



25 JANUARY 2018

## THE HOUSING MARKET<sup>1</sup>

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“Private places, where every parent hath his children taught within his doares have but small interest in this place: bycause such a parent, as he may take or leave of the generall traine, what it shall please him, his owne liking being the measure to leade him: so for exercise, or any other thing he is the appointer of his owne circumstance, and his house is his castle.”

Richard Mulcaster, 1581.

“The poorest man may in his cottage bid defiance to all the forces of the Crown. It may be frail—its roof may shake—the wind may blow through it—the storm may enter—the rain may enter—but the King of England cannot enter!—all his force dares not cross the threshold of the ruined tenement!”

William Pitt the elder, Earl of Chatham, 1763.

“People want a home they can call their own.”

Margaret Thatcher, Party Political Broadcast on housing and rates, 28<sup>th</sup> August 1974.

### Introduction

It might only be just a little too strong to argue that the housing market dominates our national life. Whilst economists, if they consider housing at all, would think of the consumption of housing services as another aspect of the basket of goods and services bought, like clothing or food. Most people would place the decision on the location and type of their accommodation as critical to their sense of well-being if not their very identity. Indeed accommodation may not only act as the critical determinant of the wealth held by a household but also the key to understanding people’s perception of their own status.

The first question we might ask ourselves is what do we buy when we buy a house? Essentially we buy the permanent value of flow of accommodation and amenities provided by the house in any particular location. For the most part we also buy the land, or a fraction, of the land on which the house is built. The value of the house then should be something close to the present value of those housing services over the lifetime of the house minus the costs of repair and maintenance plus the value of the land. It is thus not immediately clear why prices should appreciate markedly as it would require sharp revisions to the value of housing services, the underlying value of land or changes in the rate at which we discount the future.

Economists often concern themselves with preferences before writing out the whole of a problem and solving it for a decision rule. By preferences, we mean stating explicitly how we will value one set of outcomes over another and we will arrange our affairs so that we can best satisfy those preferences given our budget constraints. For the consumption of goods, for example, we will spend on each item up to the point that the utility gained from the last unit of consumption of that item is the same per pound as any other item. In effect

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<sup>1</sup> This overview lecture should be treated as a short introduction to many others' research. © Jagjit S. Chadha 2018. I am grateful for conversations with and Stephen Aldridge, Germana Corrado, Luisa Corrado, Monique Ebell, Chris Giles, Sean Holly, Amit Kara, Jeff Matsu, David Miles, Hashem Pesaran, Alan Taylor and Garry Young.



we are ensuring that marginal utility per pound is equal across all items. A good for whom we place a higher preference might be one to which we devote a considerably higher fraction of our income. And indeed as far as household expenditure is concerned we have increased the share of our expenditure on housing (including expenses such as mortgage interest, rent, council tax and maintenance) from 9% in 1957 to 18% by 2016. We have similarly increased our expenditure on leisure goods and services from 8% in 1968 to 19% in 2016 (Tetlow, 2018). Taken together these seem to imply a society more geared to consuming local amenities and leisure than in the immediate post-war period, and so bearing higher house prices.

A supporting observation is that number of households who are owner occupiers has grown dramatically. There were just under 12mn in 1980 and this peaked at just over 18mn in 2008. And although the fraction of householders who were homeowners peaked at around 70% in the early noughties and declined to some 62% by 2014, the increase in home ownership almost directly offset the scale of local authority housing provision over the same period. Since the early part of this century there has though been an increase in those privately renting and from housing associations.

The housing problem, if there is one, results primarily from a revealed preference to spend income on housing and related services and to own our own homes. Let us delve a little into some of the resulting outcomes for the housing market.

### **Asset Price Performance**

Economists are mostly concerned with the evolution of prices and quantities in a market and if we for a moment hold the quantity of land as fixed, which is not an obvious assumption as you may think. The secular rise in house prices is quite remarkable. It is no simply matter to construct a house price index but it would appear that the representative housing unit increased some six-fold relative to the price of consumption goods, since the end of the WW2, compared to some three-fold increase in equities. At least at face value the purchases seem to have offered a good return.

