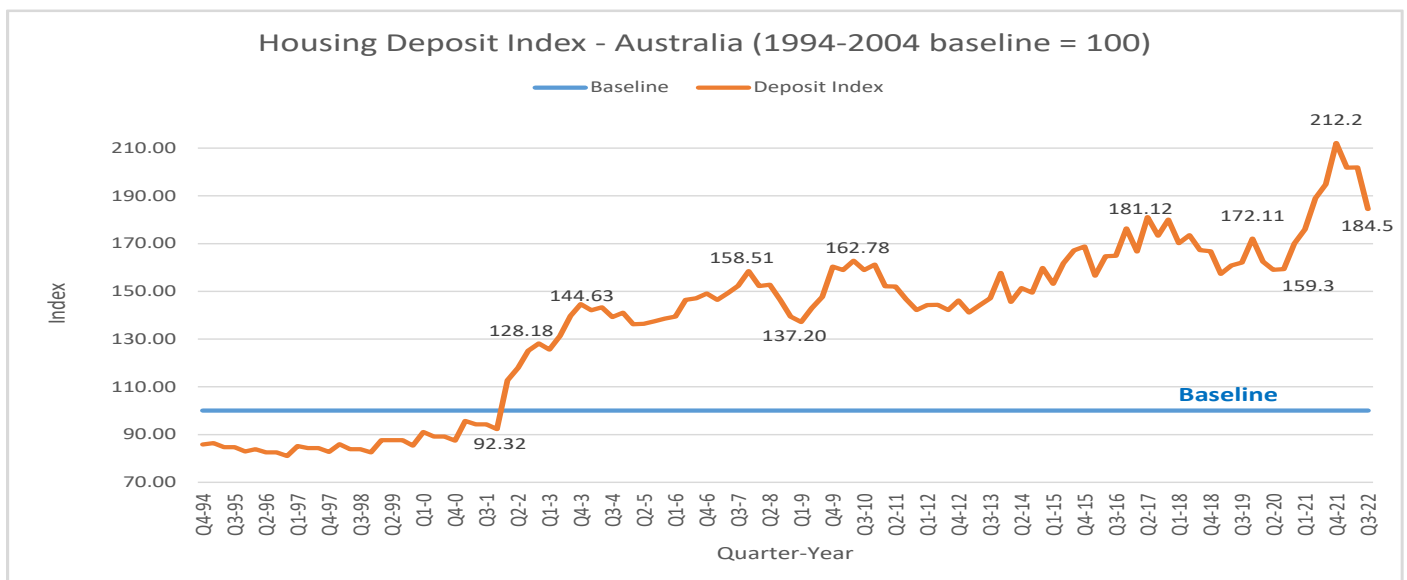
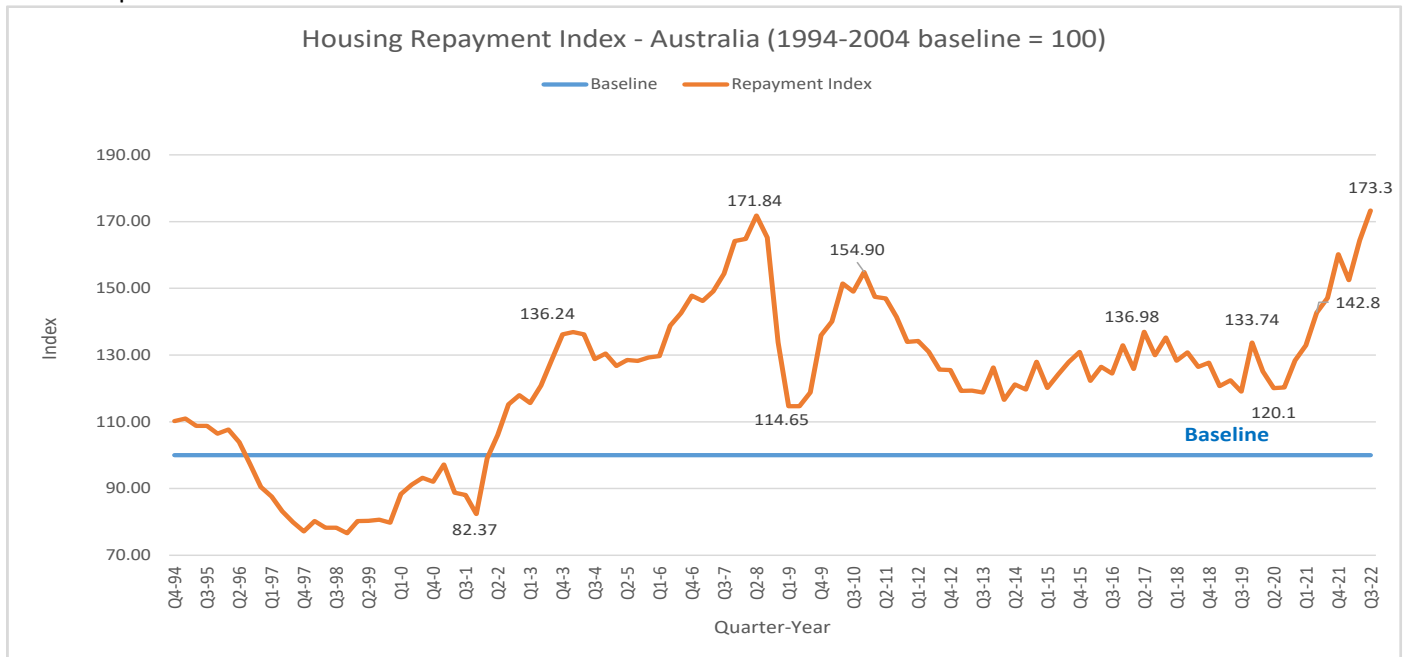
September Quarter, 2022
A Quarterly Review of Housing Affordability

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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

- Interest rates have pushed repayment unaffordability levels back to a record high with the index at 173.3, which is higher even than the 3rd quarter of 2008 just before the GFC when it hit 171.84.
- Every capital city experienced an increase in the index (which indicates a decrease in affordability) between Q2 and Q3 last year. The largest increases were Adelaide (20.5), Brisbane (14.5), Perth (13.7), Hobart (13.6) and Darwin (11.2) above the weighted average increase of 8.9.
- Sydney (8.6), Melbourne (8.4) and Canberra (5.2) were below it.
- Deposit affordability increased in all markets as a result of drops in house prices, with Hobart falling by 33.90 points, Canberra falling 27.59, Melbourne 22.40 and Sydney 18.60 – above the average fall of 17.35. Darwin (-13.96) and Brisbane (-13.63) were closest to the average. Prices in Adelaide (-4.19) and Perth (-2.96) held up.



Summary

The Q3 2022 Australian housing market saw a general increase in the Repayments Index - indicating a decrease in affordability - and a decrease in the Deposit Index - indicating a fall in house prices - making it easier to save for a deposit, but harder than ever to make payments. Aggregating across Australia, national housing repayments increased by 8.9 index points, whilst deposit costs decreased by 17.35 points. Median house prices have fallen for the last three quarters, reporting a drop of -8.4% in the Q3, 2022. All markets fell, with Canberra, Sydney and Melbourne falling the most, and Brisbane, Darwin and Adelaide the least.

Housing transfers data also indicate a decline in relative market activity with all states reporting a drop when compared to figures from the 2nd quarter of 2021. This was strongest in Sydney and Melbourne who now only make up less than 46% of all housing transfers for the quarter, a far cry from pre-covid levels in Q4 2019 where they represented 57% of house transfers. Over the last 12 months there has been a drop of 29% in house transfers across all of Australia.

The relative unaffordability of housing is obviously impacting market activity with fewer potential purchasers being prepared to pay asking prices and few vendors being prepared to drop their expectations.

That the greatest declines in sales are apparent in the markets which dropped the least in value suggests that buyers are resistant to sell at lower prices, suggesting that at this time last year owners were not suffering a high degree of stress, even with the interest rate increases.

This may have changed in the intervening period as interest rates have increased by 0.75% since then, and the RBA has indicated further rises are to come.

