



Australian Institute for Progress

Housing Affordability Index

June Quarter, 2020

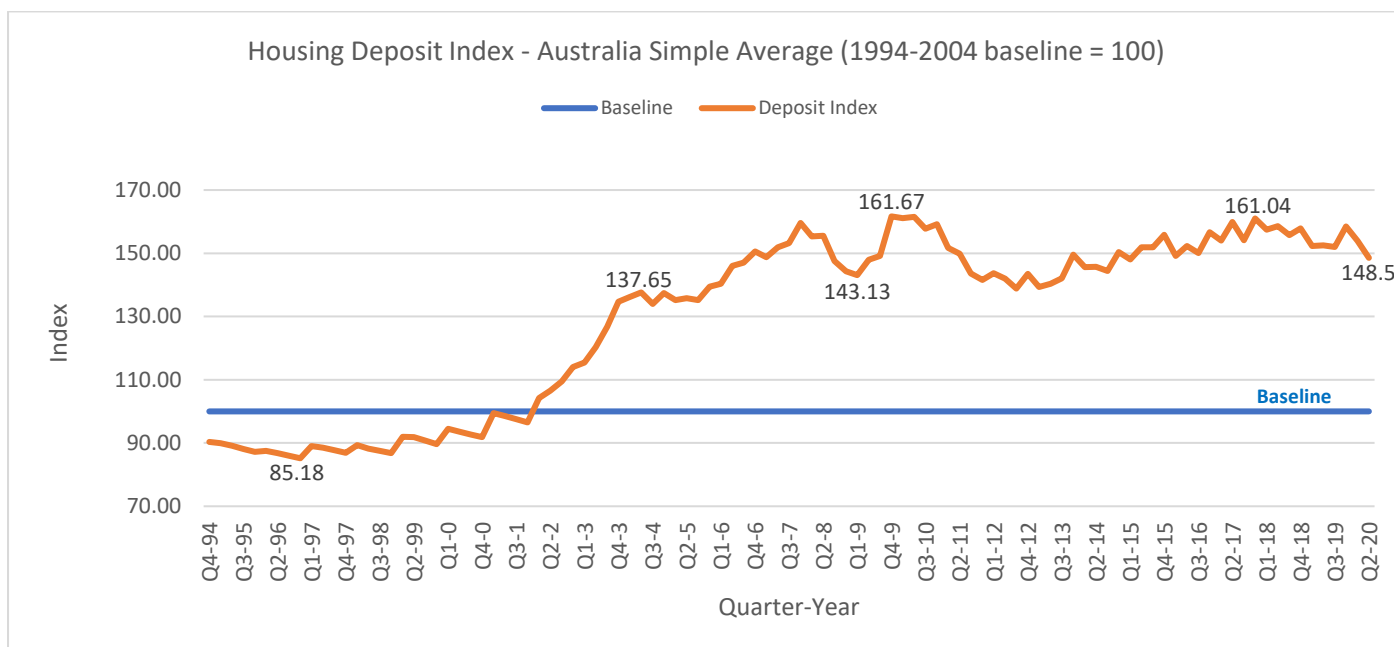
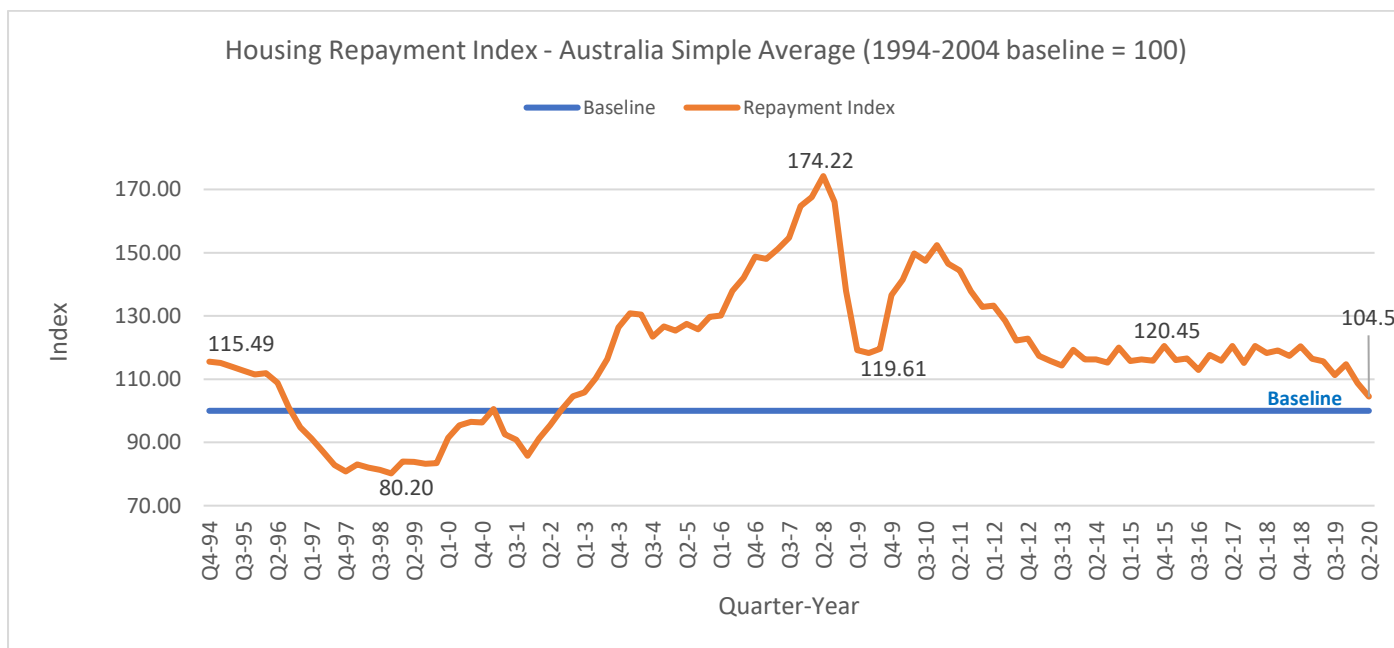
A Quarterly Review of Housing Affordability

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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 decreased over the 2nd quarter of 2020, with the repayment index decreasing from 108.7 to 104.5. The cost of repayments is now lower than 2002 Q3 levels.
- Deposits costs have also decreased over the 2nd quarter. The deposit index decreased from 153.9 to 148.5 over 2020 Q2.
- The insignificant change in deposit and repayment costs is attributable to a fall in median house prices of \$9462.5 and increase in average yearly wages of \$1659 across Australia



Summary

The 2020 Quarter 2 Australian housing market saw a slight increase in the affordability of both housing deposits and repayments – with the housing repayment-deposit gap shrinking. In all capital cities, save Canberra and Adelaide, both deposit and repayment costs significantly decreased due to a fall in median house prices of 1.55% (\$9,462) and an increase in average weekly earnings of 1.86% (\$32) across Australia.

The total number of weeks to raise a deposit, given a 10% savings rate, dropped by an average of 23.9 weeks across Australia and, most notably, 62 and 61 weeks in Melbourne and Sydney. Similarly, the proportion of yearly income used to cover repayments has fallen by 1.3% across Australia, which represents yearly savings of \$1178.5.

