



Australian Institute for Progress

Housing Affordability Index

June Quarter, 2019

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.

Summary

House repayments across Australia were at their lowest level for 16 years in the second quarter of this year, according to the ABS, but the average first home buyer is waiting an additional 15.12 weeks to save a deposit. Which means it is probably a good time to buy a house, if you can wait long enough.

This effect is created by house prices increasing an average of \$12,788 while interest rates decreased 43 basis points and average weekly earnings increased by \$22.

Compared to the 90s, which has an average base of 100 in our index, the repayments index was at 110.28 in the second quarter 2019, just over 10% higher. The deposit index was 150.64, significantly higher at just over 50% above the 100 base of the 90s. But unlike repayments deposit stress has been severe for years. It exceeded 150 for the first time in the fourth quarter of 2006, and has stayed there, with some fluctuations up and down, ever since.

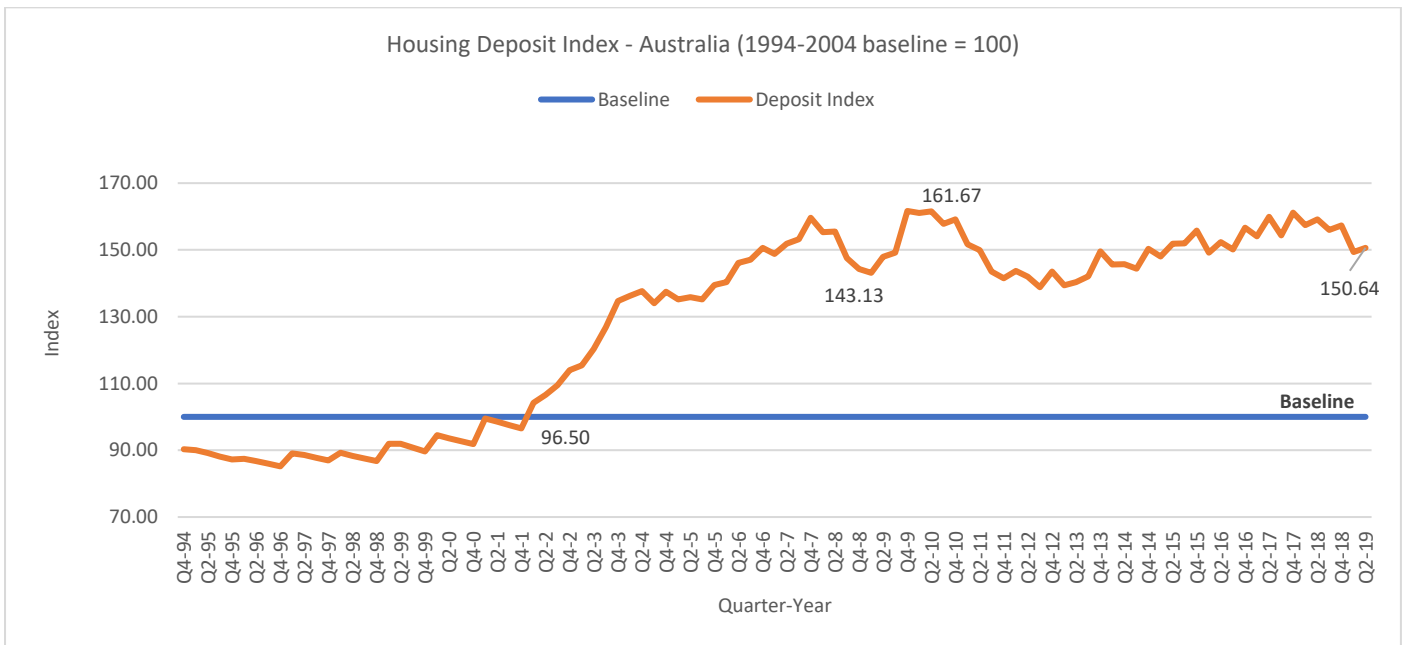
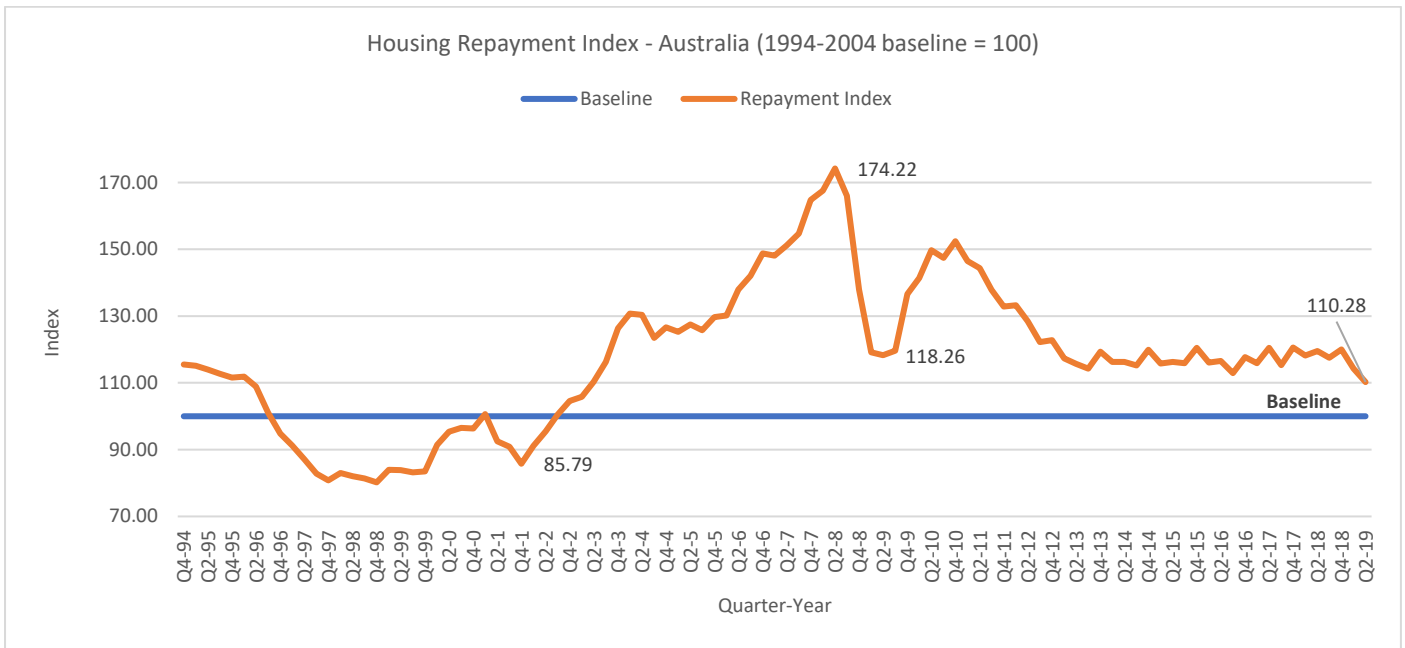
For repayments the three most affordable cities were Darwin (85.6), Perth (93.8) and Brisbane (100.3). The three least affordable on were Canberra (124.6), Melbourne (126.0) and Hobart (138.6). Sydney was a moderate 105.6 and Adelaide a more expensive 116.2.

