

All-Actuaries Summit

GETTING CLOSER
THINKING BIGGER

2-4 May
2022

Melbourne Convention
and Exhibition Centre
(Hybrid Event)



**Actuaries
Institute**



The Great Housing Bubble

Richard Lyon

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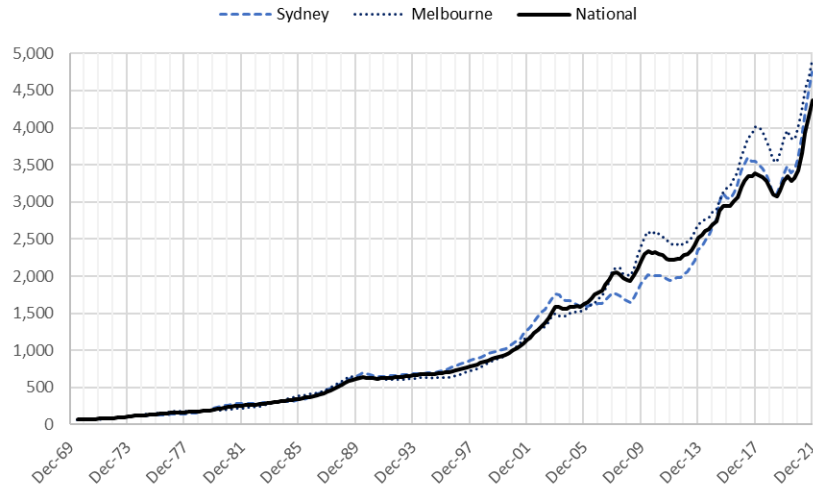
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The Great Housing Bubble

- **The bubble**
- The deflator
- Findings
- What next?

Stratospheric house prices...

Average House Price 1970-2021 (1973 = 100)



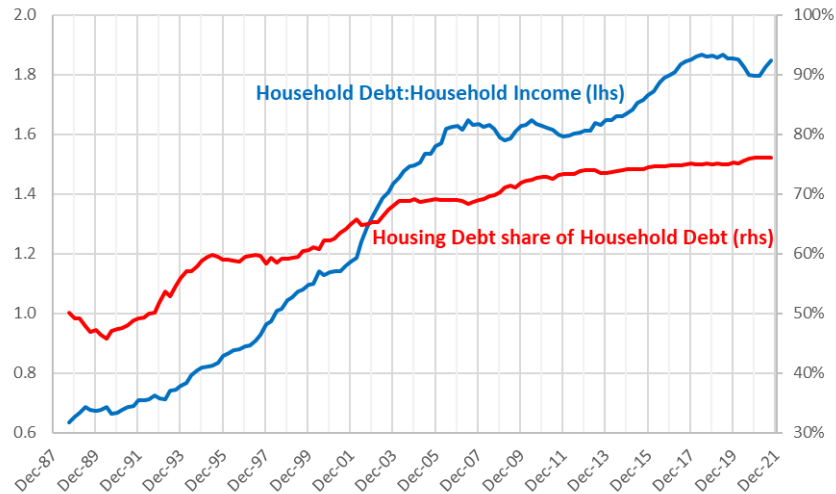
Sources: Abelson & Chung and ABS, plus analysis

- average house worth 45 times 1973 value
- almost 50 times in Sydney & Melbourne
- 27.5% increase in 12 months in 2021

... indicate a huge bubble

Household debt is very high...

