

**SURVIVE THRIVE**



# Natural Selection

**Financial Services Forum**

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# All I Want is a Home Somewhere

**Richard Lyon**

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# Australian house prices – an equity issue?

- Growth in house prices
- Impact of AWE & interest rates
- Another factor to consider
- Sensitivity
- Prognosis
- Implications for intergenerational equity

# Australian house price growth is above trend

Real house prices are 27% above the long-term trend.

That's a CAGR of about 3.1%, against a trend of 2.9%.

And there have been very large deviations from trend in the past.

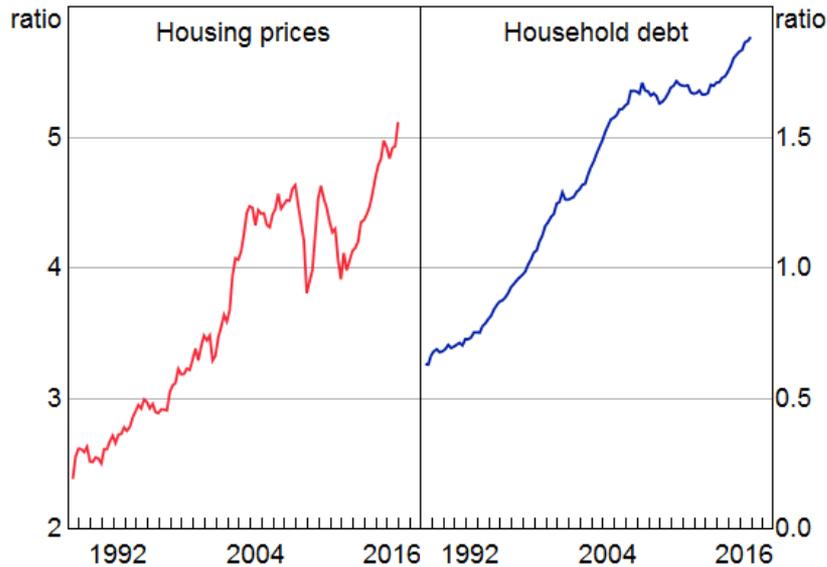


Source: ABS, AMP Capital

# Household debt growth is in line with house price growth

## Housing Prices and Household Debt

Ratio to household income\*

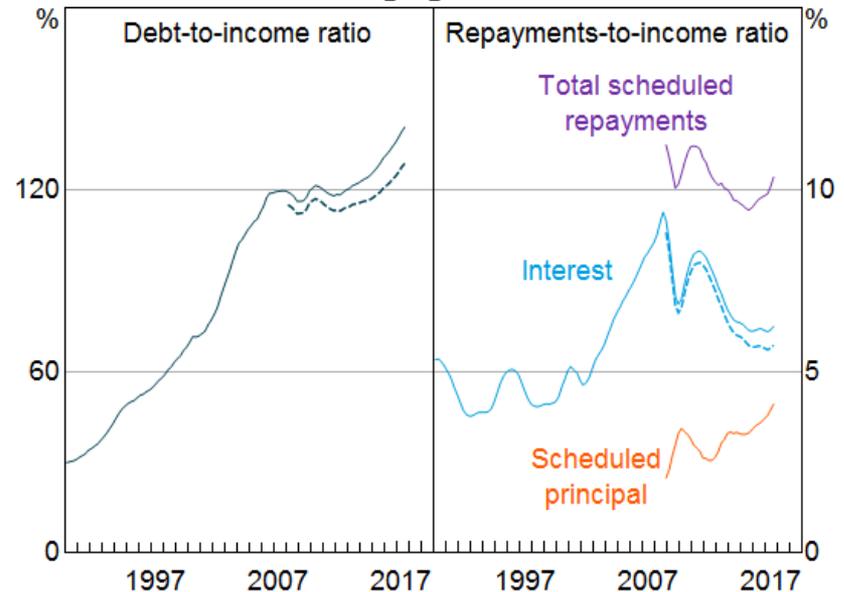


\* Annual household disposable income, after tax, before the deduction of interest payments and including income of unincorporated enterprises

Sources: ABS; APM; APRA; CoreLogic; RBA

Source: <https://www.rba.gov.au/speeches/2017/sp-gov-2017-05-04.html>

## Household Mortgage Debt Indicators\*



\* Excludes non-housing debt; dashed lines are calculations based on debt balances net of offset accounts; income is household disposable income before housing interest costs

