

HOUSING SUPPLY AND AFFORDABILITY

Address to the Council of Capital City Lord Mayors'

Towards a National Urban Policy Summit

27 May 2010

Dr Steven Kennedy*

General Manager

Infrastructure, Competition and Consumer Division

Australian Treasury

* I am grateful to Ignatius Forbes and Michael Hunter for much help in preparing this speech, and to Andrew Harvey, Leonie Holloway, Paul McBride and Richard Murray for helpful comments.

Thank you for your invitation to speak to you today.

The Treasurer released in February of this year the third Intergenerational Report (IGR). The IGR outlines the prospect for significant population increases to 2050, much of which is projected to occur in Australia's capital cities.¹

More precisely, around two-thirds of this growth is projected to occur in South East Queensland, Sydney, Melbourne and Perth, which are also the areas the National Housing Supply Council tells us will experience the greatest housing pressures.²

Managing these population increases will no doubt create major challenges, but also significant opportunities to improve urban amenity, transport and housing.

While many of the policies and governance arrangements that will determine the success or otherwise of meeting these challenges are outside the direct responsibility of the Federal Treasury, we have a keen interest in understanding developments in our major cities.

¹ Commonwealth of Australia (2010) Intergenerational Report 2010.

² National Housing Supply Council (2010) 2nd State of Supply Report. Canberra, Australia. pp xiii (Page xiii – “around two thirds of the additional [housing] demand is projected to be in and around four of the major cities: Melbourne (19 per cent), Sydney (16 per cent), Perth (10 per cent) and Brisbane and surrounding areas in south-east Queensland (21 per cent).

One reason for our interest is the central role that cities play in delivering housing to the majority of the population. And, it is developments in the housing market that I would like to focus on today.

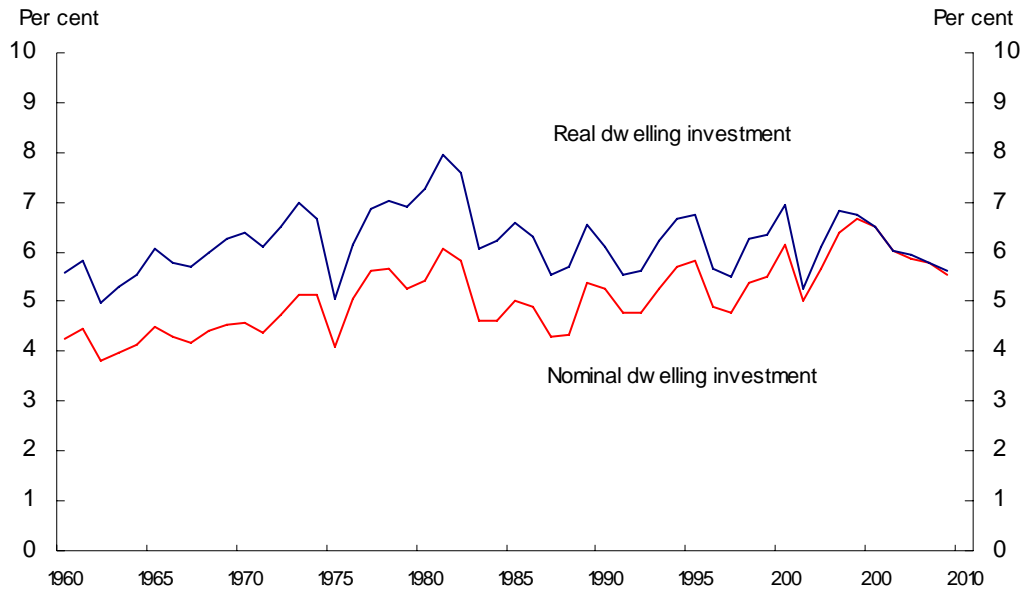
The state of the housing market

It seems that the state of the housing market is never far from the headlines. This is not surprising as housing affects us on many levels. It provides shelter, it provides a home for our family and for many of us it represents our most significant investment.³ Housing also represents a key component of the economy with around 6 per cent of national output (GDP) allocated to new housing construction and renovations and this percentage has changed little over the past 10 years.⁴

³ As Luci Ellis (2010) from the RBA outlined last week in a speech to the Financial Review Residential Property Council Conference, purchasing a house is the 'biggest purchase most of us will make', and that housing accounts for '60 per cent of household assets in Australia' and as 'an asset class worth almost \$4 trillion'.

⁴ From the perspective of activity rather than income that is, real GDP rather than nominal GDP, housing activity actually makes up a slightly small proportion of total activity than in past years.

CHART 1: DWELLING INVESTMENT AS A PROPORTION OF GDP



Source: ABS

While the amount of income Australians allocate to housing construction has changed little, the price of housing and in particular the land component of housing, which is not reflected in measures of GDP, has changed dramatically.