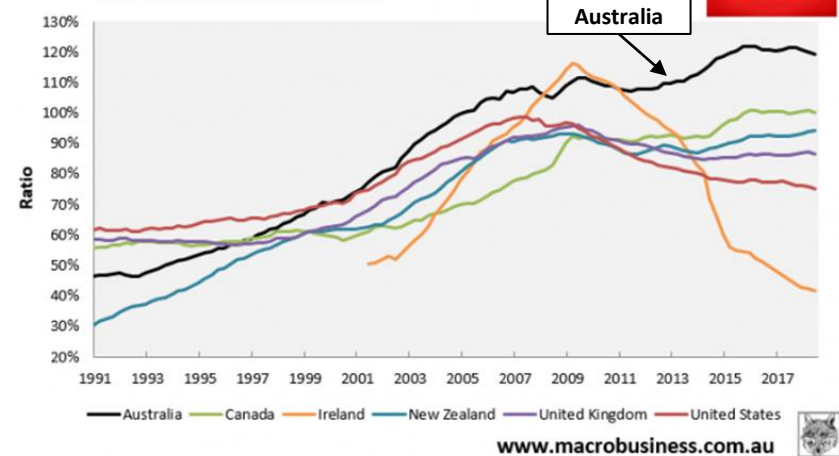
Household Debt in Australia



Source: RBA plus analysis

Household Debt to GDP: Anglosphere

Source: Bank for International Settlements



... so we are in great danger

The Great Housing Bubble

- The bubble
- **The deflator**
- Findings
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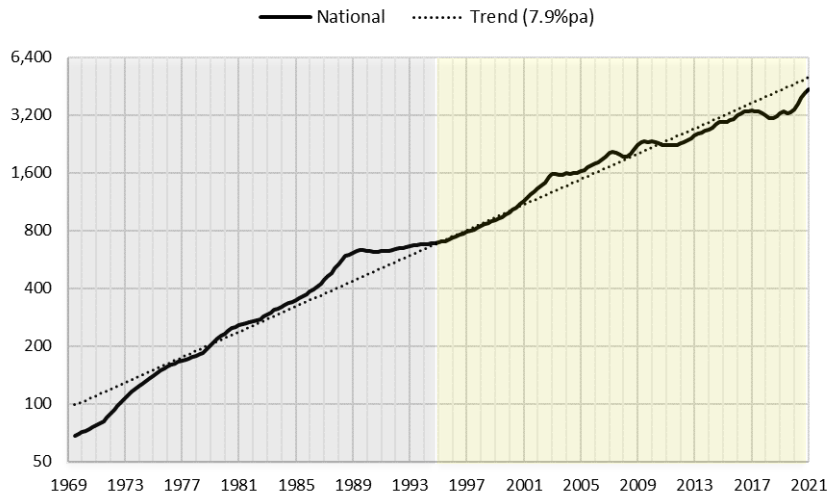
Data Sources

Data Set	Source	Web Reference
Median house prices 1970-2003	Abelson & Chung 2006	https://appliedeconomics.com.au/wp-content/uploads/2021/10/2006-real-story-of-house-prices-australia-1970-2003.pdf
House & unit price indices 2002-2021 ¹	ABS 6416.0 Residential Property Price Indexes	Residential Property Price Indexes: Eight Capital Cities, September 2021 Australian Bureau of Statistics (abs.gov.au)
Mortgage interest rates 1959-2021	RBA Table F5 Interest Rates	Statistical Tables RBA
AWE 1959-1998	Hutchinson & Ploeckl (Measuring Worth)	www.measuringworth.com/auswages/
AWE 1997-2021	ABS 6345.0 Wage Price Index	Wage Price Index, Australia, December 2021 Australian Bureau of Statistics (abs.gov.au)

¹ These indices track the total value of housing stock, so they are stock averages, estimated by trading medians

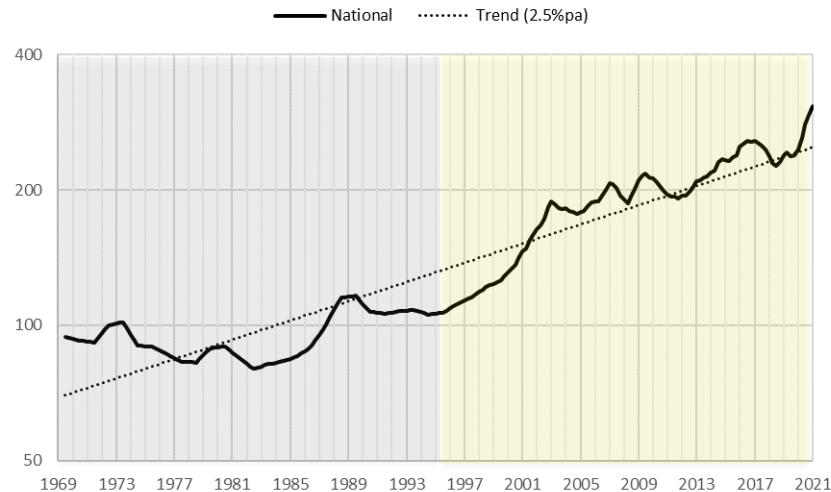
Remove inflation...