Deposit affordability shadows repayment affordability, but while the average index figure is 150.64, Hobart is at a record high of 190.6 and has been increasing steadily since its most recent low 147.3 in 2015. Melbourne is 171 and Canberra 169.9. The three cheapest cities, Darwin, Perth and Brisbane were 118.0, 128.2 and 137.7 respectively. Sydney was just under the average at 143.2 and Adelaide just over at 158.6.


Major Findings


- Repayment costs have decreased over the 2nd quarter of 2019, with the repayment index decreasing from 114.28 to 110.28 over 2019 Q2. The cost of repayments have reached a 16 year historical low
- Deposits costs have increased over the 2nd quarter, reversing the trend of declining deposit costs over the prior year. The deposit index increased from 149.4 to 150.64 over 2019 Q2.
- The increase in deposit costs is attributable to a rise in the Australian median house price of \$12,788, while the decline in repayment costs is due to the rise in median house prices being offset by home loan interest rates falling by an average of 43 basis points and average weekly earnings increasing by \$22.
- The gap between repayment and deposit costs has widened, with the rise in deposit costs being bad news for first home buyers looking to enter the housing market

	<i>Deposit Index</i>	<i>Repayment Index</i>
<i>Sydney</i>	143.2 (+1.0)	105.6 (-4.0)
<i>Melbourne</i>	171.0 (+1.7)	126.0 (-4.3)
<i>Brisbane</i>	137.7 (+1.6)	100.3 (-3.3)
<i>Adelaide</i>	158.6 (-1.4)	116.2 (-6.3)
<i>Hobart</i>	190.6 (+6.9)	138.6 (-1.0)
<i>Darwin</i>	118.0 (-1.9)	85.6 (-5.3)
<i>Canberra</i>	169.9 (+6.1)	124.6 (-0.9)
<i>Perth</i>	128.2 (-3.6)	93.8 (-6.9)
<i>Average</i>	150.6 (+1.2)	110.3 (-4.0)



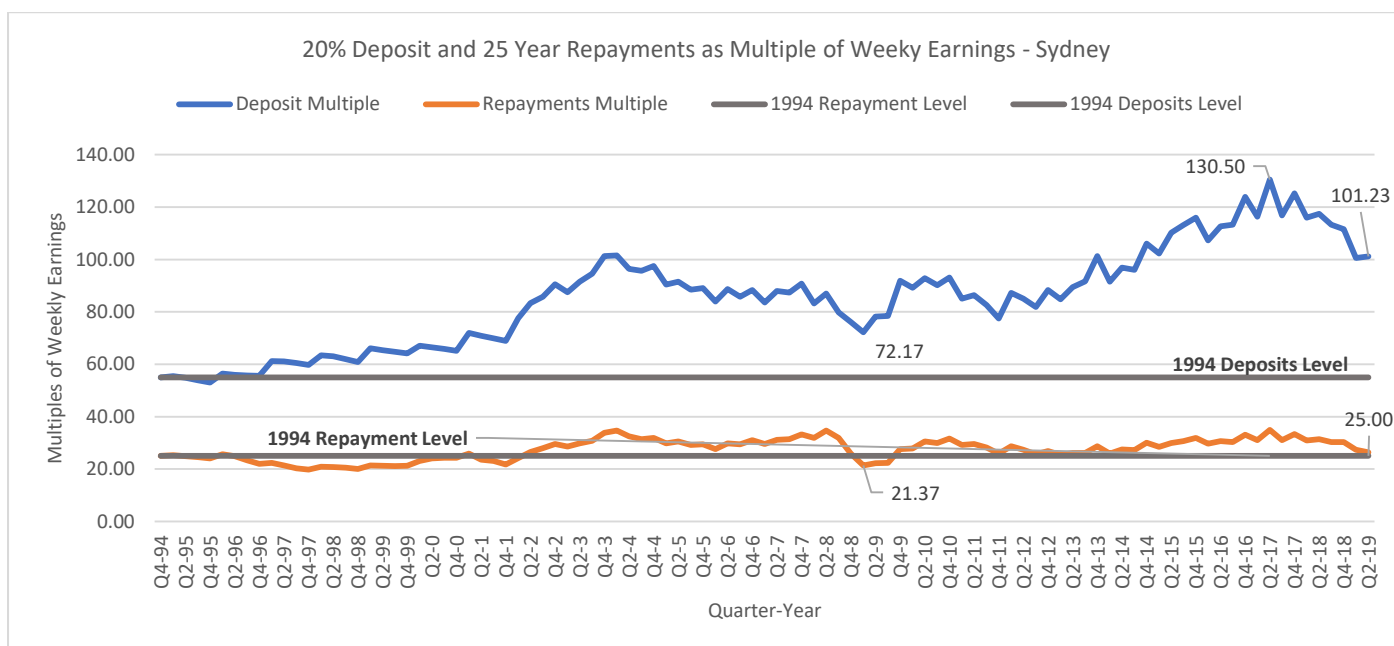
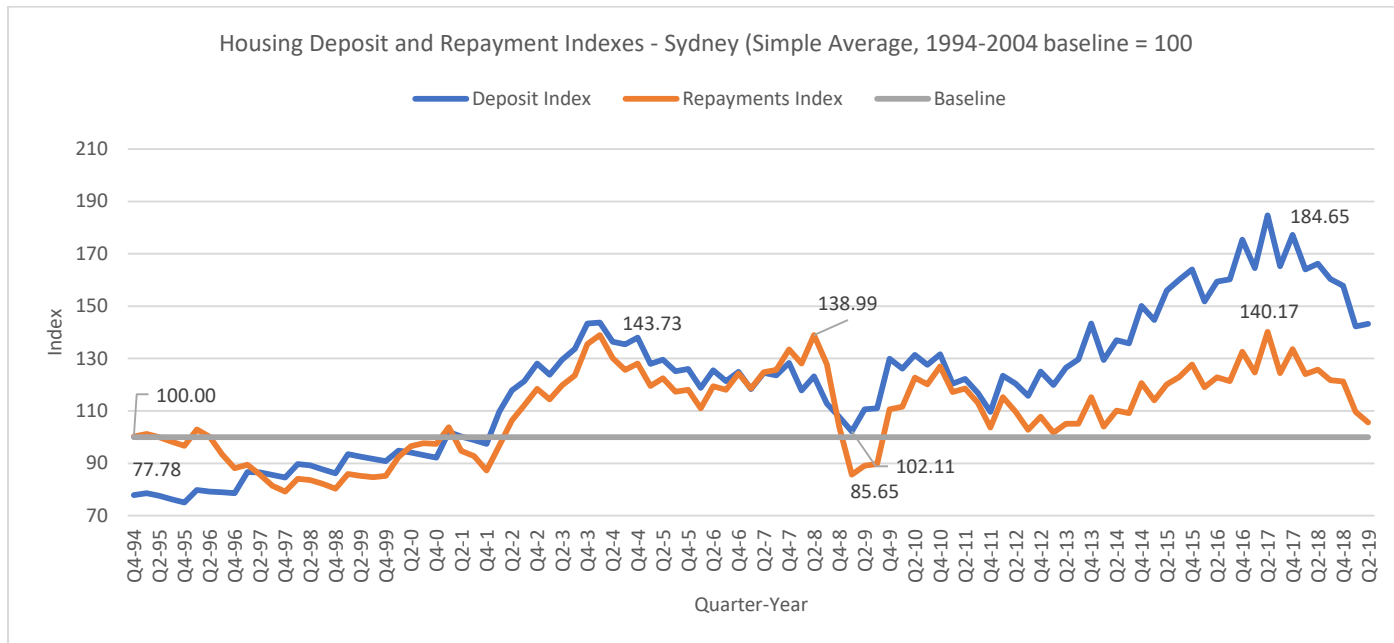
We measure repayment affordability by using ABS statistics for median house prices and calculating the ratio of repayments to average weekly earnings and expressing it as a percentage of the average for the first 10 years of the series to produce an index figure. We measure deposit affordability by calculating 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 series to produce an index figure.