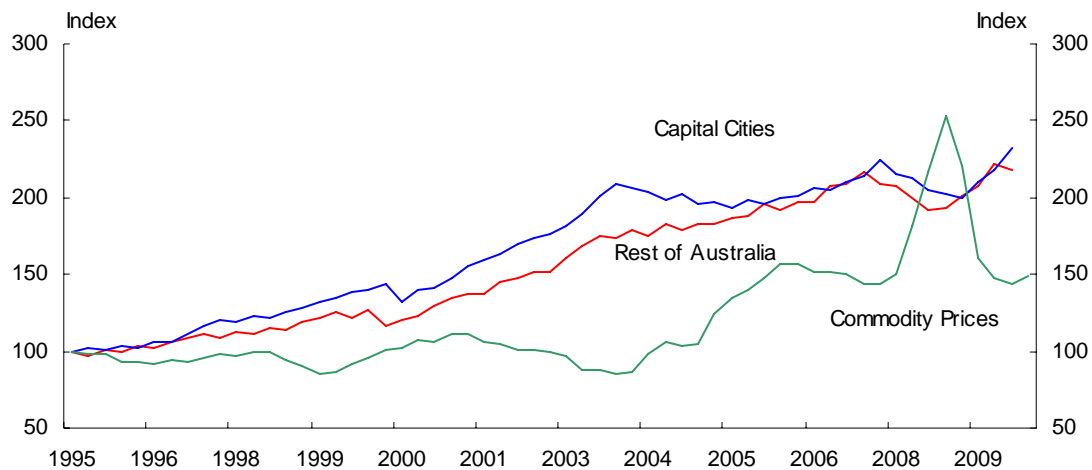
Since 1995, real house-prices across Australia have grown by around 130 per cent.⁵ This is an annual increase of nearly 6 per cent per annum. Real house-price growth provides an indication of the extent to which house-price growth has exceeded inflation.

⁵ Australian Property Monitors (2010) www.apm.com.au

To provide some further perspective on the size of these price increases, non-rural commodity (mineral) prices deflated by the CPI have grown by around 50 per cent over the corresponding period.⁶

CHART 2: GROWTH IN REAL HOUSE PRICES

1995 = 100



Sources: ABS; APM

Reflecting the increases in house prices, Australian households are the fourth most indebted households in the OECD. And the ratio of house prices to household income (a commonly used indicator of housing affordability) while having fallen during 2008, is still well above the levels of previous generations and is the fourth highest in the OECD.

This rapid growth in house prices was influenced by a number of factors that drove the demand for housing. Between the mid 1990s and 2003, the major drivers of housing demand were predominantly growing incomes, more importantly lower real and nominal interest

⁶ Reserve Bank of Australia Statistical Tables – index of commodity prices, Non-rural component, Available at <http://www.rba.gov.au/statistics/tables/xls/g05hist.xls>

rates, and increased access to credit, all of which increased households' capacity to pay for housing.

But it wasn't just that interest rates were lower in this period. Household expectations of future interest rate increases probably also fell in line with lower inflation expectations. Thus, households likely re-evaluated their ability to pay for housing into the future reflecting an expectation of ongoing lower interest rates.

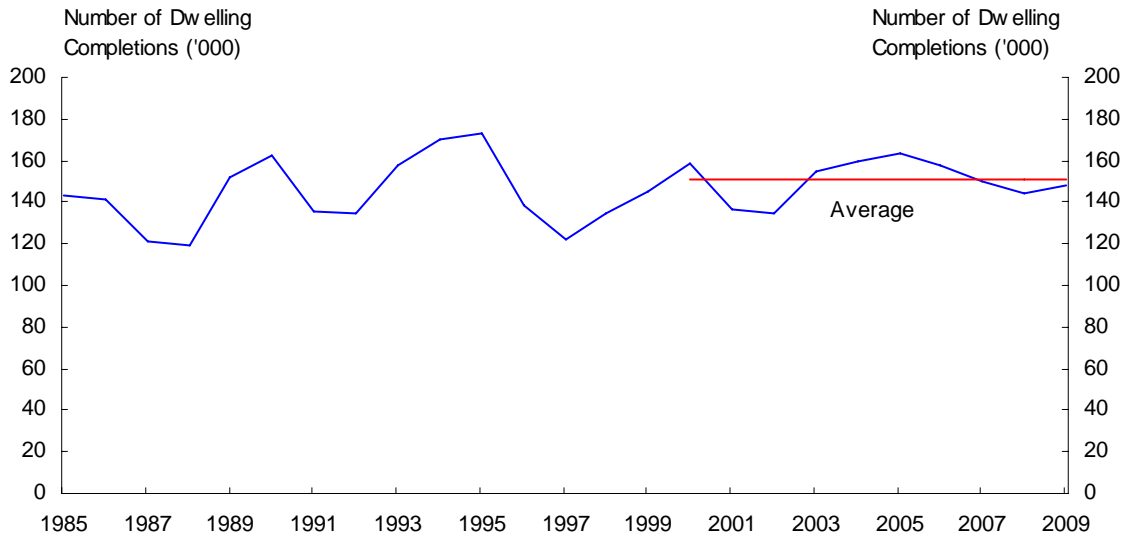
In 2004, in most cities, house price growth stalled. However, from around 2006 onwards, house prices began to increase again, this time also reflecting another demand driver – strong population growth.