Average House Price 1970-2021 (1973 = 100)



Sources: Abelson & Chung and ABS, plus analysis

Average House Price 1970-2021 - Deflated by AWE (1973 = 100)

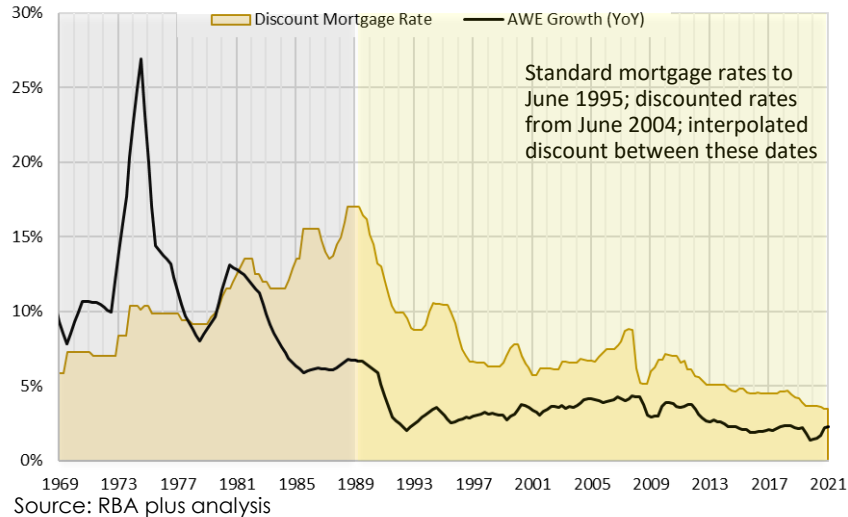


Sources: Abelson & Chung, ABS & RBA, plus analysis

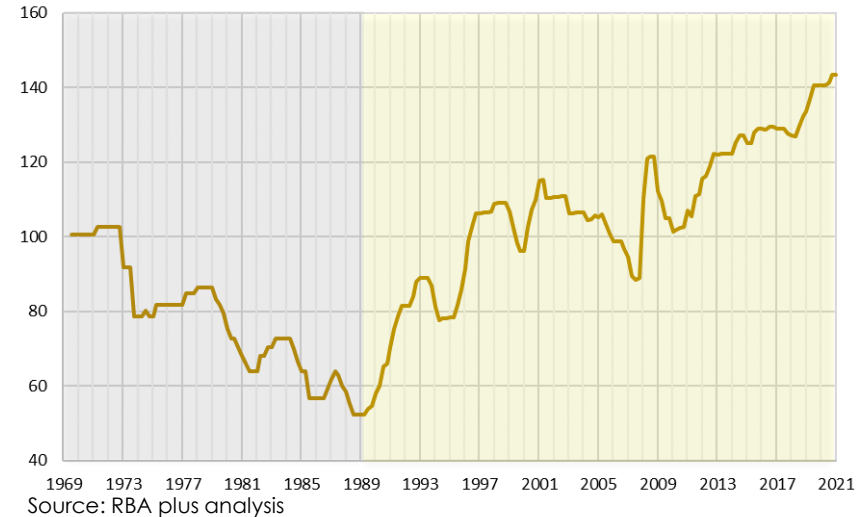
... to reveal strong growth since 1995

Borrowing power...