 Graham Young
 Executive Director
 Australian Institute for Progress

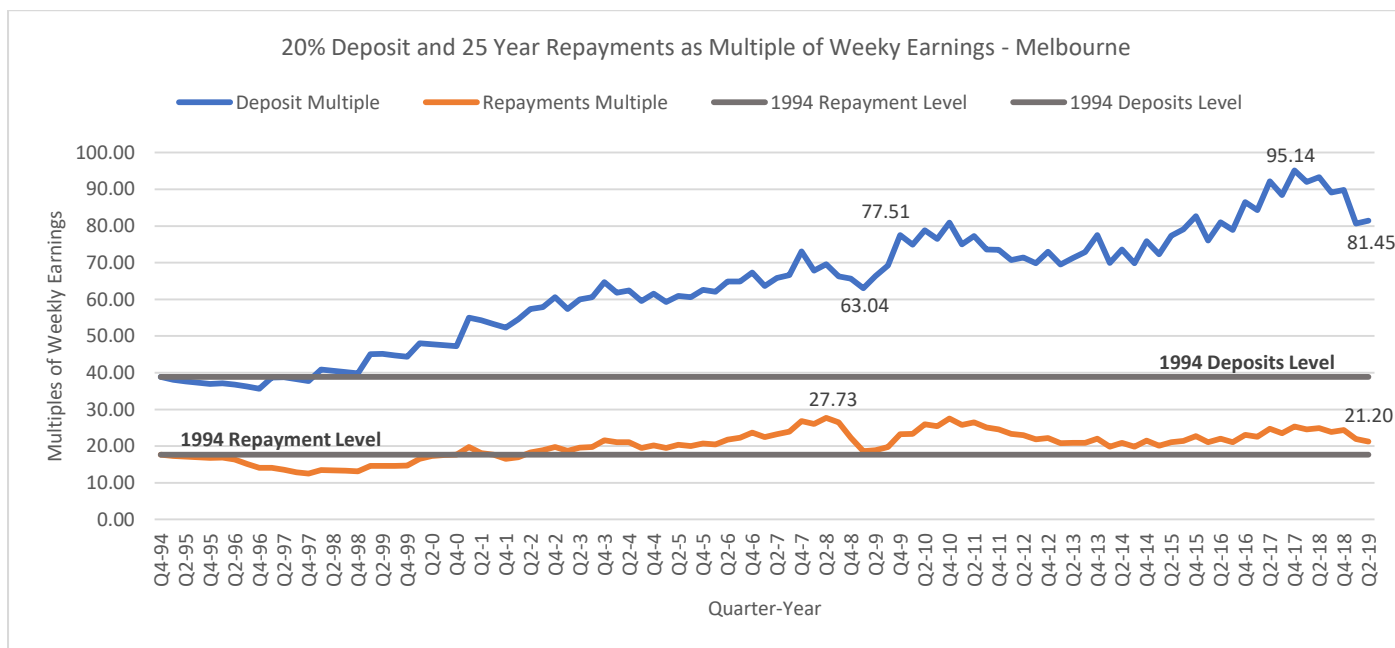
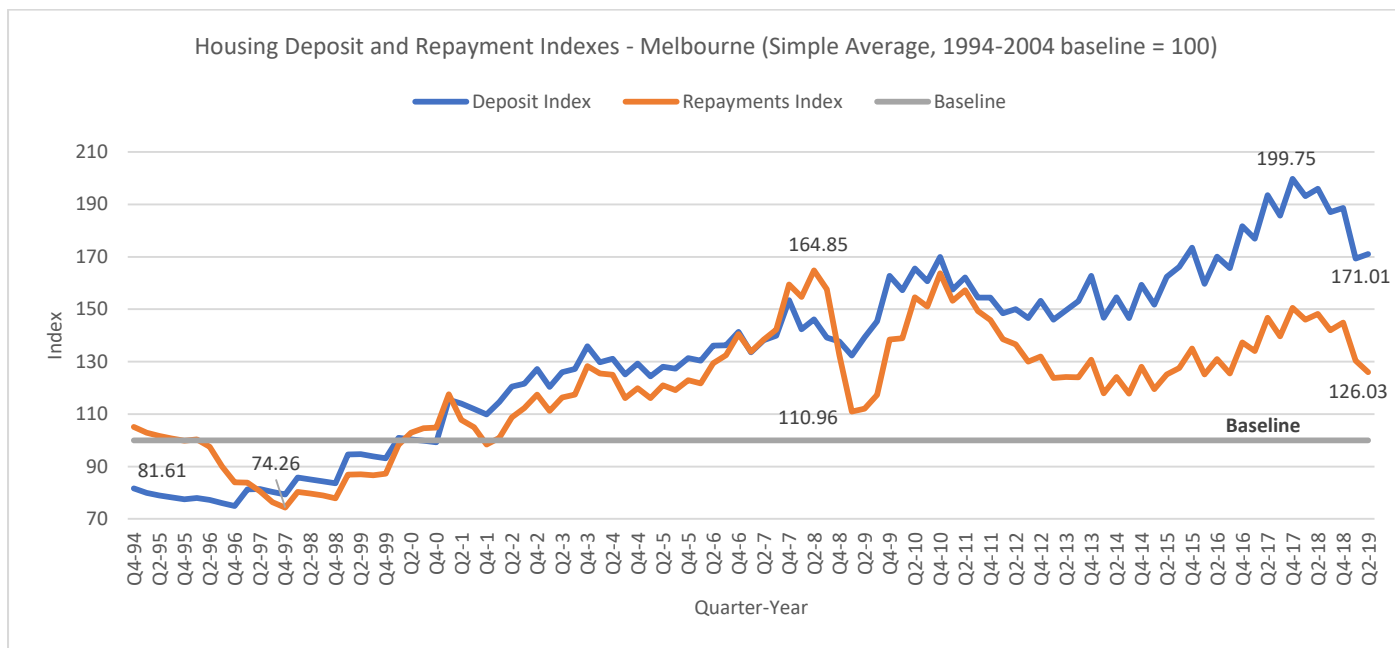

