# House Prices and Interest Rates.

A submission to the Productivity Commission (housing@pc.gov.au) by Tom Orren B.Ec.; A.C.B.M. – September 2003.

## Summary.

**Many prospective first home buyers are being forced out of the house purchase market because variable interest rates create a volatile housing market.**

**All housing loans should be fixed – for the full term of the loan. This would result is a more stable real estate market with other stability, equity and resource allocation benefits throughout the economy.**

**Fixed interest loans place the burden of prudence on financial institutions rather than on individuals who have the least capacity to evaluate long term risks. They would result in more stable interest rate levels for housing and in the economy generally.**

**Equity benefits would result as lower income earners and first home buyers would benefit through more stable house prices and more certain financial arrangements when taking out home loans.**

**Resource allocation would improve in the economy as loanable funds were directed towards the most efficient sectors rather than those where short decision making and speculation dominate.**

## Detailed Submission.

### The Price of Housing.

The point has been made that the current housing boom (and rising house prices) is desirable - that it creates wealth and an associated "wealth effect" which is good for the economy.

On the other hand, it has also been argued that the rising price of housing is cutting out a large group of Australians from the housing purchase market and committing them to lifetime of accommodation rental. This also has effects on the economy which, in the long term, may mean a large group with no access to the benefits of the "wealth effect" thus affecting future consumption.

If the current "real" price of housing is too high then this may have negative impacts on society and the economy as;

- more people are cut off from the "wealth effect"
- fewer people benefit from the security of home ownership and
- the economy diverts increasing investment funds towards housing rather than other (productivity raising) capital.

If "real" house prices in Australia are significantly higher (or lower) than those in comparable countries a decision needs to be made about the social desirability of this current situation. There are clear benefits to society of a population which has a goal of home ownership and a subsequent stability and happiness of owning a house. The level of house prices will impact on the "Aussie Dream" of home ownership for young home buyers. There are many factors affecting the prices of houses for these people.

**House Prices and Structural Inflation.**

The rise in the prices of houses relative to other prices in the economy is a case of structural inflation - even though house prices have been removed from the CPI calculations. Despite the positive wealth effects for some people all inflation has negative impacts in terms of resource allocation. If the cost of food doubled we would be taking a very different view of such price rises. Inflation changes the "playing field" and creates winners and losers.

If housing inflation created only winners there would be no problem but this is probably not the case. There are "losers" like those who are forced into permanent rental or who cannot live in their preferred areas.

On the other hand, if these "losers" could be compensated by the "winners" this may help restore equity but how could the winners compensate those who lose in a free market economy? It would be difficult to imagine that this happening and even if it did it may only serve to add more buyers to the market further raising prices.

Growth of wealth is a good thing, however, if it is not "real" and due only to inflation then it is illusory at best. At worst it causes resource misallocation and inequity.

**Factors Influencing the Price of Housing.**

Houses can be both a consumer durable good and/or an asset for investment depending on who buys them. Thus two separate markets influence house prices;

1. **The consumer market -** those wanting a house to live in and
2. **The investor market -** those wanting to make a profit from housing rental.

Both markets impact on the current price of housing – sometimes separately – sometimes together

The price of housing, generally, depends greatly upon the level of demand for housing. This overall demand is the **demand for accommodation (DA)** – This is itself broken into two areas;

a. The (effective)demand for housing **purchase (DP)**
b. The demand for housing **rental (DR)**

The relative cost of **accommodation rental** vs. **accommodation purchase** is an important factor here in that both are substitutes for each other. If one of these has a relatively lower price than the other then its price will eventually rise as people move towards it and away from the higher priced option – and vice versa. Thus if rental

prices are extremely high then more people may decide to enter the purchase market and this may raise the prices of houses to match – in the long term. And vice versa if house prices are too high. In this case more people will move towards rental. In both cases "somebody" still has to buy a house – either the consumer or a landlord but I will demonstrate below that the entry of landlords into the housing market can have a different effect from that of consumer.

There is another important substitute relationship. It is the comparative cost of buying an existing dwelling vs. the cost of buying land and building a new dwelling. Where the cost of building a new dwelling is low then the prices of existing dwellings will tend to fall and vice versa.

Thus if the cost of building a new house is extremely low compared with that of buying an existing one then more people will decide to build until (in the long run) both prices levels even out. This relationship depends on the supply of existing dwellings and the supply of land to build relative to the population and its demand. Therefore if there is a huge oversupply of existing housing prices will be low and demand for new building will also fall as it becomes relatively more expensive.

