ARTICLE

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Recent developments in the UK housing market

SUMMARY

This article uses publicly available statistics to describe recent key developments in the UK housing market. These include trends in UK house prices, indicators of affordability, availability of housing finance and the impact of demographic changes on housing needs. A future ELMR article will attempt to explain what impact these housing market developments have had on the balance sheets and behaviour of the household sector.

Over the last decade the UK housing market has generated a large amount of interest and discussion. Between 1998 and 2007 house prices rose dramatically, generating large increases in equity for homeowners but also making homeownership unaffordable for a large segment of the population. Both winners and losers must have been astonished by the magnitude and the duration of the housing market boom.

But rising house prices have also led to an unprecedented increase in the level of household debt. With the UK economy now in the midst of what is likely to be its worst ever recession, the fragility of household balance sheets may then feed back into weaker demand, prolonging the extent of the downturn.

The purpose of this article is to outline, using publicly available statistics, key developments in the UK housing market since 1998 including:

- trends in UK house prices
- indicators of affordability and sustainable prices
- housing finance, and
- housing supply and demographic factors

The first part of this article will describe trends in UK house prices, presenting the recent boom and bust in a historical and regional context. Next, the effect of house price movements on affordability will be analysed as this might give insight to whether house prices have now fallen to sustainable levels or may have further to go.

Following this, housing finance will be looked at, specifically the growth in mortgage lending to households. And finally, the article looks at current housing stocks and how these compare to future needs based on likely changes in the size and characteristics of the population.

The Office for National Statistics (ONS) publishes a full set of household balance sheets each quarter (alongside the Quarterly National Accounts). A future article, also to be published in ELMR, will attempt to explain what impact these housing market developments have had on the financial position of households and how it might be affecting their behaviour.

UK house prices

As interest in UK house prices intensified there has also been a marked increase in the number of published indices. However, different results often emerge because indices are calculated using different methodologies. For example, price comparisons could be based on:

- asking prices, prices at mortgage approval or prices at completion
- simple average prices or mix-adjusted prices designed to account for changes in the composition of properties being bought or sold in any time period
- seasonally adjusted or non-seasonally adjusted prices, and
- the area where price data is collected, either UK, Great Britain or England and Wales

Dey-Chowdhury (2007) provides a good description of these methodological issues and the characteristics of the main UK house price indices.

Figure 1 plots annual house price inflation over the last 25 years using the four most cited indices. These are the Nationwide, Halifax, CLG (Communities and Local Government formerly known as the Office for the Deputy Prime Minister (ODPM)) and Land Registry indices. Despite small differences it is clear that all four series are unanimous in the general path of house price growth presented over this period.

House price movements over the last decade have been spectacular. Between 1998 and the peak in the summer of 2007, prices rose quickly and for a sustained period of time (see **Table 1**). According to CLG figures, the average (mix-adjusted) house price in the first quarter of 1998 was £81,722, but at the peak of the market in the third quarter of 2007 the average price was £219,256 – over two and a half times higher or a total increase of 168 per cent.

But in the last year these rapid price increases have gone into reverse. In the first quarter of 2009 the average house price, based on the CLG measure, had fallen back to £190,684. This represents a 13 per cent fall from the peak.

More recent data though indicates that house prices have stabilised in the second quarter. This is shown in Figure 1 by the pick-up in the Nationwide and Halifax indices which, being based on house prices at the mortgage approval stage, are timely indicators. Significant reductions in interest rates combined with recent fall in prices may be easing affordability constraints and strengthening demand. But because the housing market's normal seasonal pattern is for a pick up in activity in the summer months, it is perhaps too early to tell whether the arrest in falling prices will be sustained and that the housing market has reached a genuine turning point.

Regional house prices

Most developed countries have experienced sharp increases in house prices since the start of the new millennium. The UK situation is slightly different in two regards. First, the house price boom started earlier than average and has seen more sustained increases. Second, the regional pattern has been fairly uniform. That is not to say that some regions saw larger rises and then subsequent falls than others but the general pattern of strong growth followed by rapid falls has been repeated across the UK (see **Table 2**). In the US for example, regional trends were much more diverse; in fact many areas saw large falls in house prices during the period when average national prices rose strongly.