 Nicholas Umashev
 Economic Researcher
 Australian Institute for Progress

Deposit and Repayment Costs by State

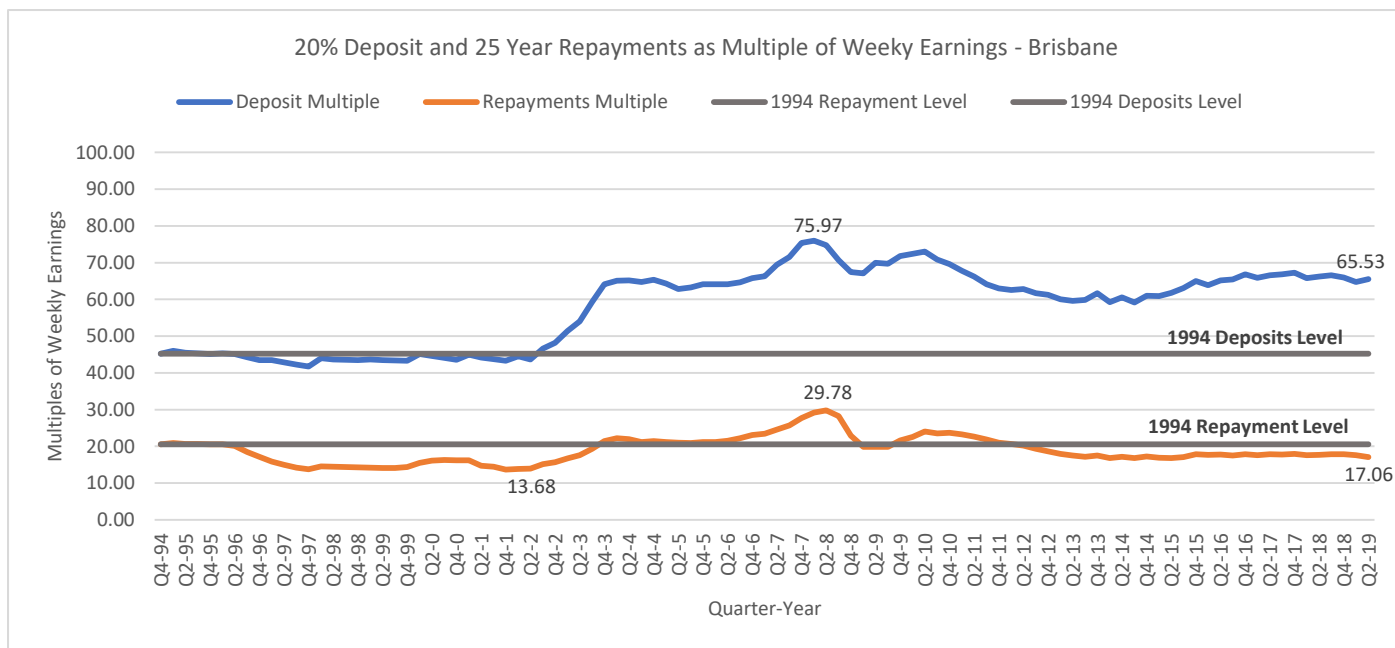
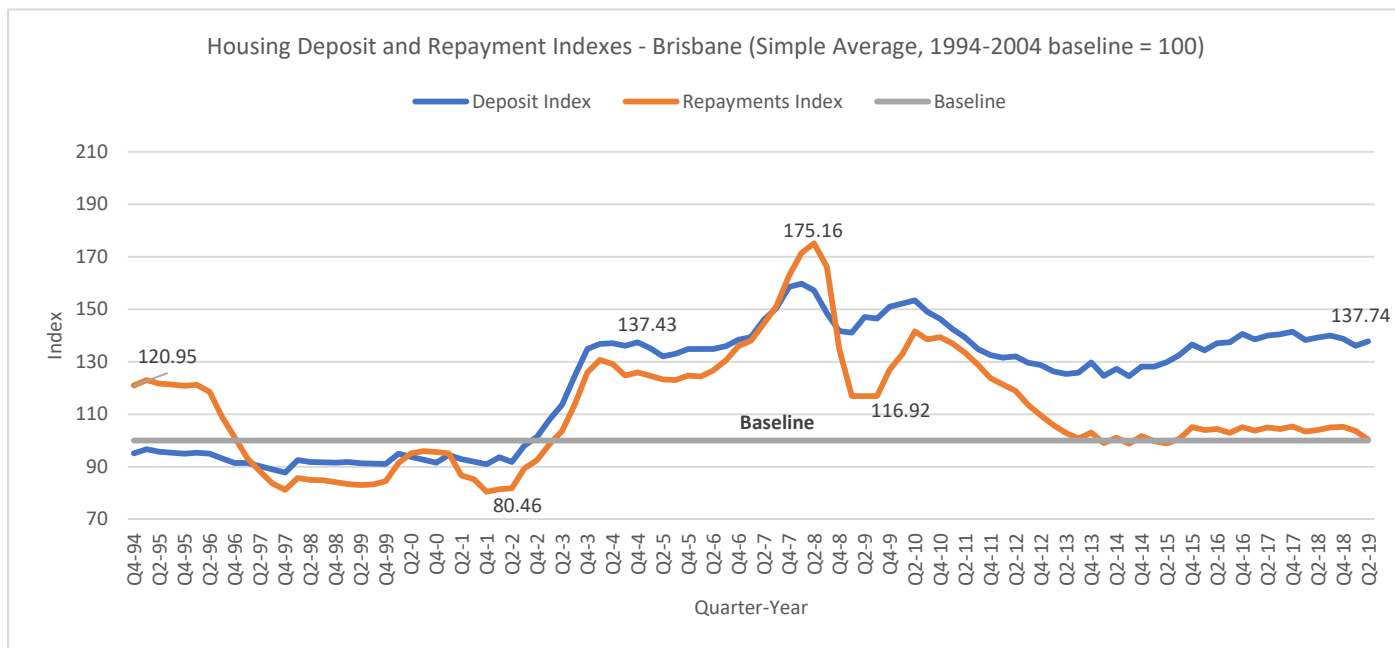
Sydney



