

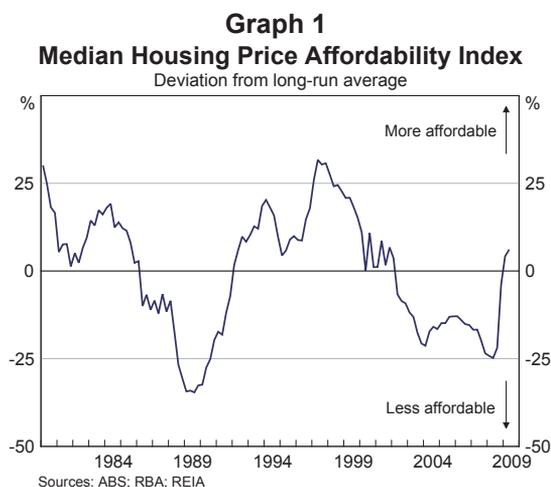
HOUSING MARKET DEVELOPMENTS

Address by Dr Tony Richards, Head of Economic Analysis Department, to the CEDA Housing Forum: A National Round-up, Sydney, 29 September 2009.

It is looking increasingly clear that Australia has avoided the large falls in housing prices seen in some other countries over the past two years or so. This is a good thing, because of the macroeconomic difficulties that have accompanied those price falls in some countries. But, looking forward, the risk is that we might move towards undesirably strong growth in Australian housing prices. This raises a number of concerns, which seem to be widely shared in the community, as is witnessed by conferences such as this one.

In this talk, I am going to cover three topics: developments in the cost of housing in Australia; developments in supply and demand, especially for new housing; and the incidence and consequences of high housing prices.

First, let us consider developments in housing affordability. One standard measure of affordability for home ownership is the ratio of average household disposable income to the principal and interest repayments on a new mortgage for a median-priced dwelling (Graph 1).¹ This measure shows a significant improvement in affordability in Australia over the past year or so.



This improvement is mainly due to movements in interest rates rather than in house prices (Graph 2). Mortgage rates are particularly low at present and, as the Bank has noted on a number of occasions, it is not reasonable to expect that interest rates will stay at the current low levels indefinitely. When they do rise towards more normal levels, discussions on housing affordability will again focus more on the level of housing prices relative to incomes.

Over the past five years, housing prices have risen less rapidly than incomes, after a long period when

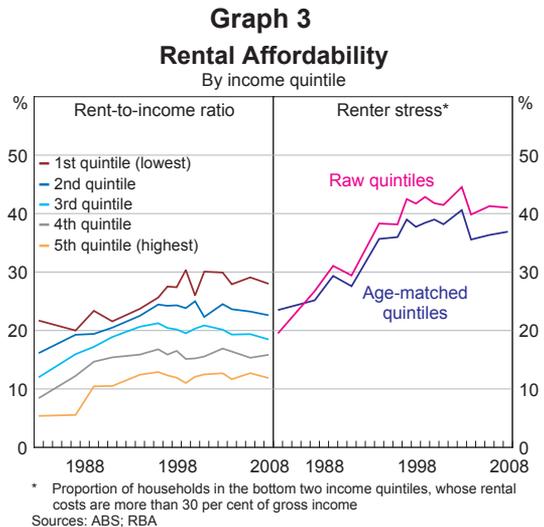
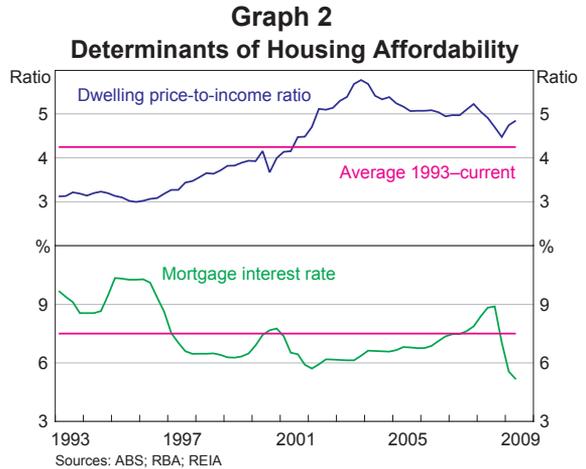
¹ It should be noted that measures such as this one do not incorporate the effect of grants for first-home buyers from the Federal and state governments.

