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THE HOUSING MARKET AND THE WIDER ECONOMY

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The views expressed here are personal and should not be interpreted as those of the Bank of England or other members of the Monetary Policy Committee.

Introduction

When I was first invited to give this speech, the suggested title seemed to me entirely appropriate. Since March 2003, when I was invited by the Government to lead an independent review of issues around housing supply in the UK, a combination of that work and the continuation of my main role on the MPC has meant that I have spent a great deal of time thinking about issues around housing. However, since the autumn of 2004 my enthusiasm for speaking on this topic from an MPC perspective has waned, although my interest in housing is undiminished.

Why do I feel reluctant to talk about housing? Quite simply, I don't want to add credence to the view that the outlook for house prices dominates our decisions, as expressed by the following: 'monetary policy is already being set in a manner deliberately designed to take the heat out of the housing market – rising house prices being the most obvious manifestation of excessive demand in the economy.'[1] On a related, but critical, note, a recent House of Lords report said: 'we would not put the same emphasis on house price inflation and its indirect effect on general inflation, as does the MPC'.[2] At earlier times, some commentators however urged us to put more emphasis on housing; for example Peter Spencer referred to low inflation in spring 2004 as 'making it very difficult to raise rates in the aggressive way which in my view is now necessary to head off this massive boom in the housing market'[3].

Not surprisingly, it is my view that the MPC's general approach to the housing market has been both consistent and appropriate, and I will reiterate it during the course of these remarks. But the monetary policy context is clearly not the only issue raised by the complex relationship between housing and the rest of the economy. Housing is firstly important as a fundamental human need, but also has wide economic significance, accounting for around 50% of UK household assets, while housing construction and improvements account for 3.7% of total output. Long-term developments in housing have significant implications for equality, both across and between generations

[1] Jeremy Warner: *The Independent*, December 15 2004.
[2] House of Lords (2004)
[3] *Financial Times*, April 21 2004

The influence of housing in inter-generational equality and inheritance is however becoming more complicated, with the increasing use of the asset value of a house by the elderly to provide annuity income (to supplement otherwise inadequate pension provision from financial assets or as payment for long-term care). In addition, there is evidence, especially in London, of increasing reliance by first-time buyers on gifts, family loans or inheritance to fund house purchase deposits[4]. While these developments suggest that the financial market is becoming more efficient at giving opportunities to unlock asset values, they also demonstrate the influence of home-ownership on a family's ability to meet financial challenges.

Strong rises (over 10% per annum in nominal terms, Chart 1) in house prices over the past three years have fostered the perception that housing is a relatively attractive investment. But over the long term both theory and past experience suggest that the returns on housing investment will be rather less spectacular, and driven by the fundamentals of income growth, real interest rates, the structure of mortgage products, taxation, maintenance costs, demographics and supply.[5] So housing assets will probably not continually yield significantly higher returns than other assets with similar risk. During periods when the demand for housing is fuelled to some extent by an investment motive (for example, if a significant number of households buy larger houses than they otherwise would) this becomes a policy concern as it conflicts with worries about the environmental costs of housing (related to the use of both land and resources). At the extreme, concerns over these externalities lead to the argument that households should not aspire to occupy a house larger than some measure of 'need'.

Structural factors such as housing tenure (in particular, the share of the private rental sector), transactions costs and the characteristics of the mortgage market housing finance affect economic performance more widely. For example, there is evidence that a high level of owner-occupation reduces labour mobility[6]. And evidence on the flow of new VAT registrations, and private business registrations suggests a positive

[4] Bramley (2003)
[5] See, for example, Muellbauer and Murphy (1997) for a rather fuller discussion of this topic.
[6] Henley (1998)

relationship with increases in the value of housing equity (Black, 1996). Interestingly, this latter paper confirms this relationship by considering the impact of increases in regional housing equity relative to the national average, suggesting one possible reason for the apparent difference in entrepreneurship between UK regions.

What, ideally, should our housing policy aims be, and how should the market element function? First, it would provide shelter for all at least appropriate to their needs (defined with reference to current decent homes and overcrowding standards), and is therefore likely to include elements of public subsidy. Second, the long-run trend of house prices would only imply a continually rising price relative to incomes to the extent that this was justified by environmental concerns. This would also mean that the relative attractiveness of investment in housing would not tend to be such that other, more productive, investment is potentially crowded out. Third, the structure of housing tenure, housing finance and transactions costs should not unduly hinder labour mobility. Fourth, the long-run cycles in the volatility of house prices would be less marked than in the past, reducing financial risks borne by owner-occupiers and also making the operation of macroeconomic policy easier. Of course, alongside this, planning regulations would continue to tackle their essential task of balancing economic benefits against environmental externalities and creating liveable places.