Table 2 also shows that, in general, the UK regions that saw the greatest house price inflation between 1998 Q1 and 2007 Q3 also saw stronger corrections. And with the exception of Northern Ireland (which started from a much lower base) and Scotland (which has its own housing market system based on sealed bids) the rise and fall in house prices across regions has been close to the national average. Furthermore there is some evidence of a ripple effect emanating from London and the South East which has led regional house price movements.

Real house prices

UK house prices have undergone similar cyclical episodes in the past. Looking at the history of the CLG index, it can be seen that prices rose by 72 per cent between the beginning of 1977 and the end of 1979. And in the late 1980s, prices rose by 69 per cent between 1987 Q1 and 1989 Q3. These were both periods where nominal prices rose sharply over a small time scale.

What makes the recent movements distinct though is that house prices have risen substantially at a time when inflation in the rest of the economy has been low. For example, the strong rises in prices in both the late 1970s and late 1980s coincided with periods of strong inflation, so in real terms, house price growth was not so marked. **Figure 2** shows Halifax and Nationwide house price indices in real terms, held at constant 1983 Q1 prices. The figure also shows the general implied inflation rates calculated as the difference between real and nominal house price inflation – which should be close to the official Retail Prices Index. Clearly the strong rise in real house prices in the recent boom also coincided

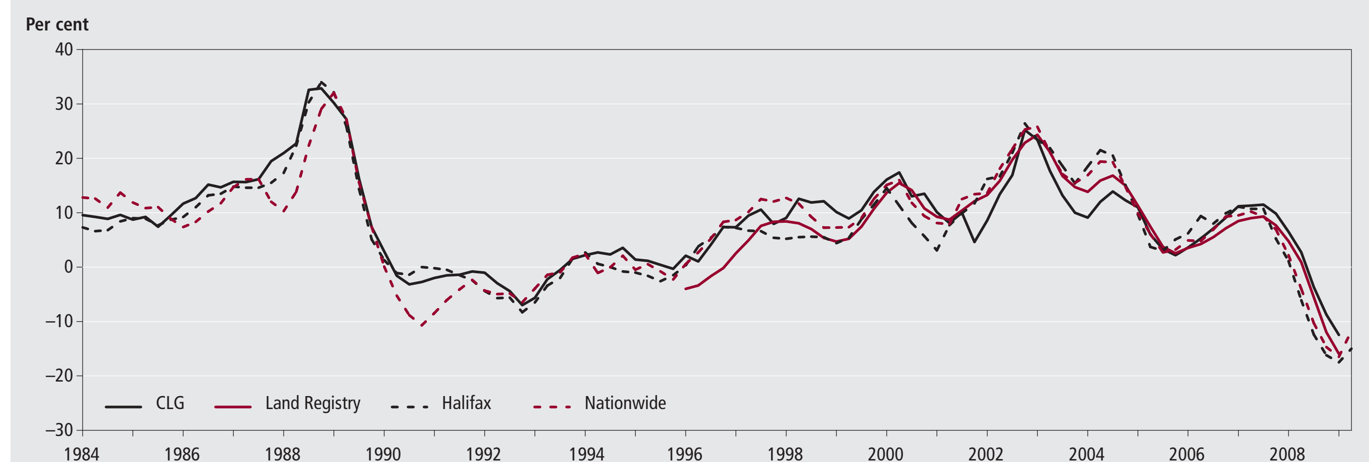
Table 1
UK house prices – boom and bust percentage changes

Percentage change

House price index	1998 Q1 to 2007 Q3	2007 Q3 to 2009 Q1
Nationwide	*192.7*	*–18.7*
Halifax	*182.5*	*–19.3*
CLG	*168.3*	*–13.0*
Land Registry	*171.0*	*–15.2*