the reverse was true.² This was a positive development, which reduced the vulnerability of our economy going into the global financial crisis. Nevertheless, the ratio of Australian housing prices to incomes is still high relative to earlier decades, or compared with other countries.

Given that housing can be used for either owner-occupation or rental use, the long-run upward trend in the purchase price of housing has also affected rental affordability. Here we can look at the Survey of Income and Housing which recently became available for 2007/08 (Graph 3).³ It shows that renters over the past decade have tended to pay a noticeably larger proportion of their incomes in rent than they did 25 years ago, although there is relatively limited evidence of an increase in the current decade.⁴ Housing stress remained quite high among renters in 2007/08.⁵

The second set of issues concern supply and demand, especially for new housing.

In recent years, there has been much discussion of the extent of



- 2 The dwelling price to income ratio is constructed using median dwelling price data from the REIA and average household disposable income data from the ABS national accounts. The dwelling price data include both houses and apartments. The household disposable income data (which exclude unincorporated enterprises) are after tax and before the deduction of interest payments, as it is this measure that best reflects funds that are available to service loan repayments. The dwelling price to income ratio presented shows similar trends to that constructed using dwelling price data from the ABS, APM and RP Data-Rismark, in that the different measures all show a declining trend in the ratio over the past five years or so and that the current level is well below the 2003 peak in all cases, although the level differs across the range of measures.
- 3 Given that household income is significantly affected by life-cycle factors, the data in the left panel of Graph 3 and in Graph 8 use age-matched income quintiles. In particular, all households in each age group are sorted by income, with the data shown in the graph being for the aggregate of the particular income quintiles from each age group.
- 4 The fact that the price to income ratio has risen more over the medium term than the rents to income ratio reflects a downward trend in rental yields over this period.
- 5 This measure of housing stress is defined as the proportion of lower-income (first and second quintile) renter households for whom spending on rent accounts for more than 30 per cent of income. Two estimates are shown: one with income quintiles defined directly from the whole population and the other that first sorts all households by age group before constructing age-matched income quintiles.

the supply shortage in the housing market, or the extent to which supply has fallen short of ‘underlying demand’. We often hear about the concept of underlying demand for housing, although it is not actually a variable that we can observe. It is essentially an estimate of what the demand for newly built housing might have been, given the observed growth of the population, but abstracting from the economic cycle, interest rates, etc.

I said in a talk earlier this year that most calculations available then put underlying demand at something like 180 000 to 200 000 dwellings per year. However, I noted that such figuring was based on simply extrapolating earlier trends in household size and ignored the likely impact of prices on the demand for housing. At some point, the overall demand for housing will be affected by the higher cost of housing. For example, with housing – both owner-occupied and rental – more expensive than in the past, we might expect to see some young adults choosing to live with their parents for longer. We might expect some households to look for an extra flatmate rather than leaving a bedroom vacant. Some owners of holiday homes or second homes might have become more inclined to sell them, with those houses then occupied full-time.

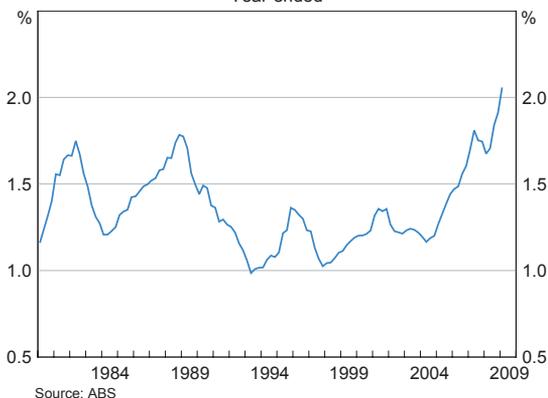
Since then we have seen some interesting additional evidence on the factors influencing underlying demand.

