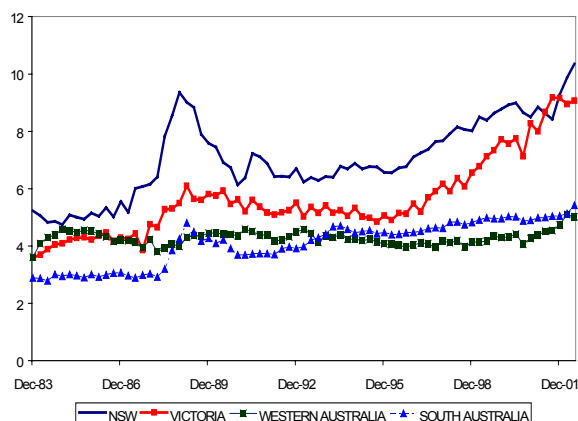


# Australian Housing Market

## Prices, debts and assets rise

The substantial increase in Australian house prices over the last few years has raised concern that the market could be overheating, raising the risk of a downward price correction. Housing affordability has clearly deteriorated as house price inflation outstrips wage growth, resulting in a sharp rise in median price/income ratios in some capital cities. The chart below shows the change in median price/income ratios across 4 States.

**Chart 1 Median House Prices/Average Earnings Ratio**

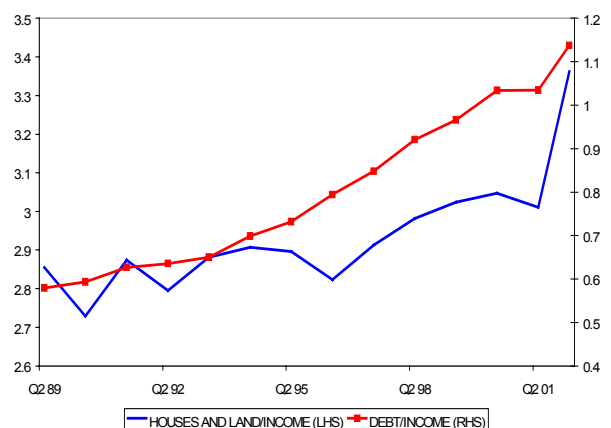


Inevitably, these changes in the housing market have been accompanied by adjustments in the financial position of the household sector. Increased house prices have been associated with a rise in the debt levels faced by many households entering the mortgage market. At the same time many existing owner-occupiers have seen large increases in the valuation of their properties, boosting their wealth. So the increase in house prices has had important implications for the distribution of wealth and debt across the population, affecting regions, age groups and tenure groups differently.

As housing credit accounts for around 80% of credit extended to the personal sector, the increased price of houses and the higher borrowing requirement associated with entering the market as a first time buyer or trading-

up has boosted the volume of household debt quite considerably. Chart 2 shows the much publicised doubling in the ratio of household debt to disposable income that has occurred over the last decade, much of which may be attributed to heavier mortgage borrowing. It also shows the other side of the household sector balance sheet related to these housing market transactions – the increase in house and land wealth relative to household disposable income.

**Chart 2 Household debt and house/land assets relative to household disposable income**



The wealth benefits of the increase in house prices will also have been spread quite widely across the population, particularly in comparison with the valuation gains that came from the rising share market of the late 1990's. This is because housing is a far more widely held asset through the community than direct holdings of equity. Indeed, for much of the population, NATSEM calculations for 2002 show that wealth basically consists of housing and superannuation

## Lower interest rates a key driver of change

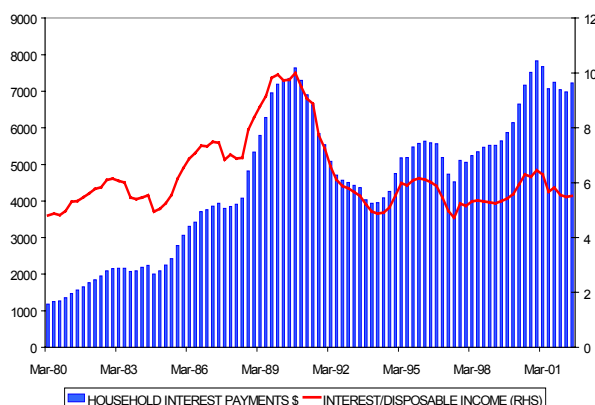
The rise in household debt and the increase in house prices are both responses to a fundamental change in

the economic environment – the shift to much lower interest rates and inflation. Lower interest rates enable the household sector to carry larger amounts of debt and that has been reflected in the prices that purchasers can afford to pay for housing. This development is not unique to Australia – similar trends have been evident in the US, UK, New Zealand and much of Western Europe.