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.

	<i>Deposit Index</i>	<i>Repayment Index</i>
<i>Sydney</i>	145.0 (-8.8)	102.7 (-6.7)
<i>Melbourne</i>	166.6 (-13.0)	118.0 (-9.7)
<i>Brisbane</i>	132.7 (-3.9)	94.6 (-3.1)
<i>Adelaide</i>	157.2 (+2.1)	110.7 (+1.0)
<i>Hobart</i>	188.8 (-14.6)	132.0 (-10.8)
<i>Darwin</i>	114.1 (-0.9)	79.5 (-0.9)
<i>Canberra</i>	171.5 (+2.5)	120.8 (+1.2)
<i>Perth</i>	122.1 (-6.0)	85.9 (-4.6)
<i>Average</i>	148.5 (-5.4)	104.5 (-4.3)



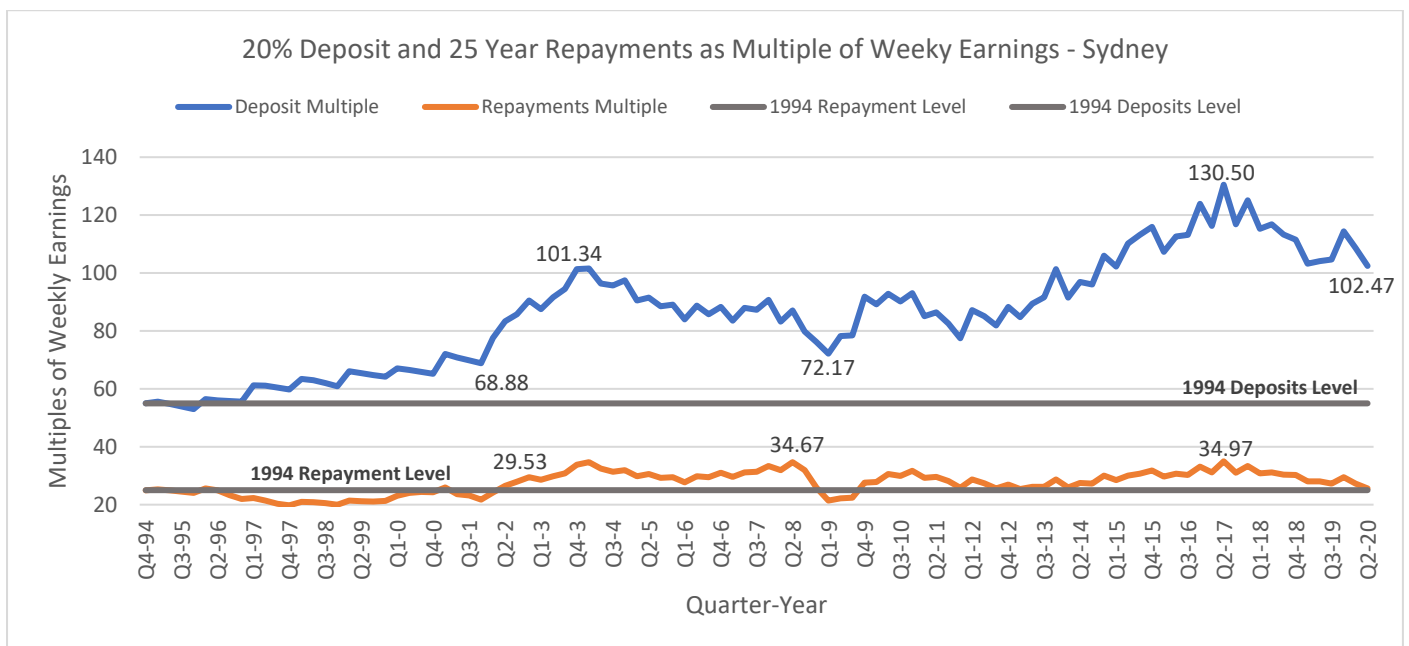
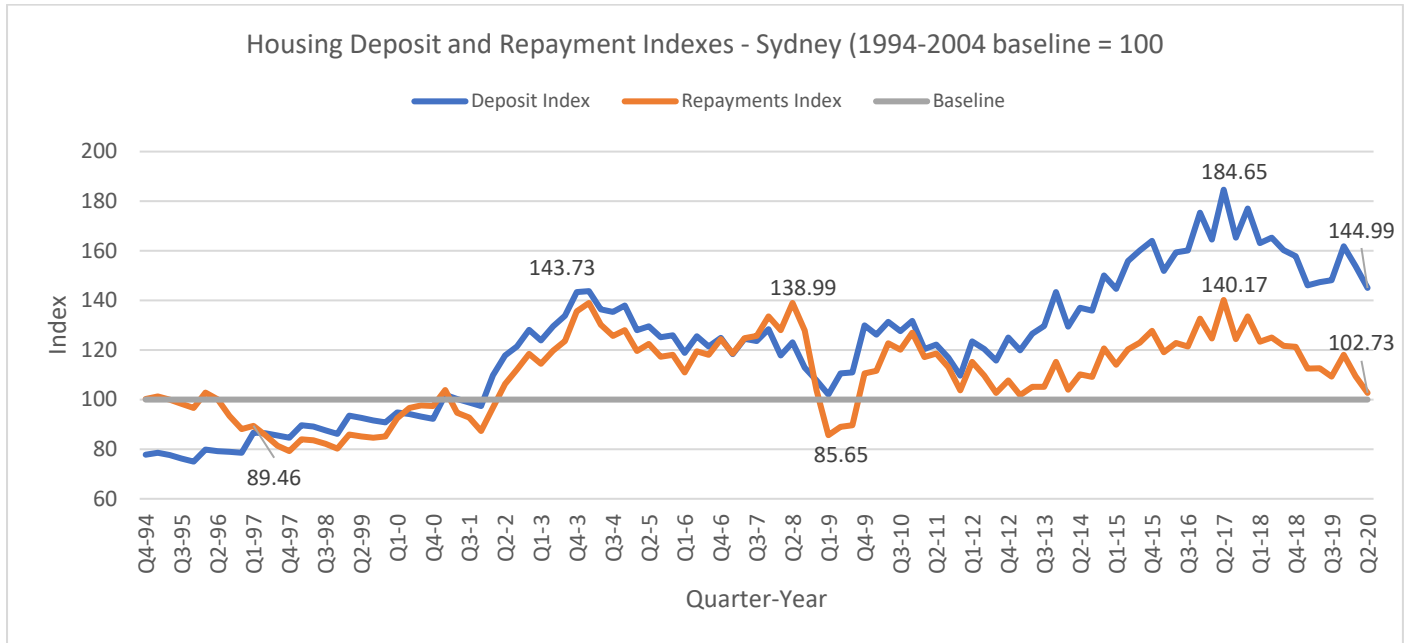
Graham Young
Executive Director
Australian Institute for Progress