In practice, underlying demand is typically calculated as the sum of four components:

- demand due to natural growth of the population;
- demand due to trends in household size (i.e. the number of people per dwelling);
- demand for new houses that replace houses that have been demolished; and
- demand for second or vacant homes.

I am going to focus on the first two of these. By far the largest factor is demand due to the growth of the population. We have had strong population growth in recent years, coming from higher rates of both natural population increase and immigration. Holding household size constant, strong population growth implies the need for substantial amounts of new housing. Indeed, the population estimates that came out last week showed growth of 2.1 per cent over the

Graph 4
Population Growth
Year-ended



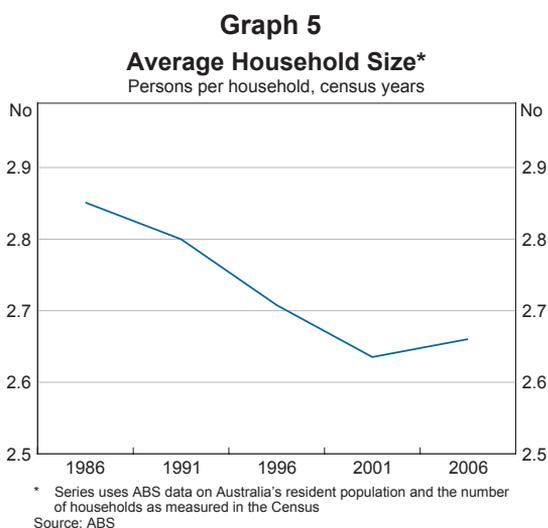
year to the March quarter (Graph 4), which of itself would imply demand for around 165 000 new dwellings a year, which is well above the construction level of recent years. This highlights the need to have a responsive supply side, something I will return to.

The second major component of underlying demand has traditionally been the demand created by falling household size. Over many decades, the average household size has fallen significantly, both reflecting demographic factors (e.g. smaller

families, which meant that we needed more housing for a given population) and rising incomes (which meant that we wanted more housing for a given population). If we extrapolated the trend into this decade, we would reach the conclusion that there was a significant amount of underlying demand from this source.

But the latest data for 2006, the most recent Census year, reveal an interesting fact. Although these data are subject to revision, the ABS estimates of the population and the number of households now imply that the long decline in average household size was interrupted between 2001 and 2006 (Graph 5). Indeed, average household size is estimated to have risen slightly over this period, a marked change from earlier decades.

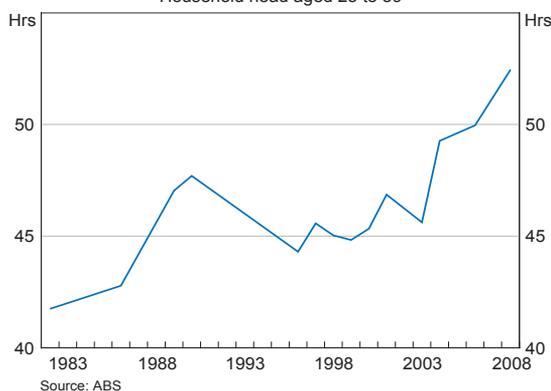
This may partly reflect demographic factors or perhaps that growth in population turned out to be surprisingly strong. However, a reasonable hypothesis is that it also partly reflects the phenomenon I suggested earlier – that it might be partly due to the significant rise in the cost of housing over recent decades. That is, the effective or actual demand for housing, as opposed to the underlying demand, will partly depend on its price. Hence the ‘undersupply’ of housing might not be as large as sometimes thought. But this is not necessarily something that should reassure us – it may be because the higher cost of housing – partly reflecting supply-side problems – has choked off some of the demand that might otherwise have existed.