Sources: ABS; APRA; RBA

Source: <https://www.rba.gov.au/speeches/2018/sp-ag-2018-02-20.html>

## Data Sources

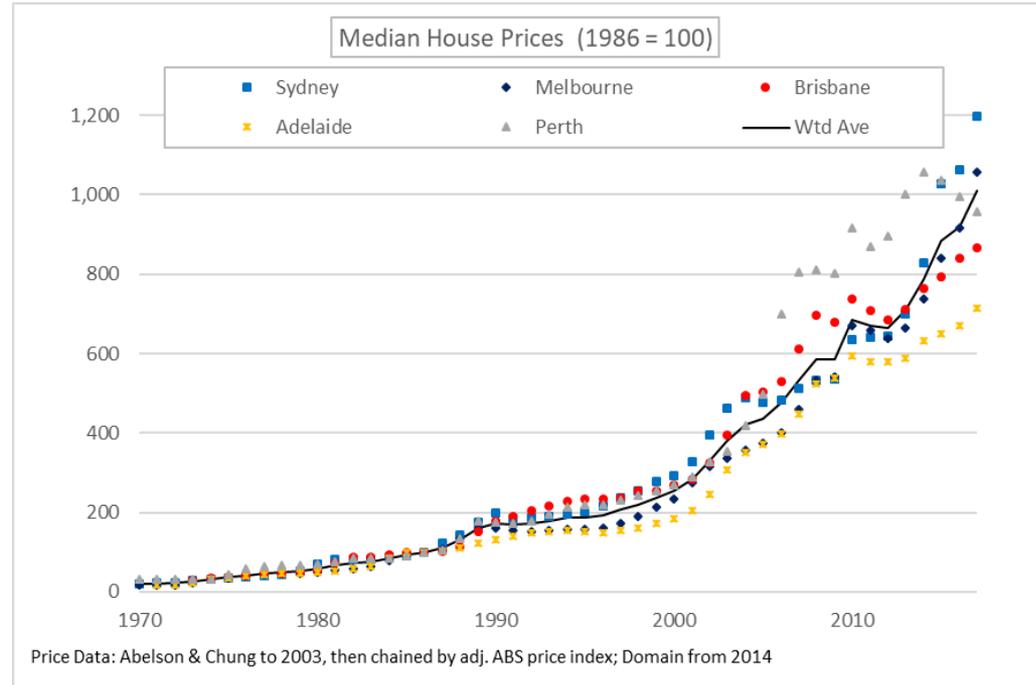
- Abelson & Chung 2006 (median house prices)  
[www.applieconomics.com.au/my/docs/7628/AER-house-prices-australia-2006.pdf](http://www.applieconomics.com.au/my/docs/7628/AER-house-prices-australia-2006.pdf)
- ABS 6416.0 (Residential Property Price Indexes: Eight Capital Cities) [www.abs.gov.au/ausstats/abs@.nsf/mf/6416.0](http://www.abs.gov.au/ausstats/abs@.nsf/mf/6416.0)
- Domain: State of the Market Report (produced quarterly) e.g. [www.domain.com.au/product/house-price-report-march-2018/](http://www.domain.com.au/product/house-price-report-march-2018/)
- Hutchinson & Ploeckl 2018 – MeasuringWorth.com (AWE)  
[www.measuringworth.com/auswages/](http://www.measuringworth.com/auswages/)
- RBA Table f5 (Interest Rates)  
[www.rba.gov.au/statistics/tables/index.html](http://www.rba.gov.au/statistics/tables/index.html)

# The Australian house price “bubble”

Median house prices have grown at about 7.7% per annum since 1986.

This is well above AWE growth of 3.9% per annum in the same period.

What happens when this bubble bursts?