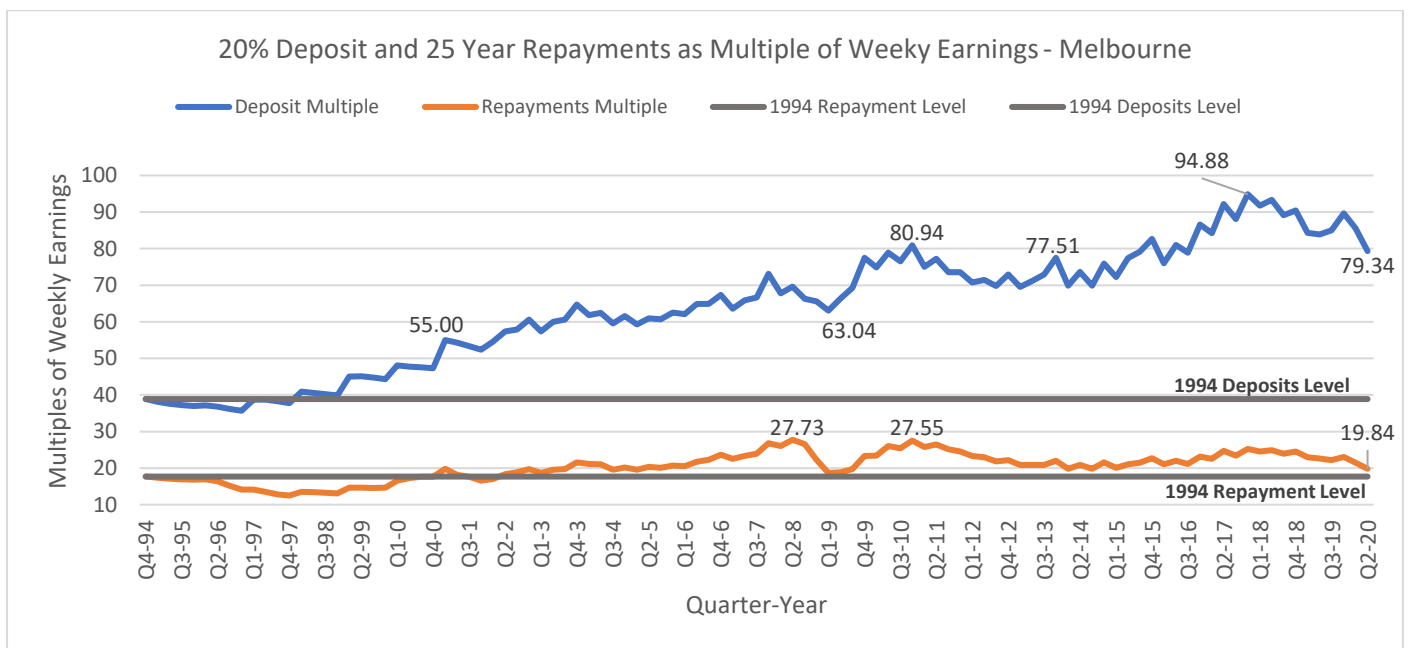
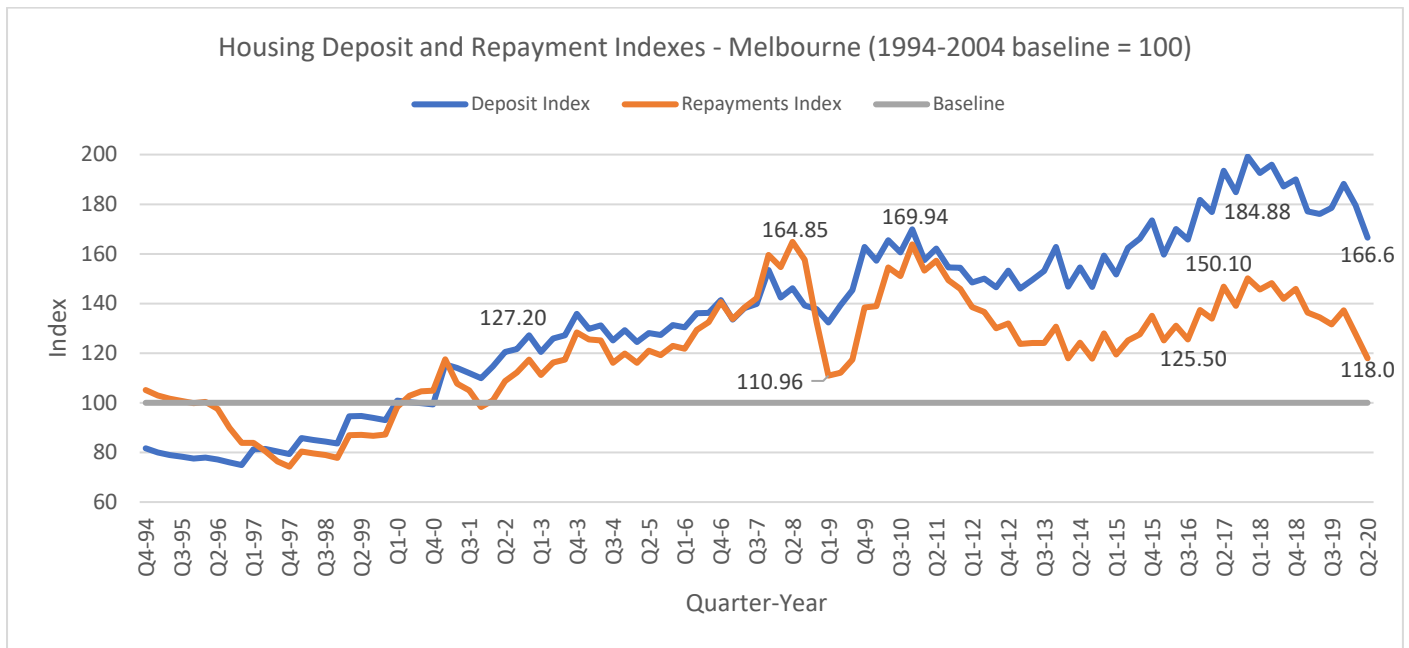
Nicholas Umashev
Economic Researcher
Australian Institute for Progress