These substitute effects operate in the short term and may influence prices of houses over short periods. If this coincides with other effects then prices may rise more (or less) sharply than expected – but only in the short term. Eventually (in the long term) they even each other out, however, it is these short term effects which cause problems (albeit temporary) – especially for young home buyers.

Also, housing prices are relative. They are relative to;

- Housing prices in other areas (nationally and internationally) – both for accommodation and for investment
- Other forms of investment (eg the equity market)

If house prices in Sydney are far higher than those in Melbourne or Perth then, in the long term, people will move to these cheaper areas and house prices there will rise. Interestingly, however, in the process, Sydney house prices are unlikely to fall – they will continue to lead the market – perhaps because of Sydney's underlying DA factors.

Also if house prices in Australia were say twice as high as those in the USA or Europe then (in the long term) a global equilibrium process will take effect to hold back local prices and vice versa. It should be noted that on this global market currency fluctuations may also impact. As the $AUS rises and falls – especially as it has done over the past 10 years Australian houses become more or less attractive to overseas investors.

In the same way if housing investment becomes far less profitable than investing in say the share market then house prices would be expected to fall and vice versa. This, also, may have had a real impact on recent house prices – especially since the share price slump post "911" as funds have moved from uncertain equity markets to more reliable property markets.

These factors have all influenced current house prices.

**The Demand for Accommodation (DA).**

The overall DA in an area is a function of general environmental factors including;

1. Population of an area
2. Standard of living in an area – i.e. Income and spending levels
3. The supply of loanable funds
4. The supply of land in an area
5. The supply of existing housing in an area (relative to the current population)
6. The supply of land in an area (i.e. the potential for increased housing)
7. Technology (which may impact on the cost of house building – as it did in the case of brick veneer and fibro construction methods after WWII). This in turn impacts on the supply of accommodation.
8. Amenity of an area in terms of scenic beauty, etc
9. Amenity of an area in terms of ability to provide livelihood – i.e. employment levels

Thus in a scenic area with a high population and good employment prospects, high incomes, a good standard of living, a limited supply of land, little available housing, little prospect for future cheap housing and a high supply funds for loan one would expect house prices to be at a premium – and the opposite would be true of a place without these things. This seems to be a logical position from which to begin.

But why is it that in a place with all these things that house prices sometimes boom and sometimes slump?

The DA will set the underlying trend for "real" house prices in an area, however, there will be deviations above and below the "real" price due to the number of people wishing to purchase (DP) vs. the number wishing to rent (DR).

In both cases "somebody" has to own the property and so we might expect that DP will always be the same despite the number of renters. However, since the DP for investment is a **derived demand** *(based on the profits to be made from renting property)* the price paid for investment properties will be higher than those paid by the general public – especially when rents are high and tax arrangements are favourable.

Thus when the DR is high one would expect that house prices would rise as investors see the potential for profits from rental. Those wishing to purchase for their own accommodation have to bid against these investors they also face rising prices. If price levels rise beyond their reach they will be forced to rent – again increasing the derived demand to purchase rental properties.

All of this is driven by the overall DA, however, the rise in house prices paid by investors will eventually be limited by the capacity of renters to pay rent. If renter's incomes are limited then rents will be limited and so the derived demand for investment properties will be limited. Investors will find other, more profitable, sectors to invest in.

On the other hand, if house prices were low and fewer people needed to rent then rents would fall. Investors would also tend to leave the housing sector and house prices would return to more normal levels.

The desirability of investing in property therefore depends on income levels and "real" purchasing power of those who need accommodation (DA). The other important factor is the level of interest rates which affect the profitability of housing investment and the ability to access funds and to enter the housing purchase market by renters.

**Population and House Prices.**

There has been much discussion about the importance of population growth in Australia on the recent house price boom and population must have a strong underlying effect. In the case of Sydney there is a structural effect as the majority of immigrants move there. The impact of this population growth on house prices, however, depends on the **effective** demand of these new citizens. With no effective demand to purchase the growing population will be forced to rent and this may increase housing demand by investor buyers thus bidding up prices – but only to the limit which renters are able to pay.

If the new population does have effective demand (in terms of income or access to loan funds) this will result in greater demand for housing as a consumer durable and, consequently, a smaller rental market, lower rental profits and fewer investment buyers.

There are also structural effects as population changes – i.e. as the population ages or single households become more common and so on. As this happens the demand for detached dwellings may fall while the demand for units rises. This will impact housing prices because the demand for the total number of dwellings rises.

