



Australian Institute for Progress

Housing Affordability Index

December Quarter, 2021

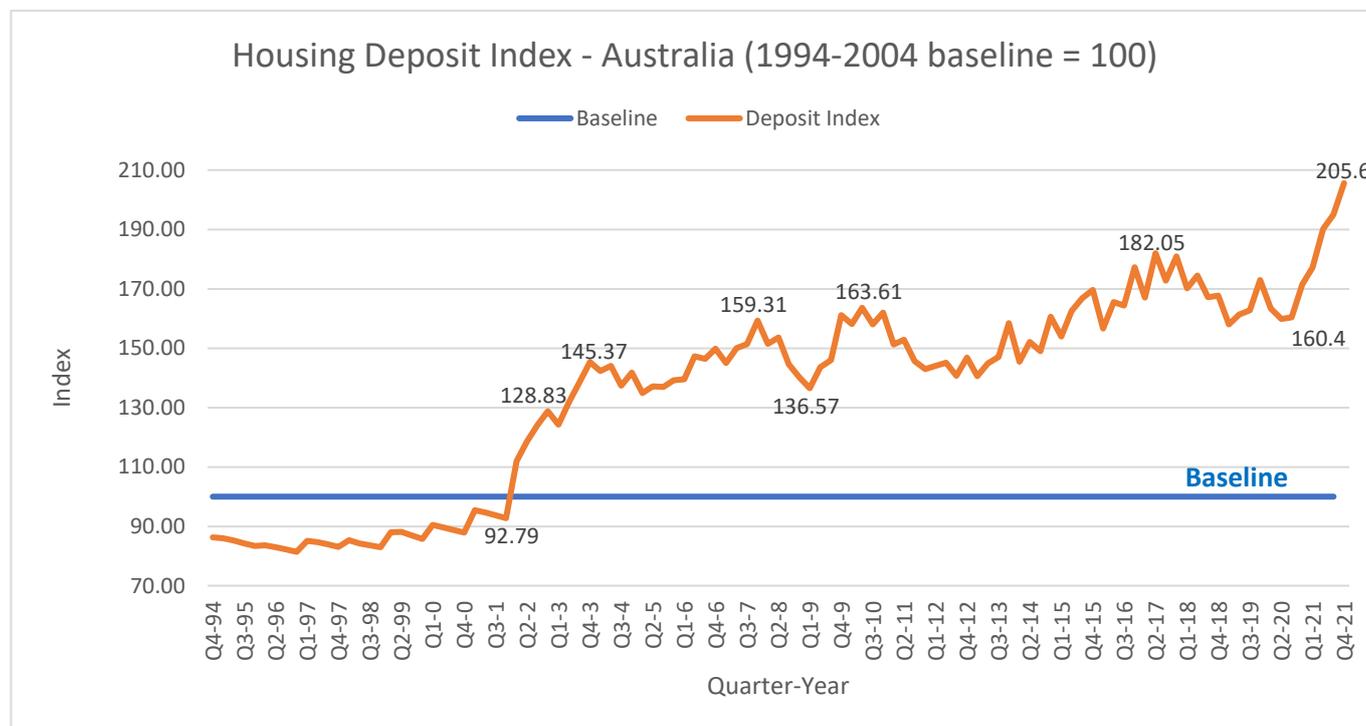
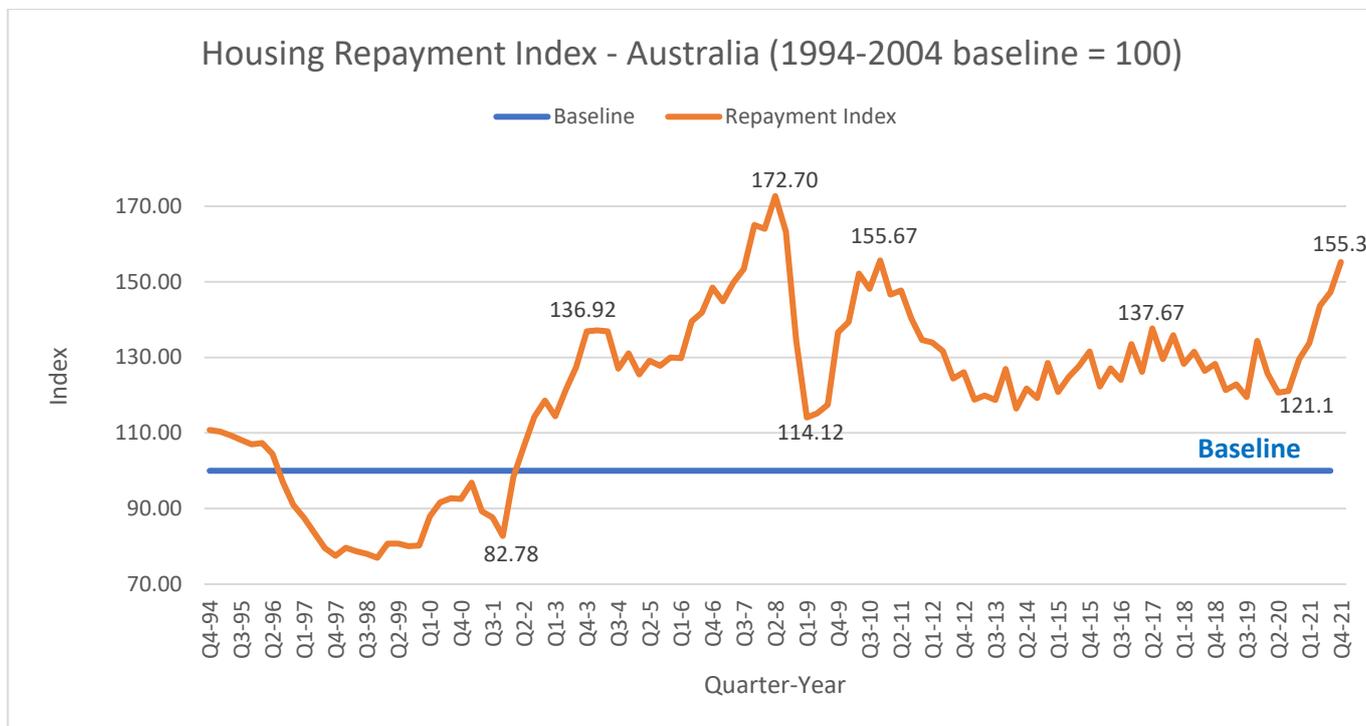
A Quarterly Review of Housing Affordability

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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

- Repayment costs have significantly increased over the 4th quarter of 2021, with the repayment index increased from 147.3 to 155.3.
- Deposit costs also increased over the 4th quarter, with the deposit index increasing from 195.1 to 205.6.
- The change in deposit and repayment costs is attributable to an increase in median house prices by \$55,466.1 (6.55%).



Summary

The 2021 Quarter 4 Australian housing market saw a sharp decrease in affordability of both housing deposits and repayments across all capital cities. Aggregating across Australia, national housing repayment and deposit costs increased by 8.0 and 10.5 index points respectively. The decrease in national housing affordability is the result of a quarterly increase in median house prices (\$55,466) and the number of house transfers significantly increasing in Melbourne (2684) relative to cheaper cities such as Hobart (-269).