Source: Nationwide, Halifax, CLG and Land Registry

Figure 1
UK annual house price growth



Source: Nationwide, Halifax, CLG and Land Registry

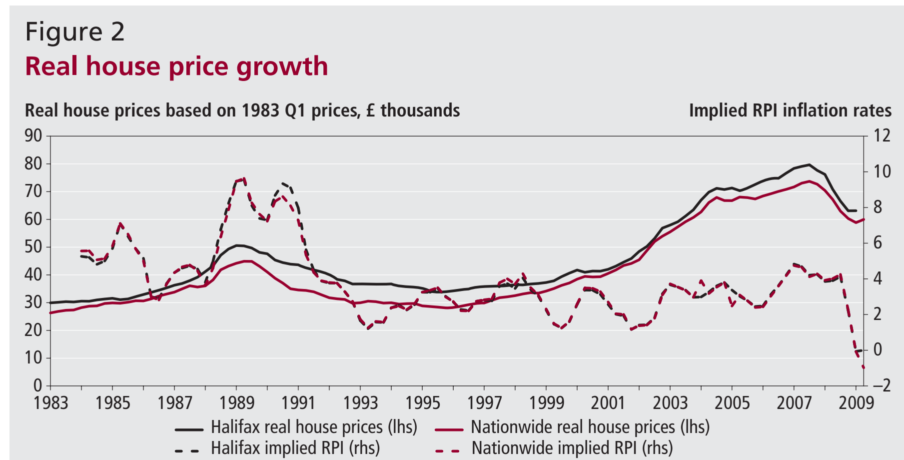
Table 2
Regional rise and fall in UK house prices

Per cent

1998 Q1 to 2007 Q3		2007 Q3 to 2009 Q1	
Region	House price growth	Region	House price growth
Northern Ireland	302.9	Northern Ireland	–33.0
London	205.8	London	–21.9
South West	200.0	Wales	–20.6
Wales	199.6	South East	–20.5
East Anglia	193.0	East Anglia	–19.8
UK	185.9	East Midlands	–18.9
Yorkshire and Humberside	185.7	UK	–18.7
North	185.5	Yorkshire and Humberside	–18.3
East Midlands	184.7	North West	–18.0
South East	183.3	South West	–16.5
North West	178.2	West Midlands	–15.9
West Midlands	159.7	North	–13.7
Scotland	149.9	Scotland	–12.6

Source: Figures based on an average of the Halifax and Nationwide house price indices

Figure 2
Real house price growth



Source: Nationwide and Halifax

with historically low rates of general inflation.

Housing affordability

There are various indicators of affordability which might give some insight to how housing market developments affect both the financial position of households and the future direction of house prices. These include the ratio of house prices to income, the relative size of mortgage payments compared to earnings, numbers of arrears and repossessions, and finally the activities of first time buyers who are likely to face the biggest constraints in obtaining mortgage finance.

House price to income ratios

Because houses, and more importantly the land on which they are built, is in limited supply it is not inconceivable that house prices should grow at a faster rate than general inflation. Any asset in fixed supply would be expected to grow at a similar rate to the economy, or broadly in line with household incomes, so real house prices will trend upwards over time and earnings rather than prices are a better deflator for judging affordability.

Figure 3 plots average house price to average earnings ratios from the Halifax and Nationwide indices, the second of which specifically relates to first time buyers (FTB). According to the Halifax data, this ratio increased from 3.14 to 5.86 between 1998 Q1 and 2007 Q3. Subsequently the fall in house prices has been reflected in the ratio which fell back to 4.35 in 2009 Q1. This suggests that house prices are still 8 per cent overvalued relative to the long term average (1983 Q2 to 2009 Q1) ratio of 4.02.

Looking at the situation for first time buyers a ratio of average house prices to earnings peaked at 5.4 in 2007 Q3 before falling back to 4.2 in 2009 Q2. A much larger 25 per cent fall in prices though would be required to restore the long term average of 3.3 (based on 1983 Q1 to 2009 Q2).