Thus if the population of an area rises the **DA** will naturally rise but this may result in either an increased **DR** or an increased **DP -** depending on the ability of the population to afford housing and thus have effective demand for it. If the population cannot afford to buy housing then they will have to rent and so **DR** will rise rather than **DP**.

However, if a rising population cannot afford to rent then people still have to live somewhere. In this case they will either share housing or build squatter's housing as happens in less developed economies. In these cases it can be seen that rising population alone will NOT lead to a rise in housing prices. In fact it may lead to a fall in housing prices as squatter's houses and overcrowding by low income earners lead to a decline in the amenity of an area.

The currently high house prices are due, in part, to changes in population size and structure, however, it may not be population alone which is the major influence on the current price of housing. Ability to enter the housing market as either a consumer or as an investor may be a crucial factor. This, in turn, depends on incomes and the cost of borrowing – interest rates.

**The Supply of Housing.**

The two major factors which impact the price of housing directly are the supply of housing and the demand for housing.

The supply of housing is no doubt an important factor in setting the price of housing. If the supply of housing is too high then house prices will fall and vice versa. On the other hand the supply of houses also responds to changes in the price of housing.

In the current situation it seems clear that the supply of housing is rising to meet the current high levels of demand – i.e. as the prices of houses rise the supply of houses expands. This is the normal operation of the price mechanism to reach equilibrium, however, this expansion of supply may be an inefficient use of resources if the price rise is driven by factors other than "real" demand for accommodation (DA). If, for instance, it is driven by an oversupply of cheap home loan funds or unrealistic expectations of speculative gain then it may be better for the economy if the resources were used elsewhere instead.

There is an underlying need to increase supply as population grows and family units decrease in size – especially in the large cities. However, if housing supply growth is driven by factors other than such "real" demand then this increase is not maximising society's satisfaction.

**The Effective Demand for Housing Purchase (DP).**

Effective demand refers to demand which is backed up by ability to pay. The effective demand for housing purchase (DP) is a function of;

1. **The "real" price of housing**
2. **Incomes**
3. **Interest rates**
4. **Government subsidies** -e.g. the first home buyer's grant
5. **Taxation subsidies** - e.g. negative gearing
6. **Housing loan profitability for financial institutions** - compared with profitability of selling loans to other sectors - such as business
7. **Returns from investment in the housing market** - ***In this sense the demand for housing is a derived demand – not desired for its own satisfaction but for the profit that can be made from it – in the same way that labour in a factory has a derived demand. The more money that can be made from it the more buyers are willing to pay and the higher they will bid for properties.***
8. **Returns from investment in other sectors –** including the equities market or the international sector
9. **Marketing** - by real estate businesses, financial institutions and the media. This is influenced by the profitability of the housing market (d above) but also feeds into it by fuelling speculative demand pressures – especially when interest rates are low and access to loans funds is high.
10. **The prices of substitutes** – eg moving interstate or overseas, or renting

Of these factors the government has most direct influence over;

- Government subsidies

- Taxation policy and
- Interest rates (through the Reserve Bank)

For each of these three areas we can look at "extreme" scenarios to examine their influence on housing prices. i.e. situations where these factors are either extremely low or extremely high. In these extremes, if all other conditions are held constant, then we can see more clearly their impact on housing prices.

**Government Subsidies.**

At one extreme if the first home buyer's grant was eliminated (**all things being equal**) one would expect it to have a downward impact on housing prices as new home buyers were forced out of the market. However the subsequent increase in rental demand could mean higher prices as investors buy more rental properties.

At the other extreme, if the first home buyer's grant were raised, to say $100,000, it would probably have an upward effect on prices as more buyers entered the market. This would continue until the first home buyers market was saturated or until house prices rose to a point where they were again unaffordable for first home buyers.

The paradox here is that (in both cases) such a subsidy may help make houses less affordable for those it is trying to help by creating increased demand and higher prices. It may be more helpful to do something to hold down house prices than to add more fuel to the market.

**Taxation Policy.**

At one extreme, if negative gearing were eliminated from the taxation regime it is clear that housing prices would fall and vice versa if the taxation benefits of negative gearing were to improve. Negative gearing has clearly added buyers to the housing market especially since the growth of promotions on the media and through financial institutions about its benefits. Such marketing has almost certainly added fuel to the housing market and lead to higher prices.

These buyers are investment buyers. They will bid up the prices of houses to the point where profits and tax advantages allow them to do so.