Interest Rates and AWE Growth 1970-2021



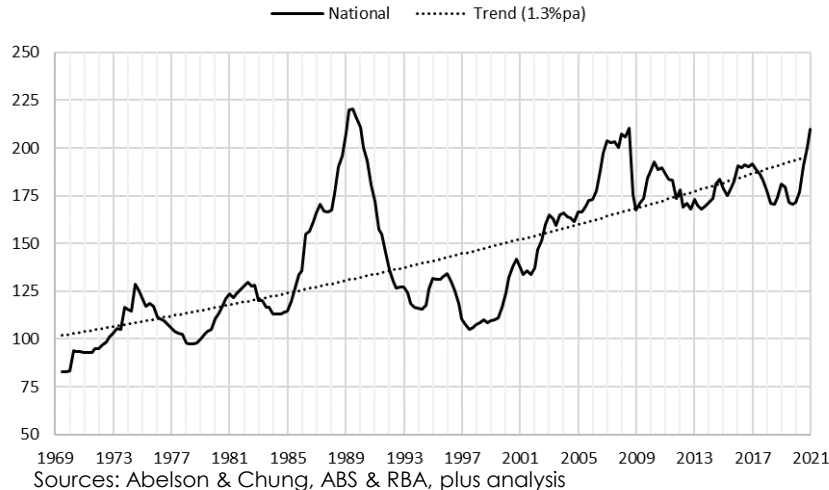
Borrowing power 1970-2021 (1973 = 100)



... has grown strongly since 1989

Deflated (and lagged) prices...

Average House Price 1970-2021 - Deflated by AWE & Borrowing Power
(1973 = 100) - 3 quarters lag



Reasons for 1.3% trend growth in prices

- Quality improvement (refer Abelson & Chung 2006)
- Second incomes
- Tax benefits incl. negative gearing and no tax on the primary residence
- Immigration
- Australian dream
- Foreign buyers
- Scarcity
- Infrastructure
- Financial assistance

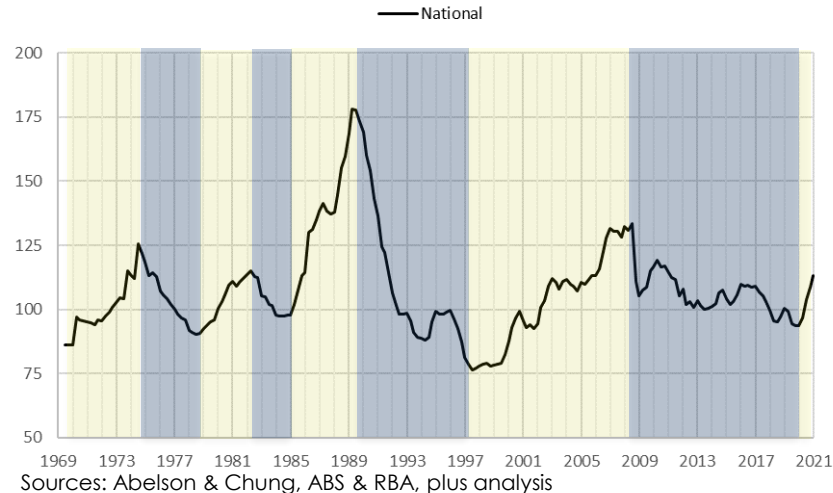
... still have a residual growth trend

The Great Housing Bubble

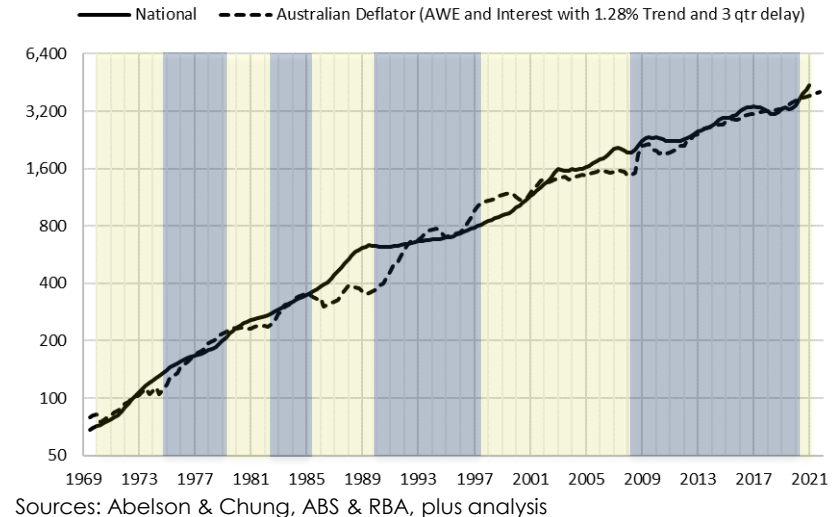
- The bubble
- The deflator
- **Findings**
- What next?