Trends and cycles

The factors which drive house prices over the long term, and therefore drive the user cost of housing have already been mentioned. The forward-looking element in house price determination (since expected changes in house prices are one element of the user cost) combined with credit constraints and an inevitably sluggish supply response results in short-term movement of prices away from equilibrium following a persistent positive demand shock. So the underlying structure of the housing market also affects the movements of prices in the short run.

Simply put, a change which increases demand for housing, such as a beneficial shift in taxation which reduced the cost of owner-occupation, would cause a jump up in house prices to restore equilibrium in the market. The rise in house prices will then enable some previously constrained owner occupier households to move further up the housing ladder, as the equity in their existing property will increase in value

significantly. Eventually the rise in prices is likely to be halted, assuming that the housing stock is expanded to meet the rise in demand, and prices may even fall back, relative to incomes, as first-time buyers find it more difficult to enter the housing market. In the UK, swings tend to be exacerbated by the dominance of short-term floating rate finance for household mortgages[7], and are also affected by a relatively low price elasticity of housing supply[8].

Most of these effects are, of course, mirrored on the downside in the event of a negative demand shock. However, the fixity of housing may mean that the downward adjustment of the housing stock creates enduring local problems. It may be convenient to talk about a single housing market, but the reality is of course much more complicated. In periods of weaker demand for housing, it is likely that this will be felt more acutely in areas with poorer housing stock, inadequate public infrastructure, or weak local economic conditions. These areas may then cease to be part of effective supply more permanently. So, unless there is specific policy intervention to stimulate demand in these areas, when general housing demand strengthens there is pressure for new stock despite the existence of vacant dwellings.

Both the recent review of the UK mortgage market by David Miles, and the review of UK housing supply which I led, were aimed at improving the functioning of the market. The key focus of the former was reducing house price volatility and (through better understanding and a wider choice of products) the risks run by individual mortgagees. The latter took a long-term view, proposing that it would be desirable in the UK to have a slower upward trend in real house prices – though leaving to Government the decision about how far to balance these benefits against environmental costs. An improved supply side could also have beneficial effects on volatility, if a more explicit government commitment to ensuring market housing affordability over the long term reduces the expected capital gains from housing investment. This is not the place to reiterate the arguments and proposals in these reviews. It is clear however that while, taken together, their policy proposals could improve the functioning of the market, they did not add up to a review of the full complexity and range of housing policy questions.

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[7] Miles (2004)
[8] Swank et al (2002)

A general issue which arises when considering policy interventions is that of distinguishing the longer-term trend in house prices from cyclical changes, and ensuring that the underlying policy framework will endure across all stages of the cycle. For example, peaks in the housing market obviously mean that the price of housing land is also high, and that land profits could potentially, to a greater or lesser extent, be diverted from landowners and developers into support for public infrastructure and social housing. But it cannot be assumed that this source of finance will be so plentiful over the whole cycle.

Considerations about peaks and cycles are particularly relevant at the present time, when most approaches to establishing the underlying equilibrium level of UK house prices agree that it is significantly below the present level. (Although it could be pointed out that these estimates have themselves tended to rise over the past two or three years, alongside the search for explanation of the continuing actual house price increases. Further, the estimates of overvaluation relative to household incomes cover a wide range – some think there is little or no overvaluation, others that it could be up to 50%.) The policy conclusions of the two recent reviews are directed at ameliorating the scale and impact of future housing cycles, rather than at resolving the present one, and will not affect the present risk of a decline in the general level of house prices. In the rest of my remarks this morning, I want to consider the nature of the present housing cycle, and the relevant issues for monetary policy.

The present UK house price cycle

In recent Inflation Reports, the MPC as a whole has stressed three key uncertainties about the housing market as it relates to monetary policy. These are: uncertainty about where the present equilibrium in house prices is, uncertainty over the timing and extent of any correction with the attendant risk of overshooting, and uncertainty about how household consumption would respond in the event of sustained outright house prices falls.