Deposit and Repayment Costs by State

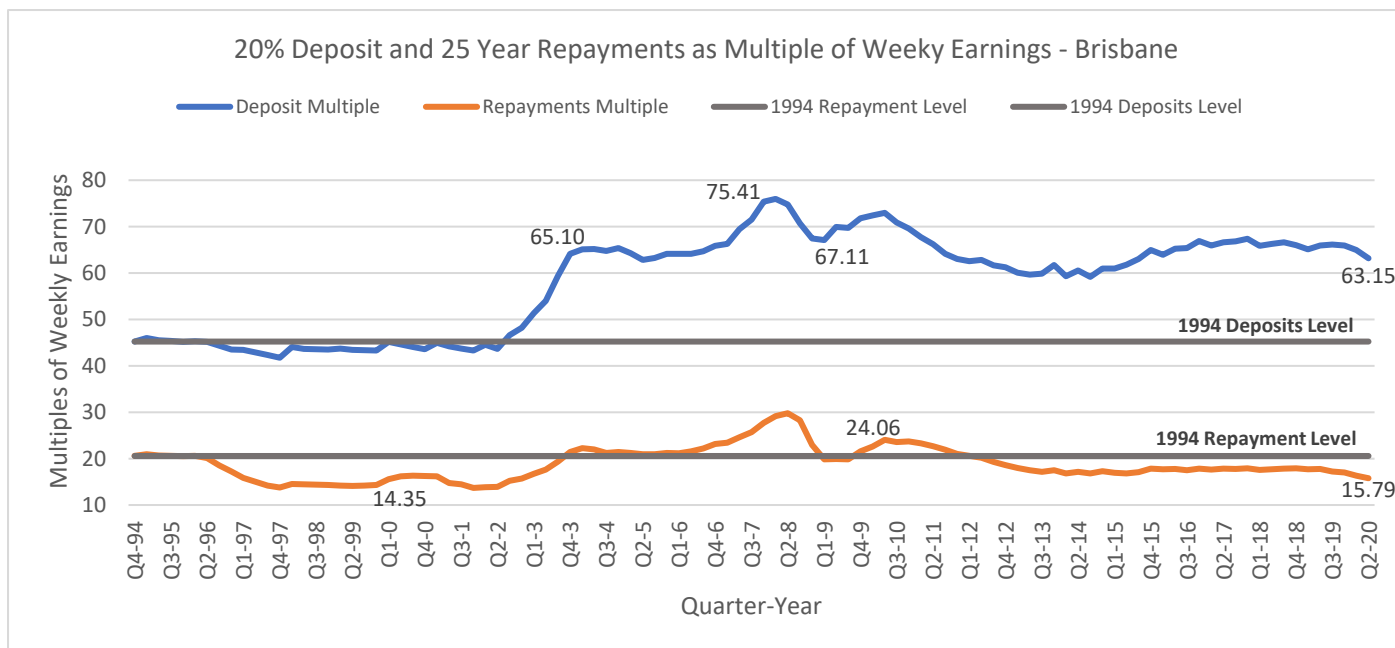
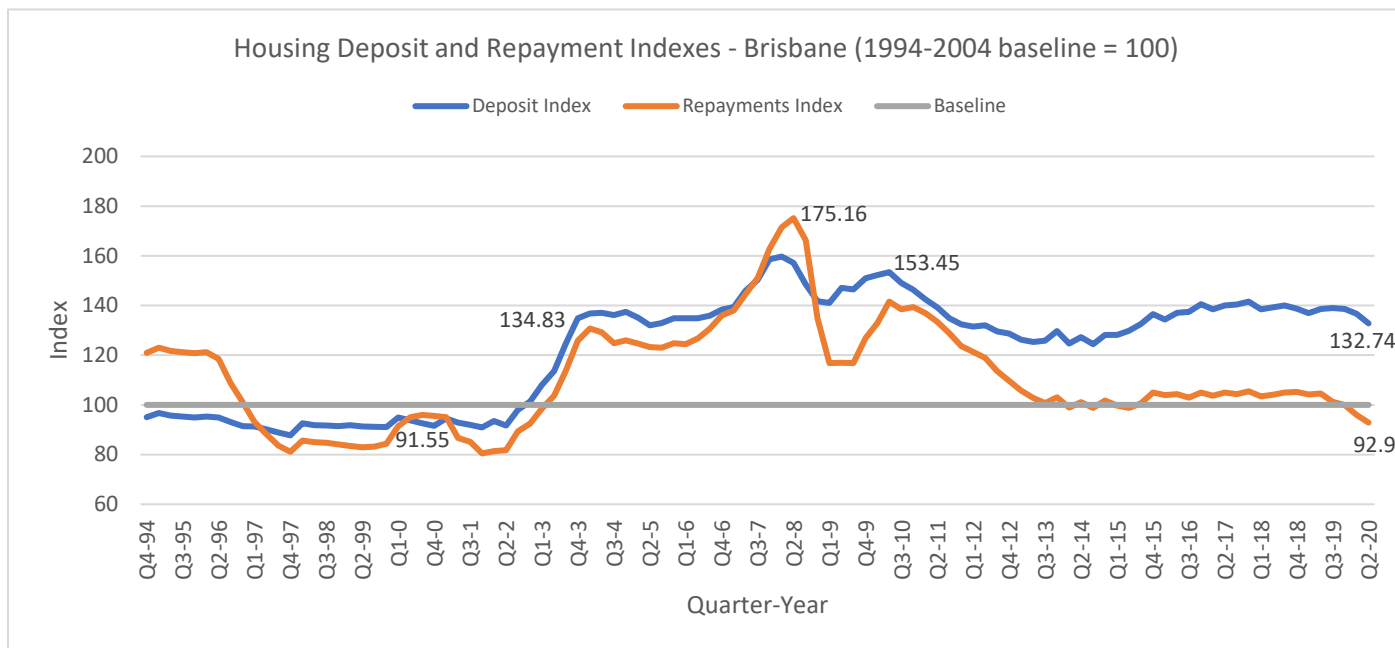
Sydney



