DEMOGRAPHIA

Land Use Regulation:

Comparing Housing Affordability in Sydney, Melbourne, Dallas-Fort Worth and Atlanta

The devastating impact of more prescriptive land use regulation (urban consolidation or compact development) policies on housing affordability can be shown by comparing four comparable metropolitan areas: severely unaffordable Sydney and Melbourne in Australia and affordable Dallas-Fort Worth and Atlanta in the United States.[1]

In 1981, Sydney and Dallas-Fort Worth were approximately the same population. Dallas-Fort Worth has grown much faster and is now nearly 50 percent larger than Sydney. In 1981, Melbourne was larger than Atlanta. Atlanta has also grown faster and is approximately 50 percent larger than Melbourne and more than a quarter larger than Sydney (Figure 3).

Obviously, the demand for housing was greater in the much faster growing markets of Dallas-Fort Worth and Atlanta than in Sydney and Melbourne. Yet, unlike Sydney and Melbourne, house prices did not rise relative to incomes in Dallas-Fort Worth and Atlanta, because the planning systems permitted new housing to be built on cheap land on the urban fringe. In 1981, the Median Multiple in Dallas-Fort Worth was 3.5. By 2008, it had dropped to 2.7. Atlanta had a Median Multiple of 2.6 in 1981 and it remained 2.6 in 2008. These and other liberally regulated metropolitan areas experienced the housing boom, but not the housing bubble.[2]

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By comparison, housing affordability deteriorated in Melbourne, from a Median Multiple of 2.9 in 1981to 8.0 in 2009. Sydney, with its earlier excessive regulation, had a Median Multiple of 4.9 in 1981, but worsened to 9.1 by 2009 (Figure 4).

Urban planning orthodoxy in Australia (very much influenced by thinking in the United Kingdom) contends that it is impossible to provide sufficient infrastructure for an expanding urban area (Section 3). Yet, this has been proven wrong by the two US examples (and many others). Dallas-Fort

[1] Excerpt from the *6th Annual Demographia International Housing Affordability Survey*.

[2] See: http://www.dallasfed.org/research/houston/2008/hb0801.pdf

Worth and Atlanta have grown more than the five major urban areas of Australia[3] combined since 1981, both in urban footprint and in population (more than double the Australian rate). Sufficient new infrastructure was provided and taxes remained low by national standards in Dallas-Fort Worth and Atlanta. Moreover, the ability of fast-growing markets to provide transport infrastructure is illustrated by the fact that Dallas-Fort Worth and Atlanta have average work trip travel times less than Sydney, despite having larger populations and covering more land area than Sydney.[4]

The explosion in Sydney and Melbourne housing prices can be traced to land price increases. For housing to be affordable, the land on which it is built must be affordable. This means that the development ratio (the price of the land ready for house construction to the total house and land package) must be kept at less than 25 percent for new housing on the urban fringe. The balance is the cost of house construction. While the development ratio has been kept within this maximum in Dallas-Fort Worth and Atlanta, rapidly escalating land prices in Sydney and Melbourne have driven the development ratio as high as 70 percent.