The trend rise in the gearing of the Australian household sector and the associated rise in ratios of median house prices to average earnings is therefore, to a large extent, a logical response to the improvement in debt servicing that flows from lower interest rates. Those falls in interest rates have largely come from the decline in inflation. Lenders no longer need to be compensated up-front for the eroding impact that moderate to high rates of inflation have on the real value of the money they lend. That has lowered the entry barrier that previously high inflation imposed on borrowers as high interest rates.

The amount of interest paid by the household sector and the ratio of interest paid to disposable income is shown in Chart 3. While the number of dollars paid has climbed back to the peak levels seen in the early 1990's, income growth over that period has ensured that the debt servicing ratio is a manageable 5 or 6%, barely half the level seen in the early 1990's.

**Chart 3 Household Sector Interest payments**



While debt servicing ratios of 5 or 6% sound reassuring, it is important to realise that the situation is not as rosy as that for those customers who actually have home loans. The 5 to 6% interest paid/income ratio covers the

entire population as does the 120% or so ratio of debt to household income. However, only one-third of all householders actually have current mortgages, the rest either rent or have paid the mortgage out.

As housing debt accounts for 80% of all credit, that means that more than three-quarters of the stock of debt is concentrated in only one-third of all households. Clearly – and as might be expected – mortgage owners have much higher debt/income ratios and debt servicing ratios than the rest of the population. Detailed ABS data suggests that current mortgage holder debt income ratios are around 300% and their debt servicing ratio is over 15%. In high cost metropolitan areas like Sydney and Melbourne, where median house price/average earnings ratios are highest, the household sector debt burdens are also higher. The Sydney debt/income ratio for mortgage owners could be heading toward 400% by now with average debt servicing ratios over 20%.

The vulnerability of householder financial positions varies by income group as well as by region. Generally the gradation across regions in house prices is steeper than that of wages. Low income earners in big cities thus face particular hurdles in entering the housing market, one of which is the scale of the debt they must incur relative to income in the early years of the loan. The table below shows approximate calculations of national debt/income and debt servicing ratios by income group based on unpublished 1999 ABS data. There are large regional variations in these ratios as well.

**Table 1 Ratios by Income Decile Australia (1998/9)**

Mortgage holders	Debt/Income	Interest/Income
1 (Lowest)	Na	Na
2	385	25
3	380	25
4	390	25
5	280	18
6	270	17
7	255	17
8	290	19
9	280	18

10 (Highest)	250	16
Average	280	18

## Household sector risks to monitor

While some of the growth in the household debt/income and house price/earnings ratios represents a logical and probably inevitable response to lower interest rates, that does not mean that the risks of higher debt can be ignored.

Increased gearing means that the household sector is more vulnerable to adverse changes – particularly steep increases in interest rates and higher unemployment. With the higher level of household sector debt/income ratios comes the risk that increases in interest rates back to double digits would absorb much larger amounts of income in debt servicing than was the case in the early 1990's when debt/income ratios were half of their current level.

Assessing the extent to which that threat is realistic requires taking a view on future interest rate movements. Current interest rates are certainly very low by historical standards and the RBA has signalled that they might well be higher if it were not for global economic uncertainties. However, provided that inflationary pressures remain modest, there seems no need to return to the level of interest rates that prevailed a decade ago. With a more highly geared economy, monetary policy can be more potent and that means that previous interest rate peaks are of less relevance to the rate outlook.

The other risk that requires careful scrutiny is that debt servicing ability might deteriorate through a fall in incomes, even if interest rates stayed the same or even fell. A recession like that in the US through 2001-2002 is the danger here. That experience showed that a significant shake-out in the labour market, adding substantially to unemployment, could occur even while interest rates were low or falling. In this scenario, the indicators of impending stress to watch would be a drying up in job vacancies and a rise in retrenchments, followed by a jump in unemployment. There is no evidence that the labour market in Australia is experiencing such a downturn. Behind the noise in the monthly data, the job market seems reasonably solid at present and none of the forecasting agencies are predicting the type of recession that would add significantly to unemployment.

## Housing market risks to monitor

The other aspect of risk that needs close watching is the housing market itself, in case the bubble bursts. We have looked at previous episodes of housing market downturns in the US, UK, Europe and Asia to see what pre-conditions are needed for there to be a large increase in home mortgage loan defaults. It turns out that a specific set of economic circumstances prevailed for widespread home loan defaults to occur in previous housing market downturns.