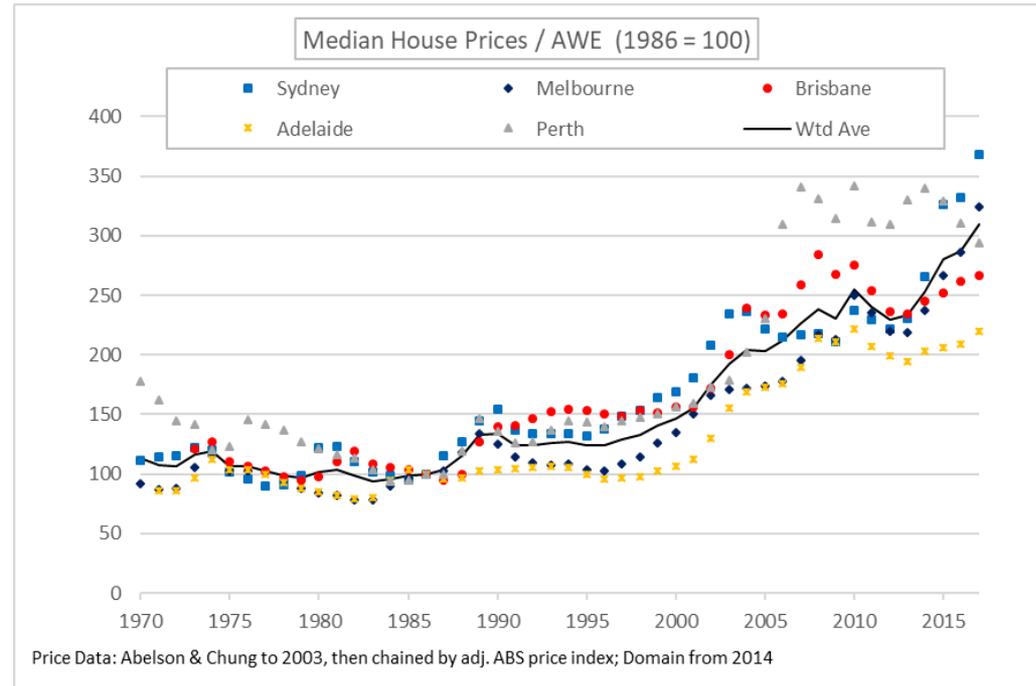


# Australian house prices v AWE

Median house prices broadly grew with AWE from 1970 to 1986.

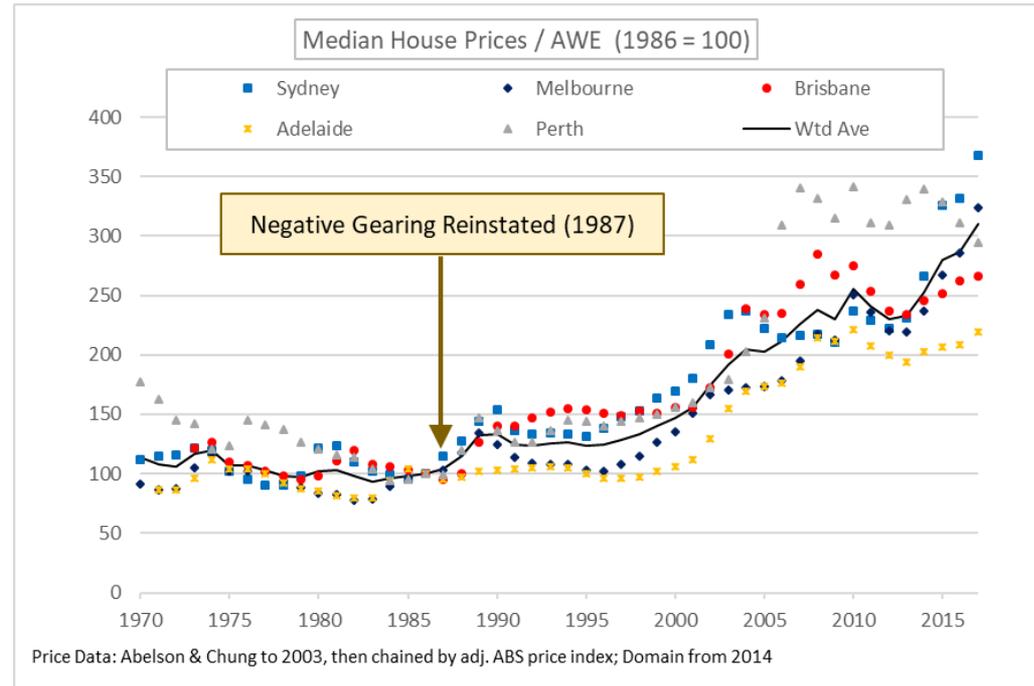
But they have grown much faster than AWE since then.