The total number of weeks to raise a deposit, given a 10% savings rate and \$1,805 average weekly wages, now averages 1001 weeks across Australia, having decreased by 51 weeks over the December quarter. The increase in the number of weeks to raise a deposit varies significantly by city, with a large increase of 70 weeks in Canberra and only 12 weeks in Sydney. This highlights the challenge of saving a home deposit.

Although Darwin and Sydney both recorded quarterly wage decreases, housing affordability in these cities decreased less than other capitals due to poor median house price growth. Median house prices in Sydney only increased by \$10,000 over the December quarter, while Canberra had an increase of \$108,000.

Both the Sydney and Melbourne markets have “surpassed” the 2008 affordability low which was national. Brisbane, Adelaide, Canberra and Hobart are slightly below the 2008 level, while Perth and Darwin have affordability which is as high as it has been for most of the last 28 years.

	<i>Deposit Index</i>		<i>Repayment Index</i>	
<i>Sydney</i>	202.0	(1.7)	153.2	(1.3)
<i>Melbourne</i>	229.5	(12.4)	173.9	(9.4)
<i>Brisbane</i>	184.6	(13.6)	138.2	(10.2)
<i>Adelaide</i>	201.7	(11.4)	151.9	(8.6)
<i>Hobart</i>	273.2	(18.9)	204.3	(14.2)
<i>Darwin</i>	144.6	(4.6)	107.7	(3.4)
<i>Canberra</i>	226.1	(15.4)	170.4	(11.6)
<i>Perth</i>	140.4	(6.3)	105.6	(4.8)
<i>Average</i>	205.6	(10.5)	155.3	(8.0)

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.



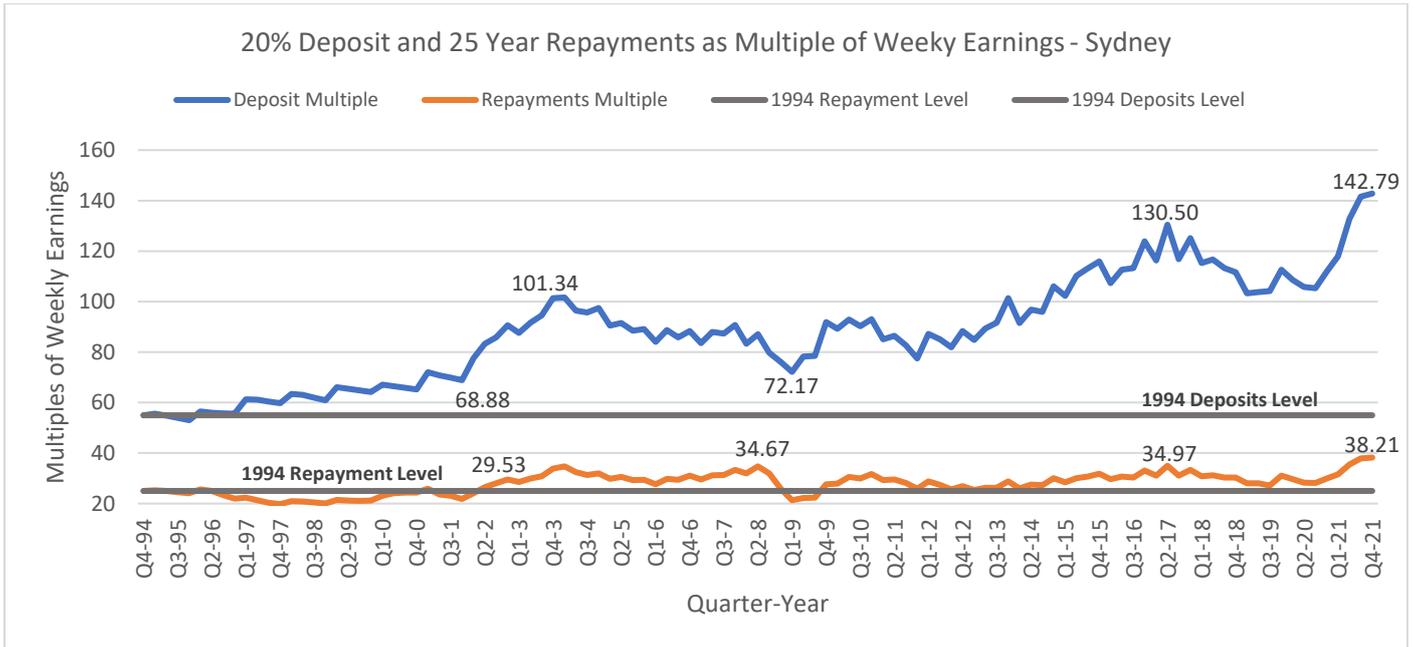
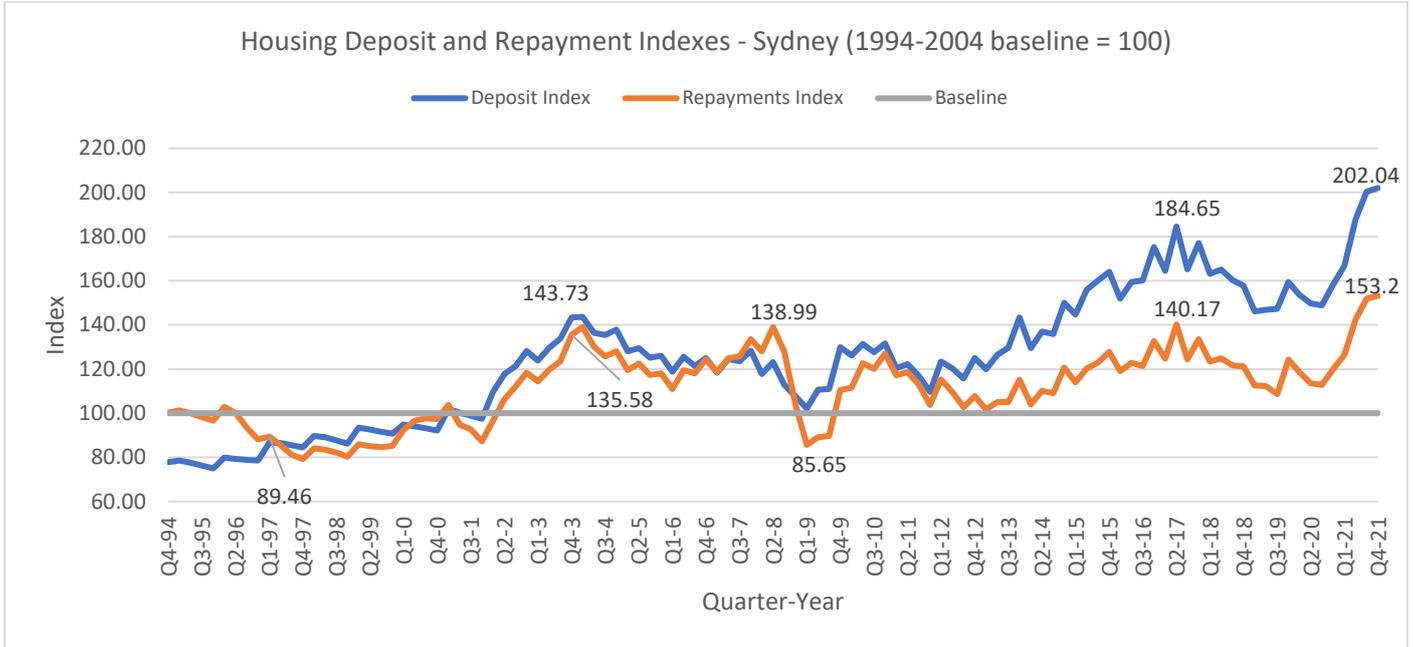
Graham Young
Executive Director
Australian Institute for Progress