Fully deflated prices...

Average House Price 1970-2021 - Deflated by AWE, Borrowing Power & 1.28%pa Trend (1973 = 100) - 3 quarters lag



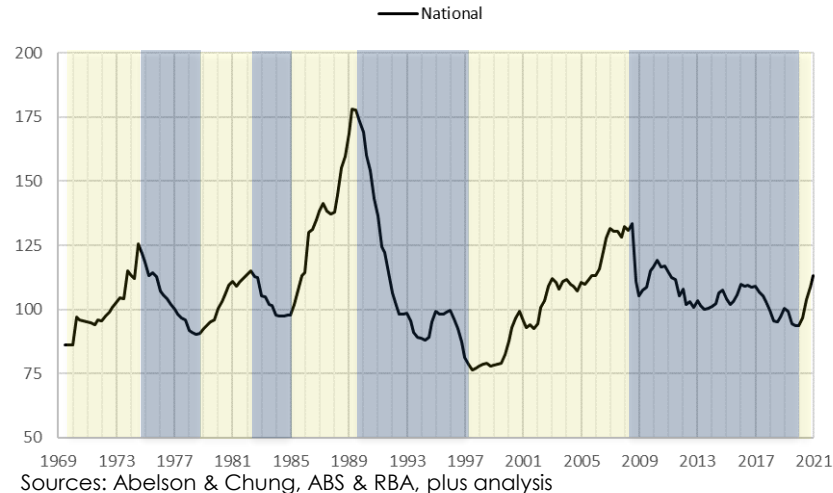
Average House Price 1970-2021 (1973 = 100)



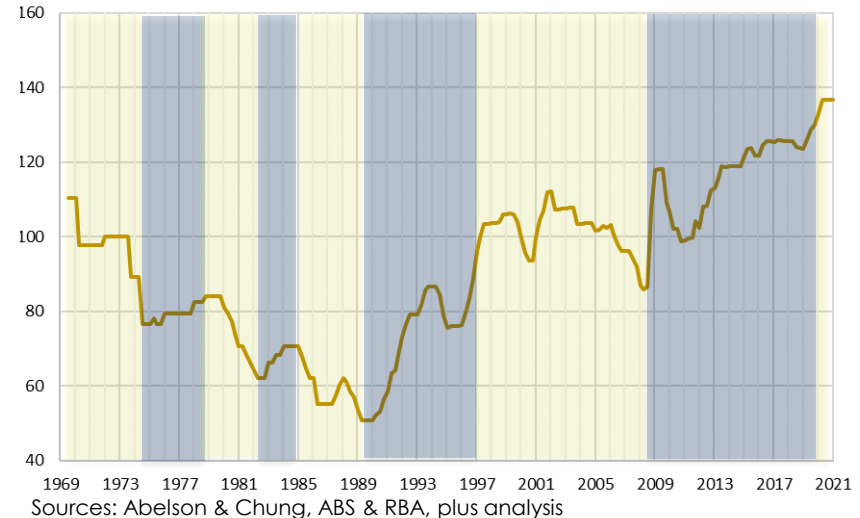
... show no signs of a current bubble

Interest rates manage prices...

