

## **Spreadsheet Tool to Assist in the Rent Vs Buy Decision**

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29 September 2008

About the most frequent statement made by property spruikers of late is that falling interest rates will reignite the housing market. Some that don't want to be proven wrong immediately have said that the "magic" quantum of interest rate cuts from the cash rate peak of 7.25% was 1%.

Leaving behind the fact that mortgage rates are now being set quite independently of RBA cash rate movements, the simple reality is that the poor level of affordability is due to the inflated bubble prices of houses, not interest rates.

I constructed a number of tables in Excel to demonstrate that point. The spreadsheet can be downloaded from my website at [www.geocities.com/homes4aussies/renvbuy.xls](http://www.geocities.com/homes4aussies/renvbuy.xls)

### **Method and Assumptions**

It is a pretty simple process and there are few assumptions. For interest, some may want to calculate their exact current position. So here is how you do it.

Firstly, take your fortnightly rent and subtract from that the cost of home ownership that you would be subjected to if you purchased. For simplicity, I chose a constant \$100\fortnight irrespective of the price of the house. Now this is extremely conservative - \$2,600 a year for council rates, water, extra insurances, and upkeep. (You might want to increase this.)

Then go to a website that will allow you to calculate the mortgage that you can afford while making those fortnightly repayments – I used the ANZ calculator at <http://www.anz.com.au/common/calculators/loanrepayment/exampleau.asp#profile>. You will need to select the interest rate and you can alter this (as I have below) to look at the affect it has on your borrowing capacity. I took the term of the loan as 25 years. Again, you can alter this but it doesn't make a great deal of difference.

Then consider how much you think you will spend on a house, multiply that by 1.05 (to allow for 5% purchase costs) and subtract the mortgage amount that you calculated above. This will tell you the amount of deposit that you require to enjoy the same standard of living after buying your home as you do renting it – I call this the "cost of living" gap.

### **Results**

Table 1 contains the cost of living gap for variously priced homes at various rents at an interest rate of 9% which approximates current standard variable rates in the mortgage market. Currently the median priced house in most Australian capitals is \$400,000 or more, and the median rent is around \$350 per week. If you look at the cell corresponding to a \$400,000 house which rents for \$700 per fortnight you will see that you would need to have a deposit of \$264,833 to buy that house and enjoy the same standard of living as you do renting it!

Table 1 – Cost of living gap at an interest rate of 9%. Assumptions listed in methodology.

	Rent paid/fortnight								
	\$ 500	\$ 550	\$ 600	\$ 650	\$ 700	\$ 750	\$ 800	\$ 850	\$ 900
Loan Equivalent	\$103,444	\$116,375	\$ 129,306	\$142,236	\$155,167	\$168,097	\$181,028	\$193,958	\$206,889
House Price									
\$ 150,000	\$ 54,056	\$ 41,125	\$ 28,194	\$ 15,264	\$ 2,333				
\$ 200,000	\$106,556	\$ 93,625	\$ 80,694	\$ 67,764	\$ 54,833	\$ 41,903	\$ 28,972	\$ 16,042	\$ 3,111
\$ 250,000	\$159,056	\$146,125	\$ 133,194	\$120,264	\$107,333	\$ 94,403	\$ 81,472	\$ 68,542	\$ 55,611
\$ 300,000	\$211,556	\$198,625	\$ 185,694	\$172,764	\$159,833	\$146,903	\$133,972	\$121,042	\$108,111
\$ 350,000	\$264,056	\$251,125	\$ 238,194	\$225,264	\$212,333	\$199,403	\$186,472	\$173,542	\$160,611
\$ 400,000	\$316,556	\$303,625	\$ 290,694	\$277,764	\$264,833	\$251,903	\$238,972	\$226,042	\$213,111
\$ 450,000	\$369,056	\$356,125	\$ 343,194	\$330,264	\$317,333	\$304,403	\$291,472	\$278,542	\$265,611
\$ 500,000	\$421,556	\$408,625	\$ 395,694	\$382,764	\$369,833	\$356,903	\$343,972	\$331,042	\$318,111
\$ 550,000	\$474,056	\$461,125	\$ 448,194	\$435,264	\$422,333	\$409,403	\$396,472	\$383,542	\$370,611
\$ 600,000	\$526,556	\$513,625	\$ 500,694	\$487,764	\$474,833	\$461,903	\$448,972	\$436,042	\$423,111

This is a clear demonstration of just how inflated are the prices of our houses!

Now, if these spruikers were correct, that interest rate decreases are really going to solve the affordability issue and get home buyers back in to the market, then this should be abundantly clear at the extreme of their argument – right? So let's just pretend for a moment that Glenn Steven's at the RBA got really carried away, and Mike Smith at the ANZ did allow the company to become a charity, and mortgage rates dropped overnight down to 5%.

A mortgage rate of four percent less than the above current situation, over a short period of time, obviously is complete fantasy. But for interest, just how much less unaffordable do Aussie houses become?

As can be seen in table 2, the answer is not a great deal!

Table 2 – Cost of living gap at an interest rate of 5%.