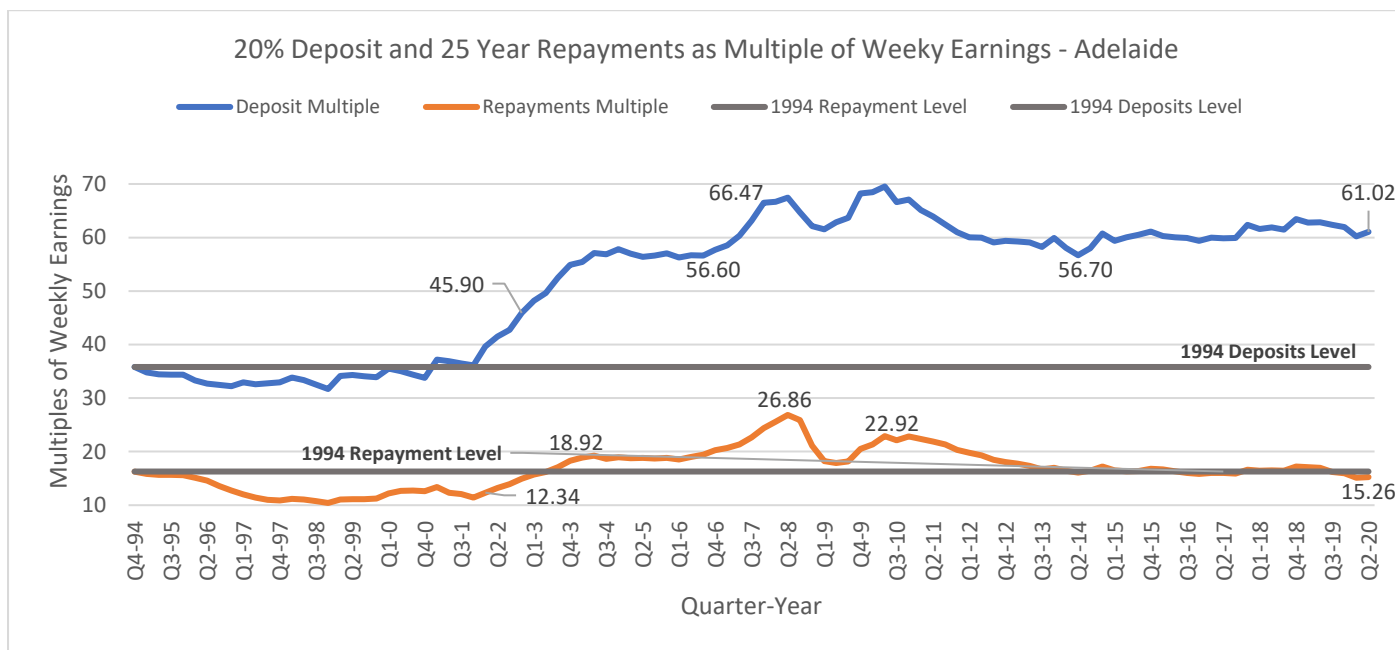
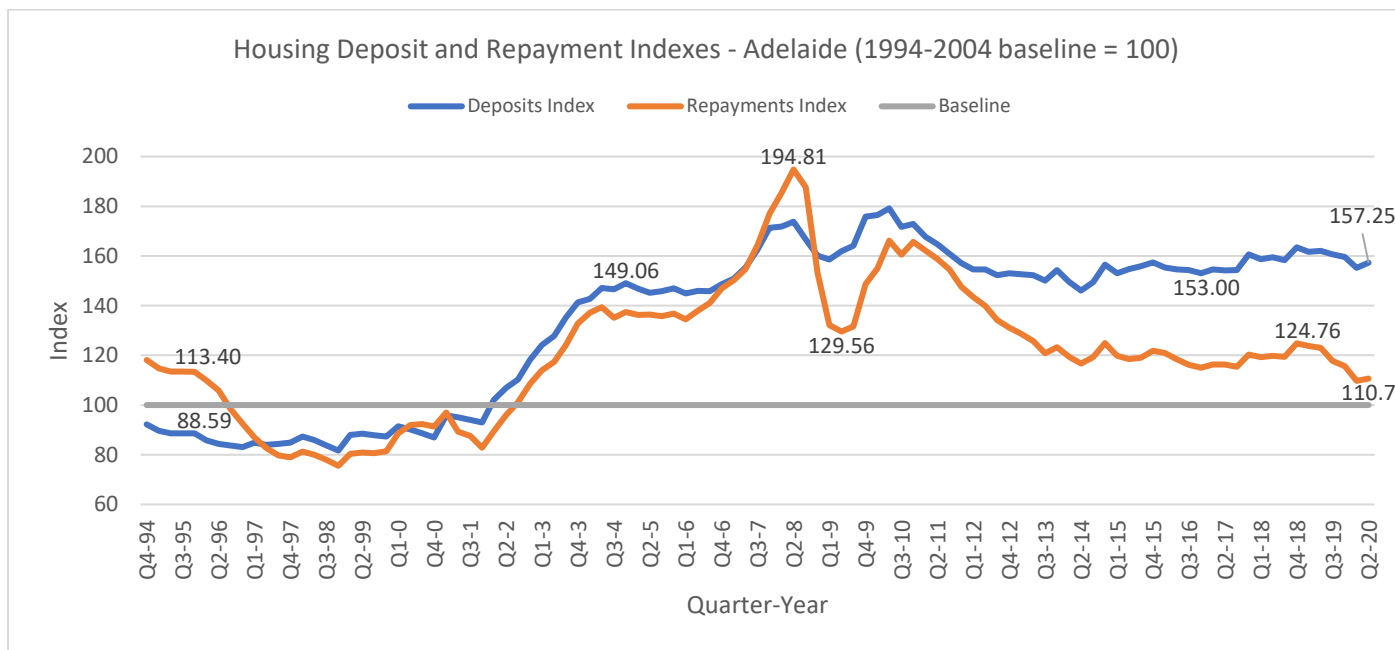
Melbourne



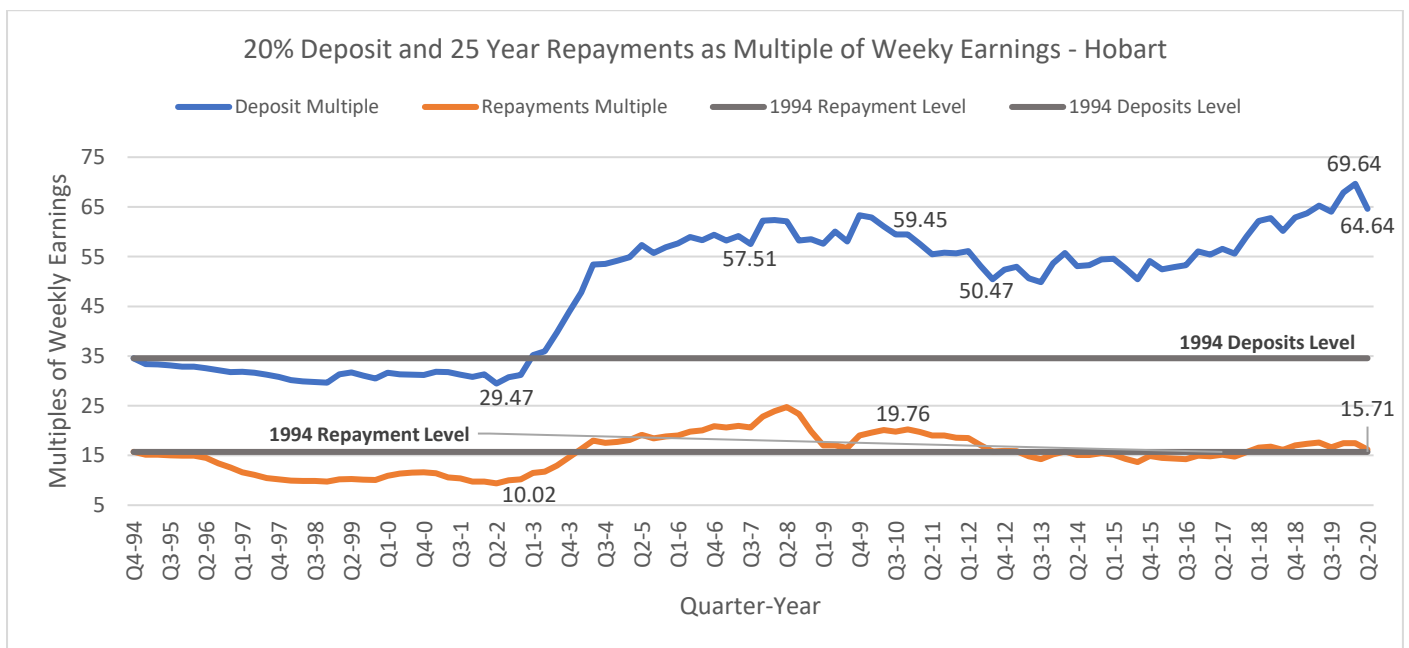
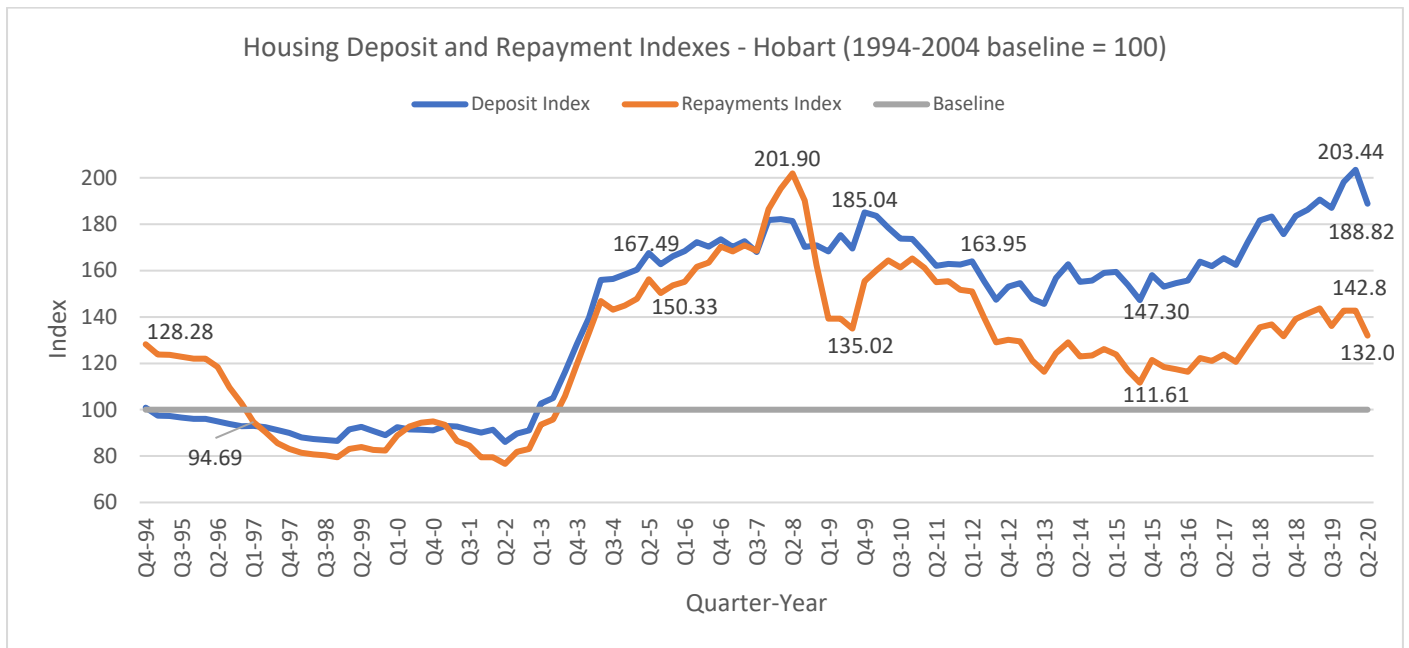
Brisbane