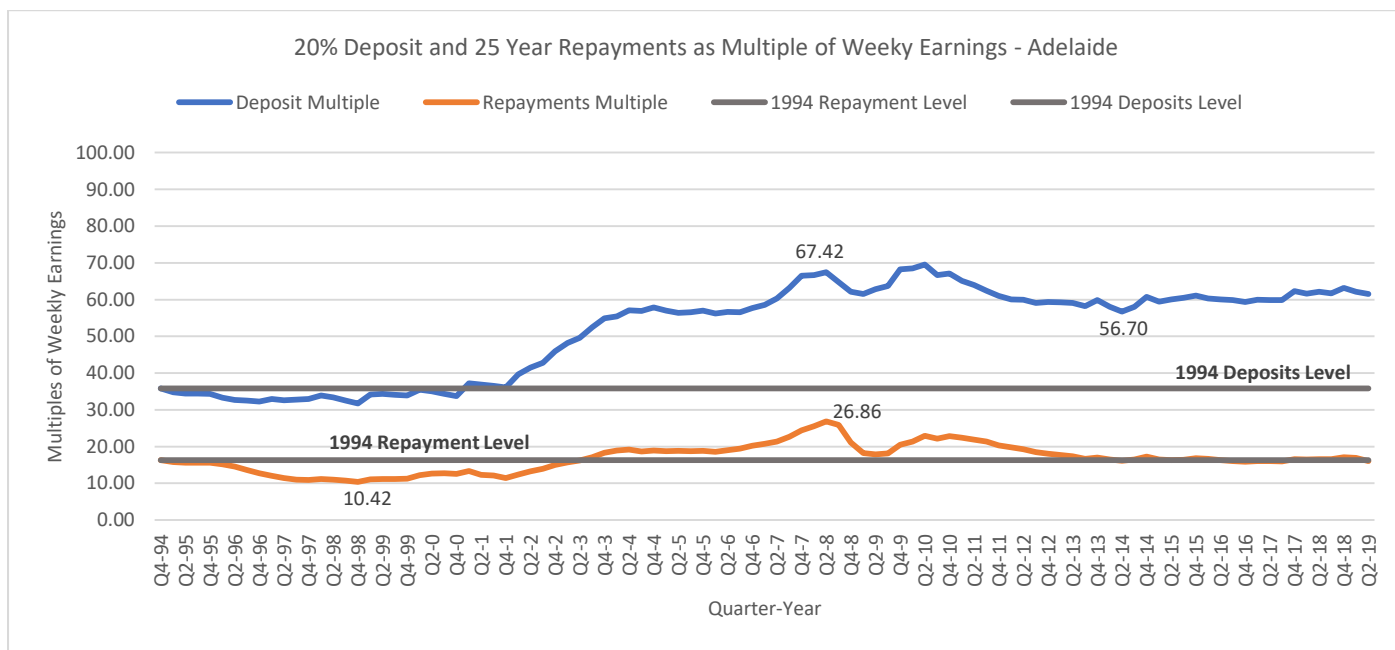
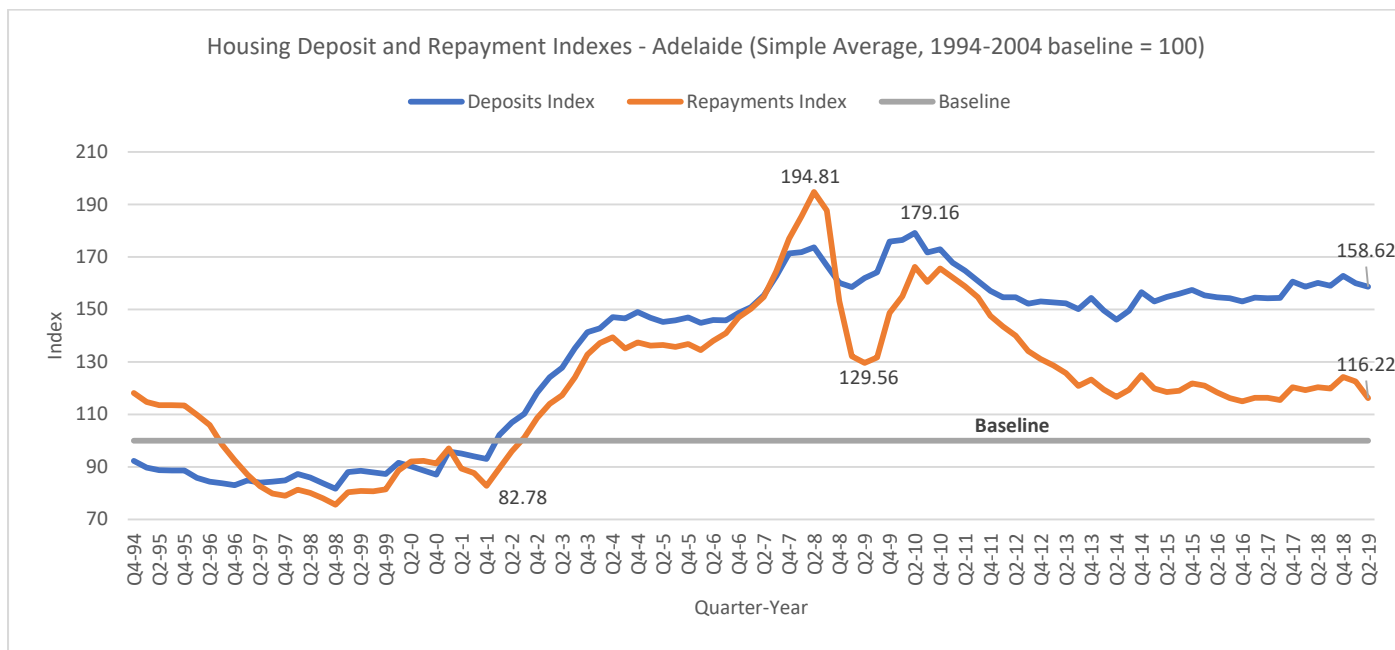
Melbourne