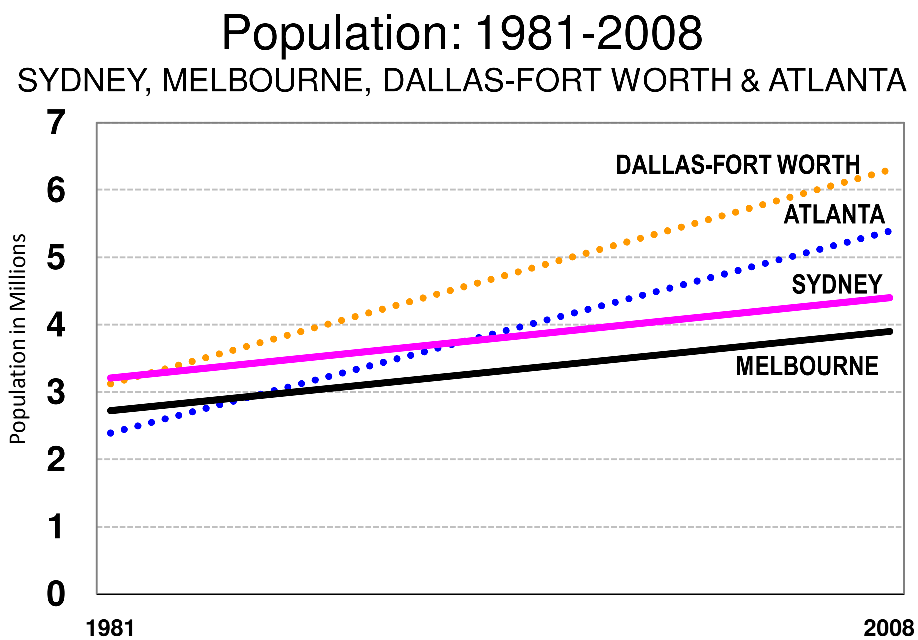

Figure 1

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[3] Sydney, Melbourne, Brisbane, Perth and Adelaide.
[4] Work trip travel time for Melbourne not available.

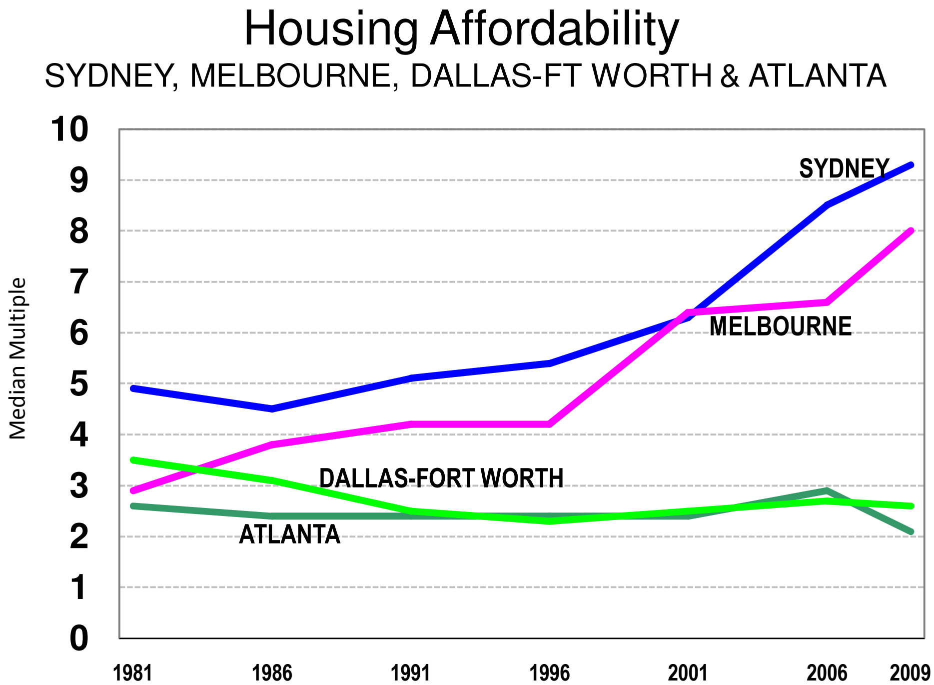

Figure 2

The extent of this increase is illustrated by Housing Industry of Australia data. Construction costs of a standardized house rose only 4 percent relative to inflation between 1973 and 2006 in the major capital cities.[5] The price of the land for building has risen nearly 400 percent over the same period, inflation adjusted. This indicates that 98 percent of the increased cost was in the land, not construction.

… in Sydney, 57 percent of gross annual income … would be required for mortgage repayments for the median priced house

Australia: A Nation in Mortgage Stress: Various measures indicate that any households spending 30 to 35 percent or more of their gross annual income on mortgage repayments are in "mortgage stress."[6] According to the latest data, the median income households in Sydney and Melbourne with a new mortgage on a median priced house would be in mortgage stress. The extent of mortgage stress has become an issue of significant political concern in Australia. According to the National Centre for Social and Economic Modeling at the University of Canberra estimated that more than one-quarter of households with mortgages or renting were in housing stress[7] in 2008.

Already, in Sydney, 57 percent of gross annual income of the median income household would be required for mortgage repayments for the median priced house. The figure would be 50 percent in

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[5] http://economics.hia.com.au/media/land_house_price.pdf.
[6] For example, see: http://www.aph.gov.au/library/Pubs/RN/2003-04/04rn16.htm.
[7] https://guard.canberra.edu.au/natsem/index.php?mode=download&file_id=848. Housing stress at the 30% or more level (mortgage or rent payments).

Melbourne. By comparison, the median income household would have median house mortgage repayments equaling under 20 percent in Atlanta and Dallas-Fort Worth (Table 7).