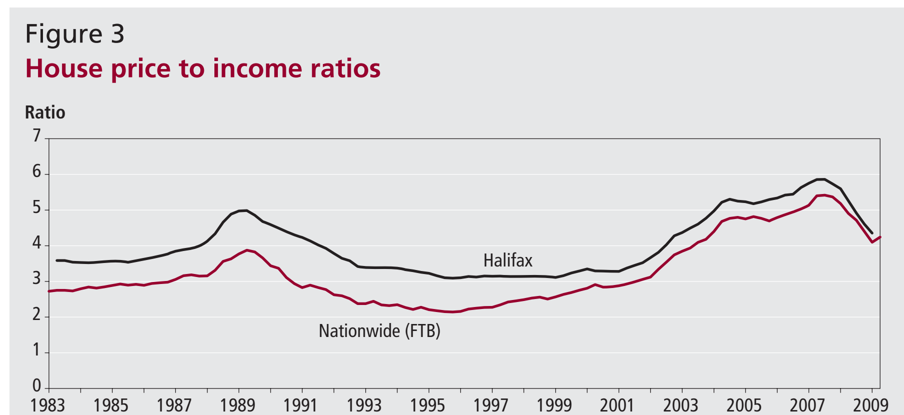
One school of thought is that the long-term ratio is indicative of a sustainable level of house prices which house prices should gravitate towards. If this were so it would suggest a further fall in house prices was warranted. For the first time buyer segment of the market an even greater fall would be required. Meen and Andrew (2008) have reported that that the earnings distribution has shifted away from this (generally young persons) group in recent years so the current high ratio could be a result of their earnings situation as much as the house prices they face.

An alternative view is that even though there is a general relationship between house prices and earnings, an equilibrium ratio between the two can itself change over time linked with other fundamentals. For example, the relationship may change due to structural shifts in credit (mortgage) availability and the interest rate regime. In the mid-1980s financial deregulation led to a rapid easing of credit constraints, making it easier to borrow larger sums of money for home purchase. And the inflation targeting era (1993 - present) has coincided with a long period of low interest rates and inflation so the cost of borrowing is much cheaper. If as a result of these factors the equilibrium relationship between average house prices and earnings has changed there is no reason to expect long-term ratios to be restored.

Interest rates and affordability

A simple ratio of average house prices to earnings is generally considered to be a

Figure 3
House price to income ratios



Source: Halifax and Nationwide

too one-dimensional view of affordability. A better measure would take into account the relative ease that households face in servicing the mortgages secured on their homes. Here the interest rate plays an important role.

However, when thinking in terms of affordability is it the nominal or real interest rate that matters? The real rate of interest adjusts the nominal rate for inflation, and because inflation erodes the real value of debt, it is often considered to be a truer measure of the long term costs of finance. To understand the relevance of the nominal and real interest rates in assessing affordability consider the following example.

A household takes out a £100,000 mortgage with a 20 year repayment schedule. If nominal interest rates were 5 per cent, then repayment of the debt would require monthly repayments of £637.85. However, at nominal interest rates of 13 per cent these repayments would rise to £1049.81. In each case the amount outstanding on the loan after each year, which is the same amount, is shown in **Figure 4.** In both cases the whole loan and interest is paid off by the end of the 20 years.

Now suppose that the household's income is £25,000 which is assumed to grow in line with inflation. What will happen to mortgage payments as a share of income with different nominal rates of interest but the same real rate of interest? This is shown in **Figure 5** where two scenarios are presented for a real interest rate of 3 per cent. The first case corresponds to a nominal rate of 5 per cent and inflation of 2 per cent, while the second case represents a nominal rate of 13 per cent and inflation of 10 per cent.

In the first case, monthly repayments as a proportion of income start off relatively low but, because inflation only steadily erodes the real value of the debt, repayments as a proportion of income falls slowly. The second case presents the opposite situation. High nominal rates means that initial repayments are a high proportion of income, but inflation quickly erodes the real value of the debt so repayments as a proportion of income fall much faster.

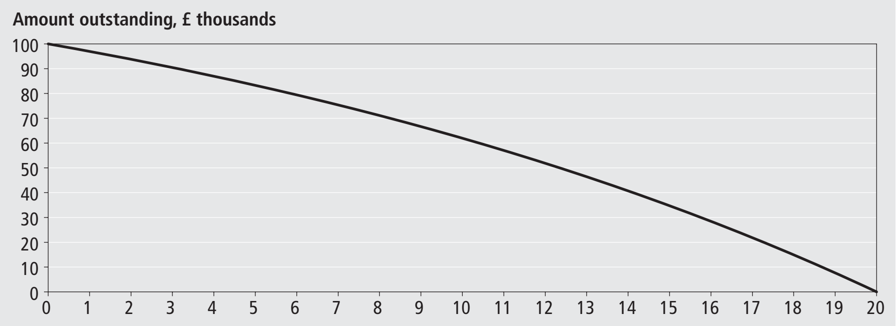
Figure 5 gives two different aspects of affordability. In the world of low inflation and nominal interest rates, debt servicing is more affordable at the beginning of the repayment period. When nominal rates and inflation are higher then affordability is better at the end of the repayment period.