Strong population growth would typically drive demand for additional dwellings. This is a little different to what happens when incomes and interest rates tend to drive demand, where you would expect to see increased demand for higher quality housing as well as additional dwellings.

In circumstances where demand is increasing strongly, one would typically expect to see additional supply. However, despite sustained demand for housing, the national housing build has changed little over the past decade. It seems Australia has had trouble building much more than around 155,000 new dwellings per annum in recent years.⁷

⁷ Australian Bureau of Statistics (2010), Series 8752.0, Building Activity.

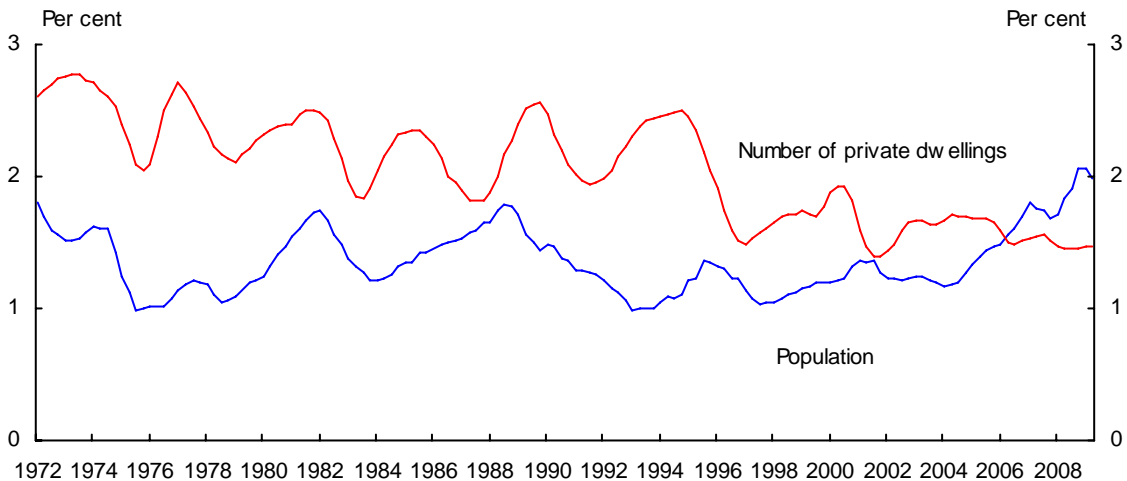
CHART 3: NUMBER OF AUSTRALIAN DWELLING COMPLETIONS



Source: ABS

And remarkably, population growth now exceeds growth in the numbers of dwellings.⁸

CHART 4: DWELLING AND POPULATION GROWTH



Sources: ABS; Treasury

So a question worth asking is why haven't we and why aren't we building more dwellings?⁹

⁸ See Lowe (2010), whose data show that this has not occurred in the previous 50 years.

Why worry?

I am occasionally asked why I am concerned about developments in the housing market.

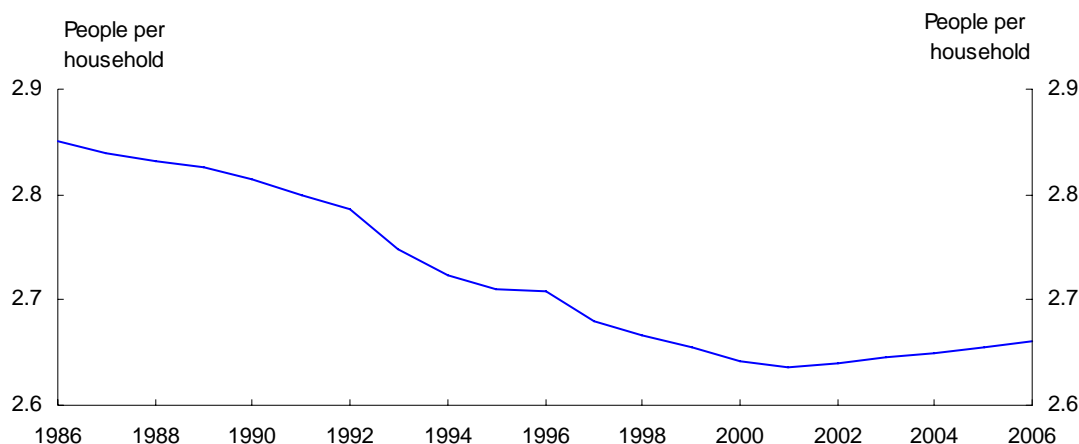
It is put to me that building houses and units takes time, supply will eventually respond to strong demand and even if supply doesn't fully respond to the increase in demand, prices rise to clear the market. Moreover, other adjustments will take place such as kids staying home for longer and that may not really be such a bad thing, though some parents may not see it this way.