The difference is substantial. In Sydney, the monthly mortgage payment on a new median priced house would be nearly $3,000 and more than $2,500 in Melbourne. By comparison, in Dallas-Fort Worth, the monthly mortgage payment on a new median priced house would be under $800 and in Atlanta under $700 (Figure 5).[8]

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Australians pay far more for their housing than Americans, and, as a result, have less income remaining to spend on consumer goods and services for themselves and their children. It is likely that this has negative impacts on employment. Moreover, house prices relative to incomes (the Median Multiple) were generally lower in Australia than in the United States as little as two decades ago.

Thus, Australia is poised for much more housing stress. Already, the payment on a new mortgage on a median priced house would place the median income household in mortgage stress. In the longer run, this means that more than one-half of households are likely to enter mortgage distress as the normal turnover of houses continues in the years to come. Further, as the price of land is driven higher by prescriptive land use regulation, the number of renting households in housing stress can be expected to increase as well.

Table 7
Share of Income for Mortgage:
Sydney, Melbourne, Dallas-Fort Worth, Atlanta
(Share of Median Household Income
To Pay Mortgage on Median Priced House)

Metropolitan Area	% of Gross Annual Income
AUSTRALIA	
Sydney	57.4%
Melbourne	50.4%
UNITED STATES	
Dallas-Fort Worth	13.4%
Atlanta	16.8%

New mortgage in September 2009

[8] Assumes a 10% down payment, and an annual mortgage interest rate loan at 5.75%. The reality is that the difference between US and Australian mortgage payments would likely be even more than shown here. Interest rates are generally higher in Australia and 30-year fixed interest rate mortgages are far more prevalent in the United States than in Australia. This works to the advantage of US home owners, even in times of relatively high interest, because of opportunities for refinancing at lower interest rates. Payment estimates are in national currency.

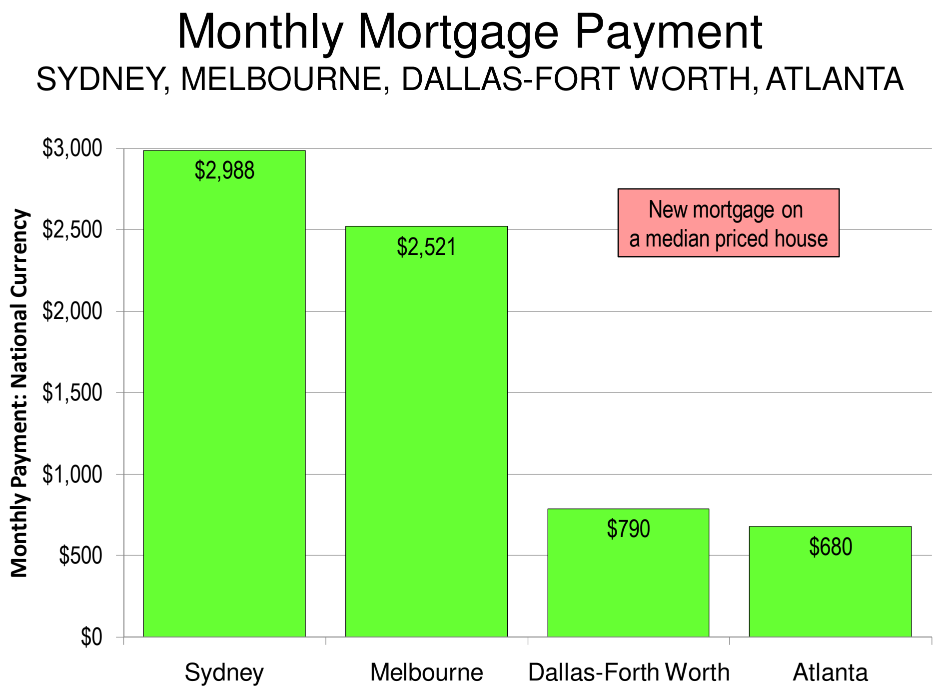
Monthly Mortgage Payment
SYDNEY, MELBOURNE, DALLAS-FORT WORTH, ATLANTA
Monthly Payment: National Currency
$3,000
$2,500
$2,000
$1,500
$1,000
$500
$0
$2,988
$2,521
$790
$680
New mortgage on
a median priced house
Sydney
Melbourne
Dallas-Forth Worth
Atlanta

Figure 3