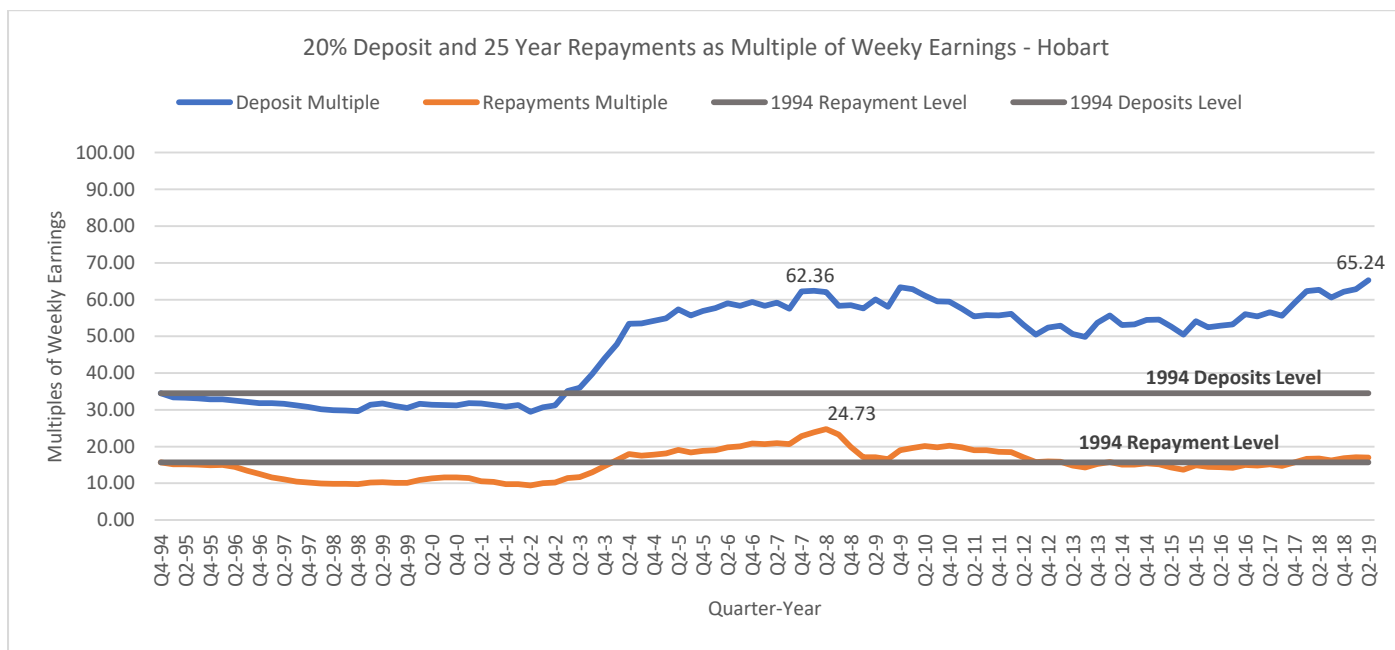
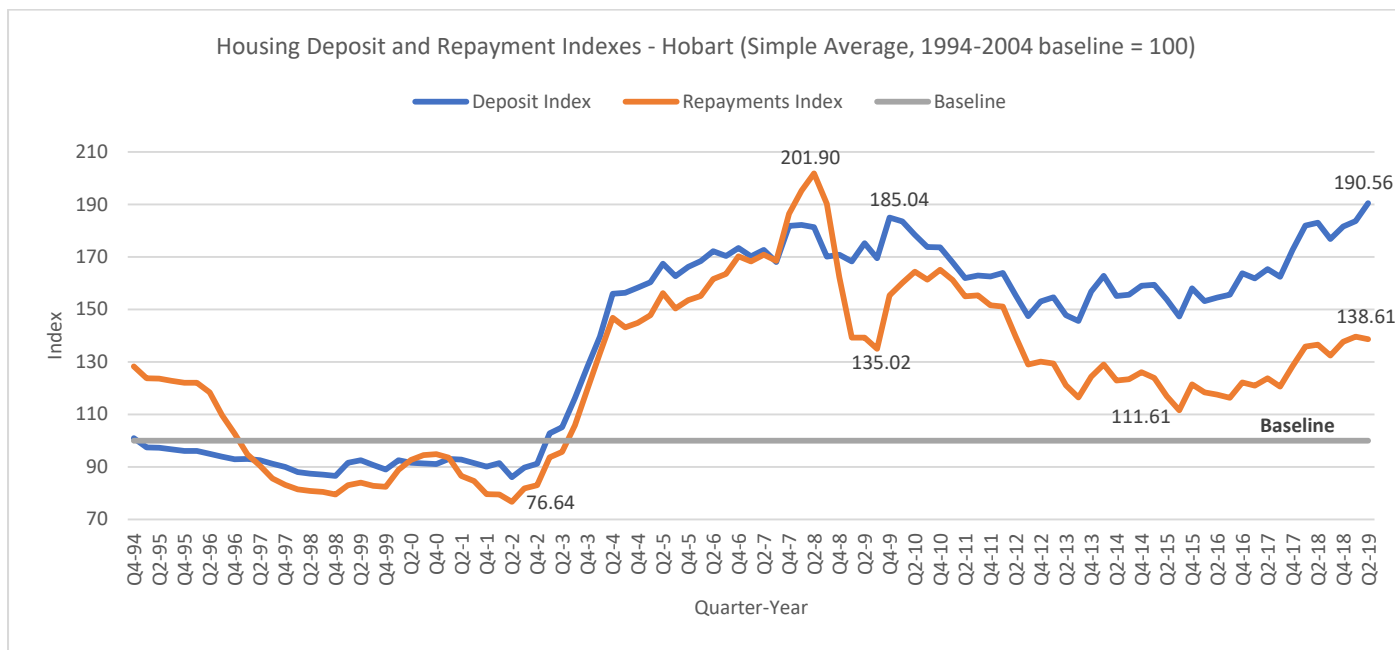
Brisbane



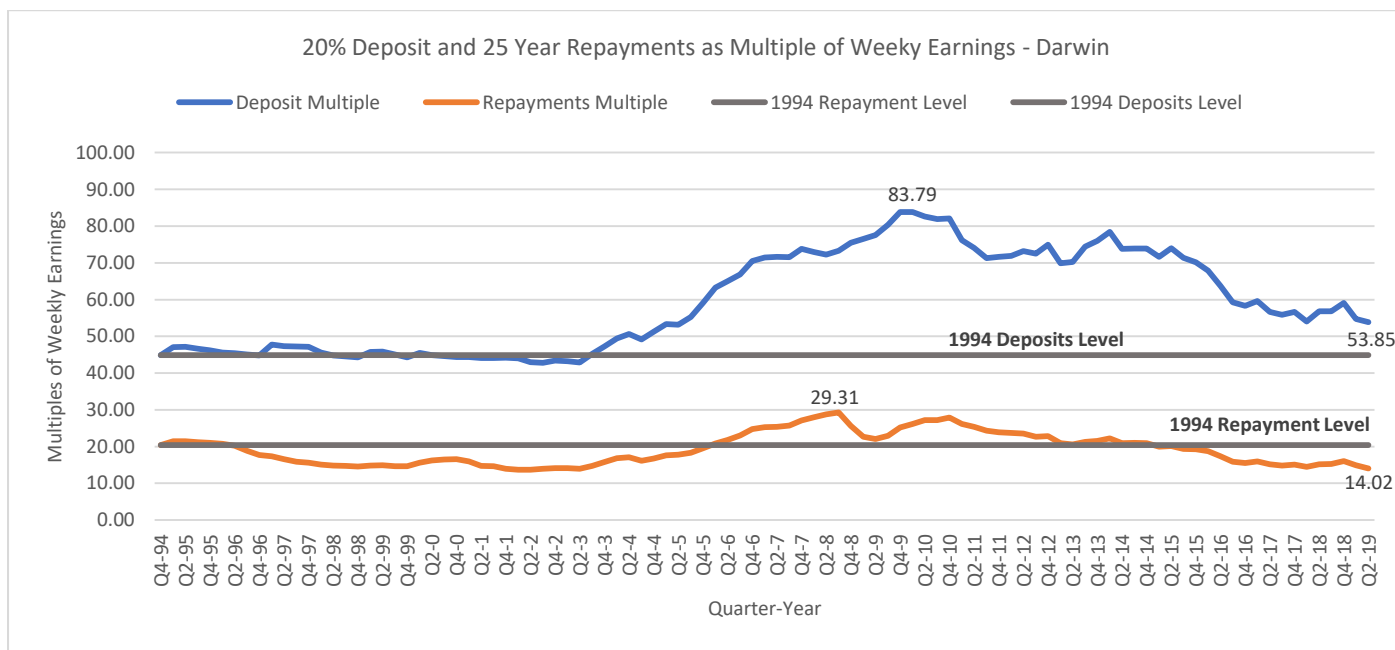
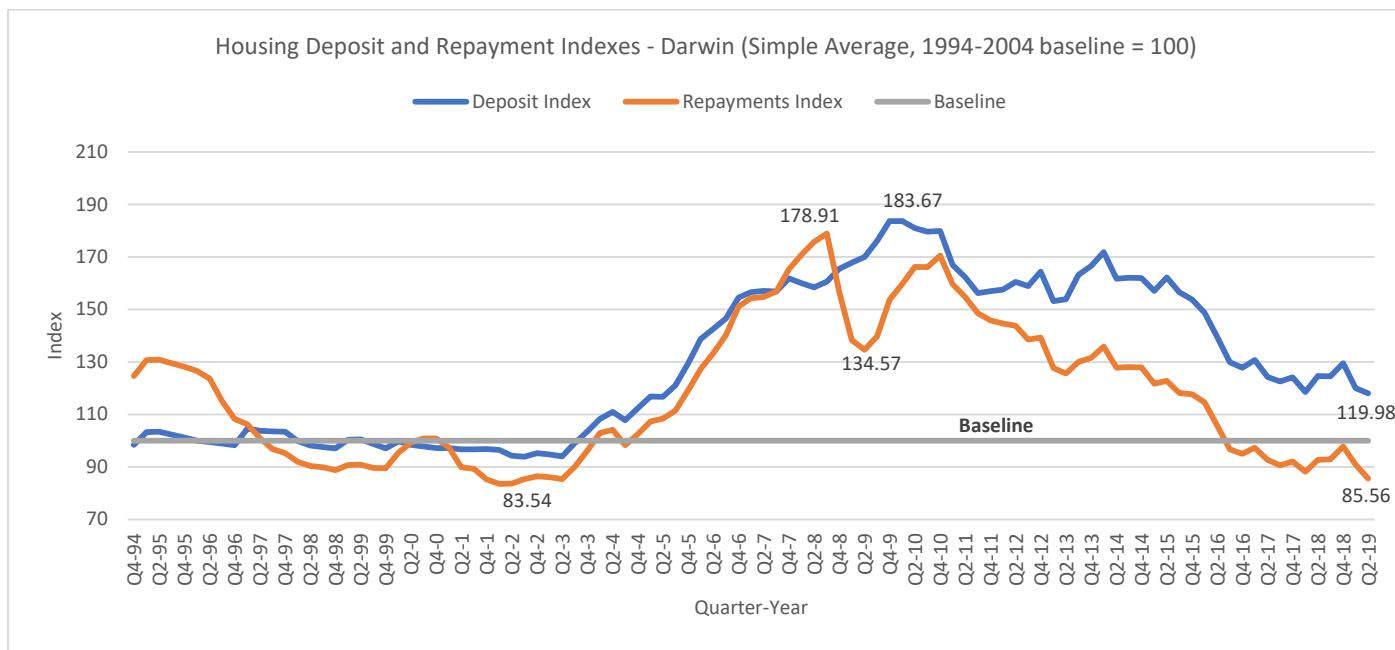
Adelaide



