



Australian Institute for Progress

Housing Affordability Index

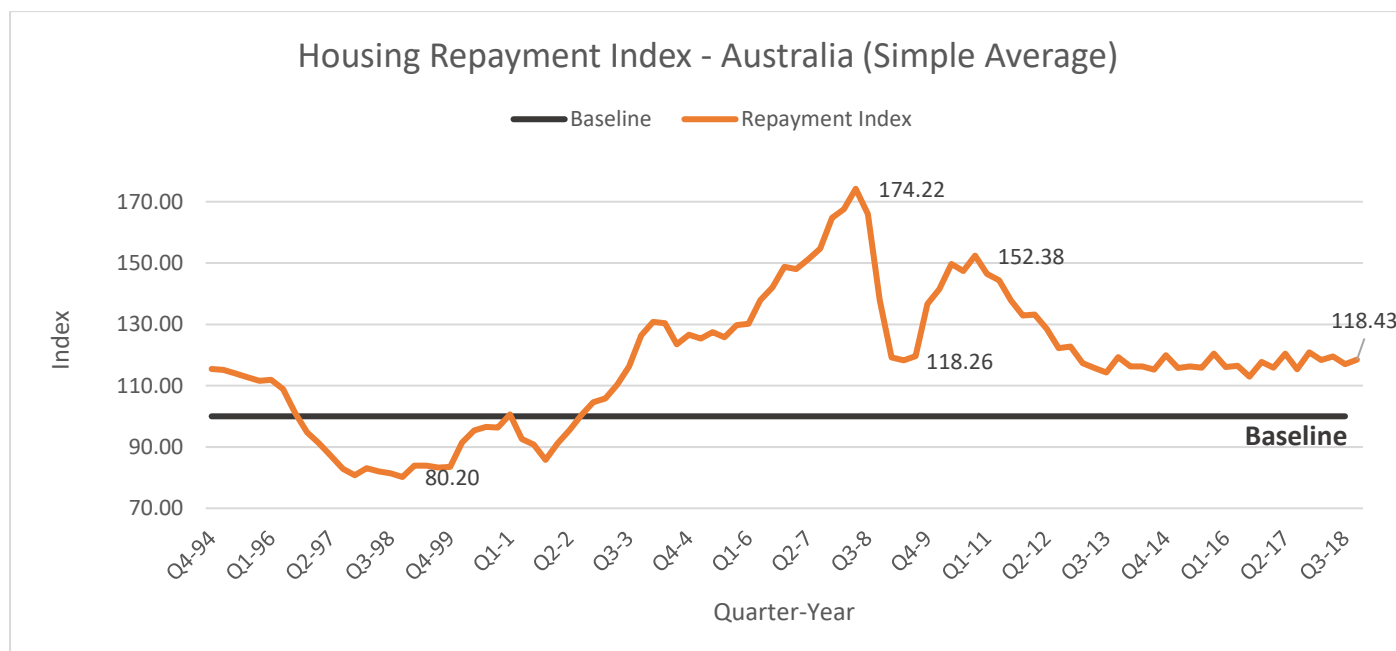
December Quarter, 2018
A Quarterly Review of Housing Affordability