We have perhaps already seen some of these adjustments with for the first time in decades the number of people per dwelling rising between 2001 and 2006.¹⁰

⁹ A question many have been asking, including the RBA. My analysis of the state of housing market draws heavily on a number of excellent speeches given over the past two years by staff from the RBA on the housing market. See for example, Richards (2008 and 2009), Ellis (2010) and Lowe (2010).

¹⁰ See Richards (2009) for further discussion.

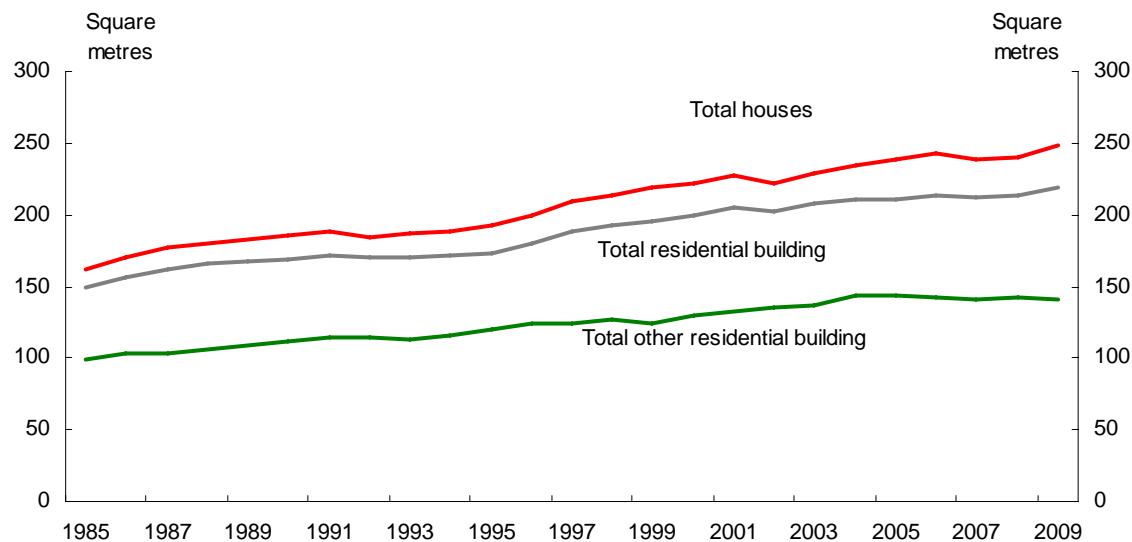
CHART 5: AVERAGE HOUSEHOLD SIZE



Source: ABS Census; Treasury

It is also the case that many people are living in much larger homes today with fancier kitchens and a range of consumer durables, such as large flat screen televisions, that would have been hard to imagine even a decade ago.

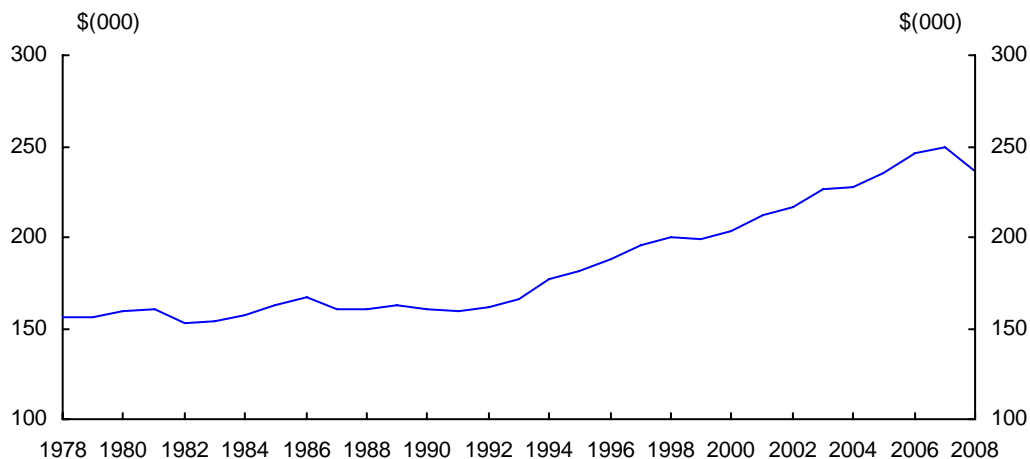
CHART 6A: AVERAGE FLOOR AREA OF NEW RESIDENTIAL BUILDINGS¹¹



Source: ABS Survey

¹¹ Note: Survey records with floor area data less than 25 square meters and greater than 1800 square meters per dwelling for new houses and floor area of less than 25 square meters and greater than 800 square meters per dwelling for new other residential dwellings have been excluded from the analysis due to the unreliability of the data.

CHART 6B: REAL EXPENDITURE PER DWELLING



Source: ABS

There is acknowledgement that in circumstances where supply doesn't respond to demand, prices and rents will rise and in general people will spend more on housing – but it is also put to me that these are the inevitable consequence of living in a prosperous country.