Why might that be?



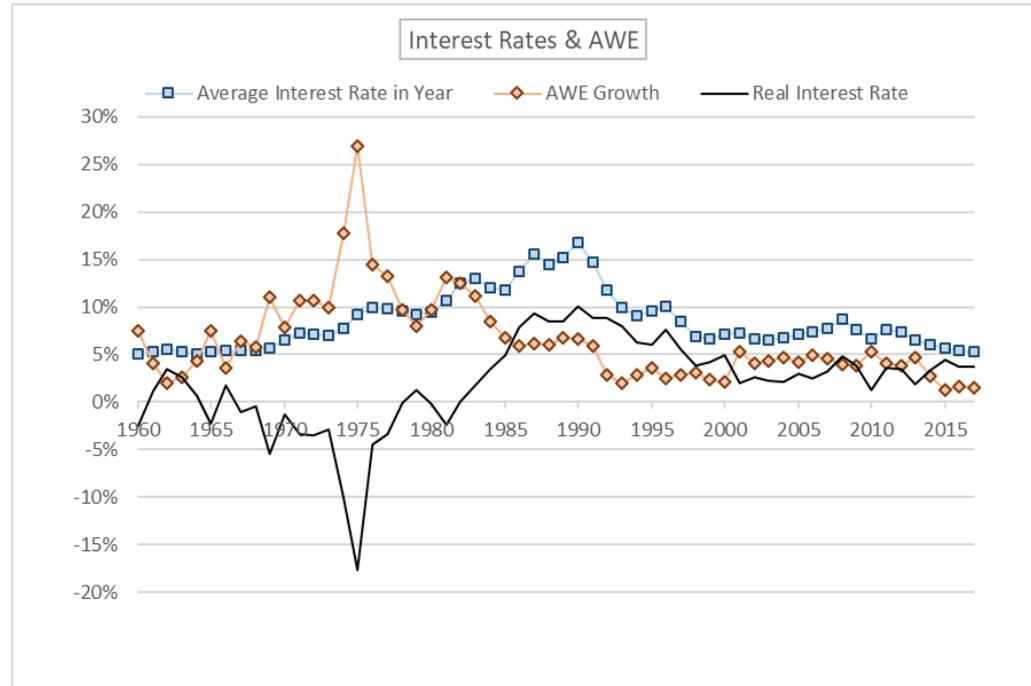
# Australian house prices v AWE

Perhaps it's negative gearing, which has been in place since 1987?



# Mortgage interest rates & AWE

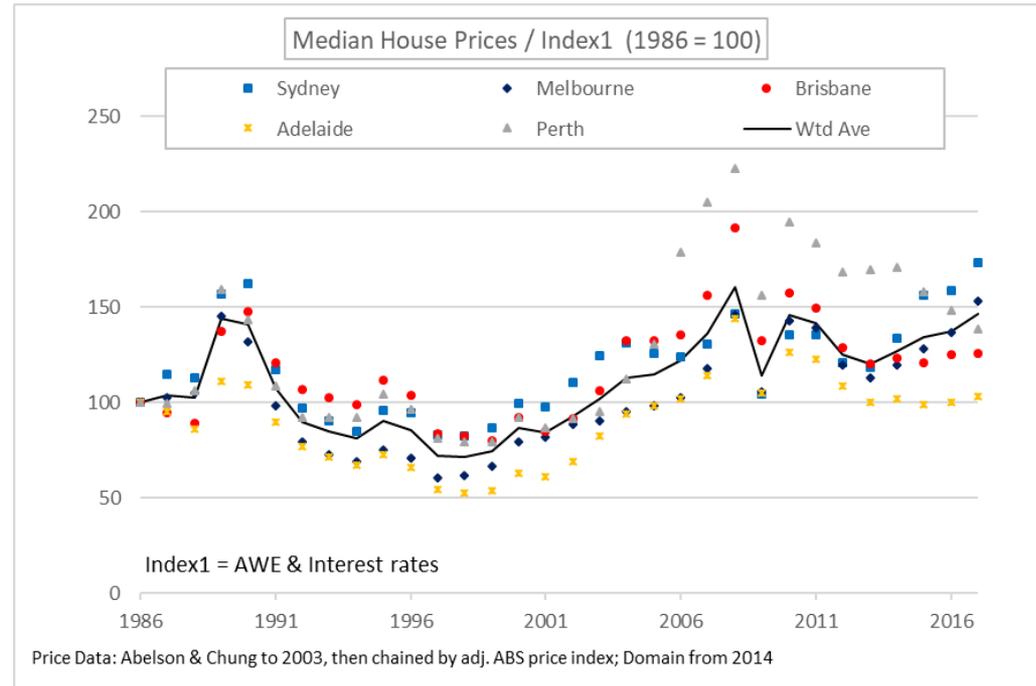
High wage inflation in the late 60s and the 70s, particularly under the Whitlam government, led to growth in interest rates until a rational economic environment prevailed, with positive real interest rates. Interest rates have fallen since then.