The purchase of housing is typically a leveraged purchase where the purchaser borrows a large fraction of the underlying price and places limited amount of equity into the asset. As with all leveraged buy-outs, this type of purchase allows a much higher return on equity than an outright purchase. It does though mean that the purchaser faces the possibility of losing all their equity if the purchase is made just prior to a period of price falls and the lender of the balance takes the risk of not being repaid but also of bearing the costs of liquidation should the borrower walk away from the property. Fortunately in the UK defaults have remained low, even after the financial crisis with less than 0.5% of homes owned being repossessed, which is itself considerably fewer than in the early 1990s.

In my Gresham lectures of 2016-7 I compared the return on equities, bonds, and housing over a 40 year period. I repeat the exercise for a ten year investor, who saves every year for 10 years, perhaps to get enough money together for a deposit on a house. The exercise here is to save a set amount every year for 10 years in one of the three assets and see whether at the end of 10 years the returns from one asset dominates. The key line is at one, which is the breakeven point. As we might expect the returns from equities show the highest variance, occasionally crossing the break-even line but at no point does 10-year investment in housing or bonds show a loss. So even if we are building up savings in the short run, housing may offer quite a good bargain. But, of course, housing is the one asset that we cannot very easily invest in little units alone.

One way we might therefore be able to smooth this process when we buy or when we want to downsize is to develop further the market for equity participation in home ownership (see Miles, 2015). Such a market will allow the part-liquidation of assets, earlier house purchase and also limit the risks faced by house buyers and lenders. Such schemes are available with some employers and with the government for new homes through Help to Buy, which is responsible for some 3% of all residential transactions but over 30% of new build transactions.



## Financial Amplification

In a series of relaxations of credit conditions since the Radcliffe Report of 1959, lending conditions until the financial crisis of 2007/8 were progressively eased. Indeed we can observe that both household credit and lending to private non-bank financial corporations not only moved in a synchronised manner but also in a manner that may have acted to amplify rather than attenuate the cycle. As the economy expands, lending conditions tend to ease and so shifts in supply will tend to encourage more loans and investments to occur (see Chadha, Corrado and Qi, 2010).

But as well as the business cycle, we can also observe at the secular level a large increase in the quantity of loans secured on dwellings relative to household income. This growth might imply both some suppression in the past but also perhaps some excessive levels of growth in the more recent path, particularly as banks replaced building societies as the main providers of mortgages. The increase in the stock of loans represents both the preference for holding housing but also the extent to which housing represents a leveraged form of accumulating assets.

The financial crisis saw the introduction of MPIs that both ration the availability of loans to risky households but can in principle be used to offset the cyclical tendency of the financial sector to amplify the business cycle. The hope here is that the overall quantum of risk from this sector will be limited but the actual availability of loans will not impinge too greatly on the plans of households. It seems inevitable that such controls may tend to bear down on the marginal borrower who is more likely to have lower income, less equity to lay down and may come to the labour market with lower levels of human capital. So unless we are very careful such policies may introduce more inequality as poorer households will be unable to access the purchase of leveraged assets.

## Regional Issues

We can examine another aspect of inequality by looking at house prices across the English regions. In 2004 the average house price in the North East was just under £100,000 and it is now around £128,000, which implies an annual rate of return of around 2%. Over the same period, the average house in London has gone from £219,000 to £482,000, which is an annual rate of return of some 6%. This relative rate of return is a huge divergence. And means that the average dwelling in London is worth some 3.5 to 4 times that of found in the North East. A less disturbing but similar story emerges if we compare the South with, very broadly speaking, the North with a ratio of around 2 units for one.

These differences in price might be equilibrium phenomenon with the value of amenities increasing at a much faster rate in the South. And it might be that travel is so costly in terms of finance, energy and time that the premium has multiplied (Miles and Sefton, 2017). What would help the equalisation of prices would be creation of more nodes to challenge London's pre-eminence, as would the relaxation of planning restrictions around London.

## Supply and Affordability

If we aggregate the housing market back up again. We can start to assess the question of affordability. The rapid increase in wages after WW2 rapidly increased the affordability of housing to a level at which it remained from the mid-1950s to the mid-1990s. The house price booms of the 1970s and the 1980s quickly petered out. The subsequent doubling of house prices relative to weekly earnings has been a surprise. Essentially since 1997, house prices have become twice as expensive relative to incomes. We can start to combine our preferences with the supply.