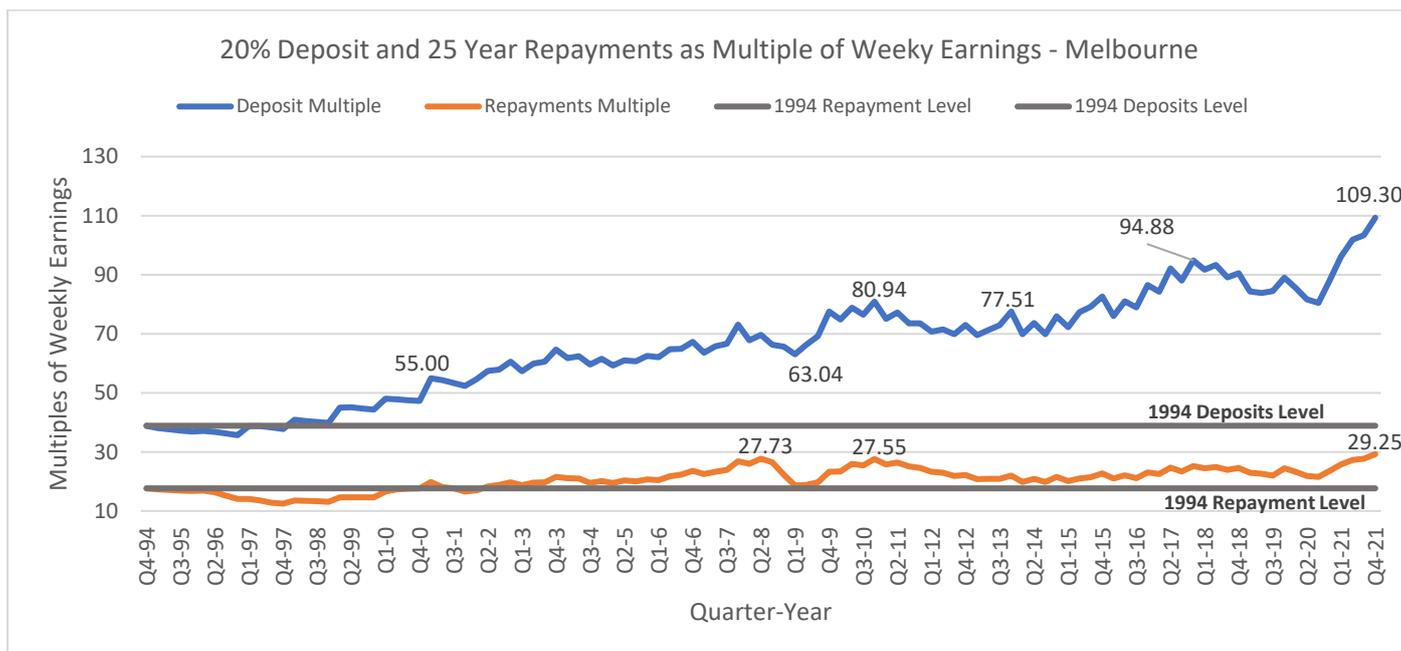
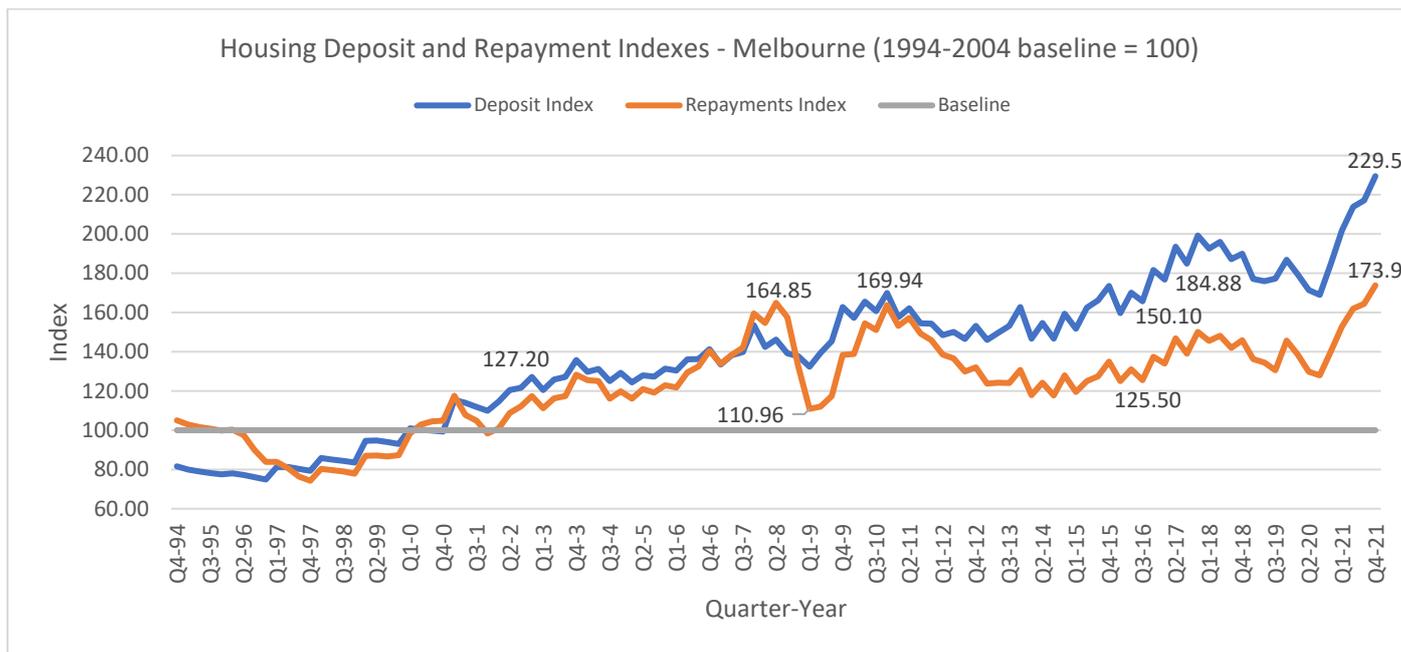
Nicholas Umashev
Economic Researcher
Australian Institute for Progress