	<i>Deposit Index</i>		<i>Repayment Index</i>	
<i>Sydney</i>	182.4	-18.60	172.0	8.6
<i>Melbourne</i>	204.1	-22.40	192.3	8.4
<i>Brisbane</i>	178.4	-13.63	166.2	14.5
<i>Adelaide</i>	200.5	-4.19	187.8	20.5
<i>Hobart</i>	249.2	-33.90	231.8	13.6
<i>Darwin</i>	132.4	-13.96	122.7	11.2
<i>Canberra</i>	202.4	-27.59	189.8	5.2
<i>Perth</i>	135.4	-2.98	126.7	13.7
<i>Weighted Average</i>	184.5	-17.35	173.3	8.9

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.



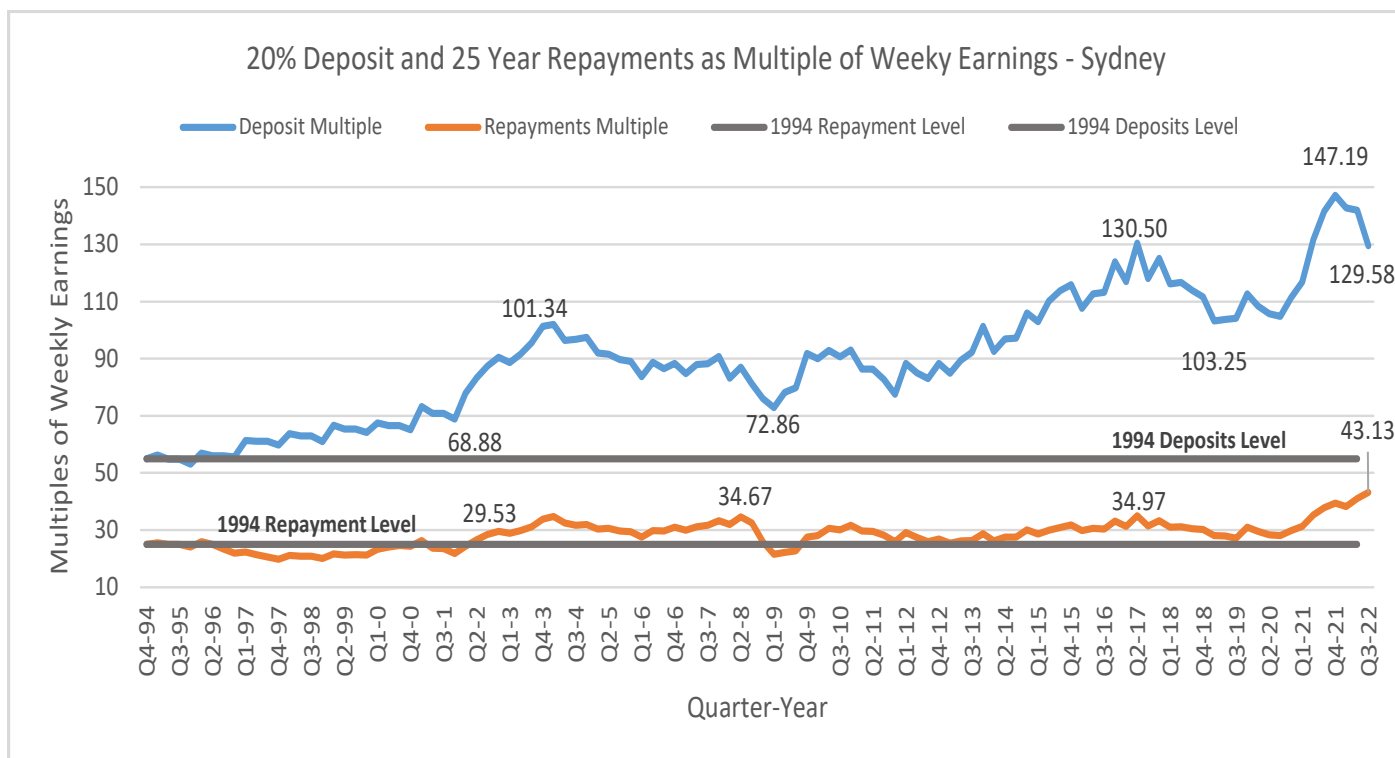
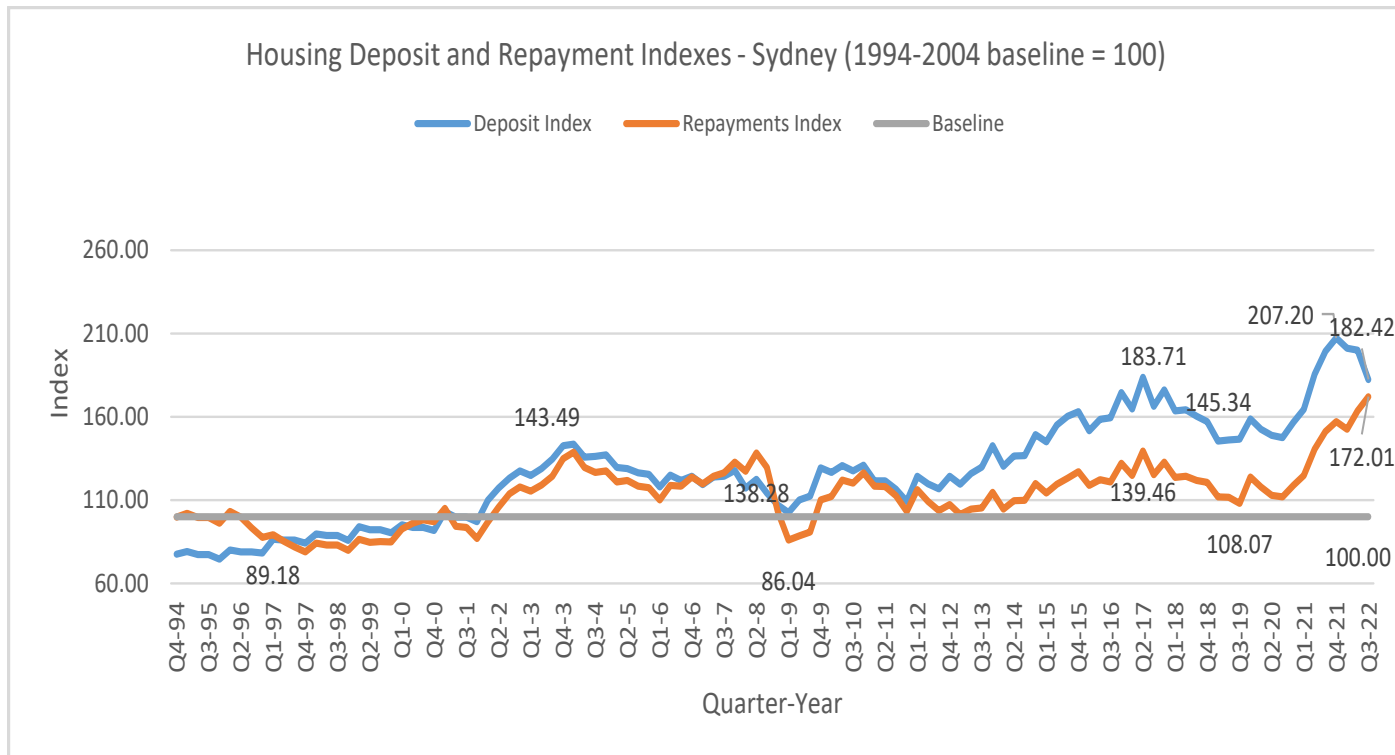
Graham Young
Executive Director
Australian Institute for Progress