	Rent paid/fortnight								
	\$ 500	\$ 550	\$ 600	\$ 650	\$ 700	\$ 750	\$ 800	\$ 850	\$ 900
Loan Equivalent	\$148,809	\$167,410	\$ 186,011	\$204,612	\$223,213	\$241,814	\$260,415	\$279,017	\$297,618
House Price									
\$ 150,000	\$ 8,691								
\$ 200,000	\$ 61,191	\$ 42,590	\$ 23,989	\$ 5,388					
\$ 250,000	\$113,691	\$ 95,090	\$ 76,489	\$ 57,888	\$ 39,287	\$ 20,686	\$ 2,085		
\$ 300,000	\$166,191	\$147,590	\$ 128,989	\$110,388	\$ 91,787	\$ 73,186	\$ 54,585	\$ 35,983	\$ 17,382
\$ 350,000	\$218,691	\$200,090	\$ 181,489	\$162,888	\$144,287	\$125,686	\$107,085	\$ 88,483	\$ 69,882
\$ 400,000	\$271,191	\$252,590	\$ 233,989	\$215,388	\$196,787	\$178,186	\$159,585	\$140,983	\$122,382
\$ 450,000	\$323,691	\$305,090	\$ 286,489	\$267,888	\$249,287	\$230,686	\$212,085	\$193,483	\$174,882
\$ 500,000	\$376,191	\$357,590	\$ 338,989	\$320,388	\$301,787	\$283,186	\$264,585	\$245,983	\$227,382
\$ 550,000	\$428,691	\$410,090	\$ 391,489	\$372,888	\$354,287	\$335,686	\$317,085	\$298,483	\$279,882
\$ 600,000	\$481,191	\$462,590	\$ 443,989	\$425,388	\$406,787	\$388,186	\$369,585	\$350,983	\$332,382

As can be seen from Table 2, if the world went crazy and interest rates dropped by 4% overnight - from 9% down to 5% - somebody buying a roughly median priced home would still need a massive deposit of almost \$200,000 to enjoy the same standard of living as they do renting that home!

Clearly, and as the RBA has frequently pointed out, the cause of the housing affordability crisis in Australia is not interest rates – it is the house price bubble. Houses are massively overpriced!

As a final scenario, I calculated the cost of living gap on the conditions that I expect will prevail in Australia in 3 to 5 years time (Table 3). This involves mortgage interest rates being around 7%, rents having increased somewhat so that the median rent is around \$400 per week, and the median price of houses in most state capitals is in the vicinity of \$250,000-300,000 (a 25-37.5% decline).

Table 3 - Cost of living gap at an interest rate of 7%.

	Rent paid/fortnight								
	\$ 500	\$ 550	\$ 600	\$ 650	\$ 700	\$ 750	\$ 800	\$ 850	\$ 900
Loan Equivalent	\$122,960	\$138,330	\$ 153,700	\$169,070	\$184,440	\$199,810	\$215,180	\$230,550	\$245,920
House Price									
\$ 150,000	\$ 34,540	\$ 19,170	\$ 3,800						
\$ 200,000	\$ 87,040	\$ 71,670	\$ 56,300	\$ 40,930	\$ 25,560	\$ 10,190			
\$ 250,000	\$139,540	\$124,170	\$ 108,800	\$ 93,430	\$ 78,060	\$ 62,690	\$ 47,320	\$ 31,950	\$ 16,580
\$ 300,000	\$192,040	\$176,670	\$ 161,300	\$145,930	\$130,560	\$115,190	\$ 99,820	\$ 84,450	\$ 69,080
\$ 350,000	\$244,540	\$229,170	\$ 213,800	\$198,430	\$183,060	\$167,690	\$152,320	\$136,950	\$121,580
\$ 400,000	\$297,040	\$281,670	\$ 266,300	\$250,930	\$235,560	\$220,190	\$204,820	\$189,450	\$174,080
\$ 450,000	\$349,540	\$334,170	\$ 318,800	\$303,430	\$288,060	\$272,690	\$257,320	\$241,950	\$226,580
\$ 500,000	\$402,040	\$386,670	\$ 371,300	\$355,930	\$340,560	\$325,190	\$309,820	\$294,450	\$279,080
\$ 550,000	\$454,540	\$439,170	\$ 423,800	\$408,430	\$393,060	\$377,690	\$362,320	\$346,950	\$331,580
\$ 600,000	\$507,040	\$491,670	\$ 476,300	\$460,930	\$445,560	\$430,190	\$414,820	\$399,450	\$384,080

Notice a few things first. If house prices and rents remained flat and interest rates dropped to 7%, the cost of living gap would still be a massive \$235,560! If prices remained flat, but median rent rose to \$400 a week, the cost of living gap reduces by around just \$30,000 (the level that it would drop if interest rates were 5%). Even if rents were really ratcheted up to \$450 a week – something I consider highly unlikely for reasons stated in some of my “bubbles of the day” – you would still need a deposit of almost \$175,000 to enjoy the same standard of living buying a \$400,000 home.

Now this, in a nutshell, is exactly why the property spruikers have entirely lost their ability to scare young Aussies into rushing out and buying at bubble prices.

And as all readers of my website know, affordability will not return to Australia’s housing markets until the cost of living gap is reduced by falling house prices. It’s just the simple reality of the market.

So, finally, if you look at the scenario which I consider is most likely in a few years time, someone renting a median house for \$400 a week will need a deposit of just under \$50,000 to buy the home for a market price of around \$250,000. Note carefully that that represents a deposit of 20%, which historically has been considered a reasonable and sound deposit on a home!

Whilst we can only make our best judgment on what will happen in the future, taking account of all of the information at our disposal, one thing is absolutely certain right now – renting is by far and a way the most economically sensible decision for Australians who have not yet purchased a home!