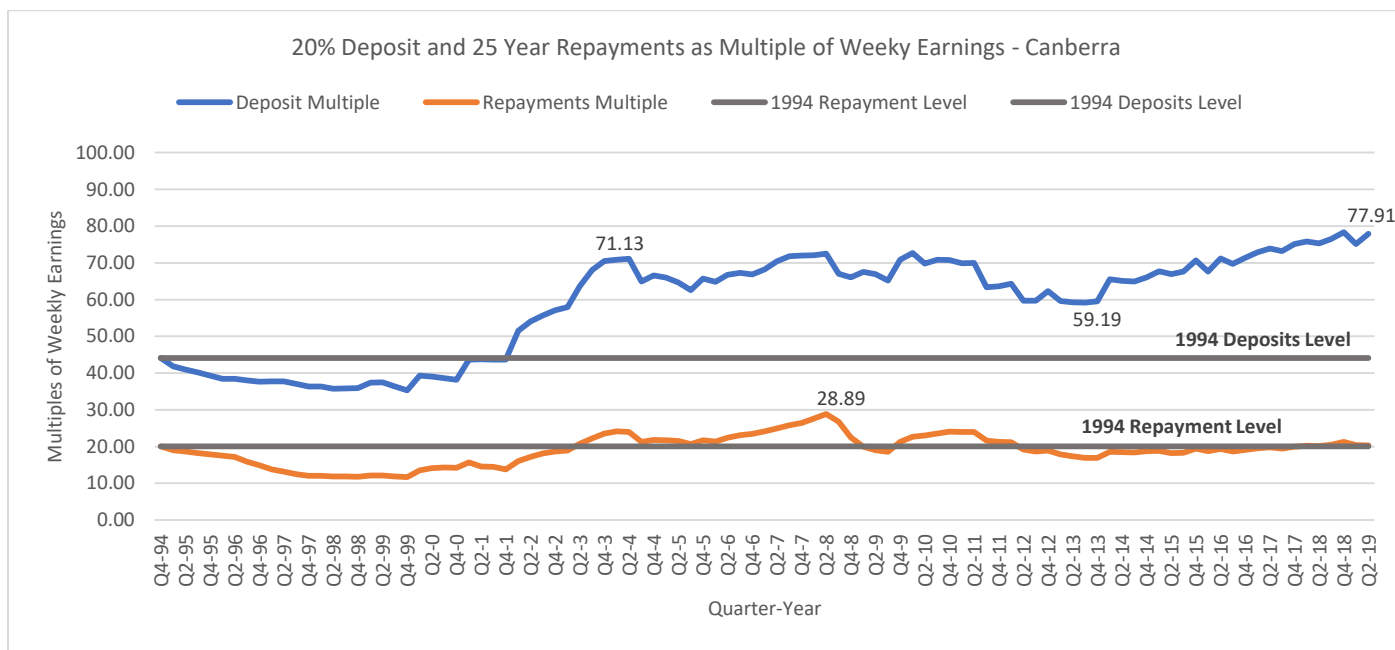
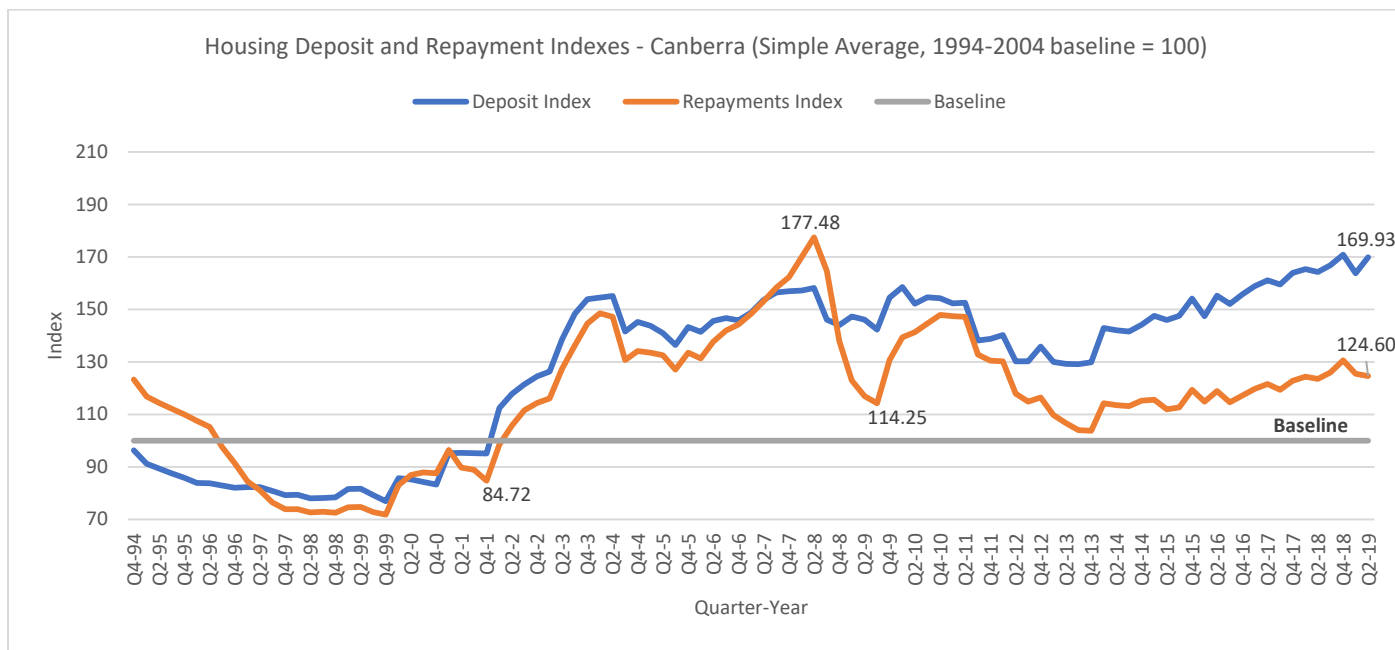
Hobart