# Australian house prices v AWE adjusted for interest rates

Adjusting for interest rates, we can see that much of the growth in house prices since 1986 has now been explained. Short-term variations dominate, but there's still an upward trend.

Is there another factor?

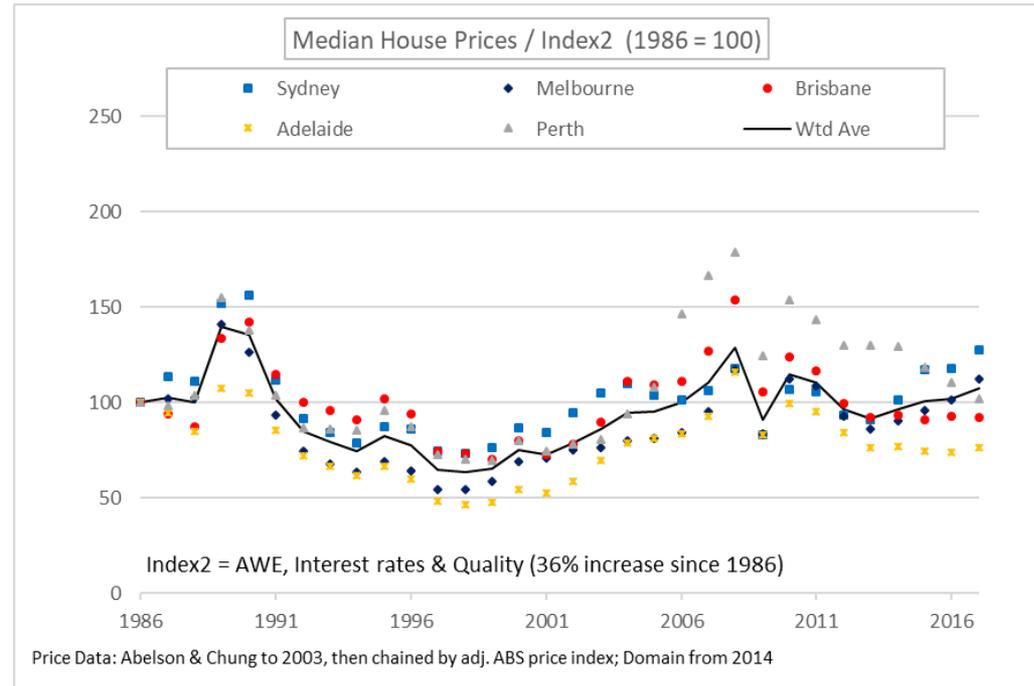


# Australian house prices v index adjusted for quality

Housing quality has increased. Examples include:

- size;
- external amenity;
- heating/cooling; and
- fittings (e.g. in the kitchen or bathroom).

At 1% per annum improvement<sup>1</sup>, national prices are almost fully explained.