I am not so sure we should be quite so sanguine about these developments in the housing market. For the rest of my talk, I am going to use an old tried and true economist's framework, namely efficiency and equity, to consider whether perhaps we should be more concerned about the apparent lack of supply responsiveness in the housing market.

Efficiency and Equity

What are the efficiency concerns that would accompany a lack of supply responsiveness in the housing market? Firstly, if supply is constrained by unnecessary and/or complex regulation, the cost of this will be higher house prices. Higher house prices reduce the

capacity of some households to purchase other goods and lead to lower wellbeing. You may be thinking, yes but what about all those who own houses, don't they benefit?

It is true that an increase in housing prices (all things equal) will lead to an increase in the wealth of those who own housing, but it also directly decreases the relative share of wealth available to those who do not own housing – typically the young. That is, a sustained rise in house prices prompts a redistribution of lifetime income from the young to the old.¹²

And we should not forget that while those who own their homes now have higher housing wealth, they can only access this wealth if they choose to live in less salubrious accommodation or borrow against their home. If they want to buy a better house, they will also pay more.¹³

Further, in a world where there is a sustained increase in demand to which supply is unable to respond adequately, there will be a sustained increase in prices. Even when demand eventually subsides, the expectations created by continued house price

¹² As Richards (2008) notes, higher house prices do not make us better off as a nation.

¹³ As Reserve Bank Governor Glenn Stevens noted earlier in the year, increasing property prices can not be viewed as a risk free path to prosperity. He noted, "I think it is a mistake to assume that a riskless, easy guaranteed way to prosperity is just to be leveraged up into property. It isn't going to be that easy. And I think if we think about property prices as parents, and you're a parent, as am I. I've got kids that within not too many more years are going to want somewhere of their own to live and you wonder, how is that going to be afforded?" Available at <http://au.tv.yahoo.com/sunrise/video/play/-/6994337/rba-governor-glenn-stevens/>

increases have the potential to cause disruptions to the broader economy.

A poorly functioning housing market, one where supply is constrained from fully responding to sustained demand, will also lead to lower productivity and lower welfare. In this case, the resources that would otherwise be put to satisfying demand for housing will ultimately be used on less valued activities. At the same time the higher prices paid for housing reduce households' capacity to purchase other goods and services.

Perhaps one last point to make about an efficient housing market before moving to equity considerations is that without an efficient housing market, policies aimed at improving housing equity outcomes are also much less likely to be successful.

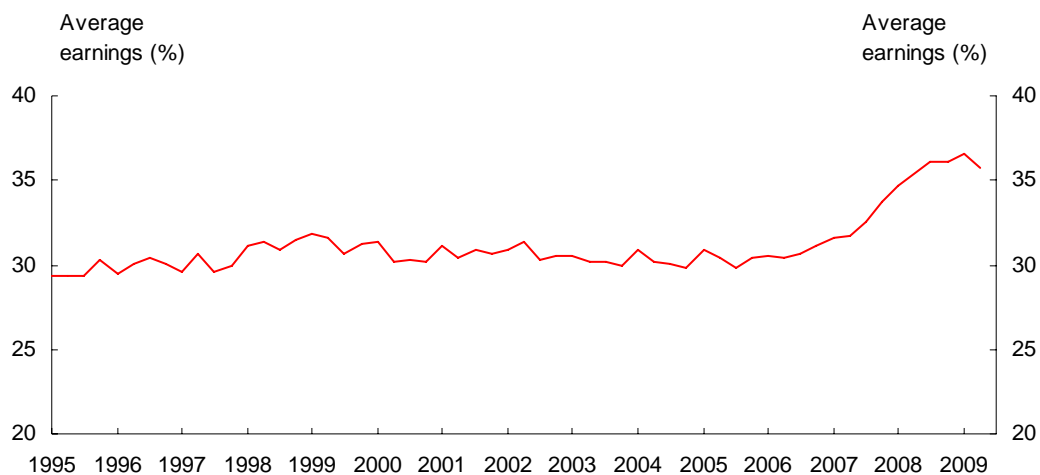
People tend to think of equity in the housing market from access and affordability perspectives. Firstly, are households able to access housing through ownership or renting and secondly, what proportion of their income do they spend on housing related costs? Further, these considerations are mostly applied to households in the bottom 40 per cent of the income distribution as richer households clearly have more scope in deciding the level of housing services they purchase.

Access to home ownership is often an intergenerational equity concern. This means focusing on the younger households accessing the housing market. In this light, there have been falls in

the proportion of 25 to 34 year olds accessing home ownership while overall ownership rates have remained relatively stable.¹⁴

The other focus of equity concerns is the approximately 30 per cent of households that are renters. Households in the rental market have been negatively affected by low vacancy rates and higher rents. The National Housing Supply Council (NHSC) in its 2nd State of Supply report finds that over 20 per cent of lower income households paid rents in excess of 50 per cent of their household income. This is particularly the case for those living in capital cities.