Average House Price 1970-2021 - Deflated by AWE, Borrowing Power & 1.28%pa Trend (1973 = 100) - 3 quarters lag



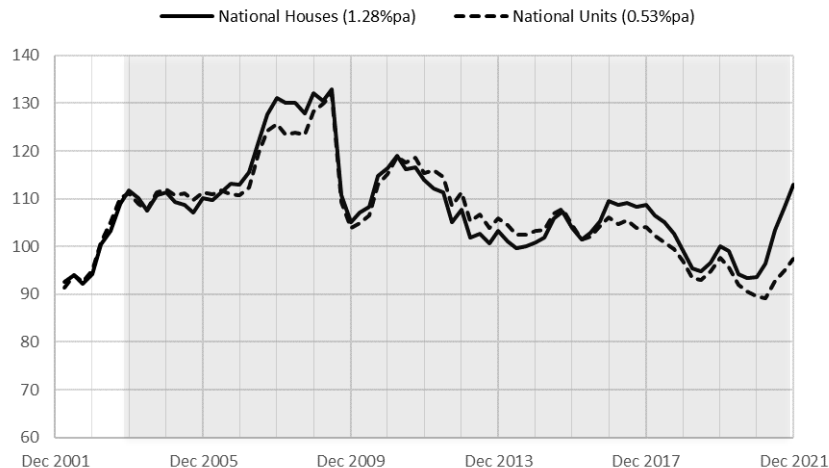
Borrowing power 1970-2021 (1973 = 100)



... so has the RBA missed a trick?

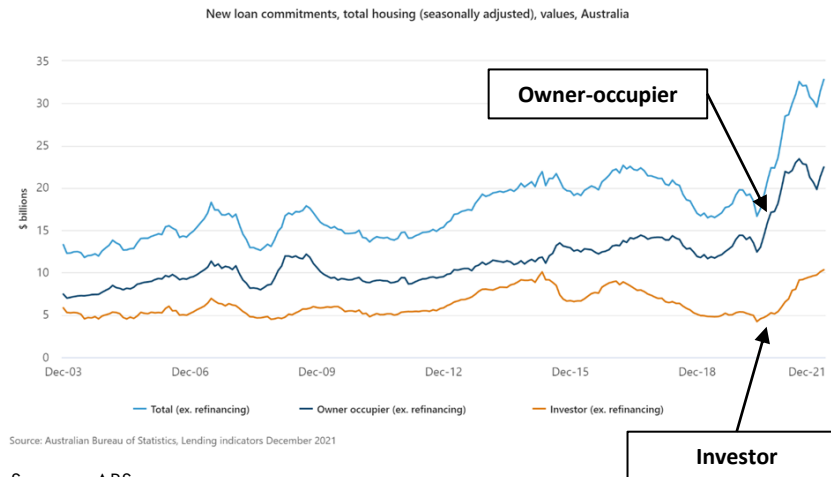
Apartment prices have diverged...

Average Home Price 2002-2021 - Deflated by AWE, Borrowing Power & Trend (1973 = 100) - 3 quarters lag



Sources: ABS & RBA, plus analysis – units index rebased to match houses for 2002

New loan commitments (\$ billion)