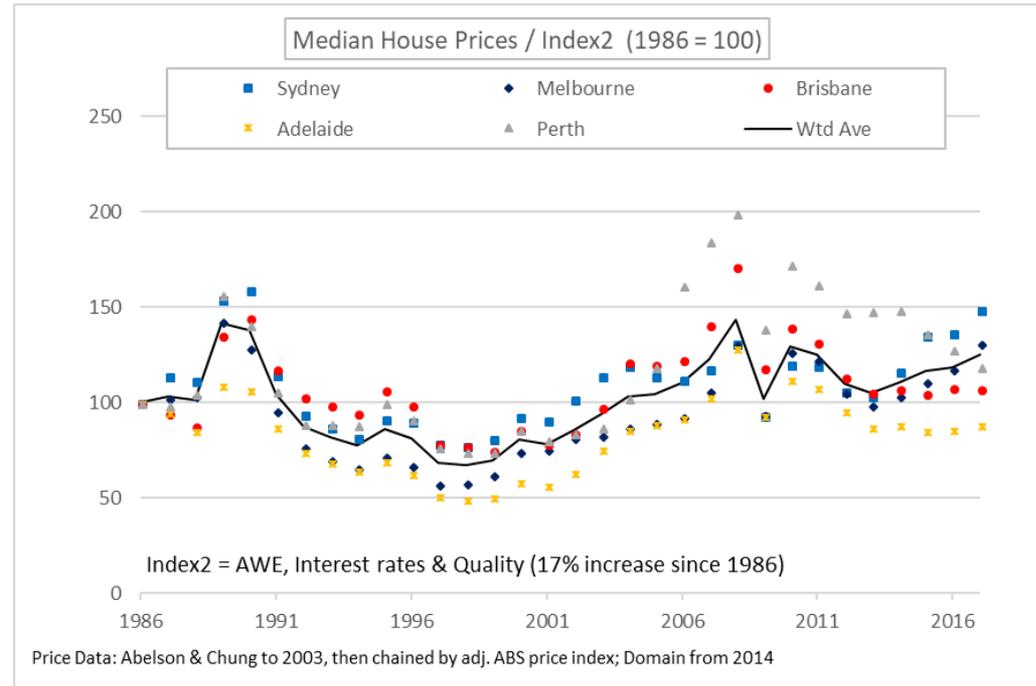


<sup>1</sup> see Abelson & Chung (2006)

# Sensitivity – quality improvement

If we only allow for quality improvement to contribute at half the rate (0.5%pa), then the national average is 25% above the index.

(As you would expect, given the previous two charts.)



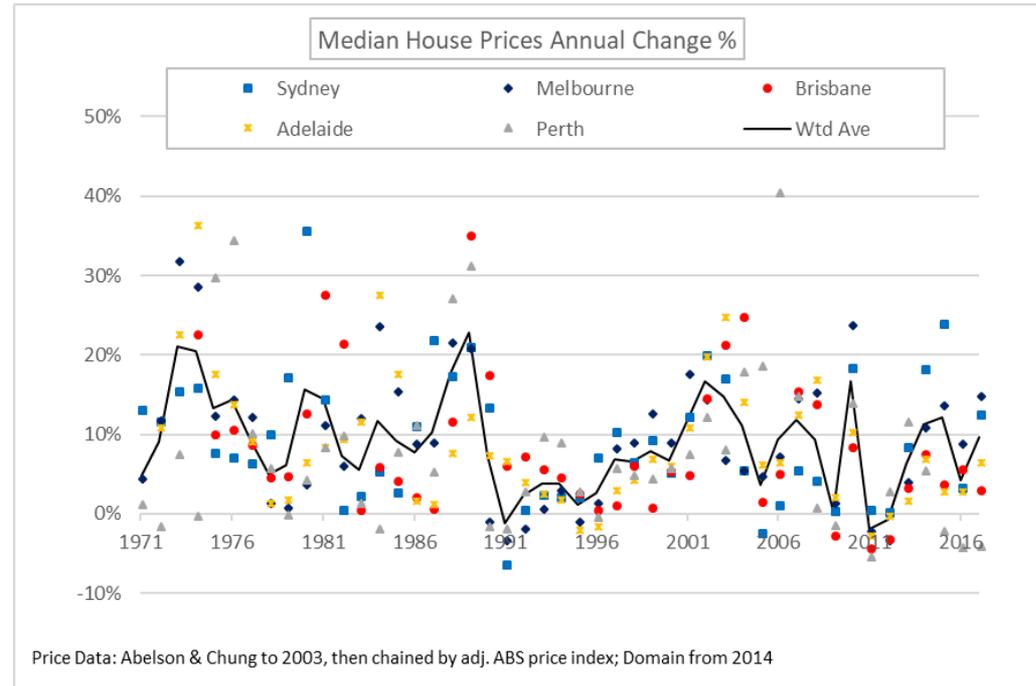
## House prices – relative (un)affordability

Basis	SYD	MEL	ADL	AUS
Base index	+28%	+12%	-24%	+7%
Interest margin 1.5%	+30%	+14%	-23%	+9%
Interest margin 2.0%	+32%	+17%	-21%	+11%
Quality growth 0.5%pa	+49%	+31%	-11%	+25%
Quality growth 0.0%pa	+74%	+53%	+3%	+46%

Unsurprisingly, Sydney appears expensive on any affordability index, especially with a lower allowance for quality improvement. But Adelaide appears cheap. This would likely change somewhat with allowance for city-specific AWE growth.