Deposit and Repayment Costs by State

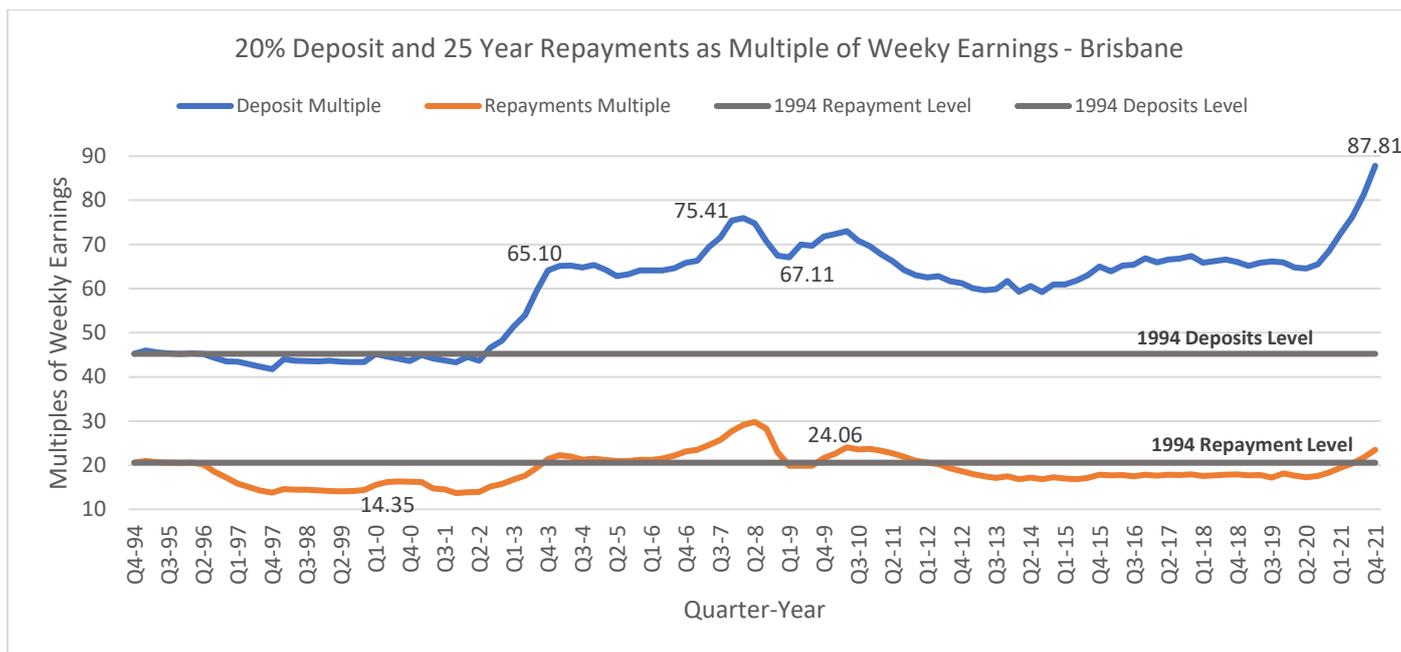
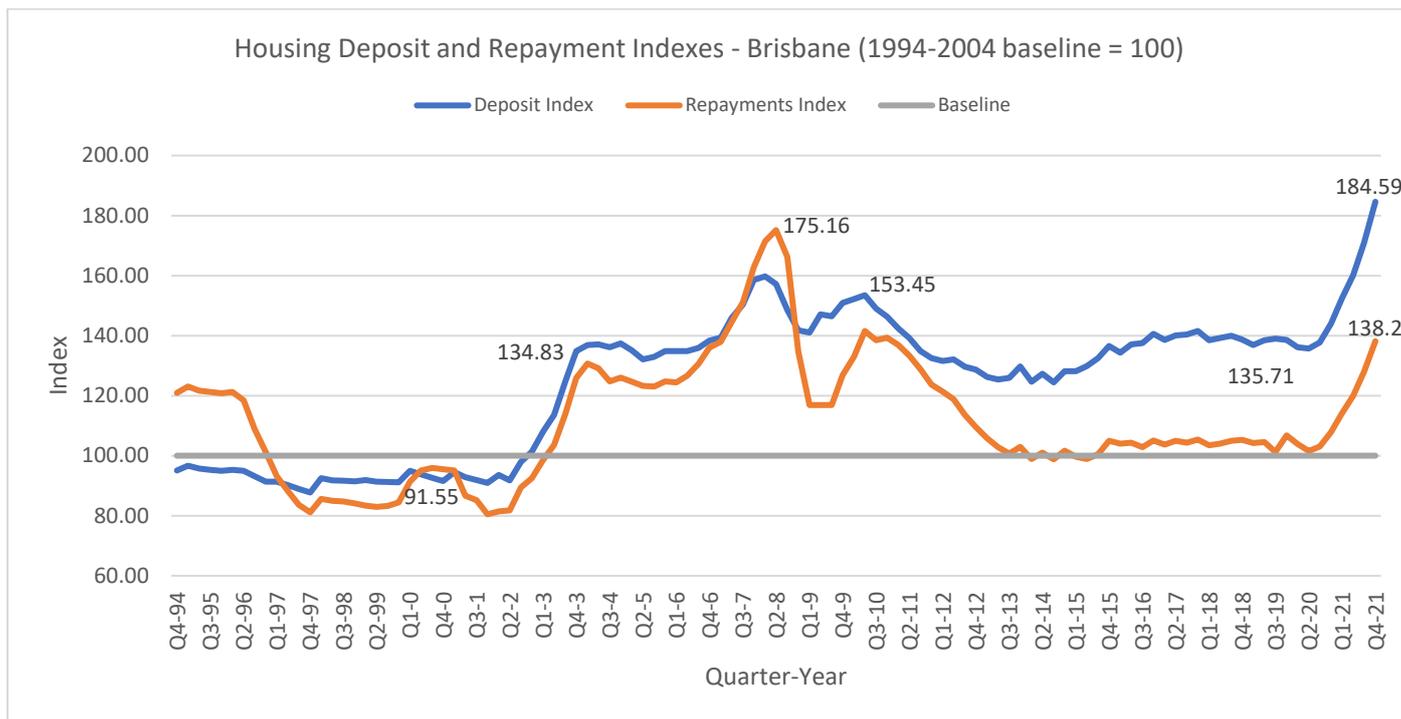
Sydney