In seeking to address these uncertainties, the first step is to consider why the rise in house prices (which have roughly doubled in nominal terms over the past five years[9]), has been so rapid. The fact that household consumption has not responded to the rise in house prices in line with historical experience (had the MPC forecast house prices accurately, we would, over the past two years, have over-predicted consumption) suggests that the reason for the increase may be different on this occasion. The previous periods of rapid house price increase, in particular the experience of the late 1980s, seem to have been linked to increased household optimism about their own income growth. The subsequent downturns were therefore, at least partly, driven by the realisation that at least part of this optimism was unwarranted.

There are four potential reasons for the recent increase in house prices. The most obvious is the front-loading effect – the fact that lower nominal interest rates ease the ability to pay at the start of a mortgage. The lower proportion of household income taken up by interest payments means that those with good employment prospects are able to take full advantage of their long-term capacity to borrow. (In future years, of course, as their debt is eroded less rapidly by inflation, the burden of payments will be relatively greater and their real disposable income after housing costs will rise more slowly.) The constraint, in terms of affordability, on first-time buyers is increasingly the ability to fund the initial capital payment, especially as loan-to-value ratios for new borrowers with high debt-servicing costs are generally lower than at the previous housing market peaks.

The second support for higher prices over recent years is the fall in long-term real interest rates. In a recent speech, Steve Nickell[10], drew on the asset-pricing framework described by Weeken[11]. The basic insight here (see Appendix, which sets this out, and indicates its limitations), is that the equilibrium house price is related to the discounted value of future rents, and an unobservable housing risk premium. Nickell pointed out that the risk free real rate has fallen from 4% in the mid-1990s to around 2% since 1999 (Chart 2) and suggested that, if rents are expected to grow in line with incomes, then this fall in real interest rates could justify a rise of around two-

[9] Average of Halifax and Nationwide indices
[10] Nickell (2004)
[11] Weeken (2004)

thirds in real house prices relative to real rents. So this is potentially a significant factor, although the estimate is very sensitive to both the risk premium on future rents and to the expected growth in rents relative to incomes.

The third reason for higher house prices is the slow growth of housing supply relative to demand. It is difficult to reach a firm estimate of just how big the gap between potential household growth and actual supply has been over the past five years or so (a comparison of the 2001 and 1991 Censuses does not adequately answer this point, mainly because an estimate of the number of concealed households is not yet available for 2001[12]). However, the most recent (and preliminary) ODPM estimates[13] of household growth in England over the next 20 years is 189,000 new households per year. Between 2000 and 2003, gross new housing completions in England averaged just 136,000 thousand per year. Although 2004 saw some pickup in completions, the total is still likely to fall short even of just keeping pace with new demand.

If evidence of ongoing inadequate new supply raises expectations of future growth in rents, then this would be an additional factor raising the equilibrium level of house prices. Although new supply is less than 1% of the stock, and therefore unlikely to have more than a minor effect, using similar assumptions to those above, an expectation of rents increasing 0.1% more quickly per year would raise equilibrium house prices by around 3.5%.

A fourth explanation is that effective demand has risen by more than would have been expected, based purely on household growth, because of an increased preference by households for investment in housing, rather than equity or other financial markets, since the sharp falls in equities between 2000 and 2003. This might occur either through elderly households delaying down-sizing in order to accumulate more capital gains, or more households acquiring additional properties – either earlier purchase of homes intended for retirement, or individual buy-to-let properties.

It is difficult to find very convincing evidence on the first of these, although a recent Council of Mortgage Lenders survey indicated that 40-50% of 45 to 64 year olds

[12] Barker (2004)
[13] ODPM Interim 2002-based Household Projections

intended to use housing wealth to finance consumption post retirement. Use of housing equity as savings might also be consistent with the evidence that consumer spending has increased by less in response to rising house prices in the present upswing than was previously the case[14]. On the second, there has been some recent indication of a rise in second property ownership, but the absolute number remains very small (although the estimates may not be fully reliable). And although buy-to-let mortgages have risen from 1% of new mortgages in 1998 to nearly 6% in the first half of 2004, data for the size of the private rented sector (available up to 2003) does not indicate that there has been a significant shift from owner-occupation to the private rented sector (which has remained pretty stable at around 10%). One possible explanation for this would be that private landlords have been taking share in the rental market from the corporate sector, given the failure to date of policies intended to increase the involvement of the corporate sector in the private lettings market.