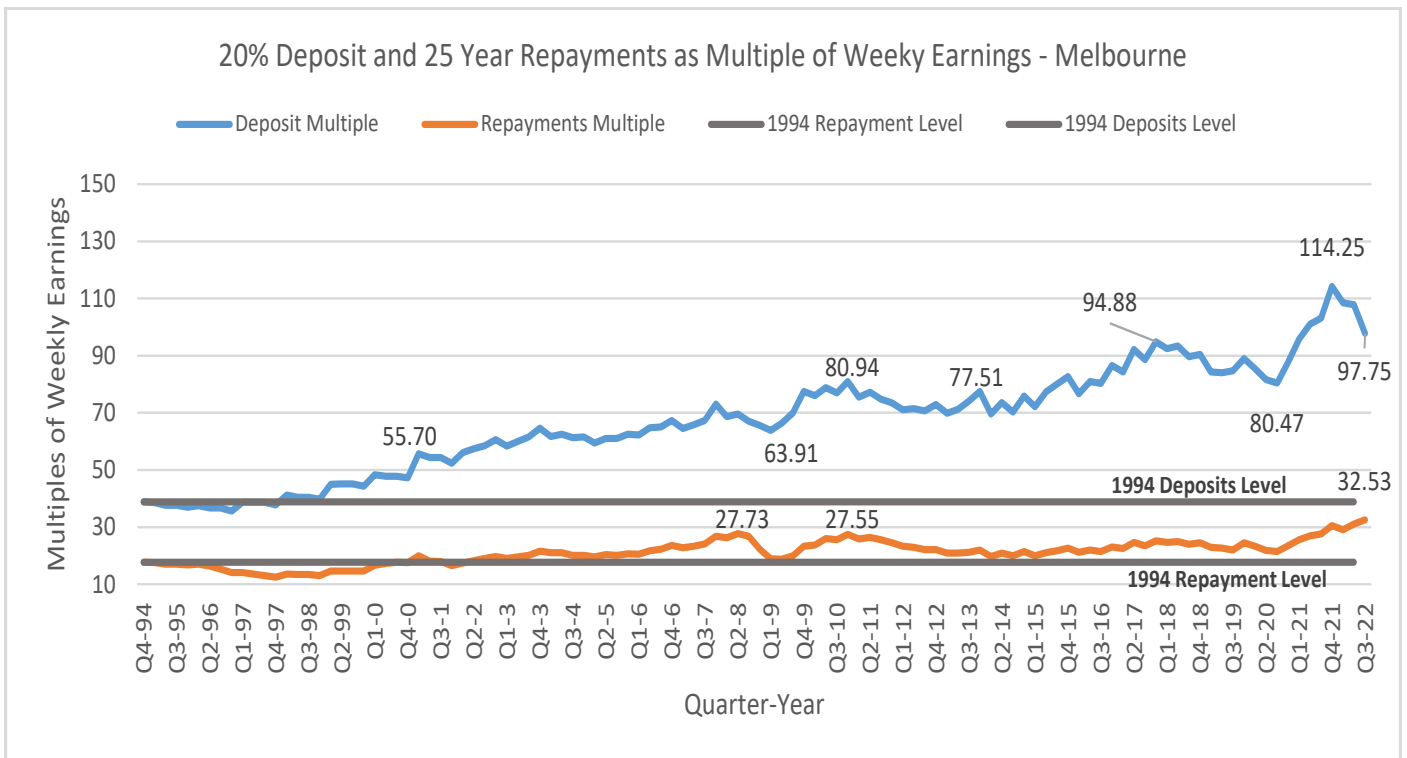
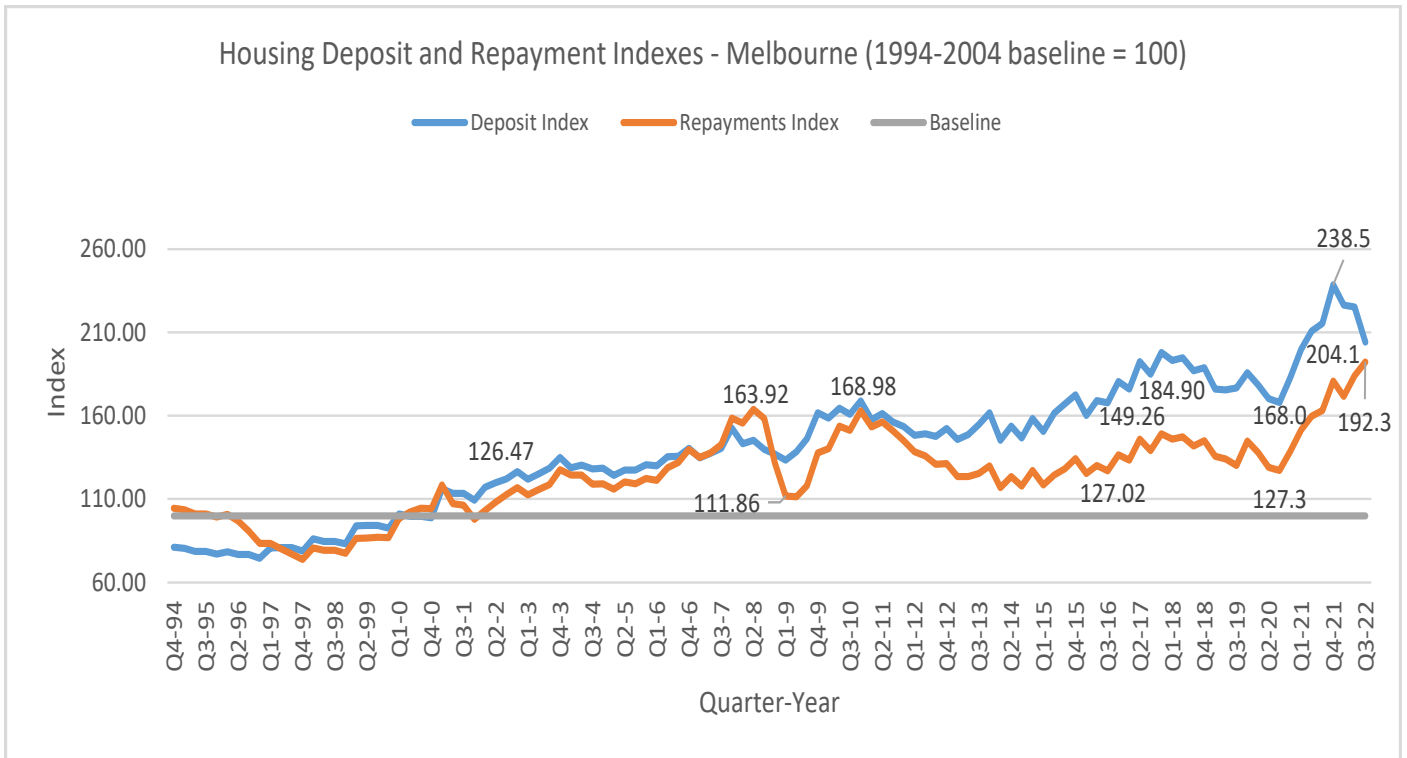
Barclay McGain
Economic Researcher
Australian Institute for Progress