And if we compare the increase in housing supply with the increase in the population (which we can assume is exogenous). Using housebuilding completions as the measure of supply this shows a ratio of 0.46 for England as a whole, over the period 1991 to 2014, with the range varying from 0.31 in London to 0.66 in the North West



and 0.9 in the North East. In other words, housing supply has been particularly constrained in the London and the South East where house price increases have been highest.<sup>2</sup>

There is much we can do on supply. Only around 10.6% of land in England is classified as urban and only 2% has buildings on it according to the National Ecosystem Assessment in 2011. There is also considerable brownfield land that could be used for housing. And if we release 0.3% of total Green Belt land (which covers 13% of England's land area), specifically in London it would provide space for approximately not far off 200,000 homes.

### **A Vehicle for Savings**

So we are left with an economy in which some 2.5 times GDP is held as real estate by households at just under 50% of overall household wealth. That wealth is concentrated in older hands. It may not all be wealth and may simply increase wealth for holders of assets at the expense of those who wish to buy it. It is difficult I understand why changes in the value of the housing stock represent net worth in economy when there are households looking to enter the market at the same time. My presentation outlines a simple example illustrating this point.

That said once households are on the housing ladder then it seems to provide a suitable way of escalating savings. And the increase in house prices along with wider house ownership has actually stabilised wealth inequality at levels far below where they were for most of the 20<sup>th</sup> century. A positive possibility is that with inheritance more wealth will cascade to younger generations and the picture will improve but a more malign possibility is that the young will simply have to wait too long and this will materially affect life chances. Again facilitating the distribution of equity might well help.

### **Concluding Remarks**

The housing market in the UK is not far off a national obsession. But it would seem to have been the case for several hundred years. One inference is that we seem to have a national preference for our housing stock. In the last 60 years we have increased the share of consumption we devote to housing services from under 10% to nearer 20%. This preference is reflected in high prices, the overall value of the housing stock is some £7tn and around 3.5 times national income.

We tend to treat housing as a composite asset and consumption good rather than just consumption. And it has shown a remarkable performance in the UK as an asset class. It has regularly outstripped the all-share equity index. Accordingly, we hold a large fraction of household wealth in real estate rather than financial assets. It is questionable whether housing constitutes wealth in the sense that changes in prices represent claims on an income stream. But it seems to serve as a store of value.

The value of housing is high both relative to income and most other measures of historic affordability. But there is considerable regional heterogeneity in house prices. The rate of exchange between a house in London and in the North East, implies, at least, 1 for 3. Similarly the ratio of house prices in the South versus those in the North is in the order of 1:2. These price differences are mirrored in the measures of regional productivity at the regional level and may imply that there are fundamental factors for the heterogeneity, with access to London explaining regional price patterns. But rather than an equilibrium outcome, the price dispersion may also be acting as a brake on factor mobility.

But there are some signs of an adjustment. The overall level of home ownership increased rapidly since the 1980s but peaked around the time of the financial crisis. The stock of secured lending similarly has fallen from a peak of nearly 120% of household income in 2008 to just over 100%. And the annual growth in such lending remains well below its postwar growth rates. Various measure by the financial authorities known as macro-

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<sup>2</sup> With thanks to Stephen Aldridge for making this point to me.



prudential instruments have acted to limit the risks of major defaults in house prices and hence on more volatile adjustments in house price, with its spillovers to the overall business cycle.

The problems of high property prices are very much tied up with social inclusion and exclusion. The question is whether those outside the generational transfers of property wealth will be able to participate in the housing market. Indeed it is possible that reducing the riskiness of lending may have increased the participation problem. And possibly made borrowing by other means more problematic. For example, saving 15% of a £350,000 house is no mean feat, particularly if the underlying house price increases by 5% per year meaning that some £85,000 will be required as a deposit in 10 years and that implies saving some £8000 per year if we allow savings to accrue interest.

The solutions to the housing problems depend on the social objective function. If we wish everyone to have a home of their own then the clear answer will not be far away from increasing supply. If an aging population is holding too much financial wealth in its houses unlike in the US then some methods of allowing housing equity withdrawal will make a lot of sense. And given that much of the purchases of housing involve leveraged purchases, where equity might be as little as 5% of the underlying asset value then providing incentives for widening equity participation may both provide a way of allowing more agents to benefit from returns in the property sector and also reduce the riskiness of borrowing. Finally, around 5% of tax revenue is currently raised from property and wealth taxes, a sector which is worth several times national output, and it might be time to re-consider how to tax wealth more appropriately.

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