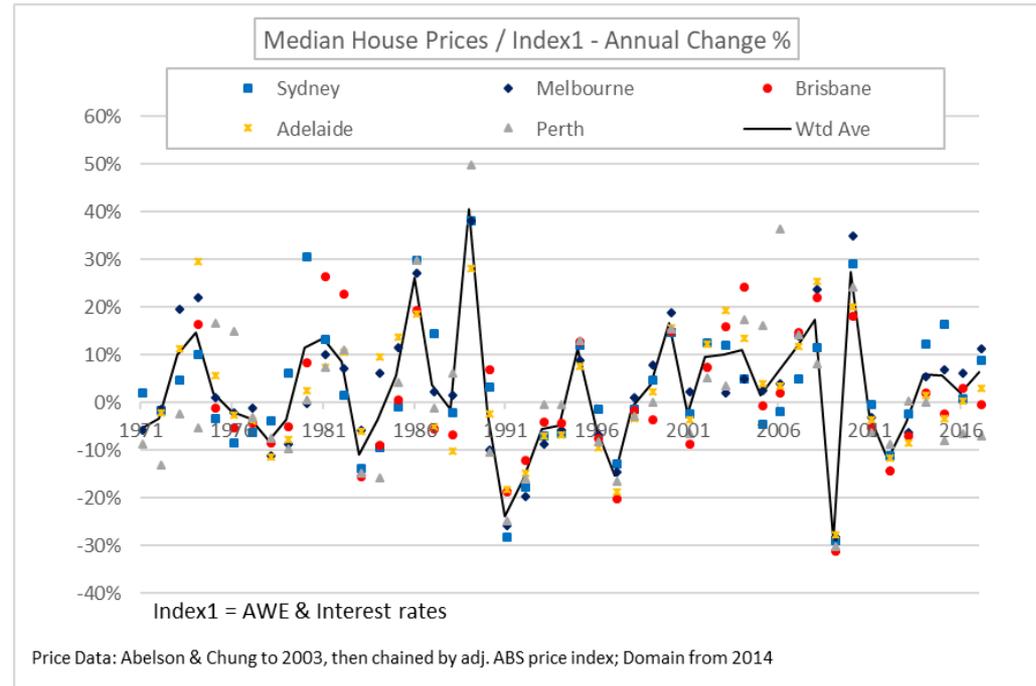
# House price movement

Median house prices seem to have behaved quite well year on year, with an average 2.3% annual increase, although individual cities are more volatile.



# House price movement – affordability change

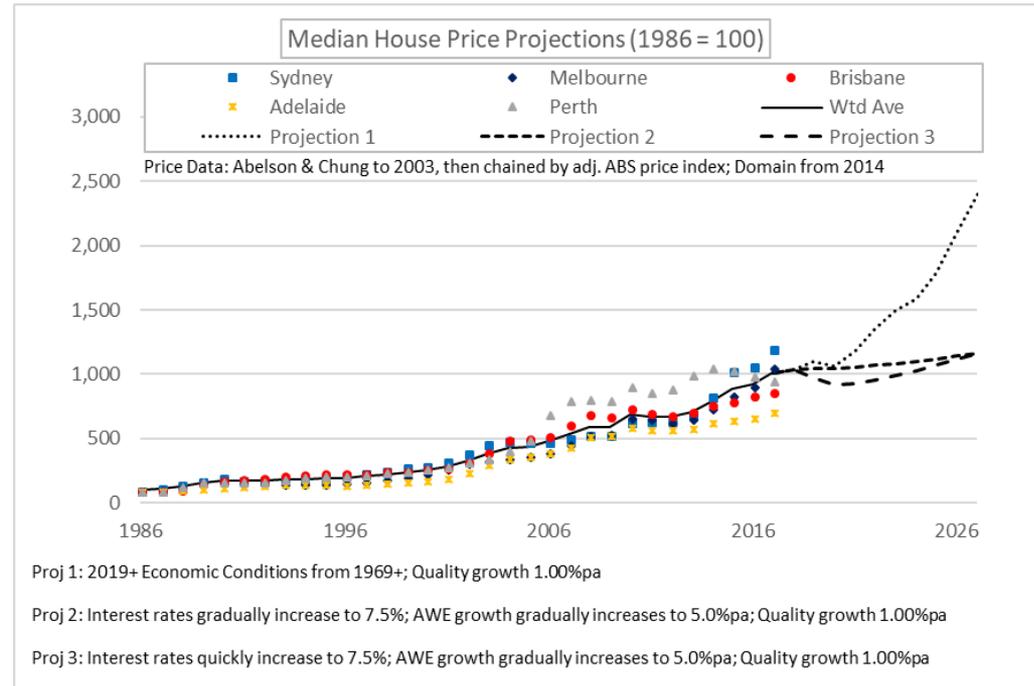
Adjusting for AWE and interest rates, however, a far more volatile picture emerges. In the past, houses have rapidly become much more or much less expensive on an affordability index.