Deposit and Repayment Costs by State

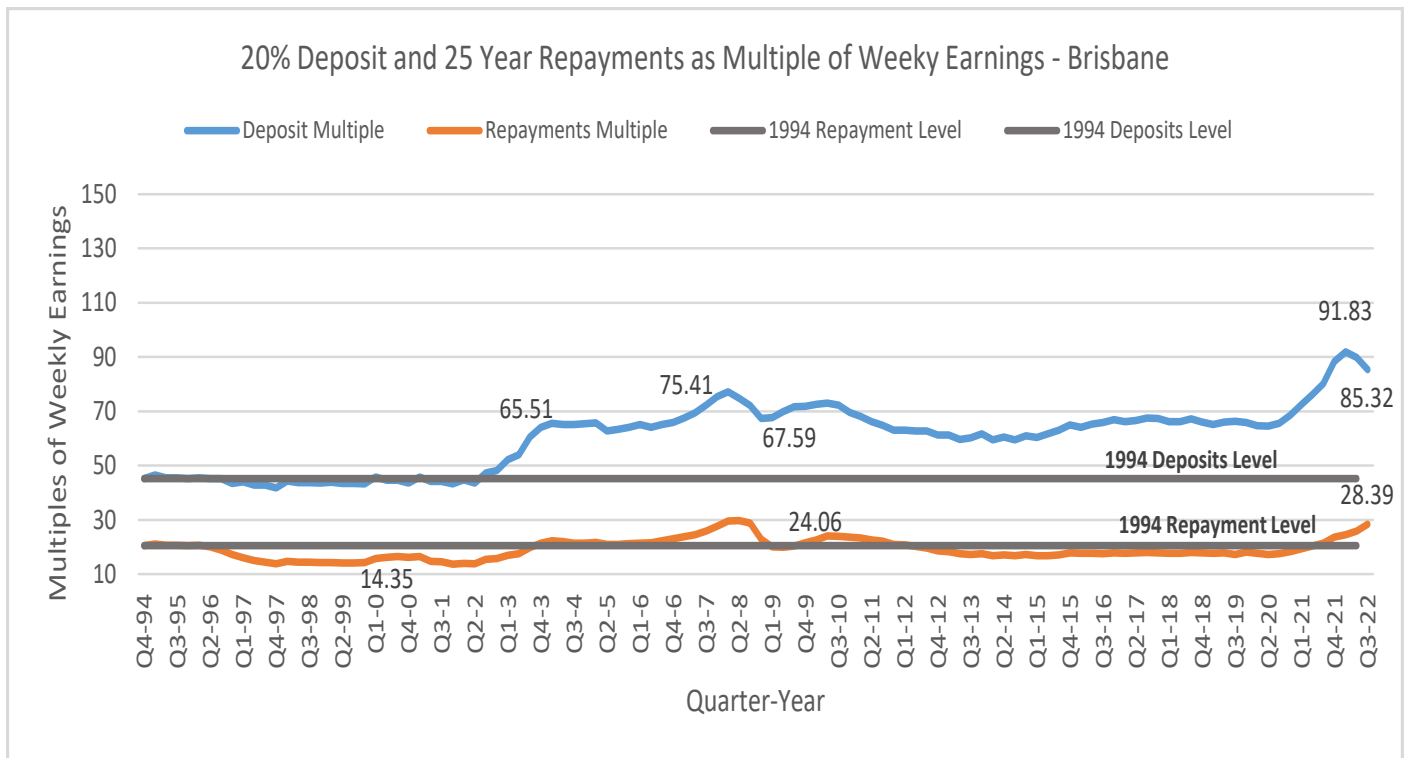
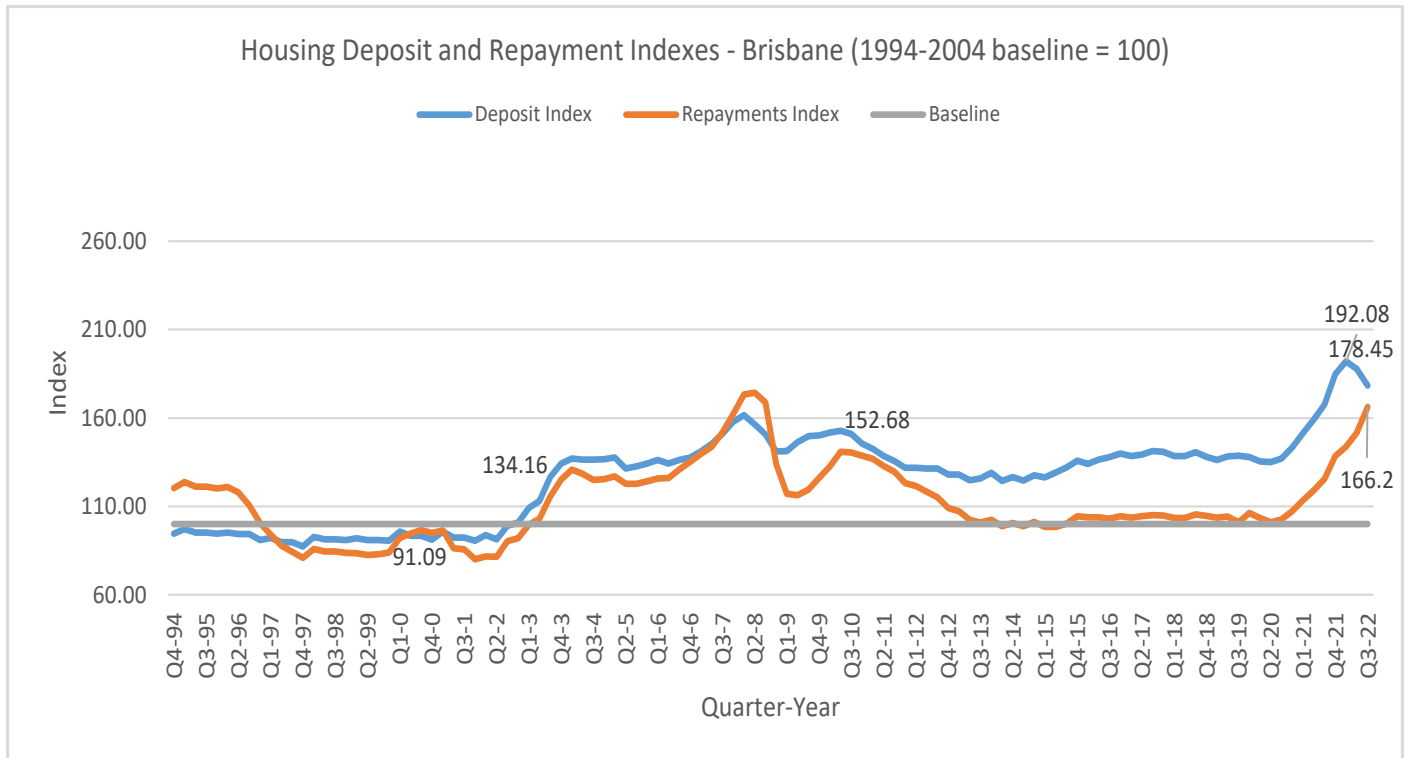
Sydney