CHART 7: RENT AS A PROPORTION OF AVERAGE EARNINGS



Sources: Real Estate Institute of Australia; ABS; Treasury

Research from the Australian Housing and Urban Research Institute finds that those currently in housing stress are highly likely to remain in housing stress the next year or the year after. This

¹⁴ Richards (2008) notes that home ownership rates have in fact fallen in all age groups but that the overall rate has remained constant due to demographic factors.

tells us that housing stress can be an enduring problem rather than a transitional issue.

This problem appears to be exacerbated by a lack of available supply of affordable homes.¹⁵ The National Rental Affordability Scheme and Housing Affordability Fund are Commonwealth programs that are designed to address this issue. A lack of supply responsiveness in the housing market, particularly at the lower end, means it will be difficult though to resolve equity concerns unless the housing market first becomes more efficient.

What might be done to improve the efficiency of the housing market?

The National Housing Supply Council outlined the features of an efficient housing market in its recent report. They suggested that it would be a market that:

- responds quickly to the changes in demand by providing the housing that is demanded in the location, size and quality people are willing to pay for;
- has no distortion to market prices;
- provides market participants with full and accurate information; and

¹⁵ See Milligan & Yates (2007).

- includes environmental and other impacts on third parties in price.

The National Housing Supply Council also noted that housing markets often ‘do not feature these characteristics’.

The COAG agenda for housing supply and affordability reform agreed by all States is very much focused on improving the efficiency of the housing market. The reform agenda is examining the degree to which various policies inhibit housing supply responsiveness including planning and zoning processes, infrastructure charges, Commonwealth and state housing policies and other regulations.

Unfortunately, I don’t have time to discuss the agenda in detail today but I would like the opportunity to discuss an aspect of the agenda that Treasury has been giving some thought to recently, which is infrastructure charging.

In our consultations to date, the major housing supply problem related to infrastructure charges appears to be the indirect costs they impose through delay and uncertainty.¹⁶

Our early thoughts on nationally consistent principles for infrastructure charges are that charges should be set with a view to being:

¹⁶ Commonwealth of Australia (2010) Australia’s Future Tax System

1. efficient;
2. transparent and accountable; and
3. capable of providing certainty to better underpin development.

The first two principles reflect the general consensus of recent reviews of infrastructure charging and are already reflected in the principles adopted by a number of jurisdictions. The third principle recognises that complex charging arrangements can create delays and uncertainty.

An efficient infrastructure charging regime should allow charges to vary to reflect the costs of delivering infrastructure to specific areas. Appropriately-set infrastructure charges can encourage more efficient land use and encourage development in areas where less new infrastructure is needed.¹⁷

For example, efficient infrastructure charges should:

- demonstrate need and nexus, that is, only the infrastructure that a development 'needs' should be financed through developer charges and there should be a clear link between the need and the infrastructure that is provided; and
- be accurate so that where infrastructure is needed, the charge equals its cost. Such a charge would not only accurately cover

¹⁷ See Commonwealth of Australia (2010) *Australia's Future Tax System*, Chan et. al. (2009), Productivity Commission (2004), and McNeill & Dollery (2003) for a discussion of these issues.

its real cost, but also be apportioned to ensure that the development is charged only for that portion of infrastructure that it demands (or is likely to use).

Good financial management also requires that charges be determined in a manner that is transparent, be subject to regulatory scrutiny and be spent in ways that are publicly accountable. This sentiment is also broadly reflected in principles advanced by reviews and referred to in state regulatory guidelines.

The practical application of this principle would ensure greater certainty around the process of infrastructure charging. It would also provide a 'checks and balances' role, thereby increasing confidence that the system is working or driving change where necessary.

The third principle, around which there is less evidence of its application, is that charges should be set to provide certainty. There is a range of features of existing systems that reduce certainty in charging regimes. This can have a significant impact on the housing supply pipeline, both in terms of risk and cost.¹⁸

Where greater certainty reduces transactions costs (for example, through the introduction of a flat fee) in the development process, it could improve outcomes in the housing market. However, a

¹⁸ A principle of certainty has been proposed by some stakeholders and is reflected in principles in Western Australia.