# House prices – where to from here?

A return to late-60s economic conditions would see house prices pause then continue to grow strongly.

Normalising to 7.5% interest / 5% AWE in the long term produces steady average growth with or without a dip.

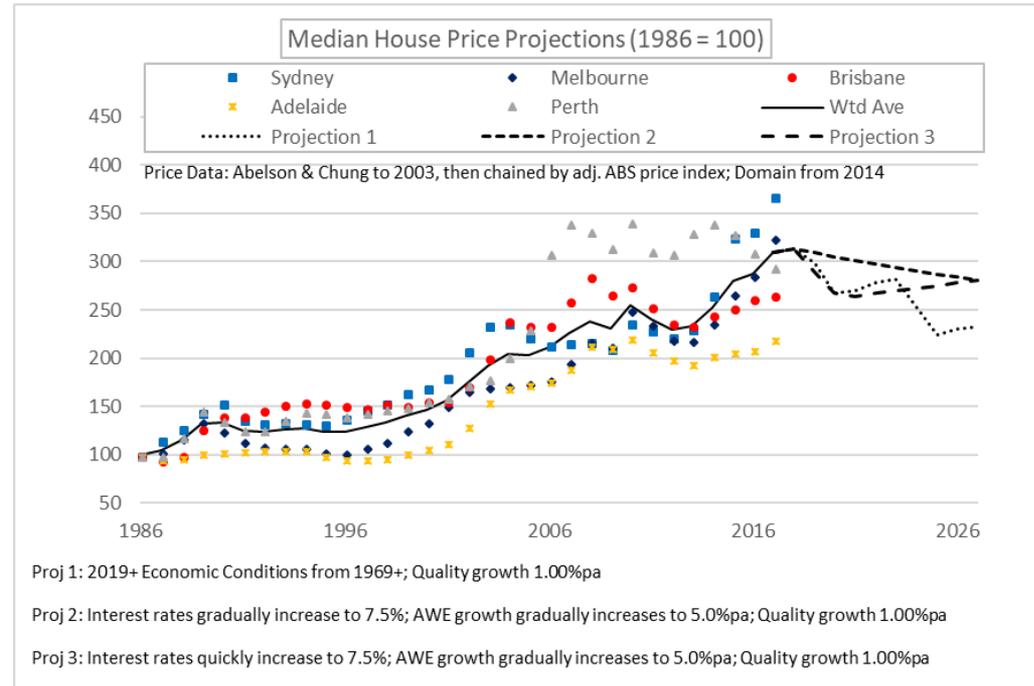


# House prices – where to from here (v AWE)?

The ratio to AWE reduces in all three scenarios.

This is a function of rising interest rates.

Projection 1, which had the greatest price growth, also has the greatest reduction in price to AWE ratio, because interest rates reach 10% in 2025.



# Implications for intergenerational equity

## Questions

If house prices can (largely) be explained by AWE, interest rates and quality, is there an intergenerational equity issue?

What might explain observed deviations and volatility?

What would improve intergenerational equity?

Is it OK to simply rely on rises in interest rates and AWE?