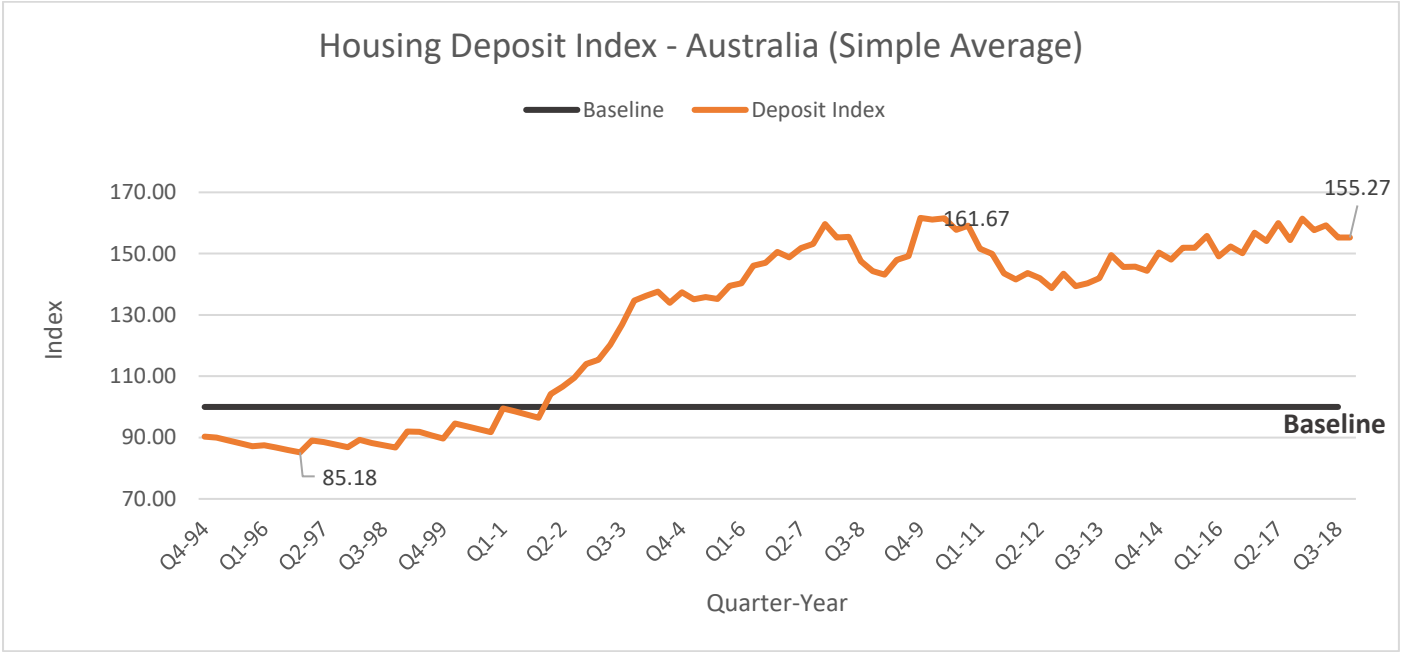
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*The Australian Institute for Progress exists to advance the discussion, development and implementation of public policy for Australia's future,
from its base in Brisbane. The future does not look after itself.*

Highlights

- Repayment costs have increased over the December quarter, reversing the previous 3 quarters of trend, with the repayment index increasing 1.21% from 117.02 to 118.43 over 2018 Q4
- National housing repayment costs have moved sideways for 5 years since Q1 2013.
- Deposits costs have remained stable over the 4th quarter, decreasing by only 0.01% to 155.27 over the last quarter. The difficulty of saving a deposit remains close to historic highs.
- Deposit costs have increased in the six and a quarter years since Q3 2012.
- With median house prices declining at the national level, the change in repayment costs is attributable to rising home loan lending rates and fluctuations in weekly wages
- Sydney was the only city to become more affordable for repayments (-3.01%) in the quarter while Canberra (+4.34%) and Hobart (+4.30%) showed the greatest decrease in affordability.
- Relative to the baseline, Darwin (96.8), Perth (100.5) and Brisbane (105.2) were the most affordable for repayments on an historical basis. Melbourne (140.1) is 40.1% over historical averages.





Summary

The 2018 December quarter Australian housing market saw a decline in the affordability of housing repayments, breaking the trend of reducing repayment costs over the prior three quarters. Despite this, repayment costs across Australia are as affordable now as they were 10 years ago at the nadir of the GFC housing market crash in 2009. Except for Sydney, which has experienced a decline in repayment costs (decreasing by -3.01% relative to last quarters index), the 8 major cities in Australia have witnessed an increase in repayment costs over the last quarter. The largest decreases in affordability have been in Hobart (+4.3%) and Canberra (+4.34%), while Brisbane, Melbourne, and Perth saw little change in repayment costs. With median house prices declining on the national level, the change in repayment costs is attributable to rising home loan lending rates and fluctuations in weekly wages.

There are two broad types of buyers for owner-occupied dwellings: first home and trading-up buyers. The deposit is a major factor for first home buyers, but not for trade-up buyers who normally have equity in their former home sufficient to cover the deposit plus change over costs. General affordability can be assessed just by looking at repayments, but new home buyer affordability has to include the ease of saving a sufficient deposit. Overall, first-home buyers face a significant savings hurdle for entry into the housing market with the deposit costs being 55% greater than our baseline while repayment costs are only 18.4% greater.