Basically international experience of these housing “busts” highlights two sets of conditions that applied at the same time,

- There needs to be widespread negative equity in the housing market – ie the value of the mortgage exceeds that of the house. This generally requires falling housing prices, the extent of the decline depending on the amount of equity that the owner has in the property. Factors like very high loan to valuation ratios clearly exacerbate this risk, and
- Borrowers' ability to service the debt has to fall sharply. This is not a case of changes in the circumstances of individuals as there is a normal level of “churning” in any home market due to factors like divorce, illness and retrenchment. Instead, something systemic has to simultaneously adversely affect the incomes of large numbers of people who have mortgages. Experience suggests that this “something” has invariably been the rising unemployment that accompanies a serious recession.

Both of these factors have, in past episodes, been evident simultaneously – one on its own need not be enough to trigger a big rise in home loan defaults. For instance, if house prices fall but borrowers retain their jobs and are able to service their debts, past experience suggests that many with negative equity sit and wait until house prices eventually recover. They do not tend to default on the loan, even though it now exceeds the value of the house. Similarly, increased unemployment on its own need not be enough to result in much higher housing loan defaults. Instead, those unable to afford the mortgage sell the house, release their equity and

move to other accommodation. They need not simply default on the loan and damage their credit history.

At present in Australia, the consensus view is that while the house price boom has passed its peak and prices in some areas could fall, the sort of price decline needed to produce widespread negative equity is not likely. Certain areas of the market appear over-extended based on conventional valuation criteria, particularly some inner city apartment markets where yields are already low, additional supply coming on stream, vacancy levels already high and investor expectations of near term capital gains quite possibly unrealistic. However, it is not valid to take the undeniable risks that appear particularly marked in one market segment and then extrapolate that to say that the entire market shares that degree of risk.

Another market segment that appears particularly vulnerable to adverse circumstances is loans to borrowers with incomes that lie in the lower half of the income distribution. Persistent house price inflation has considerably raised entry-level house prices in Sydney and Melbourne. As a result, lower income borrowers now take out large mortgages relative to their incomes to get onto the bottom rung of the housing ladder.

These lower income customers can face very high debt/income ratios and debt servicing ratios of 30% just to get into the market. This is not necessarily a problem provided that they keep their jobs and interest rates stay low. Auckland customers in this market segment have faced this situation for years and loan defaults there have remained low as interest rates and unemployment have stayed down. Nevertheless, there is clearly a heightened vulnerability to either sharp interest rate increases or higher unemployment in this customer group. Again, however, the risks should not be generalised across the entire market. The same house price inflation that has raised the price hurdle for these borrowers has boosted the equity share and wealth of other existing owners, enhancing their credit status.

## Conclusion

The increase in house prices and debt is not necessarily a cause for concern as lower interest rates have enabled borrowers to gear up in buying property. It is possible to view the risk situation as being the outcome of a combination of

- The degree of strength in the financial structure of the household sector (ie debts, assets, debt/income ratio, liquidity of assets, riskiness of income flows, debt servicing task, maturity of debts), and
- The size and frequency of shocks that hit household finances (interest rate changes, income changes due to unemployment, pay rises etc).

We can see that there has been a weakening in some areas of the household financial structure – debt loads are heavier, leaving households more vulnerable to interest rate increases. However, there have also been some areas of improvement – housing wealth, for instance, has risen considerably.

The nature of the risks and the possible triggers for loan problems can be identified on the basis of previous experience. While there certainly are market segments that raise concern, the main triggers of potential problems (a large jump in unemployment or large interest rate rises) have not been activated and the consensus view is that they will remain inactive in the near term. The management of risk in this evolving economic environment requires a close monitoring of likely interest rate and labour market trends to assess whether credit conditions in the household sector are likely to deteriorate. At the same time, movements in house prices must be followed to assess implications for the emergence of negative equity in key housing markets.

Sensitivity stress testing of loan portfolios can be undertaken to assess what impact falls in house prices or increases in either interest rates or unemployment could have on variables like the extent of negative equity or debt servicing. The US regulatory agency that oversees the housing lenders runs standard stress tests, for instance, to see what effect housing market downturns might have on lender capital adequacy.

In another example, the Danish central bank, which monitors a banking system that faces very high borrower debt levels in an economy that experienced a serious housing “bust” in the 1990’s, also runs stress tests to see what impact falls in house prices would have on the extent and severity of negative equity. Individual institutions can run precisely the same tests on their books to determine vulnerability in the face of various

shocks and several Australian banks have done just that with generally reassuring results.