In reality lenders are likely to base their assessment of affordability on the short-term. In this example it is unlikely that a creditor will advance a mortgage where repayments constitute 50 per cent of household income, and a household may be unwilling take on such a loan anyway. The low inflation and nominal interest rate regime that has prevailed in the UK since the early 1990s has therefore pivoted housing affordability to the near term and prompted a rise in mortgage lending.

Figure 6 shows actual mortgage payments as a proportion of income (averages) in the UK. The Halifax series shows that the recent peak in 2008 was somewhat below the peak in the early 1990s, when nominal interest rates rose sharply to fight against inflation and maintain sterling's parity in the European Exchange Rate Mechanism (ERM). It also shows the impact of the large recent cuts in interest rates at the end of 2008 and beginning of 2009, with the Bank of England base rate at a historic low of 0.5 per cent. This has certainly eased current mortgage affordability.

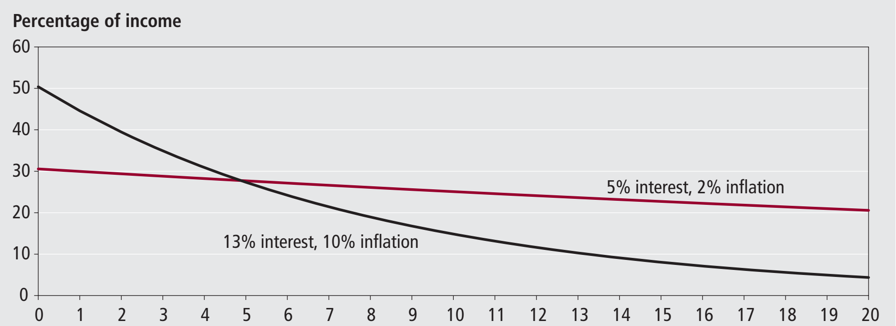
The Nationwide index in Figure 6 relates to first time buyers. Once again it is clear that affordability concerns have been placated by recent interest rate cuts. But prior to this and in the period leading up to the end of 2007 the index was at similar

Figure 4
Amount outstanding on a £100,000 mortgage



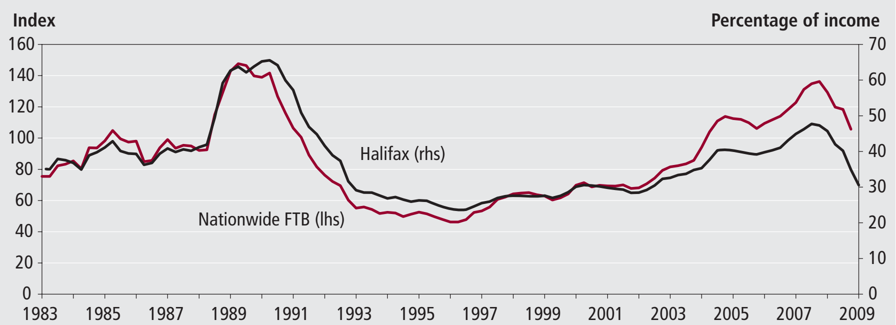
Source: Author's calculations

Figure 5
Monthly repayments as percentage of income



Source: Author's calculations

Figure 6
Mortgage payments as a proportion of income



Source: Nationwide and Halifax

levels to the peak in late 1989 – suggesting that underlying affordability is a concern for this segment of the housing market – especially if interest rates return to more normal levels.

A critical factor going forward is the strong rise in mortgage debt held by the household sector because debt servicing costs then become more sensitive to smaller interest rate movements. The long period of low nominal interest rates combined with high credit availability has probably been a significant factor in both driving up house prices and in the household sector incurring more and more debt.

The example in Figures 5 and 6 shows that at nominal interest rate of 5 per cent a household earning £25,000 per year can borrow £100,000 and faces initial repayments equalling 30 per cent of income. But if nominal rates were at 13 per cent, then maintaining the same 30 per cent of income rule in the first year (i.e. monthly repayment are £637.85) would only allow the household to borrow up to £60,663. Hence the reduction in nominal interest rates has made it affordable to borrow larger and larger amounts.