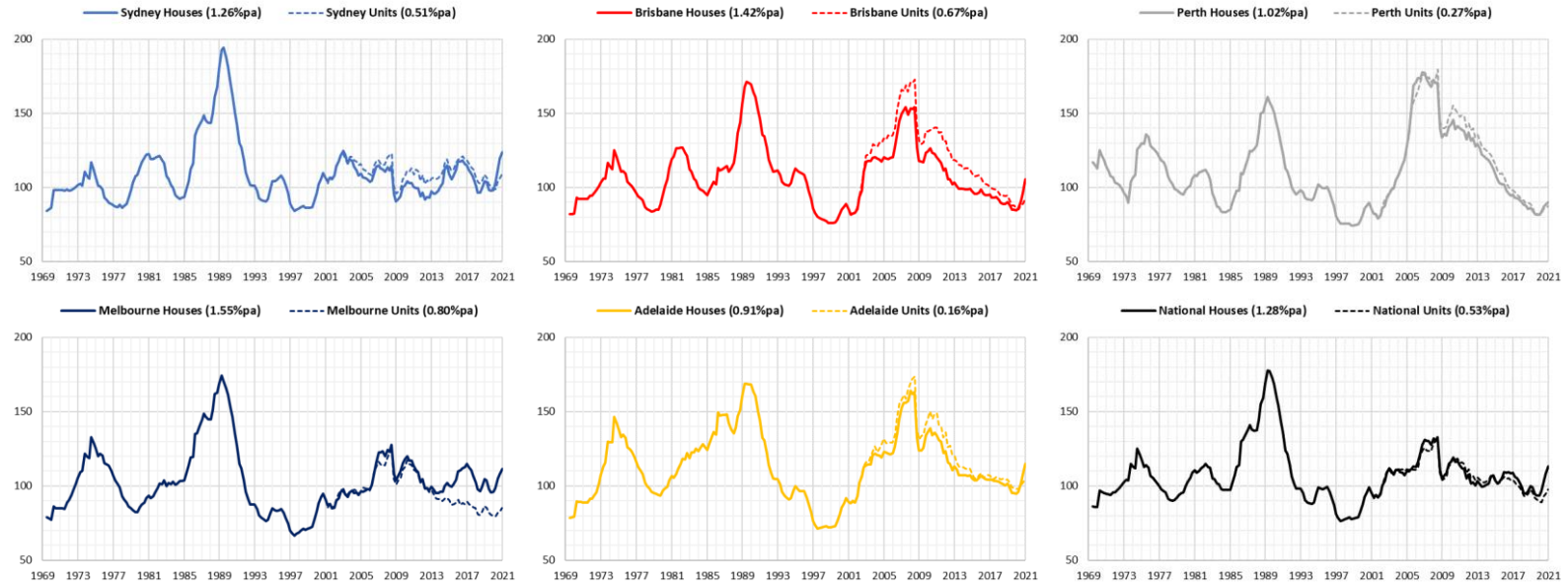
Source: Australian Bureau of Statistics, Lending indicators December 2021

Source: ABS

... perhaps due to Covid?

Location matters

Average Home Price 2002-2021 - Deflated by AWE, Borrowing Power & Trend (1973 = 100) - 3 quarters lag



Sources: ABS & RBA, plus analysis – units index rebased to match houses for 2002

The Great Housing Bubble

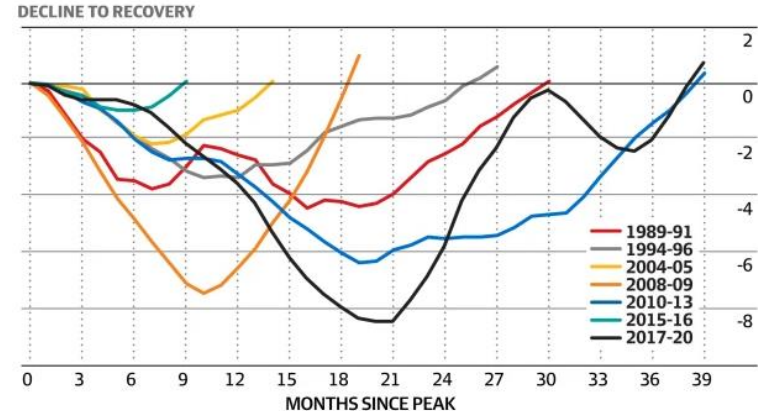
- The bubble
- The deflator
- Findings
- **What next?**

Interest rate rises reduce borrowing power...

House prices are vulnerable

- Lag means 4.8% **increase** to Q3/22
- 1% increase in interest rates **reduces** the deflator by **10%**
- 1% increase in AWE **increases** the deflator by **1%**
- 1 year of trend growth **increases** the deflator by **1.3%**
- Momentum relative to deflator?
- Interventions (e.g., election)?

Previous falls in house prices (%)



Source: AFR

SOURCE: CORELOGIC

... but what else happens in that time?

Over to YOU



Great Housing Bubble

Where do you think the market is headed, and why?

What, if any, intergenerational equity issues apply here?

What should the Institute be doing or saying?

Do you have any other comments or questions?