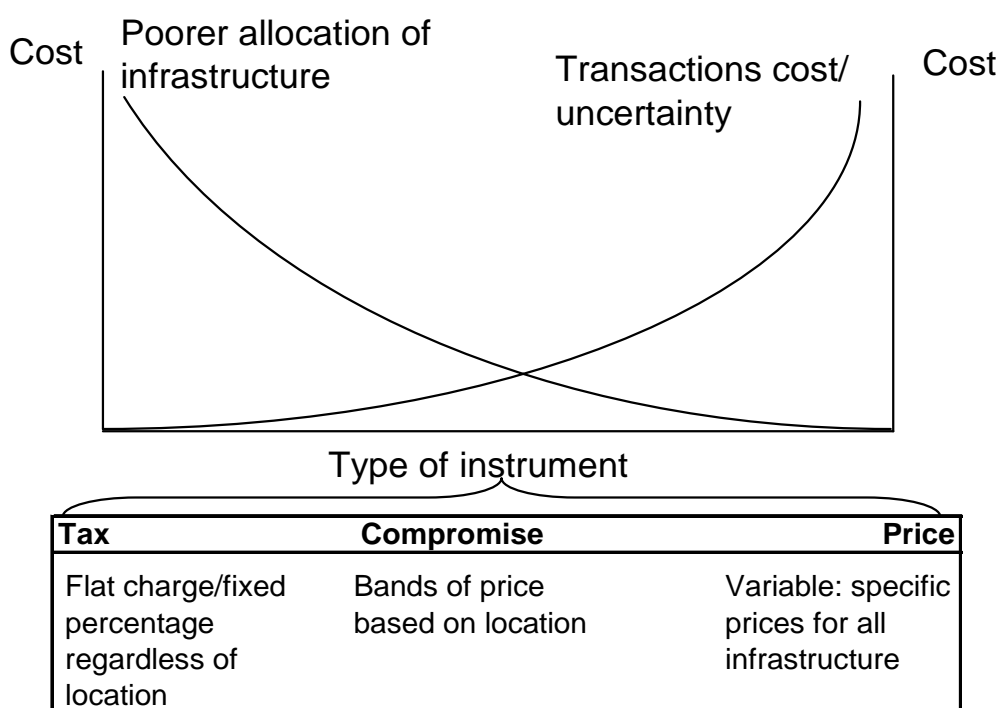
balance needs to be struck between this principle and the efficiency principle.

This is similar to the role the 'simplicity' tax axiom plays against 'efficiency' and 'equity' when balancing public finance choices.

The following chart attempts to illustrate the nature of this trade-off across equity and efficiency. It suggests that (as a generalisation) setting a charge that is perfectly accurate, one that charges the exact marginal cost of infrastructure required for housing development and induces efficient utilisation of land, is capable of creating long delays as the cost is calculated along with lengthy negotiation and planning.

This imposes costs and risks on developers, which are then passed onto home buyers along with less efficient use of land and infrastructure. Alternatively, a charge that is calculated as proxy reduces the risk, delays and costs of negotiating, but may mean that land is not utilised as efficiently as it could be and that some home buyers may subsidise the cost of other home buyers' infrastructure.

CHART 8: EFFICIENCY AND COMPLEXITY TRADE-OFF



Exploiting this trade-off to improve the functioning of the housing market is a difficult process and this graph is a highly stylised representation of reality compared to the complications encountered in practice when deciding on the type, quality and location of major infrastructure and then coordinating its delivery.

Moreover, restrictions on supply that result from the planning system, will, at least in the short term, limit the extent to which the efficiency principle can direct development to where it is most efficient and impact the balance we might seek on infrastructure charging.

Further, in this case, it may be optimal to favour a reduction in transaction costs and uncertainty over variable pricing when deciding on the nature of infrastructure charges.¹⁹

Ideally of course, we would rather enable land supply to be liberalised with some market mechanism employed to ensure that land is devoted to its most efficient uses but in the absence of this we may need to reconsider the ideal structure of infrastructure charges.²⁰

¹⁹ As I noted earlier, the key strength of developer charges is that they offer the potential for a price mechanism to direct infrastructure and development to areas where they are of highest value.

However, should the planning system exert significant restrictions on where and when supply can occur, infrastructure charges are unlikely to have a significant impact on this objective. For example, regulatory restrictions result in fringe-land selling well above what it would otherwise sell for (its opportunity cost). When this occurs, the main economic impact of an infrastructure charge is not as a price that efficiently directs activity, but instead as a tax on the inflated value (or 'betterment tax') created by the restriction.

If the regulations are accepted as inevitable, a tax on the beneficiary of the inflated value created is a relatively efficient source of revenue. The 'second best' option may then be to maintain developer charges, but configure them to operate most efficiently as a quasi-betterment tax, rather than as a price signal.

This would involve minimising scope for negotiation and providing greater up-front certainty at the cost of lower accuracy. In effect, the intent would be to extract a relatively efficient form of revenue at minimum compliance cost. In practice, this could be achieved either by replacing complex charges with more easily calculated payments (e.g. as a percentage of a development's value) or by enabling developers to opt-out of a complex charge with a more certain payment. Accepting that regulatory restrictions rather than infrastructure charges are always the main determinant of where development occurs suggests the task would be to minimise the transactions cost that they impose.

²⁰ In addition to agreed national principles for infrastructure charges, there may be value in mechanisms that lead to greater adherence to those principles such as transparency measures. Considerable progress has been made in some jurisdictions around improving the transparency of infrastructure charges with for example, the publication in the South East Queensland Regional Plan of priority infrastructure planning and infrastructure charges schedules guideline and PIP templates.

In Conclusion

There is no doubt that an inefficient housing market leads to lower wellbeing. While it is difficult to be precise about cause and effect, the Australian housing market does appear to lack flexibility and seems unable to respond effectively through increased supply to sustained demand. Moreover, it seems likely that in order to improve housing outcomes for the less well-off we need to enable a more efficient market that would lead to an increase in the supply of housing and in turn lead to lower housing costs.