However, for this to be possible the supply of credit must also respond positively – which appears to have been the case. **Figure 7** shows data on the ratio of mortgage advances to house prices and mortgage advances to incomes. Advance to price ratios have remained fairly steady, and as house prices have increased significantly it must be the case that mortgage advances have followed the same path. The ratio of advances to incomes (averages) though has drifted upwards, consistent with the data on the price-income ratio in Figure 3.

This is all evidence that mortgage lenders have relaxed lending restrictions based on simple multiples to income and moved to a broader notion of credit scoring that implicitly takes into account lower prevailing interest rates on affordability. As a result household borrowing has been able to track house price increases leading to a large rise in mortgage debt. And as lending policies evolved to suit homeownership there was also a growing sub-prime element in the UK. The consequence is that future interest rate movements will have a much more profound impact on the ratio of mortgage interest payments to income ratios than in the past – and the likely direction of future interest rates is up.

Certain first time buyer households are particularly vulnerable to a future increase in interest rates. First, the income distribution has moved against them, so income is relatively lower compared to other households. Second, they are more likely to have bought recently, towards the top of the market, meaning many of them will have borrowed using high loan-to-value mortgages.

Arrears and repossessions

Arrears and repossession are direct measures of the stress faced by households in servicing their mortgage debt. Data used to be made freely available by the Council of Mortgage Lenders (CML) but unfortunately this is no longer the case so it is not possible to show a fully up to date series.

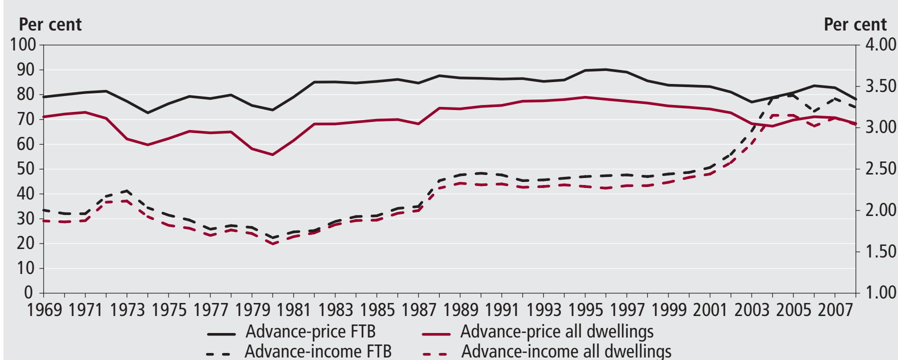
While repossessions have been rising (see **Figure 8**), there is no evidence as yet that households are under the same pressure as in the early 1990s (although it should be noted that annual figures may hide a sharper rise in the second half of 2008). The key factor here appears to be the substantial cuts in interest rates easing the burden on the household sector. Recently the Council for Mortgage Lenders revised down their forecasts for repossessions in 2009 in response to sharp interest rate cuts.

The direction of monetary policy in the current recession is in sharp contrast to the experience of the early 1990s when rates, instead of being cut aggressively, were actually hiked in order to control inflation and then to maintain the value of sterling against the German Deutschmark in the ERM. However, unemployment is still rising quickly, and could reach the 3 million level experienced in the last recession, which will continue to put some households under pressure.

The fact that repossessions have not spiked to the same extent as in the previous housing market recession is an indicator that prices may not fall by as much. High rates of possessed houses tend to push down on market prices, especially if lenders flood the market with repossessed homes at times of depressed demand and poor credit availability. And the threat of possession is a depressing force in its own right, because once possessed the former owner simply becomes a residual claimant on any equity still in the property. As lenders only have an incentive to claw back the value of their loans, they may try to sell at fire sale prices – creating an incentive for distressed households to try and sell before repossession becomes a certainty.

