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Insights from Economics

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When is housing affordable?

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The price of housing frequently makes front page headlines. Talking about house prices is as much a national obsession for the British as talking about the weather. According to the Council of Mortgage Lenders (CML) and the Office of the Deputy Prime Minister (ODPM) the (simple) average UK house price in 2003 was £155,627, 21% higher than in 2002. This sounds expensive, but how do economists assess the affordability of housing?

Comparing the average price of housing across time is not especially insightful so far as affordability goes, but it does show that UK house prices tend to rise over time and that sustained falls are unusual. Economists refer to the prevailing price at which a good or service is traded as the nominal price. Back in 1969, the usual starting point for most economists using the ODPM house price dataset, the average nominal UK house price was £4,640. Consequently, between 1969 and 2003 the average house price rose 3,254%, or by 11.2% per year. In comparison the price index for household consumption rose by less: 879%, or 7.1% per year. This tells us that the price of housing has become more expensive *relative* to goods and services more generally. The relative increase is referred to by economists as a *real* increase; it is the rate of increase which is not attributable to general inflation.

While real house prices have increased by 4.1% per year since 1969, consider incomes over the same period. The two most commonly used income measures are *average earnings* and the *average income of borrowers*. In (tax year) 2002-3 the average gross annual pay of a full-time employee in Britain was £25,170 compared with £1,306 in 1968/9. This is equivalent to nominal growth of 9.2% per year or 2.0% in real terms over the period. According to the Survey of Mortgage Lenders the average income of borrowers rose from £1,760 to £38,538, equivalent to nominal growth of 9.6% per year or 2.5% real growth.

So the underlying trend in the house price to income ratio since 1969 is clearly upwards. This does not mean that the observed ratio has risen every year. Rather, there has been volatility reflecting that in house prices. Nonetheless, if unchecked it does have important implications for the attainability of owner-occupied housing for certain groups in society. To understand

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why the ratio is trending upwards requires a thorough analysis of housing demand and supply, something that the government along with academics and interested parties, such as lenders and house-builders, needs to remain engaged in.

In the presence of an upward trending house price-income ratio *attainability* becomes an issue. Attainability is usually thought of in relation to first-time buyers, but also relates to the ability of former owner-occupier households (movers) to trade-up and attain larger properties or to attain similar sized properties in more expensive regions. The house price-income ratio is composed of two individual ratios. The first is the *advance-income ratio* which is also known as the *income multiple*. The second is the *deposit-income ratio*. The deposit-income ratio measures the extent to which purchasers have to bring their own money to the table to *'bridge the gap'* between the advance and the purchase price. If the house-price income ratio trends upwards and lenders continue to provide similar income multiples then the gap that needs bridging will tend to grow too.

Chart 1 shows the deposit hurdle for first-time buyers is now at an historic high despite the fact that the income multiple is also historically high. *Attainability is a burning issue for first-time buyers*. *In 2004 the average first-time buyer household requires a deposit equivalent to their annual income*.

Chart 1
First-time Buyers, 1969Q1=100

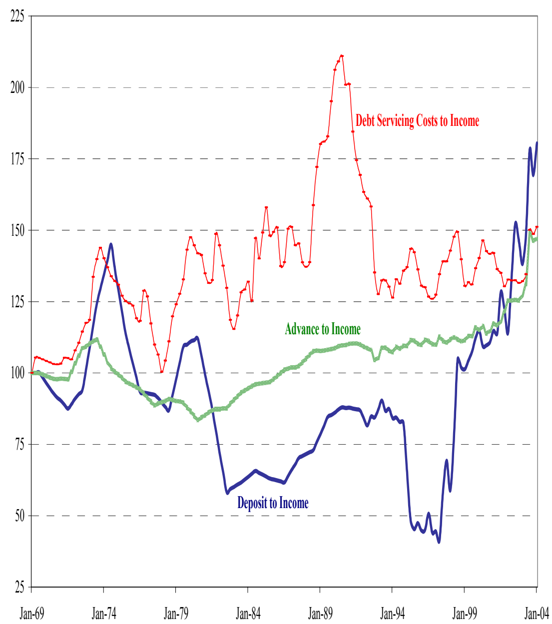
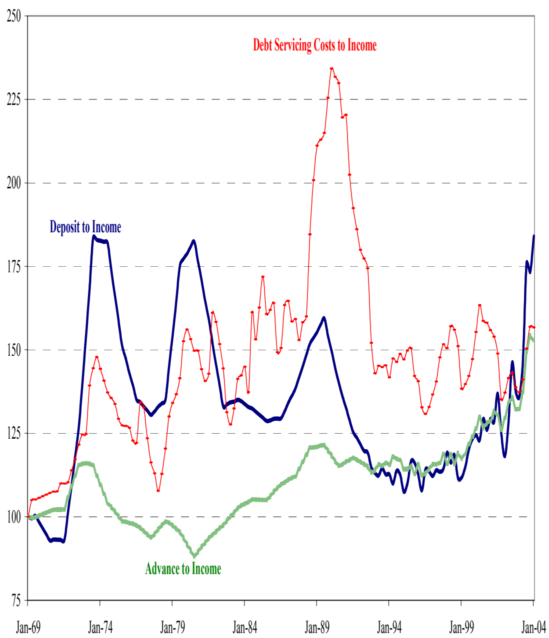