So the demand side is providing us examples both of factors contributing to strong demand and higher prices, and of other elements of demand responding to those higher prices. Indeed, there is another example of this in the Survey of Income and Housing. The survey allows us to calculate the average hours worked by households. The data show a significant increase over several decades in the hours worked by households headed by those aged 25–39 years, the age when households tend to enter into home ownership (Graph 6). This is presumably partly related to the rise in housing prices, both as a cause and effect. In particular, social trends such as the rise in female labour force participation have increased incomes, which will have contributed to stronger demand for housing. But, to the extent that this has boosted the price of housing, it will have contributed to some households needing to work longer hours.

I will turn now to the supply side. In an ideal world, supply would be quite responsive to changes in underlying demand, and only a limited increase in the overall price of housing would be required to bring on new supply, either from newly developed land on the fringes or conversion of land from lower- to higher-density use closer to the city centres.

Graph 6
Weekly Hours Worked per Household
 Household head aged 25 to 39



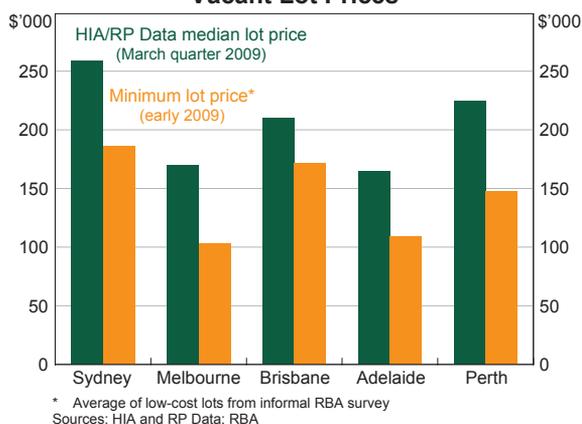
However, there is a wide range of evidence that the supply side has not been all that responsive in recent years. Here I am thinking more of the problems that have been with us for some time, rather than the current shortage of financing for apartment building and land development, which will hopefully ease as conditions continue to normalise in financial markets.

In particular, even if one discounts some of the reports from the housing and land development

industry groups, it is clear there have been problems in recent years in land zoning, and in the development and building approvals processes. An extreme example was perhaps on the fringes of Sydney, where in the middle of this decade, proposed infrastructure contributions in some new developments would have come to as much as \$100 000 per lot.⁶ Fortunately, there has been some progress in Sydney where these charges have fallen somewhat of late, although infrastructure charges have recently risen in some other states.

One summary indicator of the land release and development process may be the cost of land on our city fringes. Earlier this year, our staff looked at the cost of lower-priced blocks of land in new developments, and found that even the lowest-cost blocks appear fairly expensive in Sydney, Brisbane and Perth (Graph 7).⁷ And it should be noted that the average price of all transacted lots is significantly above these levels.

Graph 7
Vacant Lot Prices



Factors that boost the cost of new land on the fringe and reduce new supply must inevitably impact on the broader cost of housing in our cities. But zoning and development approval issues are also very important closer to our city centres. Here, the Bank's liaison program has indicated that the stock of remaining available new 'brownfield' sites for housing may be relatively limited compared with the past. Given that some increase in density is inevitable as the populations of our cities grow, this will put greater focus on the

6 This includes actual or proposed payments to local councils, the state government and utility providers.

7 The prices were typically for blocks averaging 400–450 square metres in size (a little smaller for Adelaide) and about 40 kilometres from the centre of the city (about 30 kilometres for Adelaide and Brisbane).

replacement of existing housing with higher-density housing. Of course, this process is frequently unpopular with existing residents, so there are all sorts of difficult issues for state governments and local councils to deal with. Nevertheless, if housing affordability is a concern, it will be necessary to keep working to reduce impediments to the construction of new housing, both inside our cities and at the fringes. Good public transport will also be particularly important, both for new developments on the fringe and to make it more feasible to commute into our major cities from nearby urban centres.