I have spoken about only one area where policy makers might reconsider their approach to improve the flexibility of the housing market and that is in the area of infrastructure charges. And this may be only one of a number of blockers along the housing supply chain.

I have not had time today to discuss the inter-linkages of the housing market with other areas, namely its dependence on infrastructure and concentration in cities. The housing market does not exist in isolation; it must be connected into other areas through a range of utility, transport and telecommunication networks.

The Secretary of the Treasury raised some of these issues in a speech earlier this year when he asked what our major cities would look like if they were more intelligently planned with supporting

infrastructure in the form of utilities and transport networks that were designed carefully and priced accurately.²¹

One of the outcomes entertained was the potential of such arrangements to engender lower per capita natural resource usage. Other outcomes are likely to include improved housing supply, increased productivity and greater social cohesion.

Of course, it is much harder to provide solutions to these complex challenges than identifying them but there is no doubt the solution begins with good communication between all levels of government and their advisers. In this light, thank you for the opportunity to talk with you today.

²¹ See Henry (2010).

References

- Australian Bureau of Statistics (2010) *House Price Index*, Series 6416-01.
- Australian Bureau of Statistics (2010) *Building Activity*, Series 8752.0.
- Australian Bureau of Statistics (2010) *National Accounts: Industry Gross Value Added Chain Measures*, Series 5206-09.
- Australian Property Monitors (2010) Australian Property Monitors www.apm.com.au
- Battelino, R. (2009) 'Housing and the economy' (speech to the 6th National Housing Conference Melbourne Convention and Exhibition Centre, Melbourne, 25 November 2009). Available at <http://www.rba.gov.au/speeches/2009/sp-dg-251109.html>
- Bureau of Transport and Regional Economics (2007) 'Estimating urban traffic and congestion cost trends for Australian cities' (Working Paper No. 71). Available at <http://www.bitre.gov.au/publications/49/Files/wp71.pdf>
- Commonwealth of Australia (2010) *Australia's Future Tax System: Report to the Treasurer*. Available at www.taxreview.treasury.gov.au
- Commonwealth of Australia (2010) *Intergenerational Report 2010. Australia to 2050: future challenges*. Available at www.treasury.gov.au/igr/igr2010/
- Ellis, L. (2010) 'Recent Developments in the Housing Market and its Financing' (speech to the Financial Review Residential Property Conference 2010, Sydney, 18 May 2010). Available at <http://www.rba.gov.au/speeches/2010/sp-so-180510.html>
- Henry, K. (2010) 'To Build, Or Not To Build: Infrastructure Challenges in the Years Ahead and the Role of Governments' (speech to the Conference on the Economics of Infrastructure in a Globalised World: Issues, Lessons and Future Challenges, Sydney, 18 March 2010). Available at <http://www.treasury.gov.au/contentitem.asp?NavId=008&ContentID=1763>
- Chan, C., Forwood, D., Roper, H. and Sayers, C. (2009) 'Public infrastructure financing – An International perspective' (Staff Working Paper No. 03/2009, Productivity Commission).
- Glaeser, E. (2005) 'Urban Colossus: Why is New York America's Largest City?' (Discussion paper No. 2073, Harvard Institute of Economic Research). Available at <http://www.economics.harvard.edu/pub/hier/2005/HIER2073.pdf>
- Housing Institute of Australia - Economics Group (2009) 'HIA-Commonwealth Bank affordability report – September Quarter 2009'. Available at http://economics.hia.com.au/publications/hia_cba_affordability_report.aspx
- Lowe, P. (2010) 'Some Challenges for the Future' (speech to the UDIA2010 (Urban Development Institute of Australia) National Congress, Sydney, 10 March 2010). Available at <http://www.rba.gov.au/speeches/2010/sp-ag-100310.html>

McNeill, J. and Dollery, B.E. (2003) 'Calculating developer charges for urban infrastructure: A feasible method for applying marginal cost pricing', 48(3) *Engineering Economist* 1–23.

Milligan, V. and Yates, J. (2007) 'Housing affordability: A 21st century problem' (National Research Venture 3: Housing affordability for lower income Australians, Australian Housing and Urban Research Institute). Available at http://www.ahuri.edu.au/downloads/NRV3/AHURI_Final_Report_No105_Housing_affordability_a_21st_century_problem.pdf

National Housing Supply Council (2010) '2nd State of Supply Report'. Available at www.fahcsia.gov.au/sa/housing/pubs/housing/national_housing_supply/

Productivity Commission (2004) *First home ownership* (Inquiry Report No. 28).

Richards, T. (2008) 'Some Observations on the Cost of Housing in Australia' (speech to the Economic and Social Outlook Conference, Melbourne, 27 March 2008). Available at <http://www.rba.gov.au/speeches/2008/sp-so-270308.html>

Richards, T. (2009) 'Housing Market Developments' (speech to CEDA Housing Forum: A National Round-up, Sydney, 29 September 2009). Available at <http://www.rba.gov.au/speeches/2009/sp-so-290909.html>