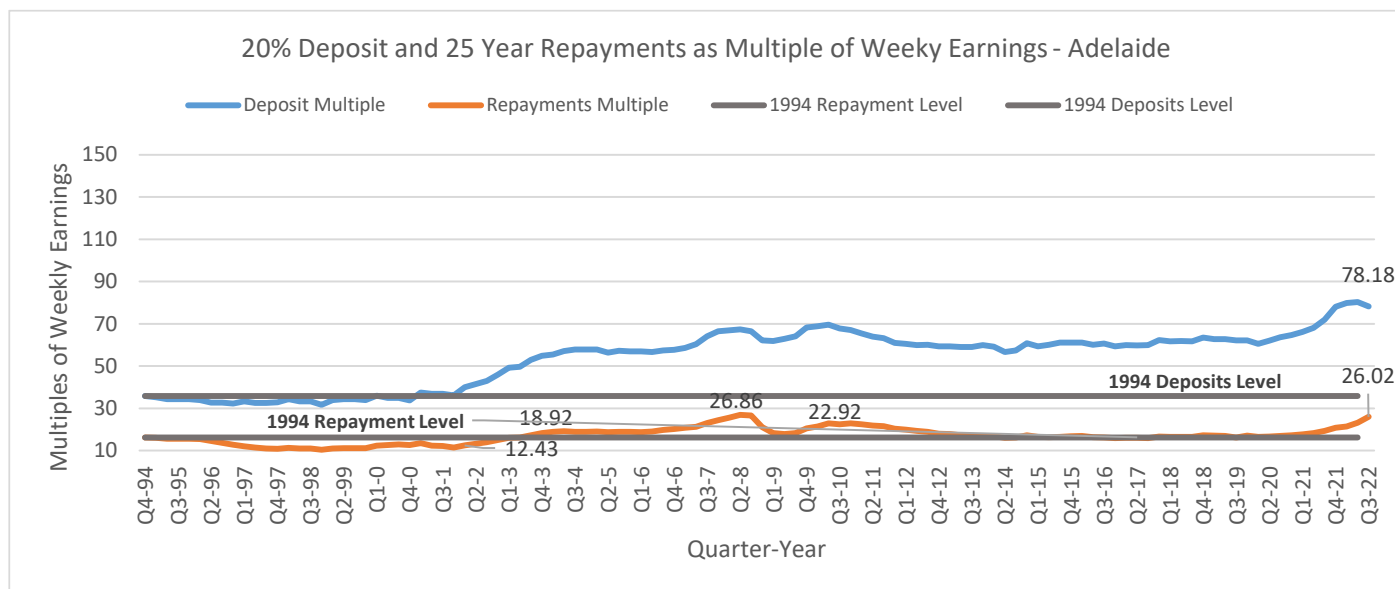
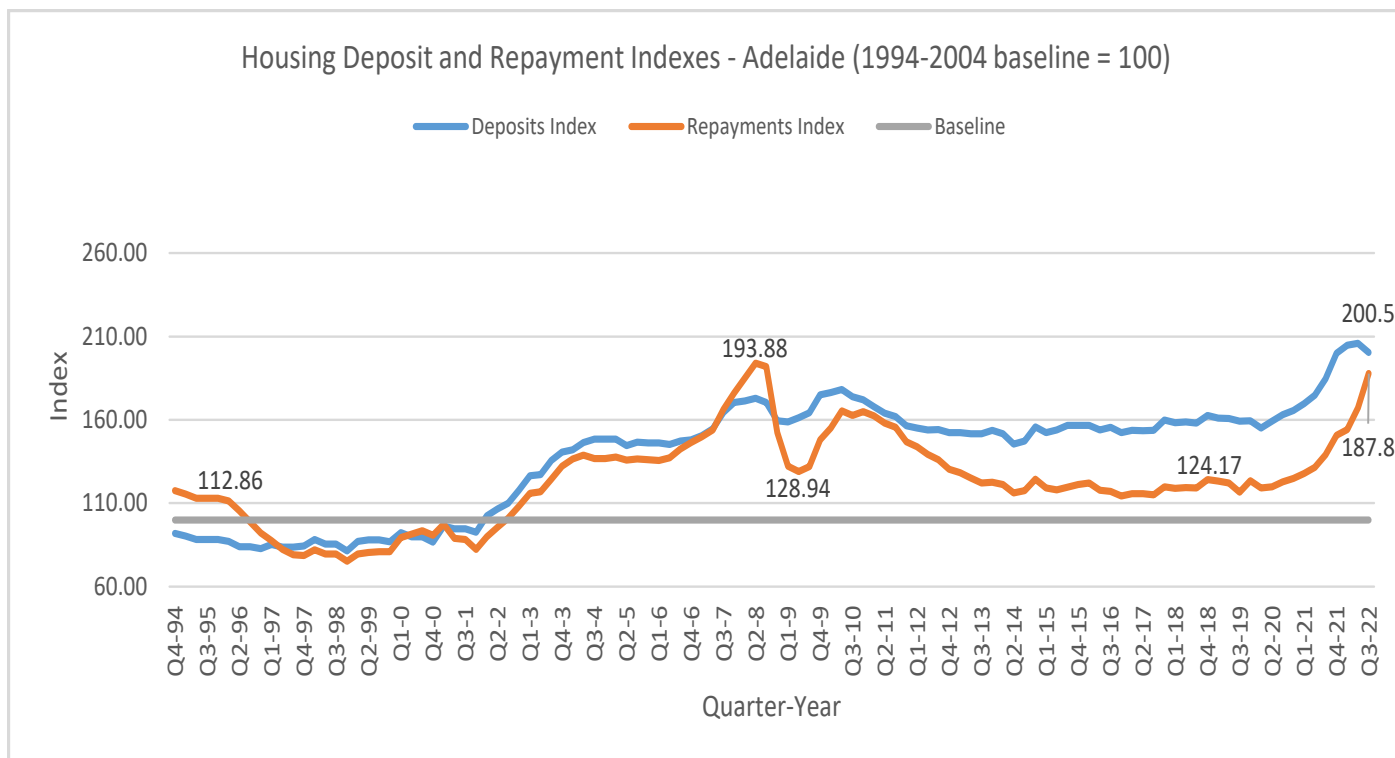
Melbourne



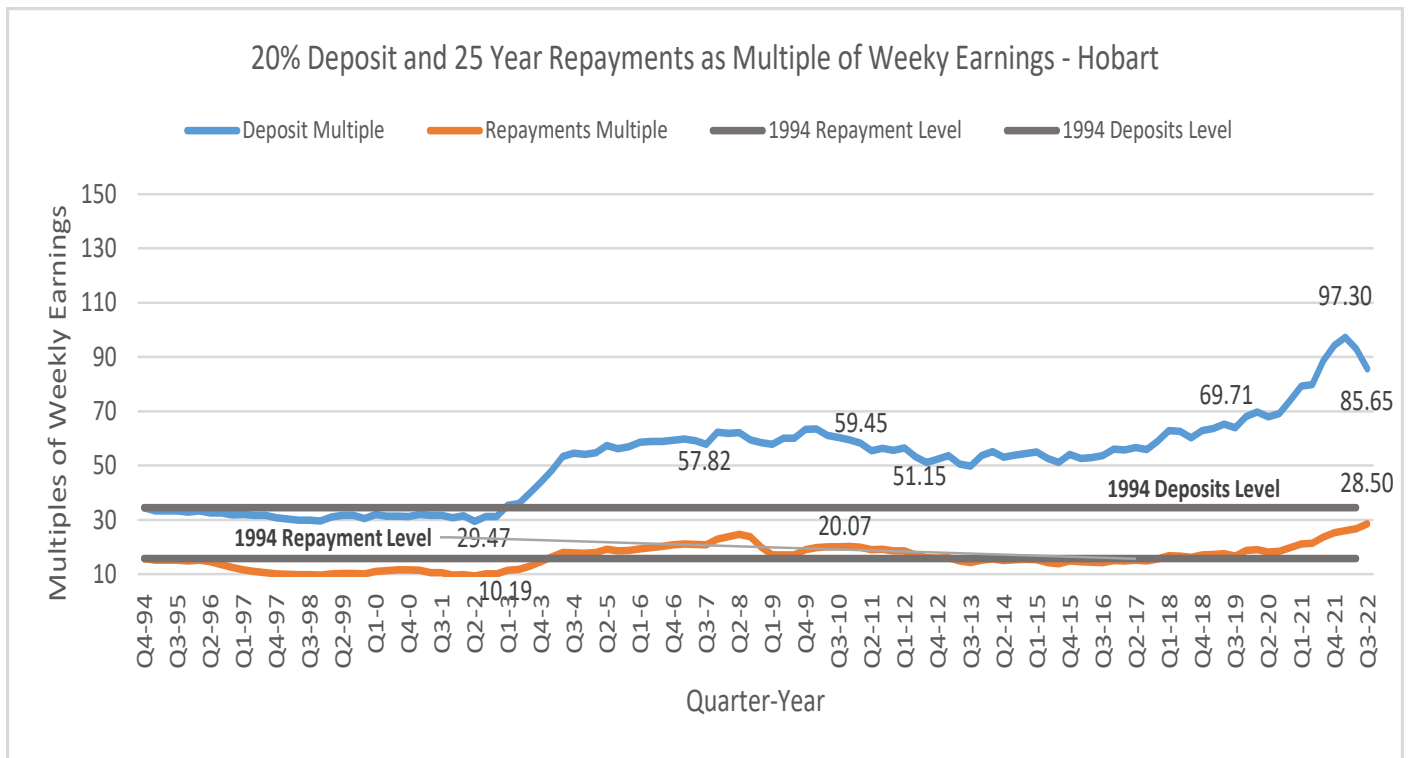
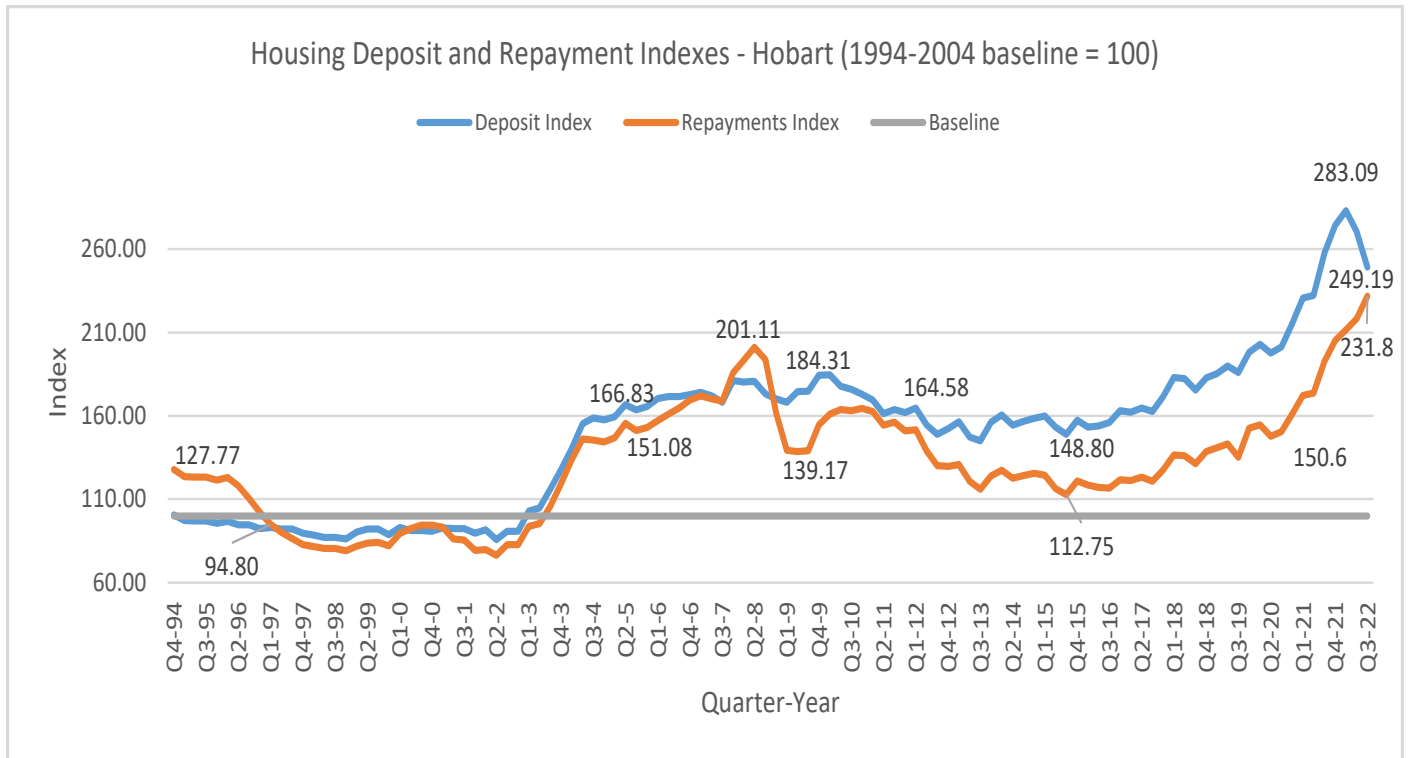
Brisbane