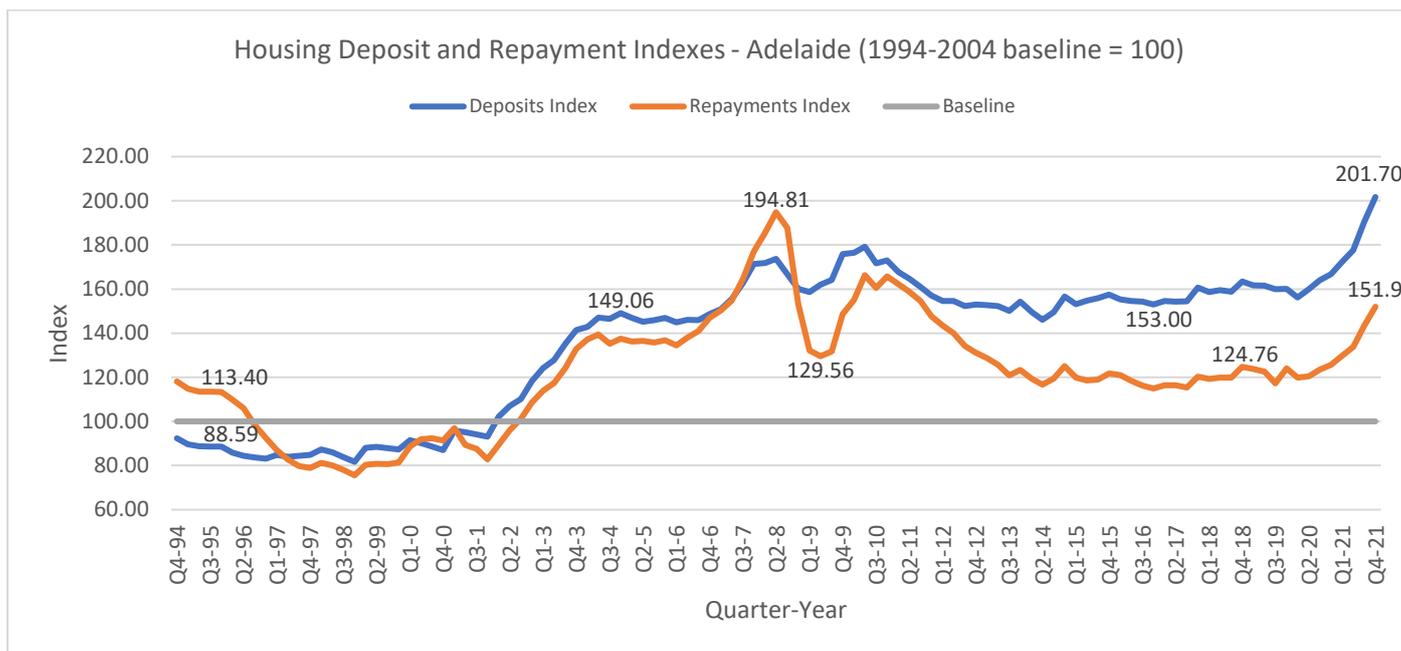
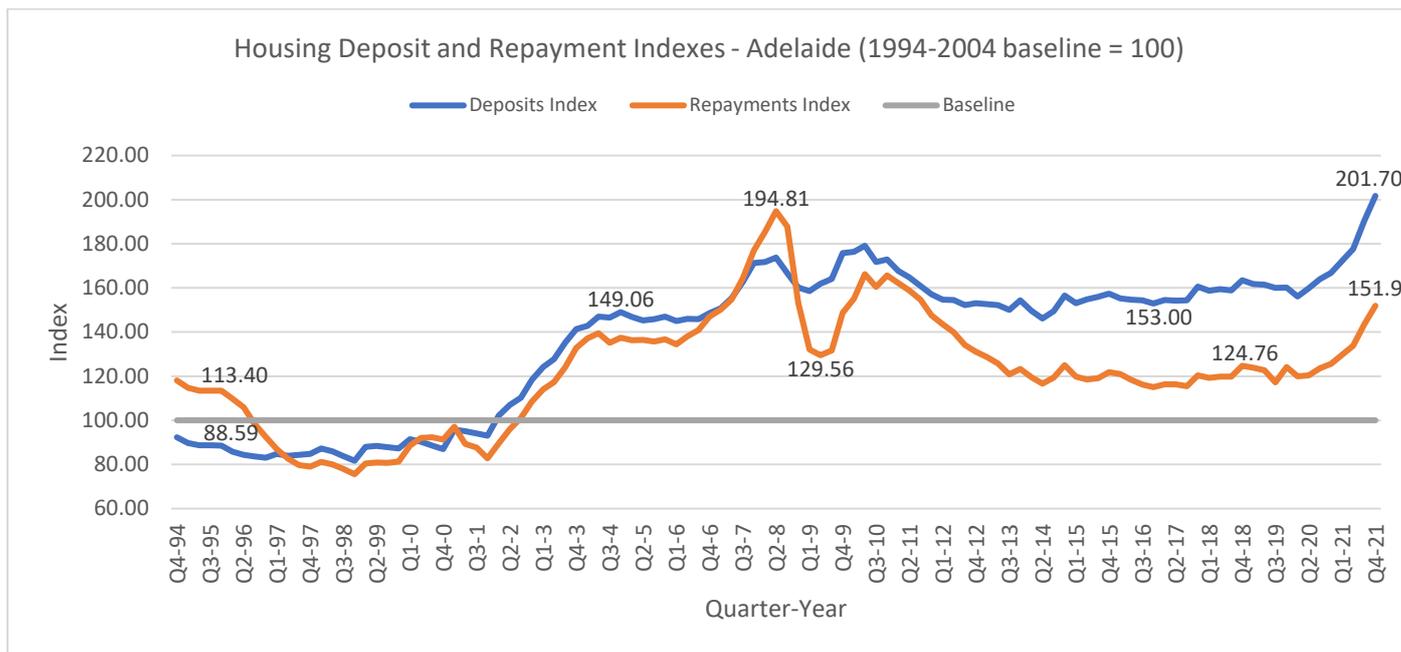
Melbourne