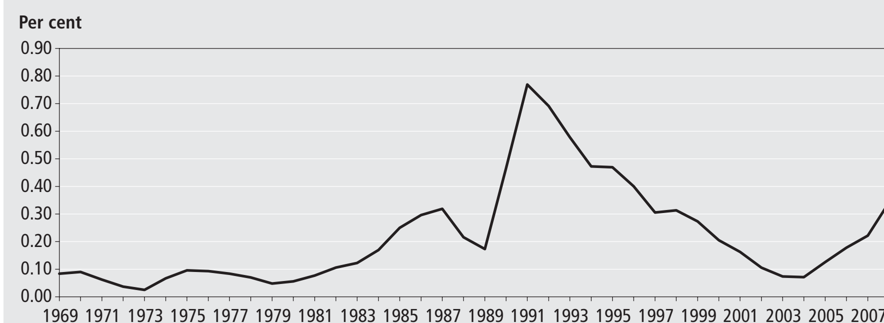
It is also a mistaken belief that in the UK,

Figure 7
Ratios of advances to income and prices



Source: CLG

Figure 8
Properties taken into possession as a percentage of all mortgaged properties



Source: Council for Mortgage Lenders

unlike in the US, households can simply walk away from their properties should the efforts of servicing mortgage debt become too onerous, so encouraging repossession. The responsibility for any negative equity is not removed by simply posting the keys through the lenders letter box. Households can still be pursued through the courts. There is a further disincentive as credit ratings will be impaired making it harder to borrow in the future.

Lenders also appear to be using possession orders as a last resort. This may partly reflect government influence through its large stake in the UK banking sector. But also banks themselves may see limited value in forcing people from their homes and attempting to sell the property in a difficult market.

Despite these reasons, a weakening labour market is likely to put some upward pressure on the repossession figures in 2009. And given the large stock of mortgage debt held by the household sector repossession orders may increase if interest rates start to rise again.

First time buyers and the buy-to-let market

First time buyers are important because they are a source of liquidity to the entire housing market. Not only do they normally account for a large proportion of all transactions, they generally enter at the base of chains enabling transactions to proceed higher up the property ladder. Without first time buyers the rate at which transactions proceed may stall, putting downward pressure on house prices. Interest in first time buyers also arises because this group, not having built up previous equity and likely to be on lower earnings than the general population, will face more acute affordability pressures when house prices rise quickly.

An indication that first time buyers are facing severe affordability constraints is shown in **Figure 9** where the proportion of transactions accounted for by first time buyers has fallen from around a half to a third since 1998. There is though some difficulty in defining a 'true' first time buyer. During the mid to late 1980s a significant number of first time buyers came from council tenants purchasing their homes under 'right to buy' schemes which would have pushed up the general age and proportion of first time buyers in the market during this time.

More recently, figures from the Council for Mortgage Lenders, suggest that one in five first time buyers are actually 'returners' – that is they were previous owner-occupiers who temporarily moved into rented accommodation. Rising numbers of returners have generally resulted from breakdowns in household units - for example widows and divorcees who may not have previously had property in their name but did have a share in past equity. Therefore recent increases in the average age of first time buyers may be reflecting these factors, rather than underlying affordability pressure on younger cohorts.

However, it is undeniable that first time buyers under the age of 25 are becoming increasingly scarce. Meen and Andrew (2005) argue that this cohort has seen their relative earnings position deteriorate, and when combined with increasing levels of graduate debt, this has exacerbated affordability constraints from strongly rising prices. However, there are a number of factors which suggest that these trends are not solely related to affordability, including:

- demography – an aging population lowering the relative proportions of young people
- the timing of house purchase. This is usually related to key events such as marriage and starting a family which are now occurring later in life
- the high premium attached to mobility in professional and personal lives. The transaction costs associated with home ownership are a barrier to this, and
- the private rental market. This has improved with buy to lets (professional landlords) providing better quality properties and with competition keeping rents down

Home ownership though still appears to remain a long-term aspiration of young people even if it is not a short term one. And as Meen and Andrew (2005) suggest: tenure choices of young people including the decision to settle down later in life may actually be the consequence of rising house prices.