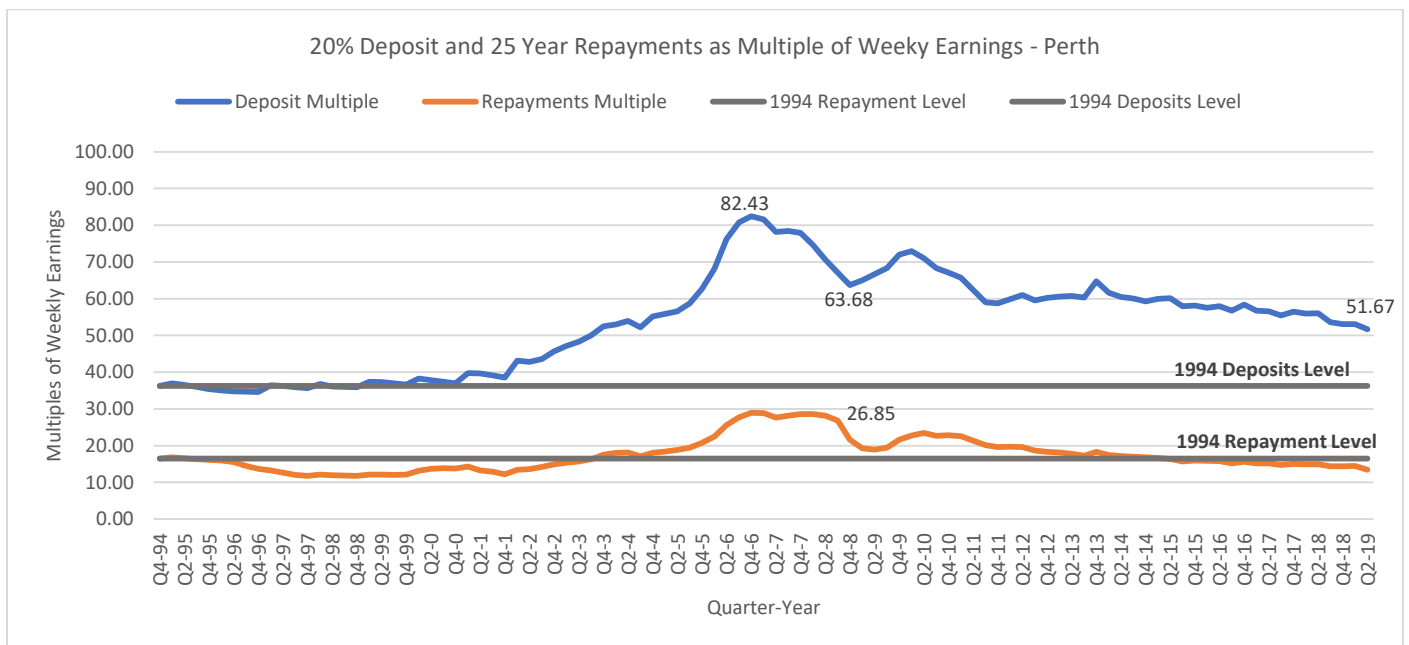
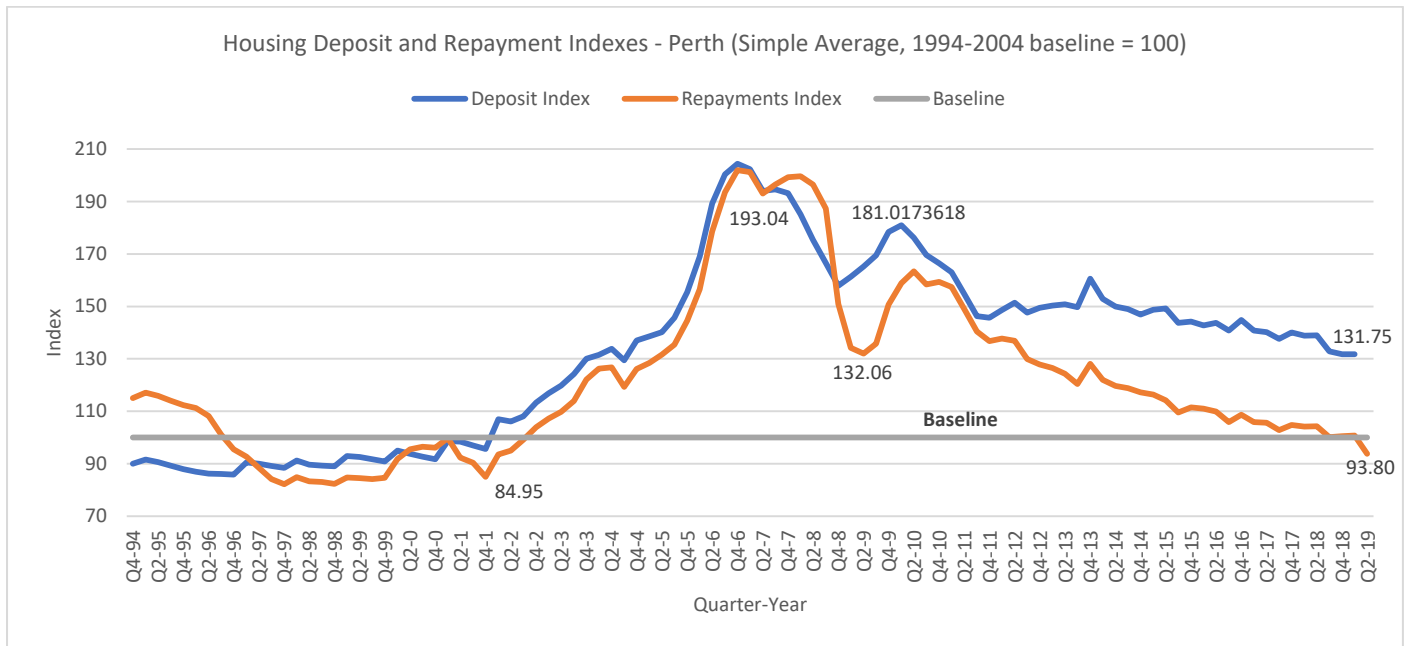
Darwin



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 Q1:2019 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 weekly multiplier to be the simple average of the weekly multiplier for Australia's 8 most populous cities. Using the weekly multiplier values, we use a city's average 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 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.

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. (June 2019 series). *Residential Property Price Indexes: Eight Capital Cities*. Obtained via: <https://www.abs.gov.au/ausstats/abs@.nsf/mf/6416.0>
3. ABS 6302. (May 2019 series). *Average Weekly Earnings: Australia*. Obtained via: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/allprimarymainfeatures/7F76D15354BB25D5CA2575BC001D5866?opendocument>
4. RBA F05. (June 2019 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>