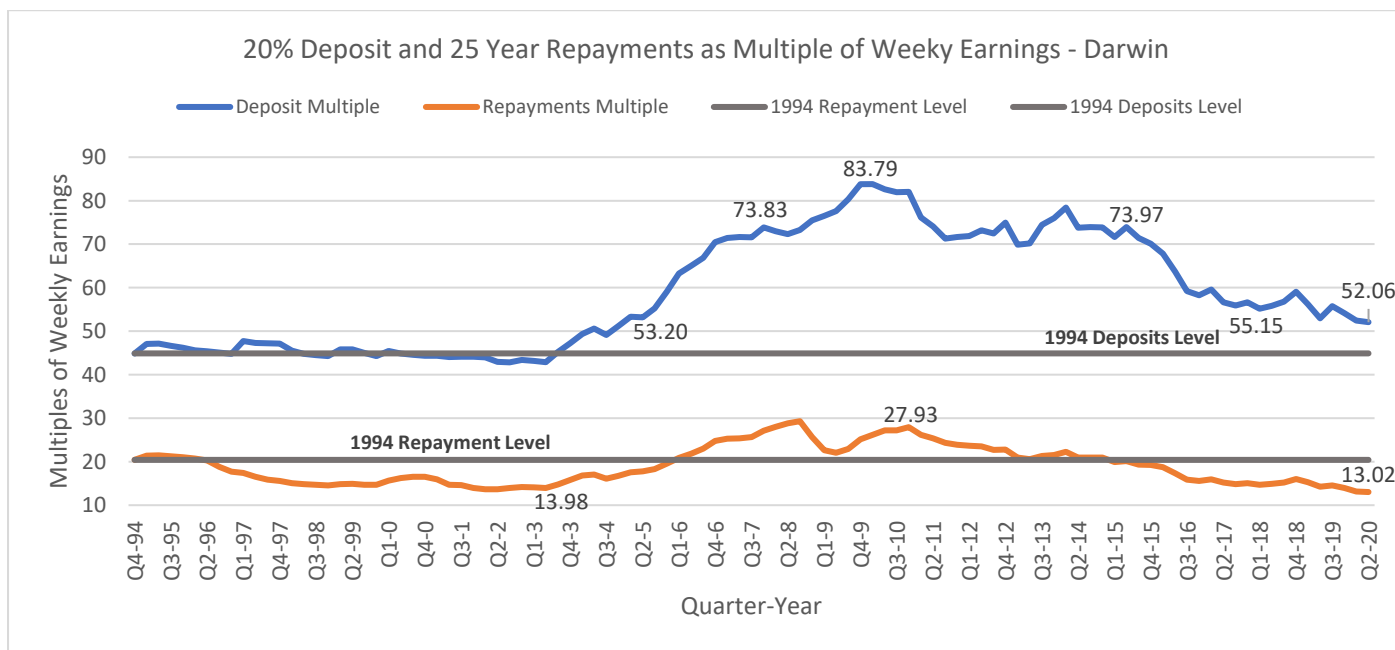
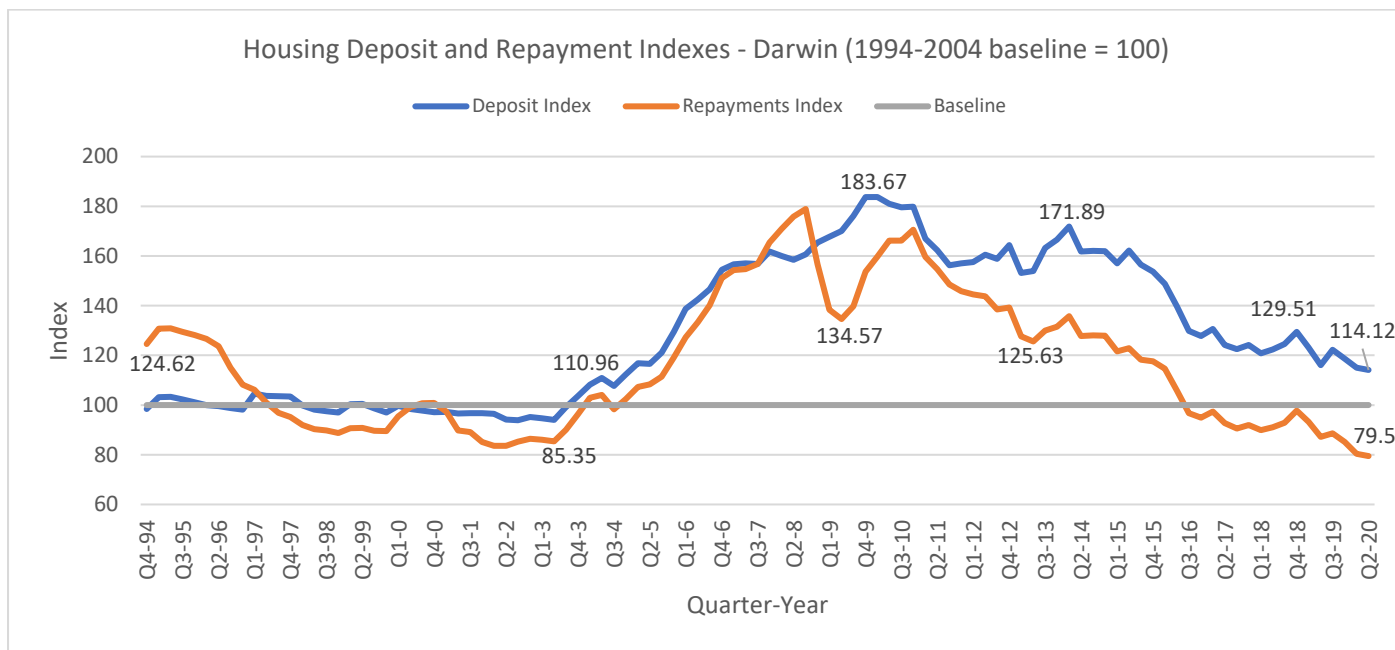
Adelaide