Again a paradox may exist. That negative gearing (which was designed to provide lower cost rental properties for those who cannot afford to buy homes) may have lead to more and more people being forced into the category of permanent renters.

Taxation policy can have a big impact on economic activity. The previous removal of negative gearing had a huge impact on the supply of rental accommodation and housing prices. However negative gearing is adding "highly charged" buyers and this is making it difficult for first home buyers to compete.

Consumers and Investors Together.

The worst scenario occurs when conditions are right for both investors and consumers to enter the market. When incomes are high and interest rates are low both groups

have access to funds and the ability to buy. This tends to drive up house prices very quickly. This happens most quickly when interest rates are falling from high levels. It is like a green light to enter the house market.

**Interest Rates.**

The housing loan market cannot be seen in isolation. What happens there impacts the economy as a whole due to the limited funds available for loan.

Interest rates form a very real part of the direct cost of housing. This is because the cost of loan repayments can be up to 3 times the cost of the original house price. This can have a huge impact on the decision to purchase.

At one extreme, if interest rates for housing were zero then it is fair to argue that house prices would rise as more and more people used these "free" funds to buy more and more houses. On the other hand it could also be argued that so many people would be building new houses that their prices would eventually fall due to oversupply – but this would be in the long term. The result of these underpriced funds would be resource misallocation.

At the other extreme, if interest rates were 100% to 200% it's fair to say that few people would be involved in the housing purchase market. House prices may be relatively low because few people could make returns out of such expensive loans from simply renting out their properties. Either that or nobody could afford the rents charged and people would be forced into squatter's huts.

In reality, however, none of these scenarios would occur because housing loans are only one option open to money lenders. Housing funds must complete on the open market with other borrowers for access to money. The basis for this competition is the "marginal efficiency of capital" – the profitability of investment in housing vs. the profitability of investing in other sectors.

If, for some reason, the profits from investing in housing are higher than other sectors then more loan funds will be directed there and other sectors will be (relatively) underfunded.

When interest rates are low the marginal efficiency of capital in housing (the profitability) is high. This causes the **investment demand** for housing purchase to rise - thus raising the prices of houses.

Moreover, because housing loans are often taken over very long periods, there is a great degree of uncertainty about future conditions – both in the housing market and the interest rate market.

Uncertainty in the housing market is usually confined to the short or medium term because most buyers believe that in the long term housing prices will rise. An average of 100% every ten years is often quoted.

In the interest rate market, however, there is much greater uncertainty. Interest rates may reach as high as 15% or 16%. If this was to occur over the next few years then

the profitability of investing in houses would fall dramatically and there would be a big fall in real house prices as both investors and consumers dropped out of the market.

The primary risk taker in this process is the borrower who is usually committed to a **variable loan**. As interest rates climb the borrower faces huge debt servicing problems. Even with fixed interest loans are usually fixed for no more than 5 years after which the borrower is again at the mercy of unknown future interest rates. Financial Institutions **(FI's)** tend to be insulated from such interest rises because of this system. The borrower carries almost all the risk.

FI's pass on most rate rises. If default occurs they sell off mortgaged properties to recoup their loans. If FI's have been prudent few losses will occur due to existing loans and fewer new loans will be given as fewer people can afford the repayments.

**The Current Interest Rate Regime.**

Currently housing loan interest rates are dominated by the **variable loan**. The current rate is set by prevailing interest rates and if rates should rise in the future the loan is readjusted accordingly. This is done solely in the favour of the banks and to the cost of borrowers with often disastrous results as rates rise.

Under the current situation purchasers of houses tend to have short term view when making a decision to borrow. This is emphasised by the trend toward "honeymoon" rates for the first year. These are designed to attract borrowers with short term perspectives. Under these conditions borrowers often overvalue future profits from capital gain and discount concerns about future interest rate rises. They may therefore tend to borrow more than more prudent investors would and thus end up facing financial difficulties in the long run if interest rates rise substantially before capital gains are achieved. This strategy is quite okay at the start of a boom cycle but very dangerous towards the end of one.

For this reason banks can profit more from lending to housing purchasers during booms. While business investors are being prudent about their investment decisions (taking account of the longer term) house buyers (in general) are much more short sighted and much less prudent. Banks lend them more because the risk of loss is small – especially in the case of second mortgages. So interest rates have a tremendous effect on the immediate decision to borrow for houses for both borrowers and lenders.