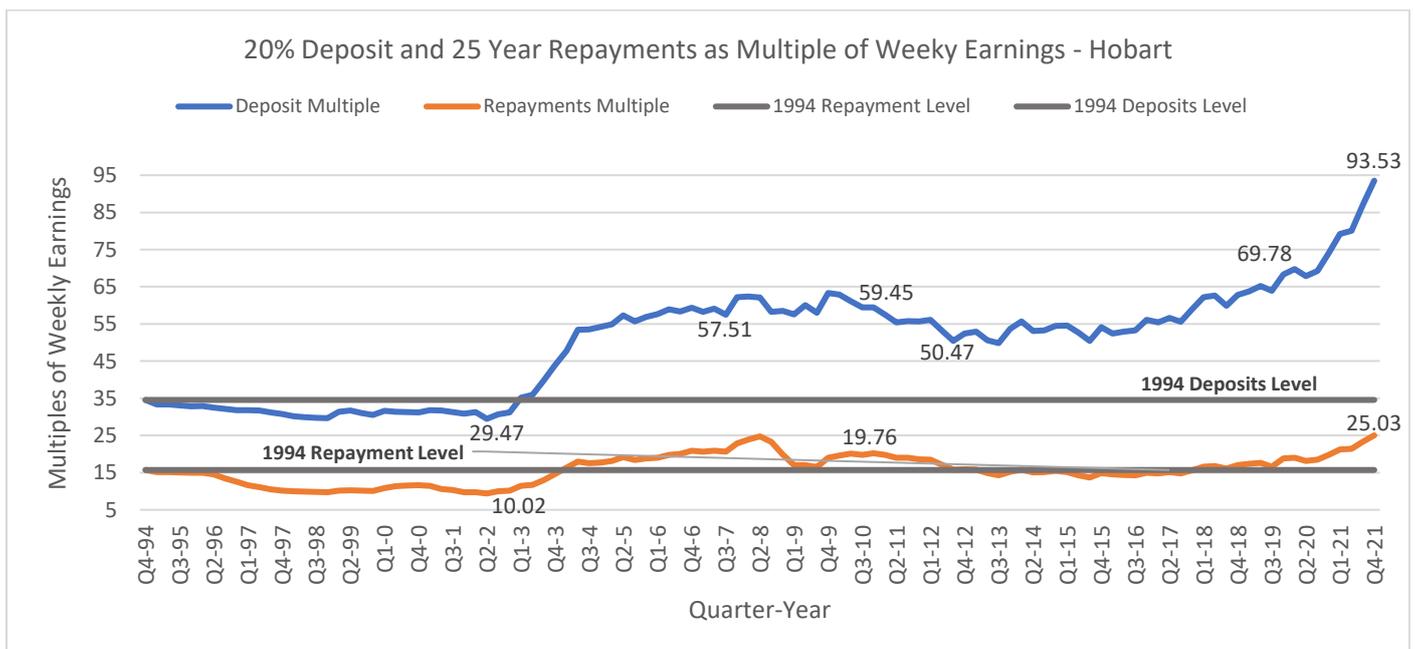
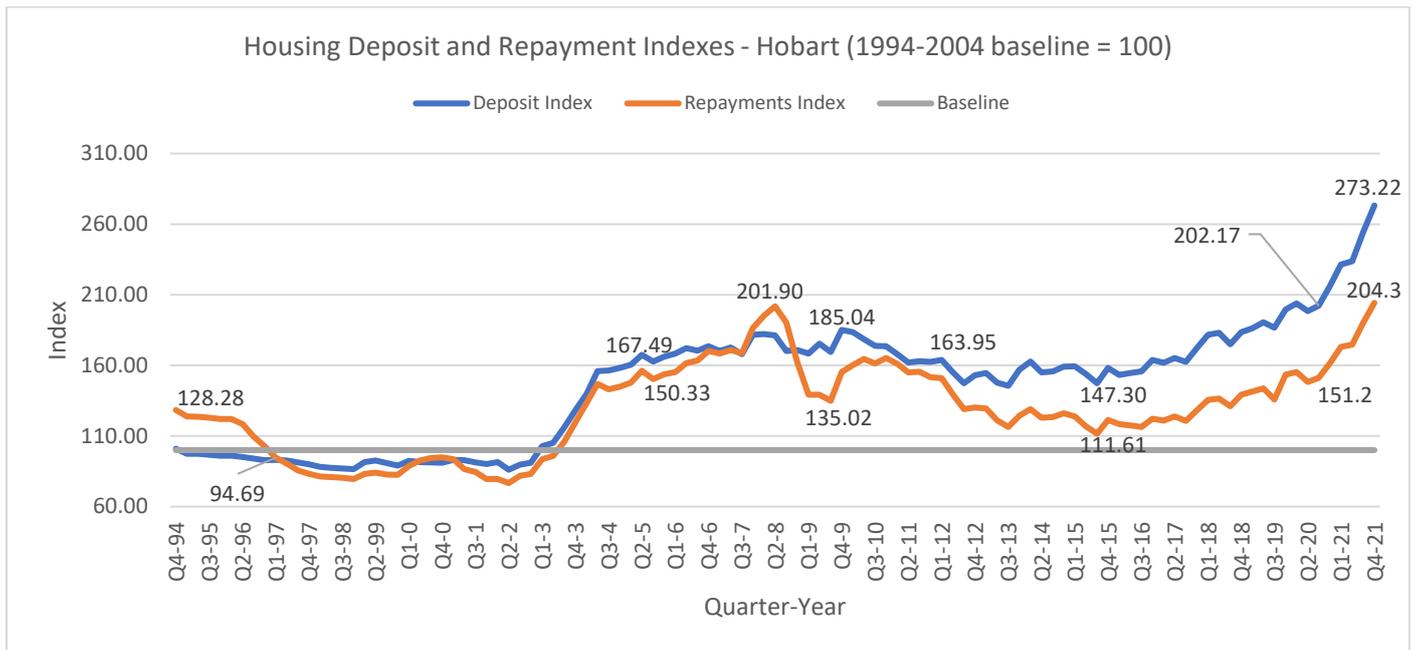
Brisbane



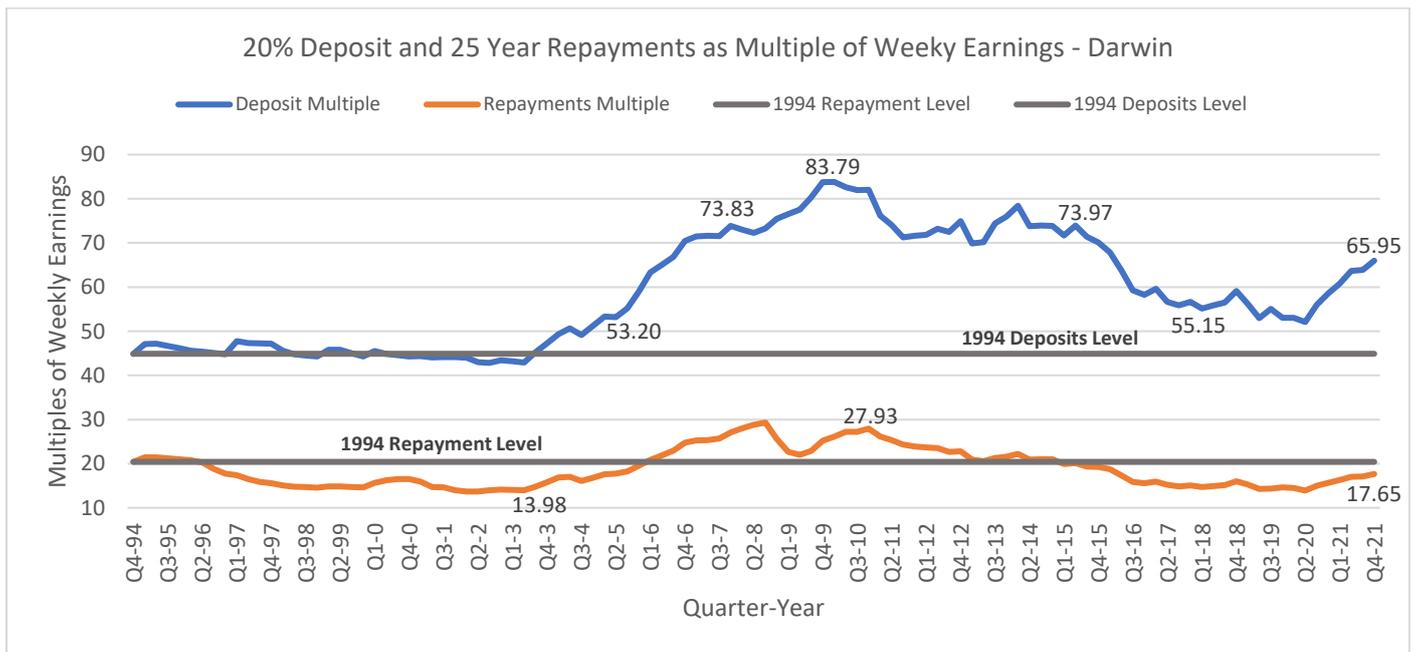
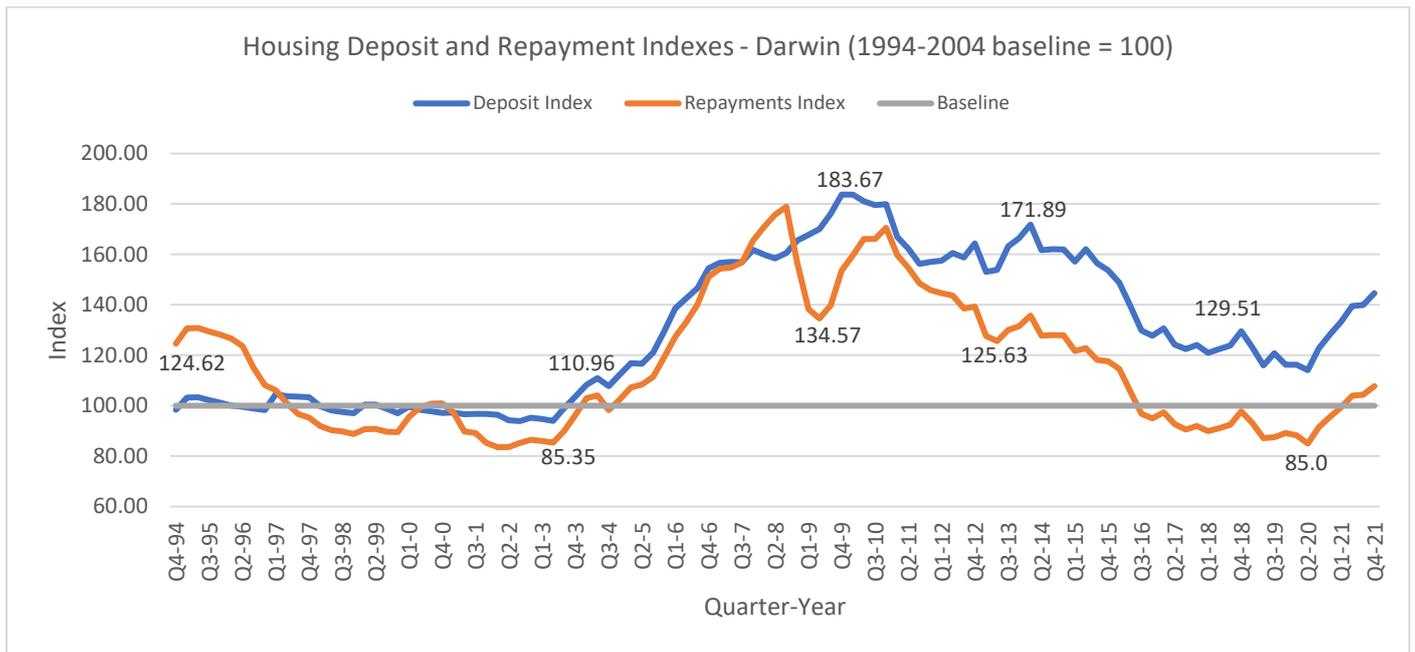
Adelaide