Taking account of saving a deposit, first home buyer affordability remained stable over the last quarter, declining by only 0.02 in our deposit index. However, the change in deposit affordability varied significantly across Australia with the three major cities (Sydney, Melbourne, and Brisbane) experiencing falling deposit costs while Adelaide, Hobart, and Darwin saw an increase in deposit costs.

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.

	<i>Deposit Index</i>	<i>Repayment Index</i>
<i>Sydney</i>	152.8 (-4.18%)	117.4 (-3.01%)
<i>Melbourne</i>	182.5 (-1.11%)	140.1 (+0.10%)
<i>Brisbane</i>	138.7 (-0.93%)	105.2 (+0.27%)
<i>Adelaide</i>	160.7 (+1.32%)	122.7 (+2.55%)
<i>Hobart</i>	182.2 (+3.05%)	138.1 (+4.30%)
<i>Darwin</i>	128.2 (+2.98%)	96.8 (+4.24%)
<i>Canberra</i>	170.9 (+3.09%)	130.6 (+4.34%)
<i>Perth</i>	131.8 (-0.86%)	100.5 (+0.35%)
<i>Average</i>	155.3 (-0.01%)	118.4 (+1.21%)

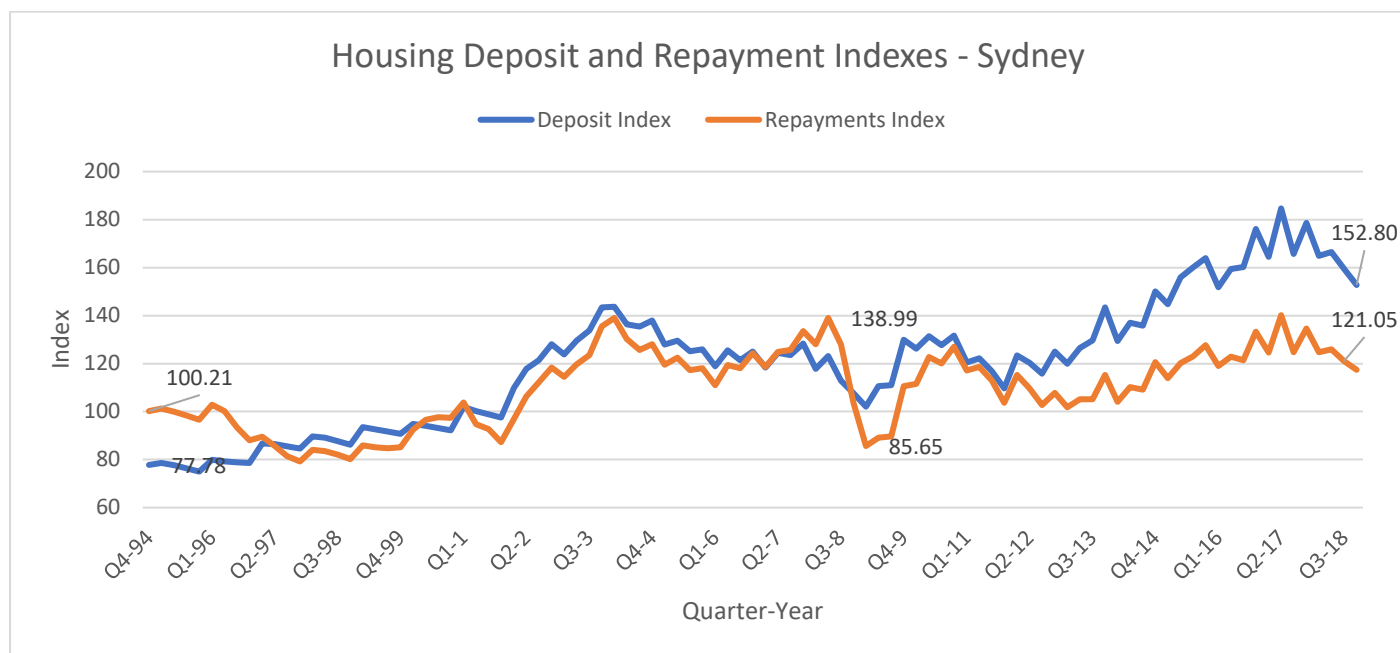
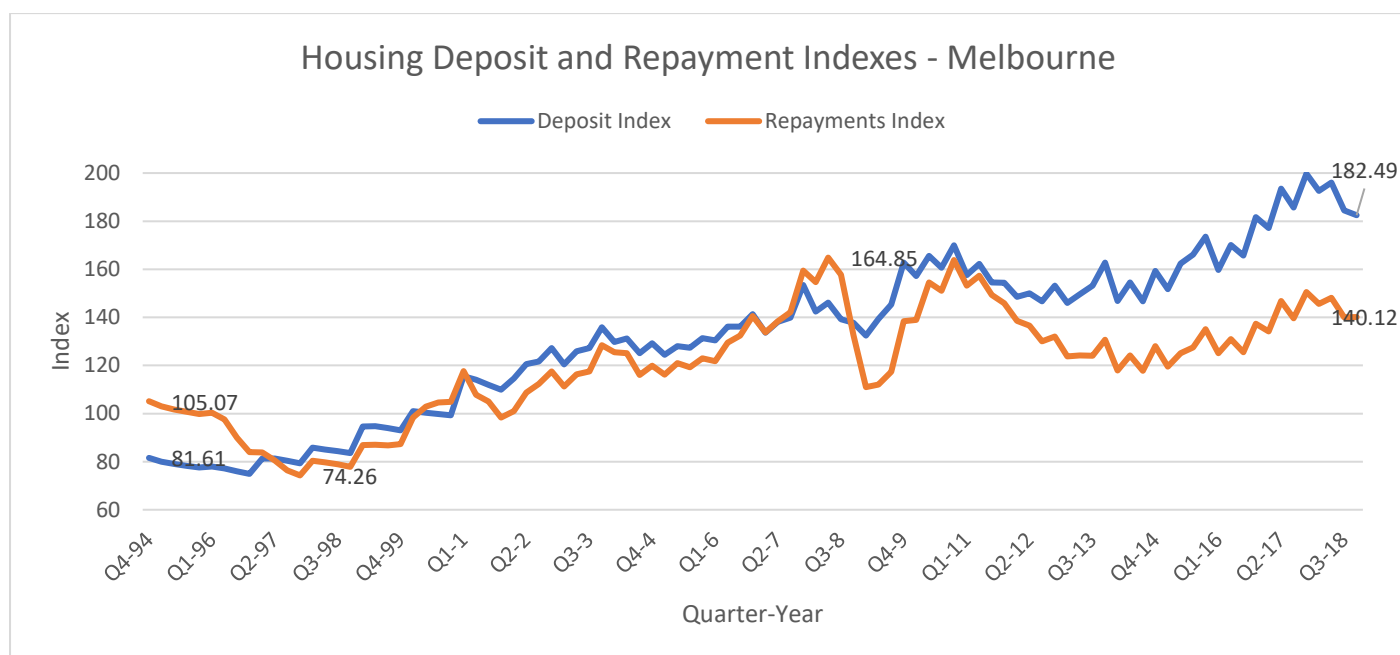