This variable interest system may be responsible for an over allocation of funds to the housing market by FI's by providing them with a safe, profitable investment environment – at the expense of borrowers. They may also contribute to the very rapid rise in house prices as interest rates fall.

Besides being a cost of housing, interest rates are also an instrument of government economic policy. If a recession looms governments tend to keep interest rates low to improve the marginal efficiency of capital in all sectors. When this happens it is usually the housing and construction sectors which "take up the slack" and help pull the economy back into strength.

At these times loanable funds are diverted towards the housing sector and house prices may rise. This may be seen as a kind of temporary structural (sectoral) inflation due to temporarily increased liquidity. This liquidity placed at the disposal of investors with a short term (perhaps imprudent) view can increase demand and raise prices.

Thus the housing and construction industry is a kind of economic "relief valve." However, if this relief valve is left open for too long and overlaps with a boom in housing the effect is to accentuate structural inflation in the housing sector and this has impacts on the rest of the economy through the price mechanism.

This is similar to the way the share market has seen a general rise in prices over the past 10 years as a result of increased global superannuation funds in search of somewhere to be invested. When liquidity is in over supply prices will rise.

Low interest rates, thus, may contribute rising house prices irrespective of other variables due to the short term investment view taken by inexperienced investors who find it easy to obtain finance. This results in an over allocation of funds into the sector.

**Interest Rates and House Prices.**

There is a direct relationship between house prices and interest rates. For example, at a certain level of demand and supply (and therefore a certain price level for houses) a fall in interest rates will lower the **cost** of housing purchase. This has the effect of **increasing effective demand** and so house prices will rise. If interest rates fall again price will rise further until over supply eventually results.

On the other hand if interest rates were to rise dramatically house prices would stop rising and may even fall as buyers readjust their purchase decisions.

In the long run the other overall DA will set the underlying trend for house prices but the current interest rate will impact greatly in the short term because the cost of interest makes up the great majority of the cost of housing – up to 300% of the original purchase price. In many cases the purchase price is almost irrelevant (compared to the interest rate cost) because buyers see future capital gain as a "certainty". It is the interest rate which determines the purchaser's capacity to make repayments and therefore their bids for properties on the market.

**Banks, House Buyers and the Current System.**

This current system may be creating a housing market which is more volatile than it needs to be - characterised by booms and slumps in the short term while showing an underlying general (and expected) growth in the long term. This long term trend is driven by the overall demand for accommodation (DA) due to population growth, etc. However, it is the "boom" cycle which is causing the current problem for first home buyers and will also cause future problems when the "slump" phase hits - as it will.

Already there is talk of a housing slump over the next 5 to 10 years as interest rates begin to rise.

If house prices do fall significantly the banking sector is largely insulated from the pain. Even if large numbers of overfinanced properties have to be sold off cheaply banks which have been prudent should suffer no more than a decline in profit growth.

In the meantime many of the bank's customers would have faced great hardship as they were forced to accept the burden of their imprudent decision making. It may be better for the economy if this burden of prudence was placed on the banks which have far better structures for dealing with such long term economic decisions.

**A New System?**

The current situation could be improved if ALL housing loans had to be fixed interest rate loans.

Under such a system banks would have to make prudential decisions about housing loans and housing loan rates would tend to even out over the long term. This would bring far greater stability to the housing loan market and to house prices.

Under this system consumers would also benefit if interest rates fell as they could refinance existing loans and they would have greater financial certainty when taking out loans in the first place.

In the long run banks would be no worse off than they are at present even though short term booms would be less profitable.

**Conclusion.**

For the economy as a whole a fixed interest home loan system could mean improved efficiency in the investment sector as borrowers of funds compete more equally for loans. The business sector would benefit more from government decisions to reduce interest rates in uncertain times – because it would have more access to funds currently being channelled into the housing sector. Price and interest rate stability would be greater overall and the economy would be more effective in satisfying the population's needs and wants.

Stability in the housing market would also bring greater overall stability. Unnecessary shifts in employment between sectors would be reduced and, while the "wealth effect" due to speculative booms in real estate may diminish so too would its negative side - the "loss of wealth effect" during slumps.

While fixed interest rate housing loans would not totally remove booms and busts from the economy it may be one step in micro-economic reform which would help do so. It may also improve the allocation of loanable funds in the economy as a whole. Allowing them to flow to the sectors most desired for the society.

A housing boom is like a gold rush – great if you're in on it but basically a lot of pushing and shoving which could be avoided if common sense prevailed.