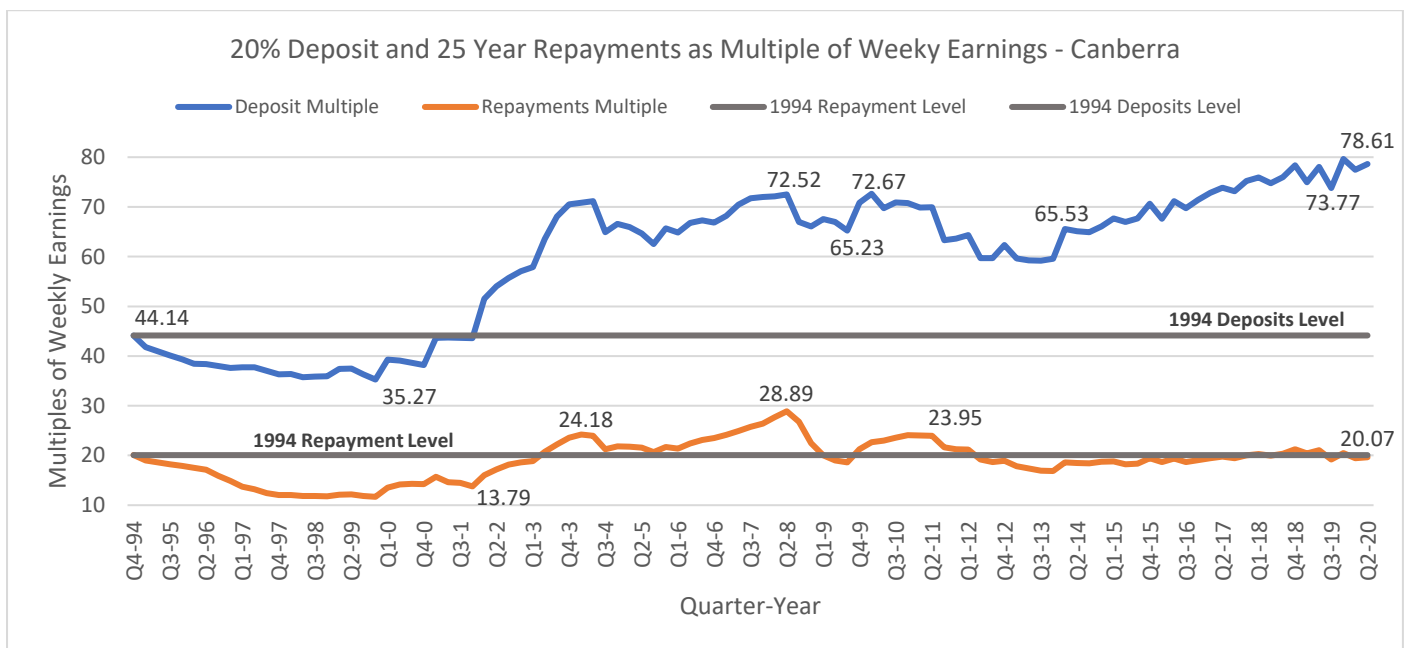
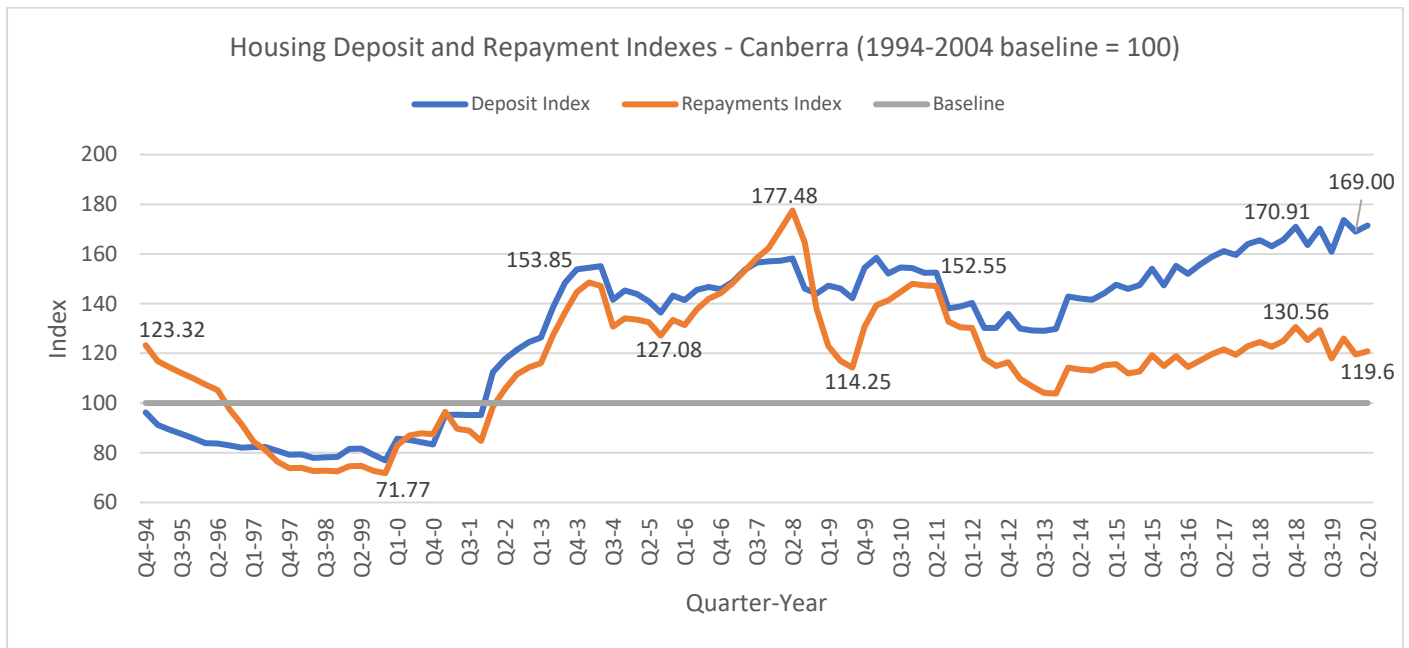
Hobart