Putting these factors together, an account of the recent past might be that the fall in real interest rates was potentially a source of a very large rise in the equilibrium house price to income ratio. However, even with the reduced burden from front-loading, lack of access to capital for larger deposits could have reduced this effect, as the implied increases in deposits and payments presented problems for some potential first-time buyers. Estimates suggest that in fact a smaller proportion of newly-forming households has been able to afford to enter owner-occupation than during the last house-price cycle[15]. It is likely that this has been due to the weak response of supply to demand arising both from strong household formation, and, to an uncertain but probably lesser extent, from increased investment demand.

Outlook for house prices and consumption

The many uncertainties surrounding the various possible explanations for the recent strength of house prices mean that the present equilibrium value of house prices is also highly uncertain. According to this analysis, over the next two or three years, the main factors affecting prices are likely to be movements in short-term interest rates, or in long-term real rates (where the reasons for the recent fall are not clear), and changes in perception of the relative investment potential of housing. (Changes in

[14] Inflation Report, November 2004, Bank of England
[15] Bramley (2003)

supply may be important over the longer term, but it is highly unlikely that the rate of new supply could be increased sufficiently in the short term to make a significant impact. The prospect of improved supply responsiveness might however have some impact in the short term if changes in the longer-term price trend are fully anticipated.)

So it remains unclear if the level of UK house prices is at or above equilibrium today, and, if above, how far. The MPC's central assumption in the November Inflation Report was that house prices might fall modestly for a period. But this remains only one of a wide range of possibilities, especially given the potential of asset prices to experience significant, and sometimes prolonged, overshooting of fundamental values in either direction.

The remaining key issue is the response of consumption, and perhaps the economy more widely, to developments in the housing market. The above analysis suggests that the explanations for the price upswing do not lie in an over-optimistic view about future consumer income growth (which led to the past correlation between house prices and consumption), but rather in a combination of factors related to changes in the financial market and in the housing market itself. This supports the argument that there may be a lesser impact on consumption from declining house prices than appeared to be the case in the past, when sharply rising unemployment led to a reassessment of consumers' income prospects, and a fall in house prices.

One potential challenge to this view is that the impact on consumption is rather greater in the event of house price falls than for increases. There are some possible reasons why this might be the case. For example, there is a risk that increased concerns about the future course of house prices could lead to a sharp tightening of lending criteria by financial institutions.

Further, if the argument that housing is increasingly being used as an investment vehicle has some substance, there is scope for a greater reaction of consumption, other things (primarily changes in equity prices in this case) being equal. This would suggest that, having not raised consumption in response to rising housing equity, households will nevertheless consume less as prices decline, due to concern over the

implied fall in the value of their savings. While, as discussed above, the evidence on how far housing has been used as a savings vehicle in recent years is not clear-cut, there is some risk that this mechanism could generate a negative wealth effect in these circumstances. This would be different from previous UK experience, where it has more normally been found that simple wealth effects from house prices on consumption cannot be consistently identified[16]. (There is, however, a potential offset to this. If it is correct to argue that first-time buyers are saving more for deposits, and there is some tentative evidence from the Family Expenditure Survey that the consumption ratio of renters under 35 has fallen in recent years relative to other groups, then for this group consumption might increase if house prices fell).

However, other potential downsides seem less likely to occur. Widespread negative equity might be expected to result in sharp decline in labour mobility, but with lower loan-to-value ratios than at the previous market peak, only a major fall in nominal prices would result in significant negative equity.

It might also be possible that the impact of (rather more nebulous) consumer confidence effects might be greater for falling prices. The fact that there has been no evidence of surprisingly weak consumption, or any fall in consumer confidence itself (Chart 3) in recent months is not conclusive either way in this debate, as there has not yet been any significant nominal declines in house prices overall.

Conclusions

The importance of housing could hardly be over-stated: it is a necessity - good housing is vital to individuals' prospects for health and even education. It is a major factor in household balance sheets, an important economic sector and one which raises significant environmental concerns. It has many links to the wider economy, affecting the overall supply capacity and the success of regional and local economies. In these remarks it has only been possible to focus on some aspects of the broad canvas offered by the title.

[16] For example, see Miles, D (1997)

Both in the long-run and the short-run there are reasons for policy interest. The Government has rightly recognised the importance of tackling house price volatility and the issue of inadequate housing supply. However, the measures now being proposed are aimed at reducing future volatility in the market, not at dealing with the consequences of the present cycle.