To summarise the supply and demand situation, we have had strong demand for new housing in recent years coming from strong income and population growth, but there have been a number of factors on the supply side that have combined to keep the supply of new housing below where it would have been in a more responsive environment. As a result, we have had the combination of higher prices and lower supply than might otherwise have occurred.

Over the past five years, our incomes have grown, with per capita real GDP 9 per cent higher on average than over the preceding five years. And there are many more of us (average annual population growth has been 340 000 over the most recent five years, up from 240 000 over the prior five-year period, an increase of around 40 per cent). Yet the number of dwellings we have built has not risen: commencements of new housing over the past five years have averaged around 150 000 dwellings, versus around 155 000 over the previous five-year period. It would not be surprising if this was one factor that had contributed to the increase in the cost of housing over the past decade.

My third point is a reminder on the consequences of higher housing prices.

It is important to remember that housing is a consumption item. We all need to consume some level of housing services, either rented or purchased. So a higher level of housing prices and rents allows less spending over our lifetimes on other items. And there are some important generational and income distributional aspects to changes in housing prices and rents. Lower-income households are less likely to own housing, either their own home or an investment property, than higher-income ones (Graph 8). So when the price of housing rises, higher-income households tend to benefit at the expense of lower-income households. As I have noted before, as a nation, we are not really any richer when the price of housing rises, but the more vulnerable tend to be hurt.⁸

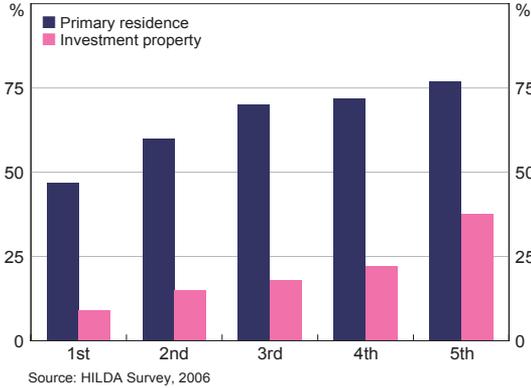
In conclusion, I think it is becoming well understood that supply-side factors, in addition to the well-known demand-side ones, have contributed to the relatively high level of housing prices in Australia. In addition, the social impacts of declining housing affordability are becoming well understood.

Fortunately, there has been some progress on a number of fronts. Indicators of private home-building have been picking up since late 2008, and completions in 2009/10 are likely

⁸ See my March 2008 talk to the Melbourne Institute Conference. For example, see also Bajari P, CL Benkard and JR Krainer (2005), 'House Prices and Consumer Welfare', *Journal of Urban Economics*, 58(3), pp 474–487. These authors show that 'there is no aggregate change in welfare due to price increases in the existing housing stock. This follows from a simple market clearing condition where capital gains experienced by sellers are exactly offset by welfare losses to buyers ... [W]hile price changes do not result in aggregate changes [in welfare] ... this is far from true at a disaggregated level ... Housing inflation involves a redistribution of income between those buying and those selling their homes' (pp 474, 483). Willem Buiter has reinforced this point more recently: see Buiter WH (2008), 'Housing Wealth Isn't Wealth', NBER Working Paper No 14204.

Graph 8
Property Ownership Rates

By income quintile, per cent of households



to be well above the low levels of 2008/09. An expansion in the supply of public housing is also occurring, after a long decline in its share in the total dwelling stock. In addition, governments, both state and Federal, are taking some steps that will help to free up the supply side.

But clearly there is scope for further progress. Population growth and the demand for housing are strong. Furthermore, as the recovery picks up steam, labour shortages in the building industry may again

emerge. Looking ahead, we can be fairly confident that the housing market, like other markets, will clear. The task for public policies is to help ensure that this occurs with relatively higher construction volumes and lower growth in prices, rather than vice versa. ❧