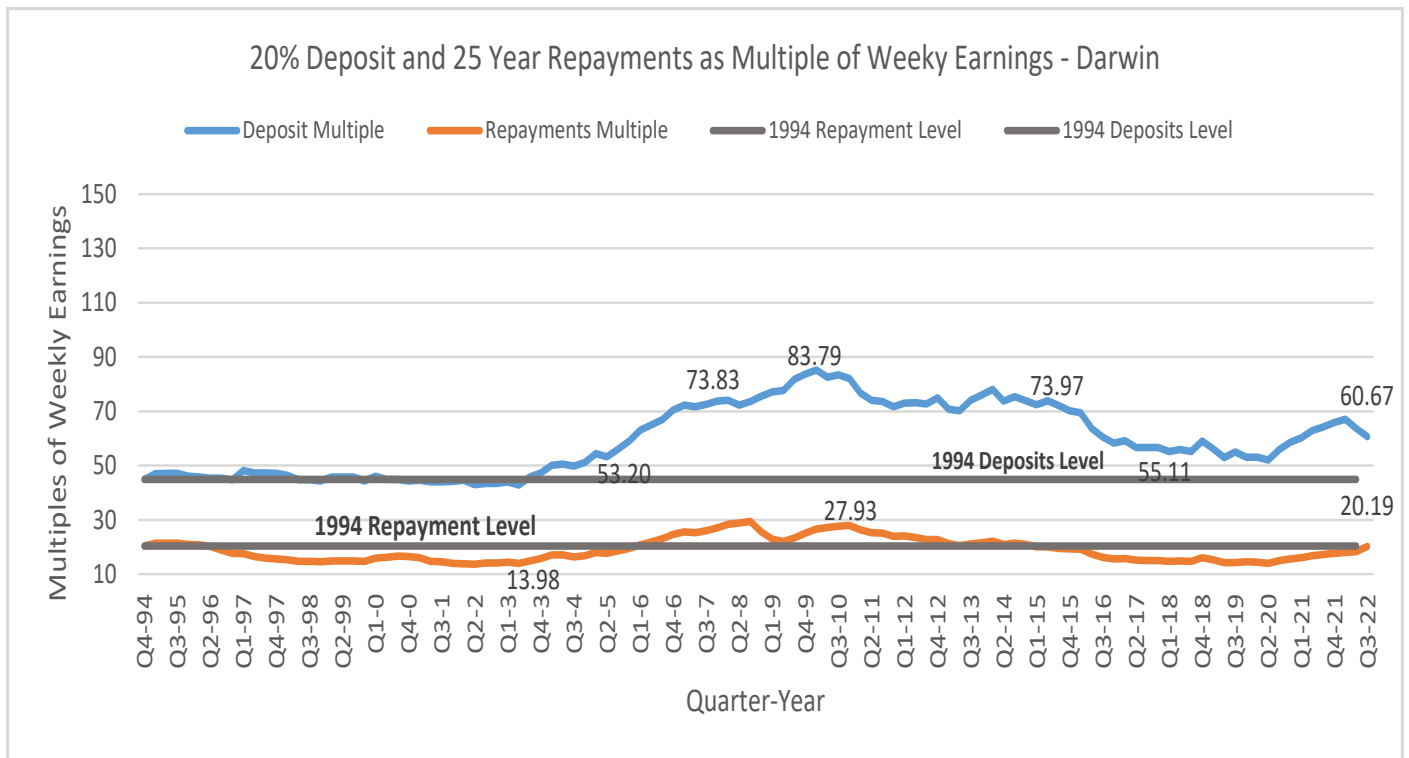
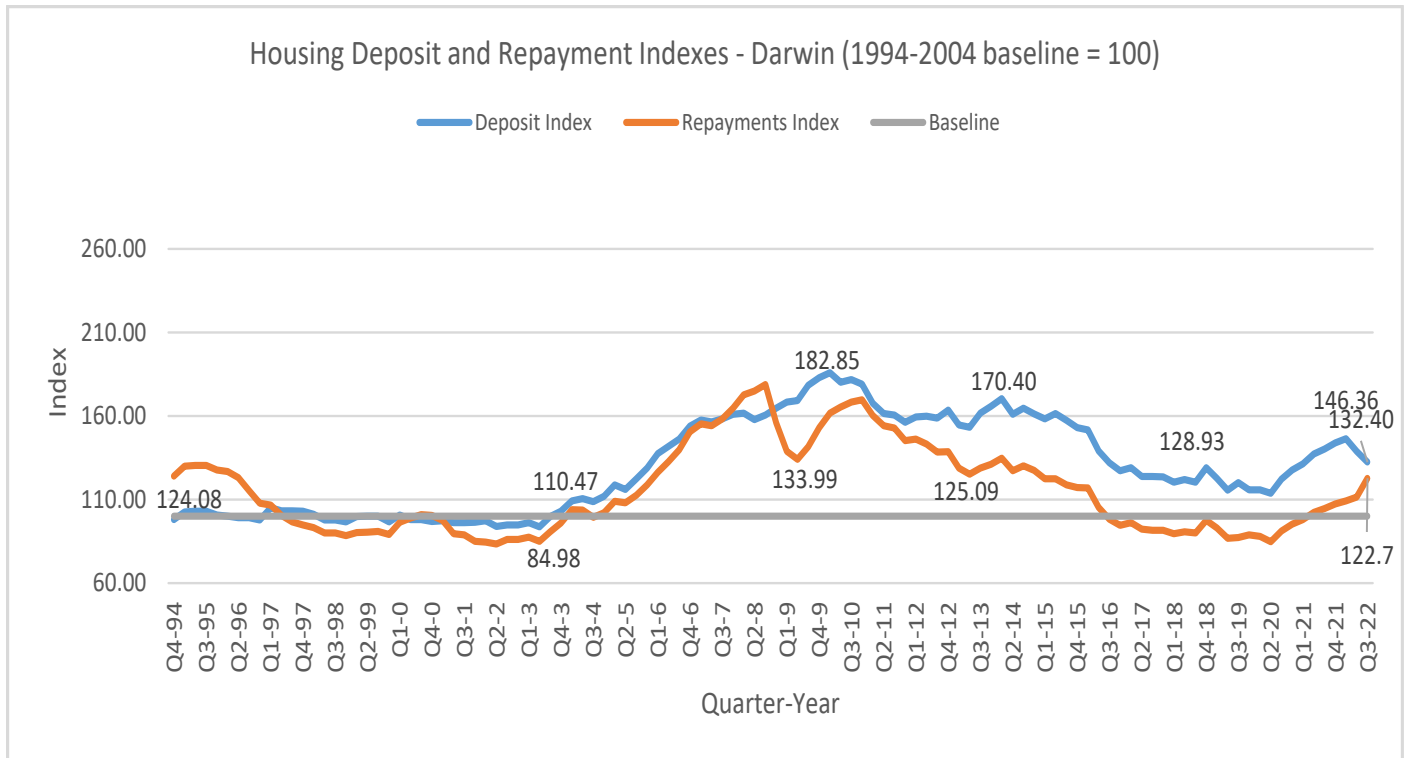
Adelaide