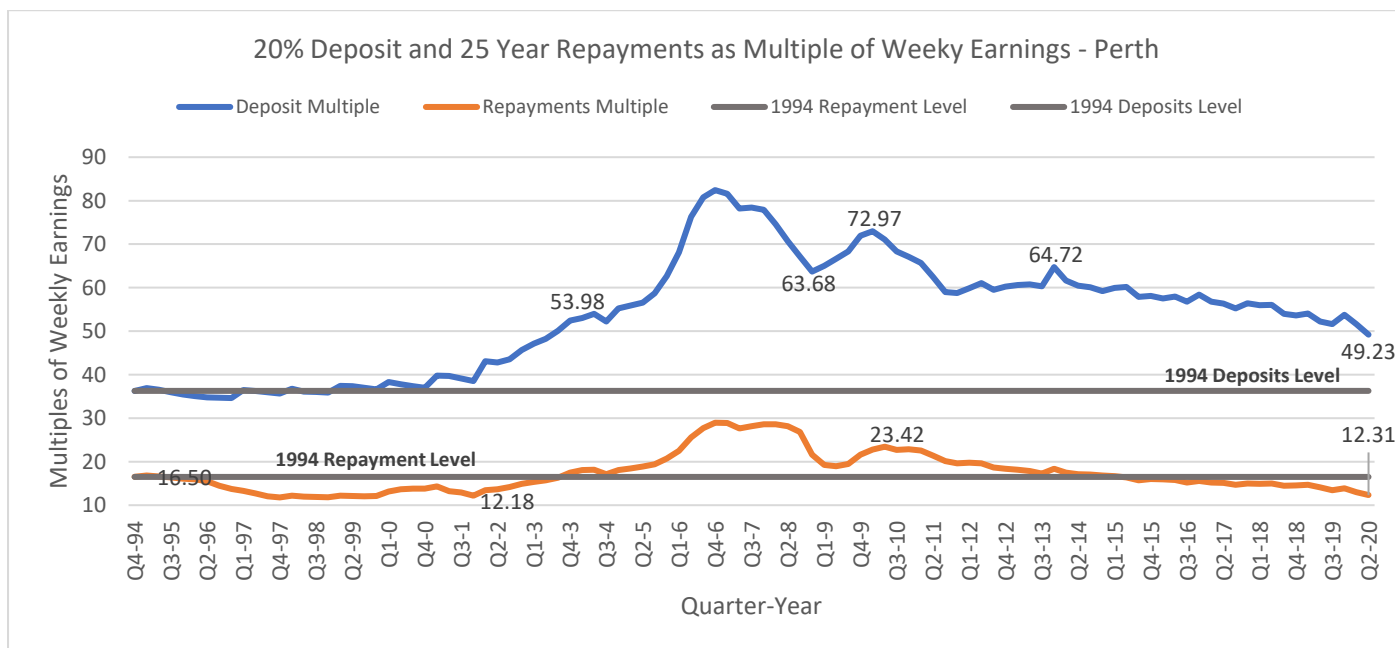
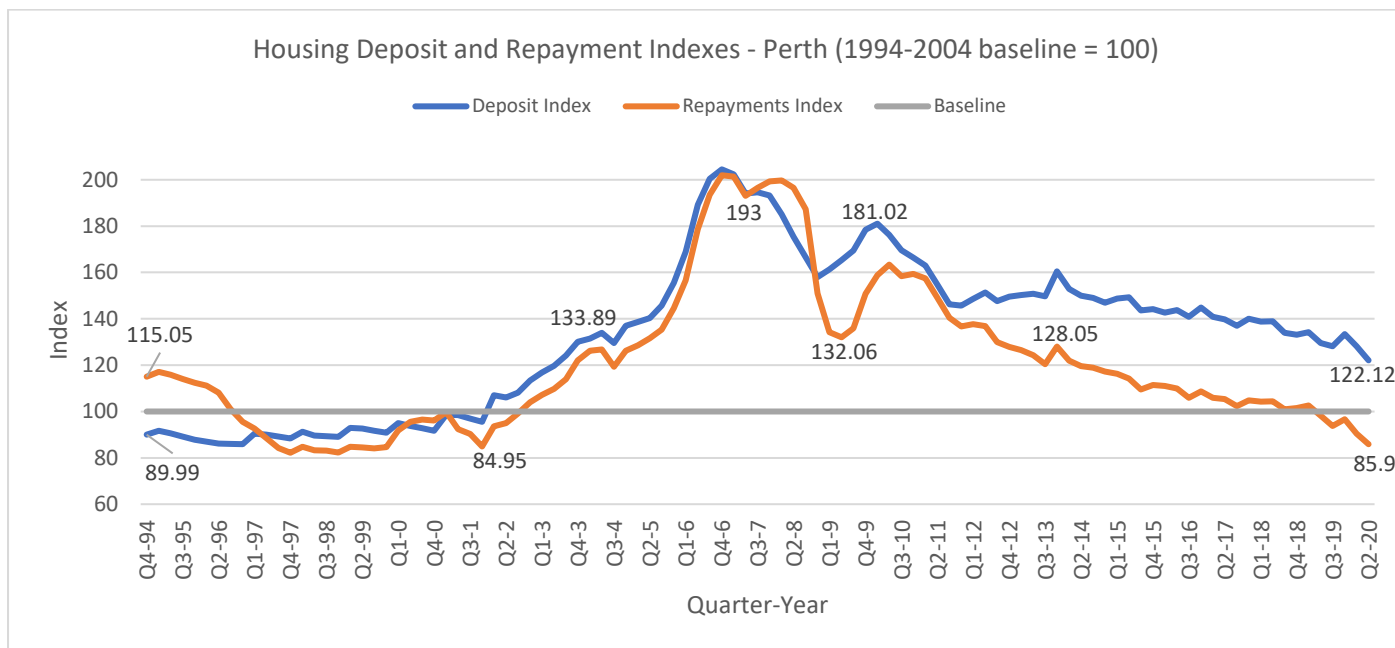
Darwin



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 Q2:2020 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. Note that due to the limited housing data available, we take the national average to be the simple average of the deposit/repayment weekly multiplier for Australia's 8 most populous cities. 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).

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 discounted housing loan rates.

References

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3. ABS 6302. (November 2019 series). *Average Weekly Earnings: Australia*. Obtained via: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6302.0Main+Features1Nov%202019?OpenDocument>
4. RBA F05. (June 2020 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>