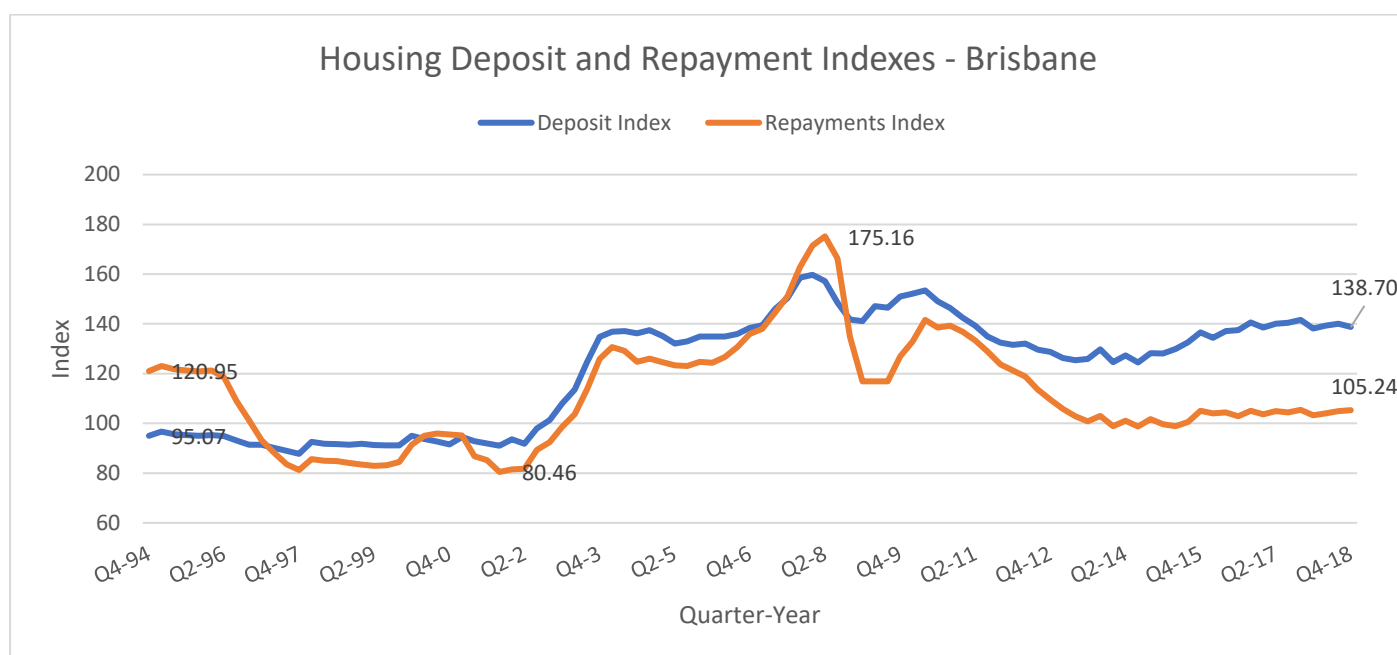
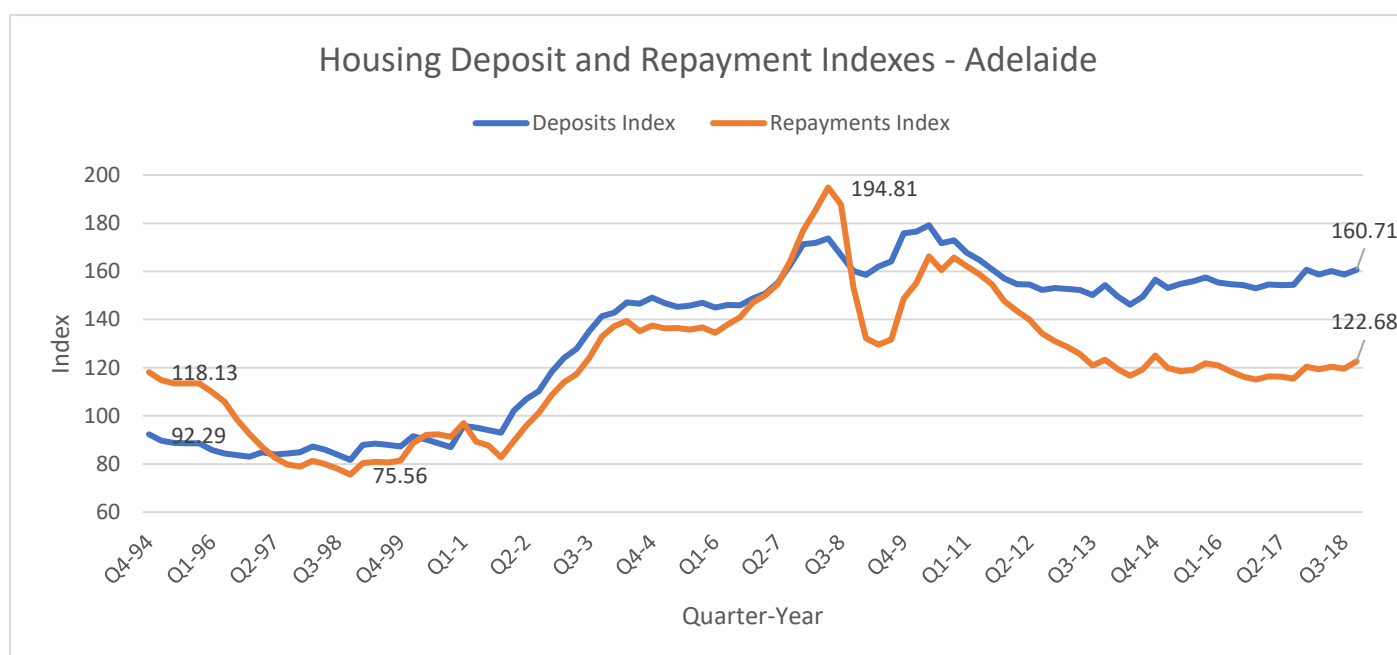
Graham Young
Executive Director
Australian Institute for Progress