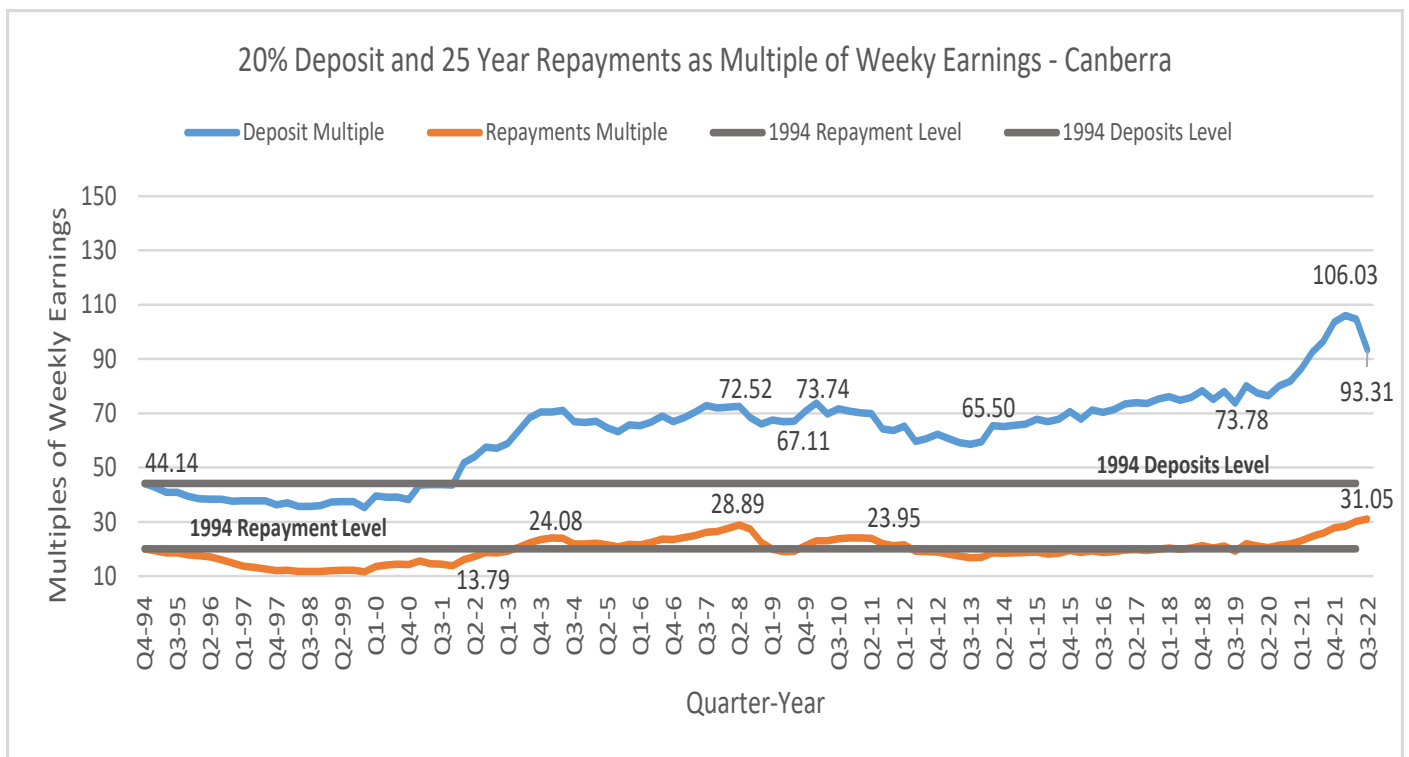
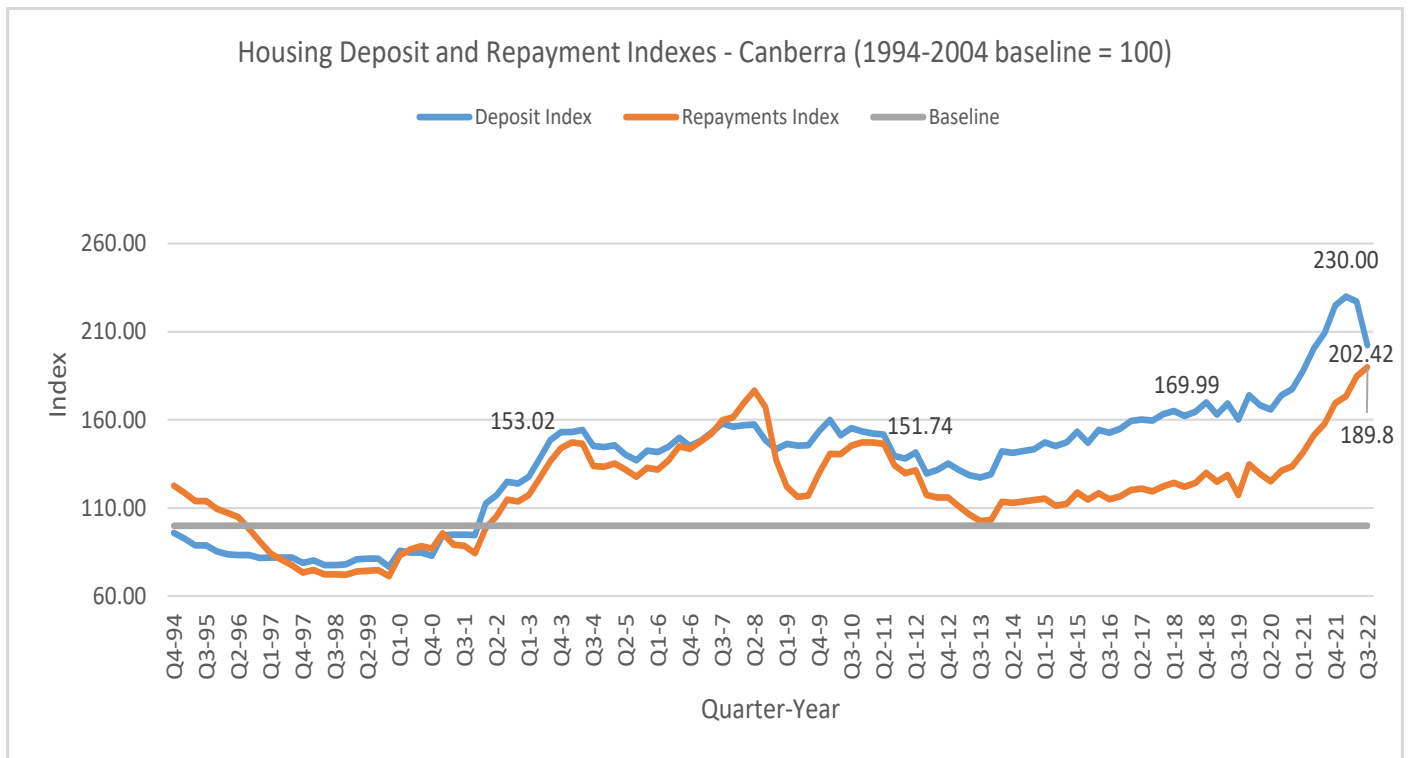
Hobart