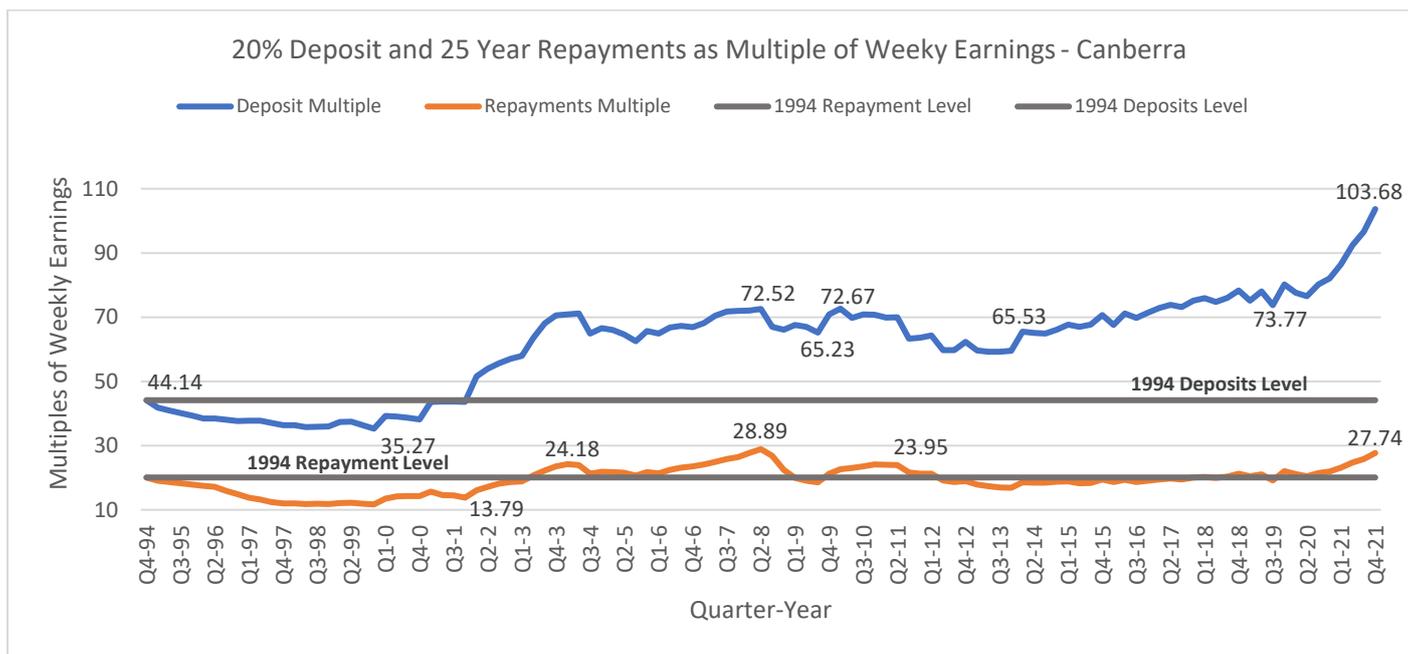
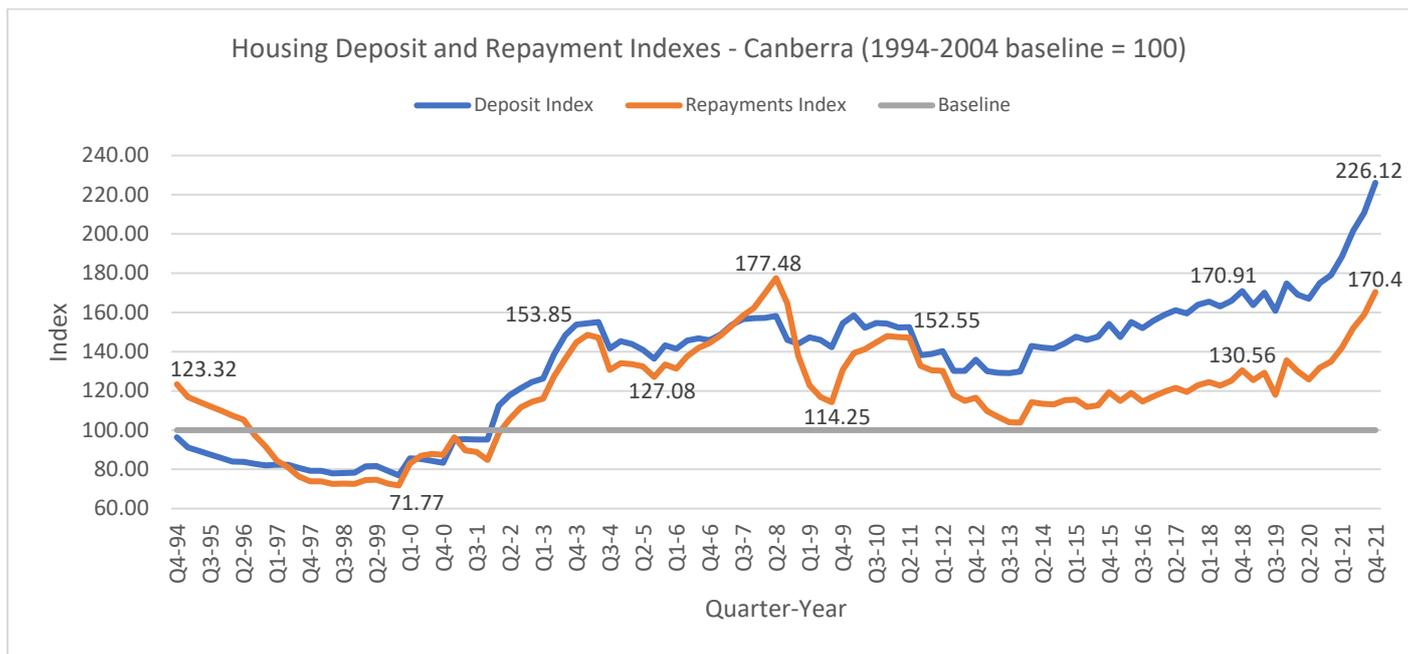
Hobart