From the standpoint of the MPC, the questions raised are rather different. In previous speeches I and other MPC members have set out why it is generally undesirable to target asset prices when setting interest rates – particular reasons being the wide range of uncertainty around the equilibrium for any asset price, and the dangers to credibility of diverting policy from the goal of achieving the Government's inflation target.

Nevertheless, the outlook for house prices and its potential effect on household consumption (and therefore demand pressures and inflation) remains one of the major issues confronting the MPC at the present time. I have argued that there are a number of factors which could have contributed to the rise in house prices in recent years; falls in short-term interest rates, lower long-term real rates, constrained housing supply and increased investment demand. Pretending to have any degree of confidence in predicting asset prices is notoriously foolish. But in view of the evidence on affordability, and the balance of arguments about overvaluation, the likelihood of some decline in house prices, at least relative to earnings, seems now to be much greater than that of a further significant increase. There is however a plausible case to be made that this will be associated with less downward pressure on consumption than appeared have been the case in previous cycles, even when possible asymmetries have been considered.

But to go back to where I started, the housing market is far from being the dominant issue. It is perhaps not even the most important asset price, in the light of the significant decline in the dollar's effective rate in the fourth quarter of last year. And it is in some sense easier to react to. Past experience suggests that house price movements in one direction over a quarter are more often than not followed by a further change in the same direction. So it can be clearer how account should be

taken of news in this series, whereas exchange rate changes are likely to contain more noise (Chart 4) .

In considering the MPC's decisions over the coming months, it is vital to remember that our decisions are affected, as always, by a wide range of factors. In particular, I am interested in understanding better the factors behind, and the possible significance of, the recent improvement in private sector productivity. House prices may be one indicator, but there are many other questions, puzzles and surprises which are also likely to pre-occupy us.

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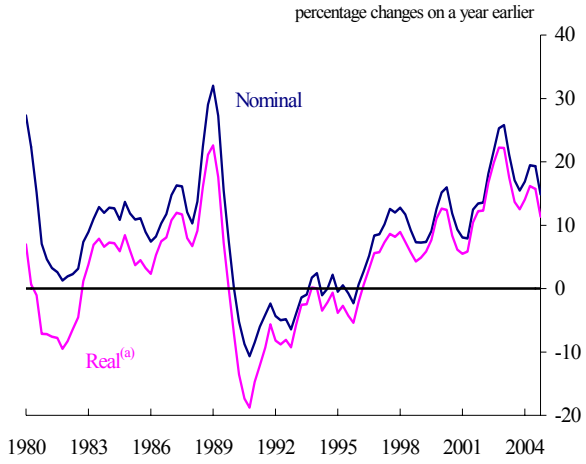
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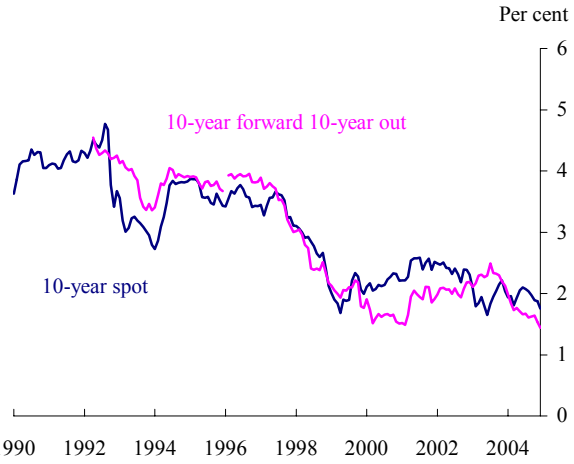
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Chart 1: Annual house price inflation



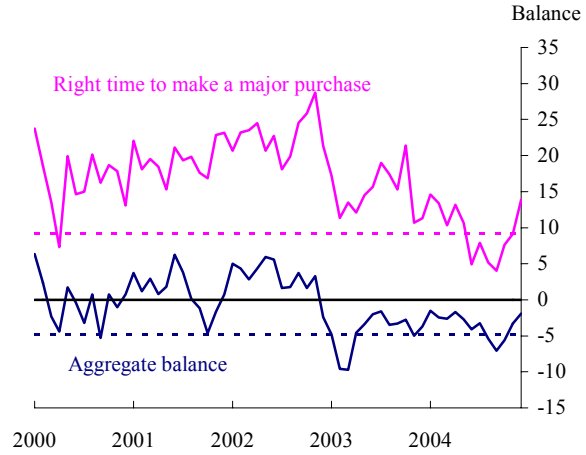
Source: Nationwide and ONS.
(a) Nationwide index deflated by the Retail Price Index.