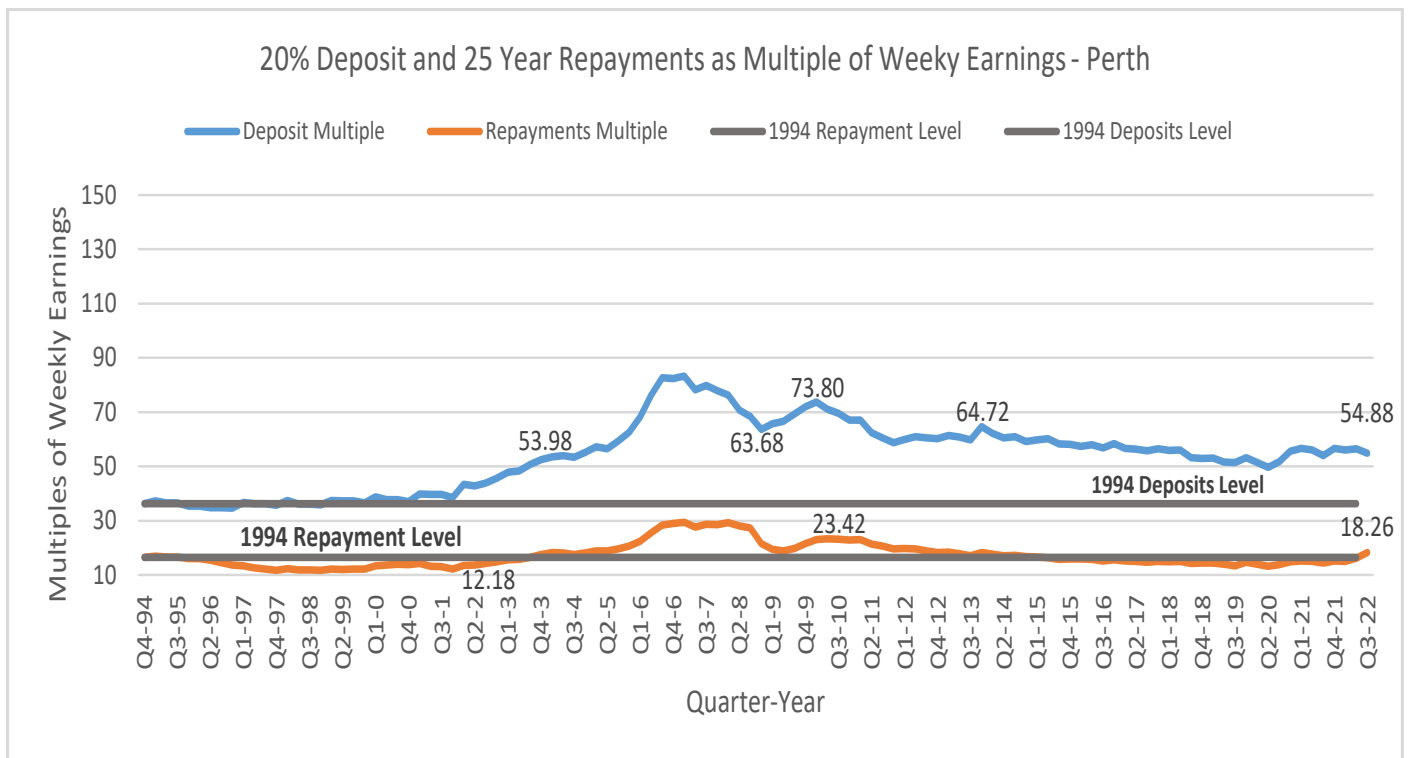
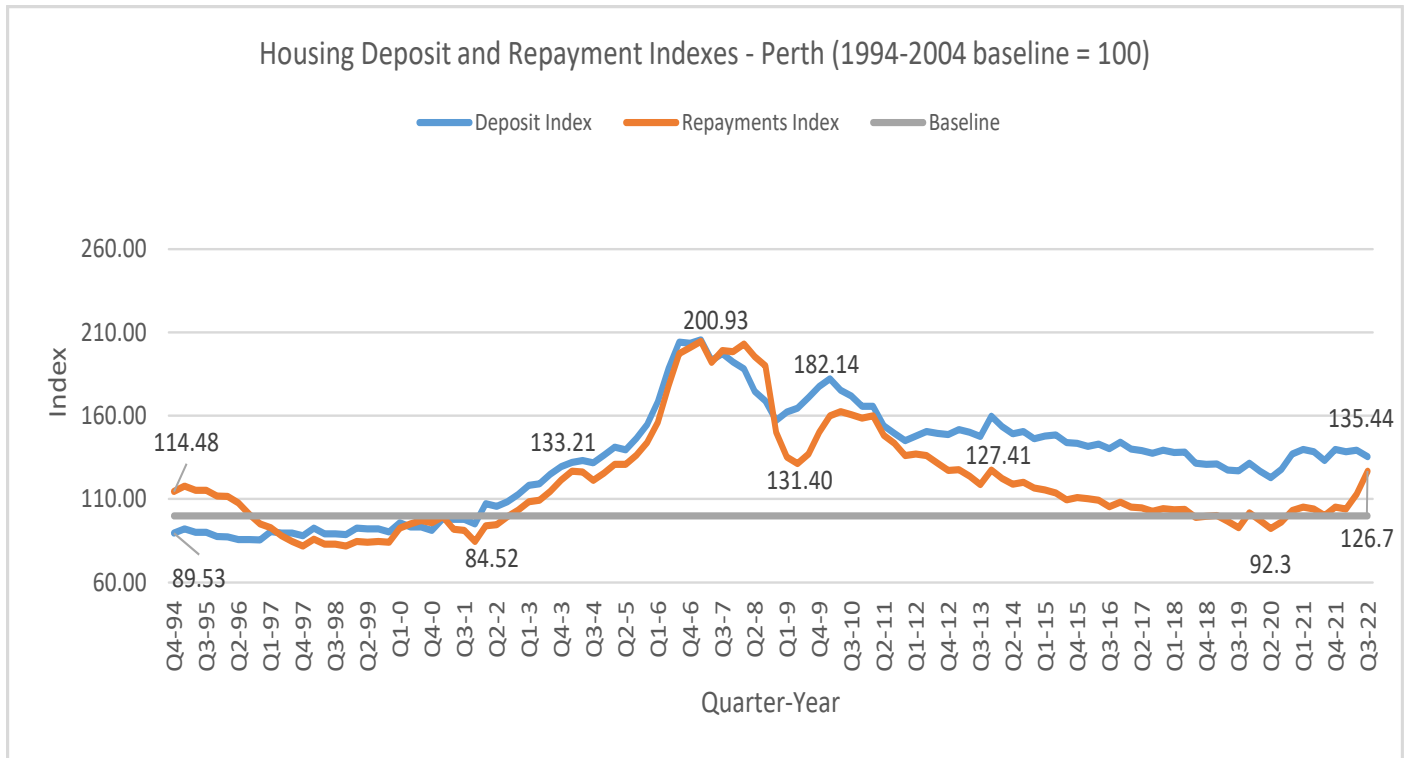
Darwin



Canberra



Perth



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 (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 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.

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>