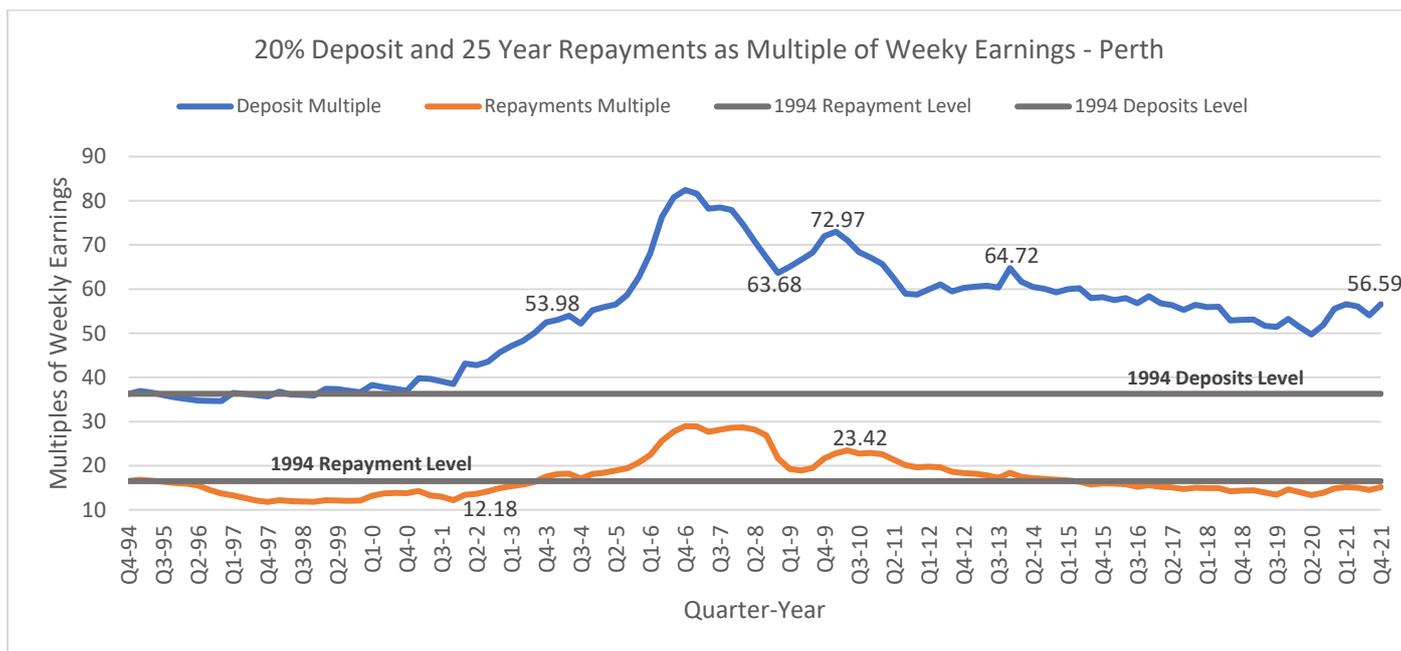
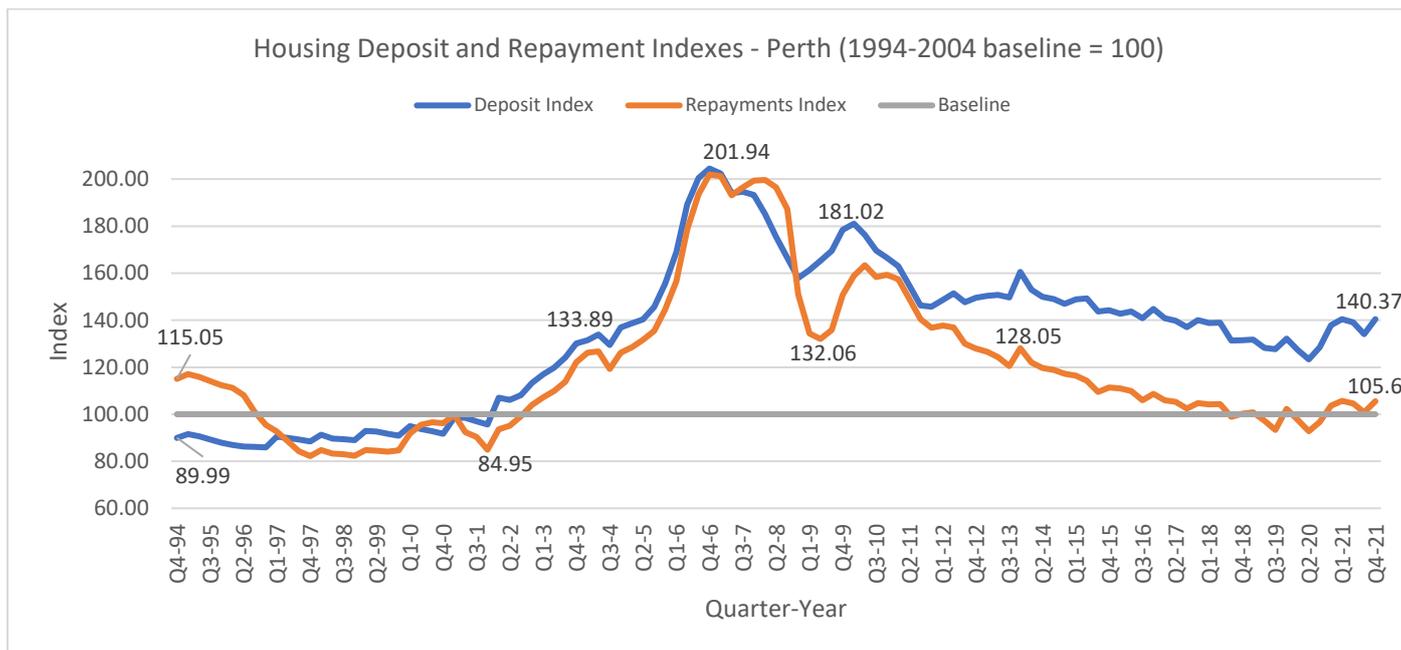
Darwin



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 Q4:2021 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 6416. (March 2022 series). *Residential Property Price Indexes: Eight Capital Cities*. Obtained via: <https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/residential-property-price-indexes-eight-capital-cities/latest-release-data-download>
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4. RBA F05. (April 2022 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>