

## Pay the mortgage and save a fortune



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Much of the debate about housing affordability confuses basic facts about the true cost of mortgage finance

The debate over saving policy and housing affordability sidesteps a basic measurement issue. While there are legitimate disagreements about how best to measure saving and housing affordability, one issue is routinely overlooked – the effect of inflation.

It means a household with an average-size (\$133,000) mortgage is saving \$4000 a year more than they may think. More dramatically, it also means the cost of financing home-ownership is overstated by 50%.

The way inflation erodes the value of money is widely understood, but the effect on saving is often ignored. If someone lends \$100,000 at 9% interest for a year, when the inflation rate is 3%, they are not really earning \$9000. This is because their original \$100,000 only buys what \$97,000 bought a year earlier.

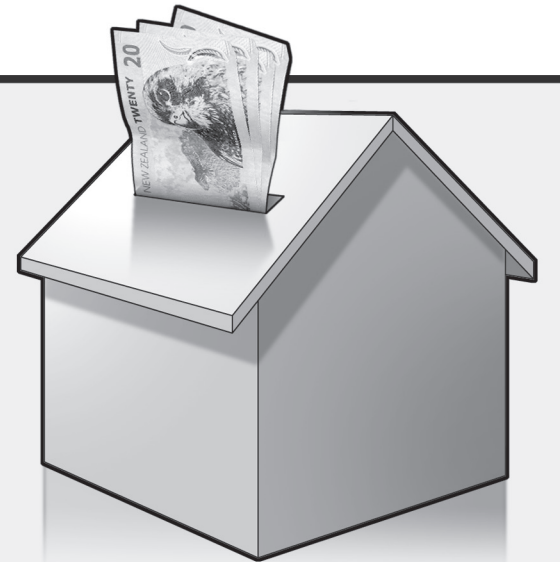
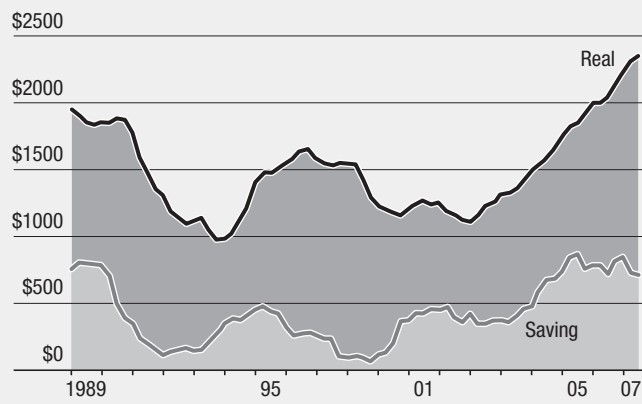
That means they need to split the \$9000 interest two ways: \$6000 real interest earnings and \$3000 compensation for inflation. If they add the \$3000 to their original \$100,000, they have the same in price-adjusted terms as what they started with. If they spend the \$3000, they have reduced their original capital in price-adjusted terms.

In the same way, when someone borrows \$100,000 and makes an interest payment of \$9000, they are actually saving \$3000. Again the payment needs to be considered in two parts: a payment of \$6000 real interest; and a payment of \$3000 to compensate the lender for inflation. The latter is counted as saving, because the borrower has reduced their debt to \$97,000 in price-adjusted terms. Even though they still owe \$100,000 in dollar terms, this sum neither buys as much nor takes as long to earn, because incomes will also have increased by 3%.

Consider a concrete example. Suppose someone borrowed \$250,000, the median price of a house, in September 2004. At the time, the five-year mortgage rate was 7.95% and the average hourly wage was \$20.25; \$250,000 was equivalent

### Monthly interest payments

On a median price house, adjusted to 2007 dollar terms



to 12,345 hours of work, and the monthly interest payment would have been \$1656.

After three years, if just the interest was paid, they would still owe \$250,000. But at 2.9% inflation a year for three years, the debt would only be worth \$229,500 in 2004 terms. Since average hourly wages increased to \$23.06 in September, 2007, the outstanding debt would only represent 10,841 hours work.

The \$20,500 reduction in inflation-adjusted debt is genuine saving. It came about because the borrower made \$20,500 in payments to the lender over the three years to compensate them for inflation.

It is surprising that we do not routinely adjust interest payments for the effects of inflation when we discuss saving. This adjustment has been recommended by economists for at least a century and the recommendation is included in the System of National Account guidelines published by the UN.

It matters even when the inflation rate is 2-3%, as it is in New Zealand. Currently, some \$4 billion of the annual mortgage payments made by borrowers comprise saving because it compensates lenders for inflation – roughly \$4000 for an average mortgage, or \$9000 for someone with a \$300,000 mortgage.

Since much of this mortgage debt

is financed from offshore borrowing, the national saving rate is also understated, probably by 2% of GDP. Clearly, these are big numbers.

This “hidden” saving has risen considerably in the past five years, as the average mortgage size has increased and the inflation rate has drifted upwards (see graph). The hidden saving on a mortgage equal to the price of a median house was more than \$700 a month last September, compared with \$350 a month in September 2002.

If a large fraction of mortgage payments is saving, it follows that standard measures of housing affordability such as the AMP Home Affordability Index overstate the cost of finance. These indices calculate the fraction of the average income that is needed to pay the interest cost on a mortgage large enough to buy the average house.

In the past five years about a third of these interest payments have been saving. They should no more be included as part of the cost of housing than pension contributions should be included in the cost of housing.

If one makes an adjustment for these savings, it proves that standard measures of housing affordability based on headline mortgage rates overstate the true financing cost by about 50%.

It is true, of course, that families have to find the cash to pay the mortgage every month, whether these payments are true interest costs or saving. When the inflation rate increases, these payments become larger and more onerous and fewer families can afford to make them without reducing other expenditure to extremely low levels.

This problem has been recognized by economists for sufficiently long that it even has its own name – “mortgage tilt.” It is one of the problems that arises when there are seemingly modest increases in the inflation rate, say from 1% to 2% or 3%.

But increases in mortgage payments caused by increases in the inflation rate are not the same as those caused by increases in house prices or increases in real interest rates, as the former increase saving while the latter increase the true cost of home purchase. Each will have very different effects on a household’s financial future.

The issue of housing affordability is sufficiently important that we should make this distinction.

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**Standard measures of housing affordability based on headline mortgage rates overstate the true financing cost by about 50%**

### ECONOMICALLY SPEAKING

Iceland and New Zealand have banks that act irresponsibly and drag their economies into deeper debt. Both also have central banks that exceed inflation targets and raise interest rates.

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### THE STOCKMAN

The Victorian government will not compensate Tabcorp and Tattersalls for the revocation of their pokies licences, a move that deprives them of an estimated \$A670 million and \$A598 million respectively.

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### RURAL BUSINESS

The history of the meat export industry shows that examples of reform momentum have died when prices have improved. It could happen again later this year.

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