Chart 2: 10-year real interest rates(a)



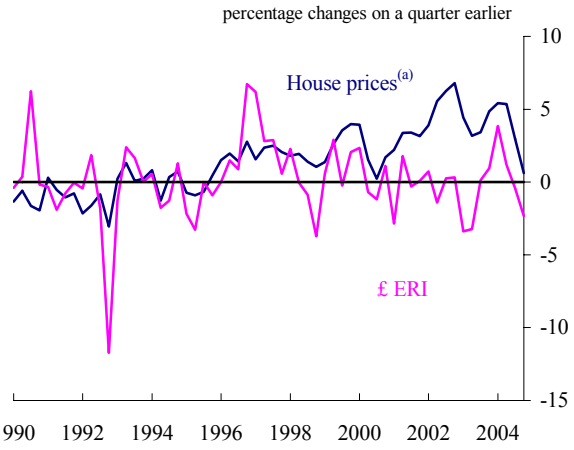
Source: Bank of England.
(a) Real interest rates implied by index-linked gilts.

Chart 3: Consumer confidence(a)(b)



Source: Martin Hamblin GfK.
(a) Dashed lines indicate averages of series from 1988.
(b) These data have been seasonally adjusted. See box in Berry, S. and Davey, M. (2004) "How should we think about consumer confidence?" Bank of England Quarterly Bulletin, Autumn

Chart 4: Quarterly asset price changes



Sources: Bank of England, Halifax and Nationwide.
(a) The average of the Halifax and Nationwide indices.

Appendix: Pricing houses using an asset price formula

The relationship between equilibrium real house prices and the discounted present value of the real expected future pay-off on housing can be written as:

$$P_h = D/(r_f + \rho - g)$$

where P_h is real price of houses, D is real pay-off on housing, r_f is the real risk free interest rate, ρ is the risk premium on housing and g is the expected growth rate of real housing dividends. Assuming that the real pay-off on housing grows line with real wages implies that this formula can also be used to look at the house price to earnings ratio. It can be seen from this that a fall in the real risk free rate will lead to an increase in the equilibrium house price to earnings ratio. For example the discussion in Nickell (2004) shows that if g is 2% and the long run risk premium averages 3%, then a fall in the real risk free interest rate from 4% to 2% would imply that the equilibrium real house price to earnings ratio should rise by roughly 67%.

Although illustrative of the sort of mechanisms that may exist in the housing market, this is clearly a simplified framework. Weeken (2004) discusses the theoretical limitations of the model in more detail. These limitations arise amongst other things from: the lumpiness of housing, which makes it difficult to make small adjustments to a housing portfolio; limitations on people's ability to take advantage of arbitrage opportunities, for example because of borrowing constraints; and taxes and regulation which create a wedge between the post tax returns on property and other investments such as shares. Planning restrictions and the slow response of the housing stock to demand mean that returns on housing investment may exceed the cost of finance for considerable periods of time; see Weeken (2004) on this point.

Therefore although the formula is useful as an illustration of the possible mechanisms at work in the market, in practice the calculated level of house prices to earnings from the formula should not be treated as an exact measure of equilibrium. This is true not only because the theoretical assumptions may be violated, but also because of the difficulties of precisely measuring the data (such as the real pay-off on housing and the housing risk premium) used in the formula; again see Weeken (2004).

The real pay-off on housing can be proxied by the real housing dividend or the amount of net rentals that is actually retained rather than being spent on new housing investment. Weeken (2004) cites evidence suggesting that historically the ratio of the housing dividend relative to net rentals has been close to one, so the difference between a formula based on the housing dividend and one based on net rentals will be small. Net rentals are given by rents after subtracting maintenance and management costs and the distinction is important because typically the difference between net and gross rental income can be large; see Weeken (2004).

The risk premium, ρ, will depend on the covariance between expected returns on housing and expected consumption growth and will reflect whether housing provides returns when it is needed most (in other words in bad times). The risk premium will therefore be positive if there is expected to be a strong positive correlation between housing returns and consumption growth. In contrast, if housing provided a degree of insurance against bad times, so returns on housing are expected to be strongest when consumption growth is expected to be low, then consumers would be prepared to pay a premium, so ρ would be negative.