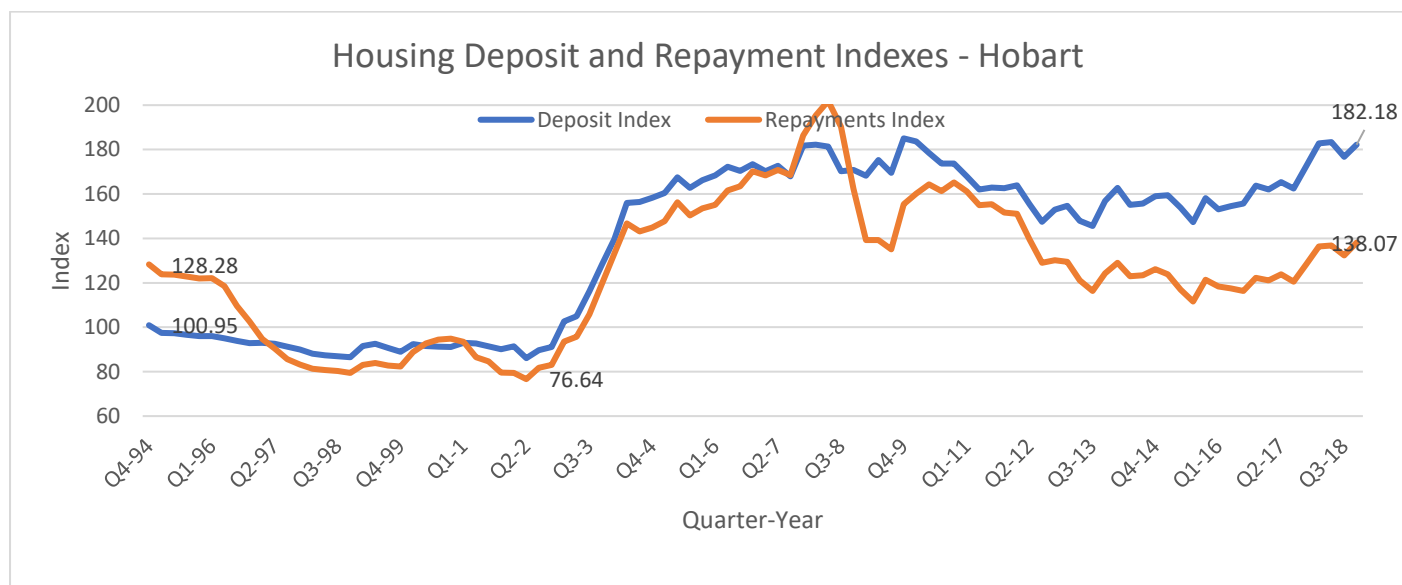
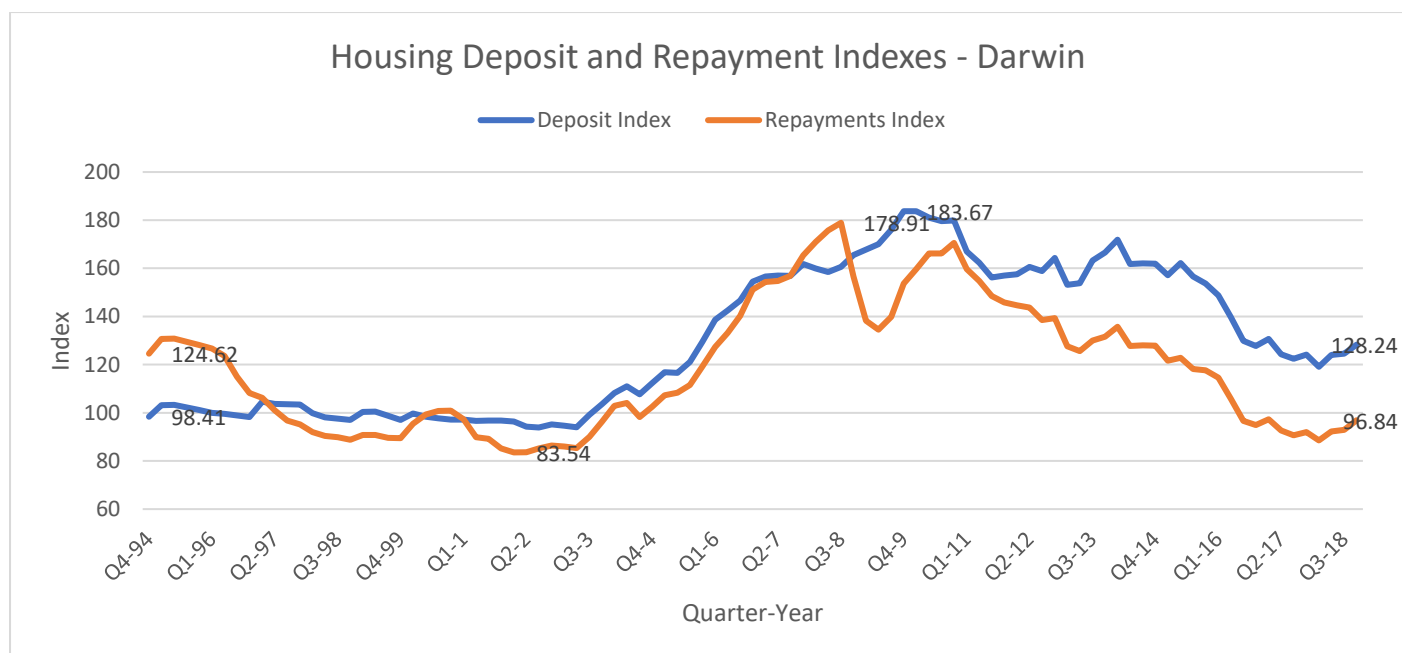