Chart 2
Movers, 1969Q1=100



Source: ODPM and Author's own calculations

Attainability for former owner-occupiers is often ignored because rising house prices lead to increases in housing equity and so households become less financially exposed; their loan to value ratio falls. But this ignores the importance of income multiples. When house price growth is faster than income growth the income multiple needed to trade-up (or move to more expensive areas) rises over the longer-term, meaning households increasingly need to supplement their (growing) housing equity. When income growth is at least as fast as house price growth, the income multiple needed to trade-up falls over time.

Assessing attainability for movers requires looking at the deposit-income ratio in conjunction with the advance-income ratio. This is because the deposit can comprise of housing equity. Chart 2 suggests that *attainability for former owner-occupiers (movers) is now poor since, despite historically high income multiples, the deposit-income ratio has reached a level last seen during the house price booms of the 1970s*. The average former owner-occupier household in 2004 requires a deposit equivalent to 1.8 times their annual income and an advance 2.7 times income.

Attainability is one dimension of affordability, the other is *sustainability*. In the context of owner-occupied housing, sustainability relates to the difficulty households have in servicing their mortgage and so continuing to reside in their current property. This will be dependent on mortgage rates as well as the size of the advance; low mortgage rates on large advances can be as sustainable as high mortgage rates on small advances. Debt servicing costs include repayment of capital and payment of interest.

From Charts 1 and 2 we observe that in 2004 the cost of servicing mortgage debt as a share of borrower income is on par with a level seen across much of the last 30 years and is well below the highs of the late 1980s and early 1990s. This is despite historically high income multiples and tax relief on interest payments no longer being available. The average first-time buyer household purchasing in 2004 is devoting 20% of their annual income to servicing their mortgage compared with 28% in 1990. Meanwhile, the average former owner-occupied household purchasing in 2004 is devoting 18% of their annual income to debt-servicing compared with 27% in 1990.

So what have we learnt about the economist's take on housing affordability? Firstly, affordability is actually short-hand for attainability and sustainability. So when reading about affordability we need to be clear as to what dimension or aspect of affordability a writer is referring to. Secondly, any assessment of British housing affordability has to recognise that over the past 30 years or so average real house price growth has outpaced real income growth. The tendency for the house price-income ratio to rise has implications for attainability and for sustainability.

Finally, what of affordability in 2004? Well, an analysis of attainability shows very clearly the problems that first-time buyers in the UK are facing in trying to get on the property ladder; the average deposit needed by a first-time buyer household is now equivalent to a year's income. But, trading-up or moving into more expensive areas also appears historically difficult for former owner-occupiers despite their accumulation of housing equity. When entering the market in 2004 the average former owner-occupier household is borrowing at a record high income multiple and yet still requires an historically large deposit relative to their income. Sustainability remains generally favourable at present, but with record income multiples and interest rates having edged up there are inevitably some vulnerable homeowners. Affordability will remain an issue in the UK so long as the nature of housing demand and supply means that the house price to income ratio trends upwards. More affordability headlines surely lie around the corner.

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