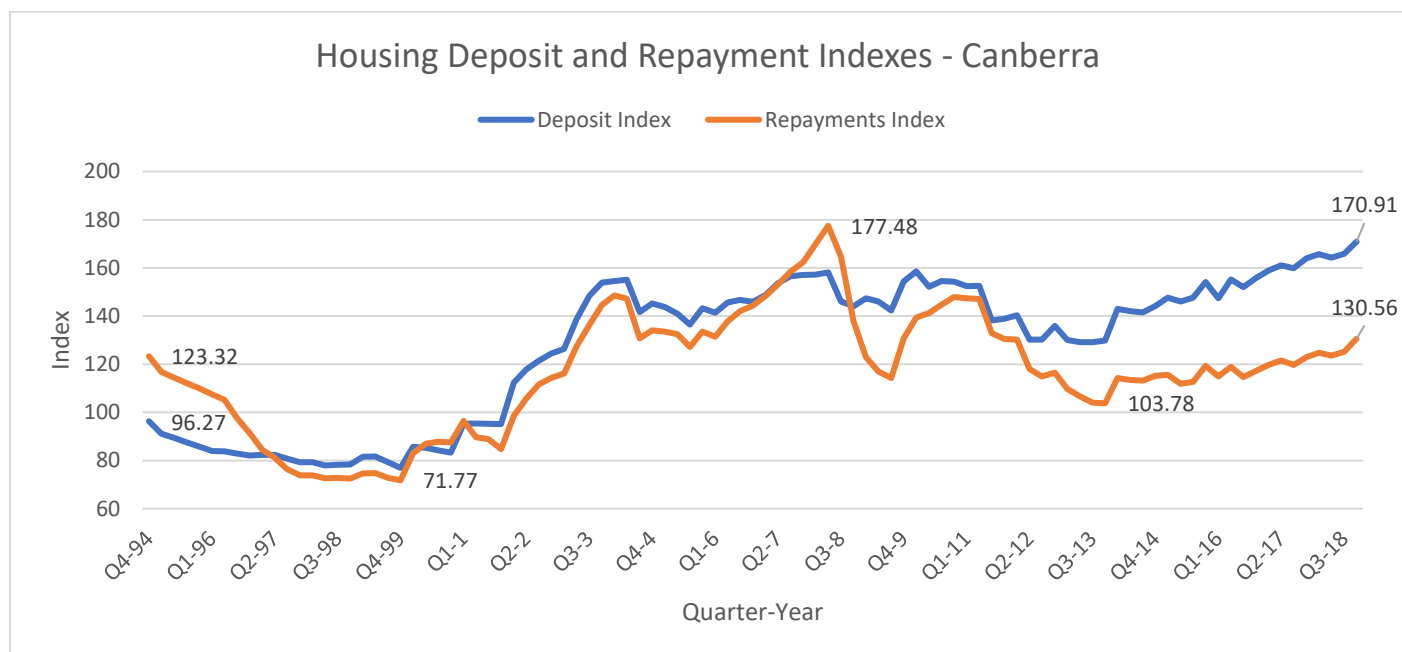
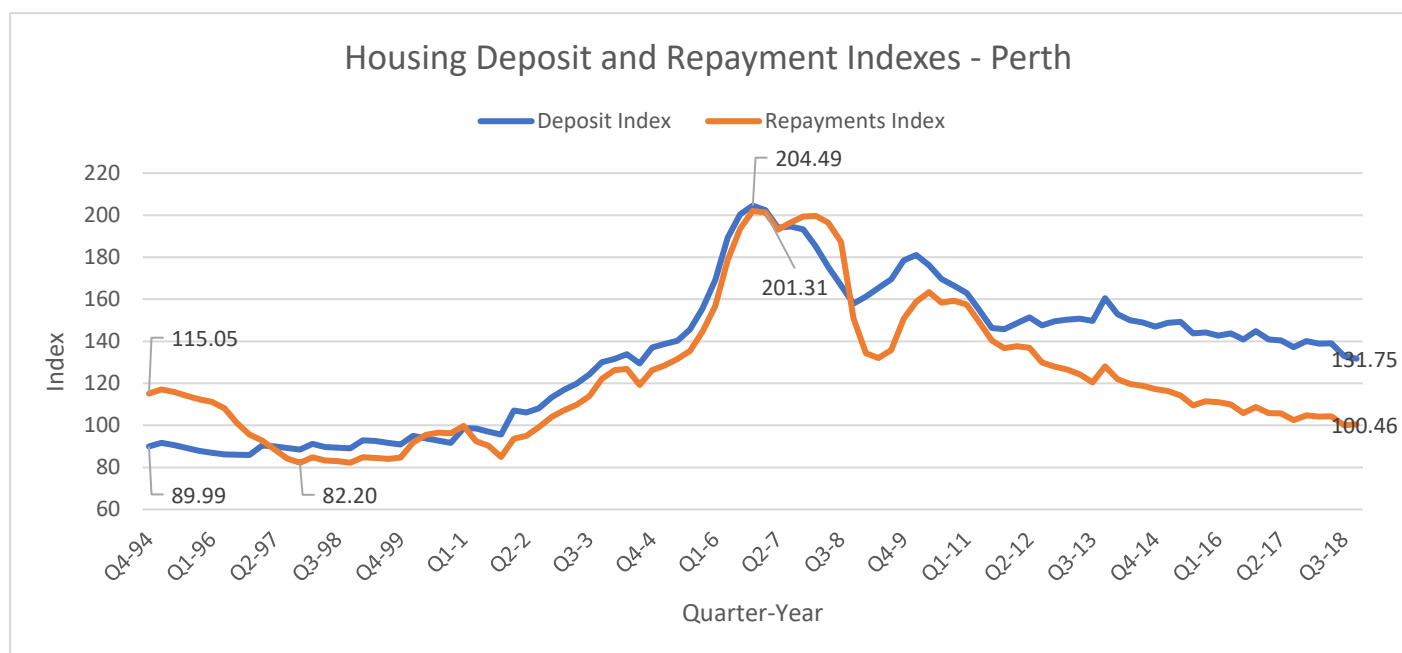
Nicholas Umashev
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Deposit and Repayment Costs by State

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 Q3:2018 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. (December 2018 series). *Residential Property Price Indexes: Eight Capital Cities*. Obtained via: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6416.0Main+Features1Sep%202018?OpenDocument>
3. ABS 6302. (May 2018 series). *Average Weekly Earnings: Australia*. Obtained via: <https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6302.0Main+Features1May%202018?OpenDocument>
4. RBA F05. (December 2018 series). *Indicator Lending Rates*. Obtained via: <https://www.rba.gov.au/statistics/tables/xls/f05hist.xls>