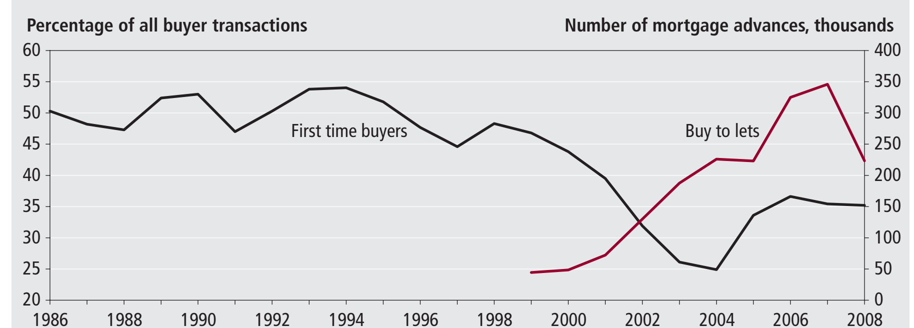
There are essentially two types of first time buyers, both of which face vulnerability in the current housing market. Unassisted first time buyers tend to have relatively high income but have bought properties with a high loan to value ratios. This group is most likely to move into negative equity in a falling market.

Assisted first time buyers, on the other hand, have lower incomes but due to financial help from parents can put up larger deposits, so their mortgages are based on lower loan to value ratios. While this protects against negative equity, the assisted group tends to have a higher multiple of mortgage payments to income – so are more susceptible to an increase in interest rates.

Proof that affordability constraints are having a large effect is the changing proportion of first time buyer types. In 2006, 40 per cent were assisted, but in 2009 the proportion had jumped to 80 per cent according to CML data. This partly reflects the withdrawal of high loan to value mortgages that the unassisted group were dependent on, but primarily that house prices have increased to such an extent that the first time buyer group cannot raise sufficient deposits independently. In fact, the CML report there is now little evidence of younger generations even attempting to save for deposits and a high expectation that parental assistance will be required.

Mortgage products have adapted to allow for greater parental involvement in their children's house purchases. For example, not only do parents increasingly pay higher proportions of deposits, they can also secure mortgage repayments against their own equity or income. Rising house prices have had the effect of redistributing wealth from the young to older owner-occupiers, so parental assistance may be thought of as an early inheritance or living bequest.

Figure 9
Proportion of first time buyers and numbers of buy to let mortgages



Source: Council for Mortgage Lenders

While this certainly helps individuals, in a perverse way it may be detrimental to general affordability. The recycling of equity gains from the top of the market may keep prices higher than they would otherwise be by breaking the self-correcting mechanism between affordability and demand.

Another way in which equity has been injected from the top of the market into the lower rungs of the property ladder has been through the emergence of buy to let investors. This is a relatively new phenomenon in the UK housing market, but as Figure 9 shows, the number of buy to let mortgages grew by around 50 per cent a year between 1999 and 2007 due to:

- strong house price growth generating significant capital gains and a cheap source of finance from equity release
- new specialist buy to let mortgage products, and
- low returns on other assets and concern over future pension provisions

The anecdotal evidence suggests that new buy to let investor demand has offset the effects of falling first time buyer numbers on housing demand which also prevents affordability constraints from influencing prices.

Since the start of the recession in the second half of 2008, the buy to let market though has declined markedly. Much of the funding had come from providers dependent on wholesale funding, the biggest of which was Bradford and Bingley, so the impasse in money markets caused by the global credit crunch basically led to a cut off in new buy to let mortgages. These loans were also seen as particularly risky because many buy to let investors were highly leveraged. But even before this, yields were lagging behind the interest payments on loans – due to rising interest rates and the increasing size of loans – with investors relying solely on long term capital gains for their returns. Ironically, now that the market has all but closed, buy to lets have seen a significant improvement in profitability due to the low cost of borrowing and strong activity in the rental market.

Home ownership at the crossroads

Evidence that affordability constraints have had an impact on the housing market is shown in **Figure 10** which shows that the proportion of owner-occupied housing in all tenure types, after rising for many decades, started to fall in 2004.This is despite an increase in the number of people owning several properties such as buy to let investors and casts doubt on the government's goal of increasing homeownership to 75 per cent of households. In fact, the proportion of owner-occupied properties purchased with a mortgage has been falling for even longer with the decline starting in 2001. The Council for Mortgage Lenders has argued that this is evidence that growing affordability pressures have put homeownership at the crossroads, where strong price increases are beginning to reverse the traditional preference for homeownership.

Housing finance

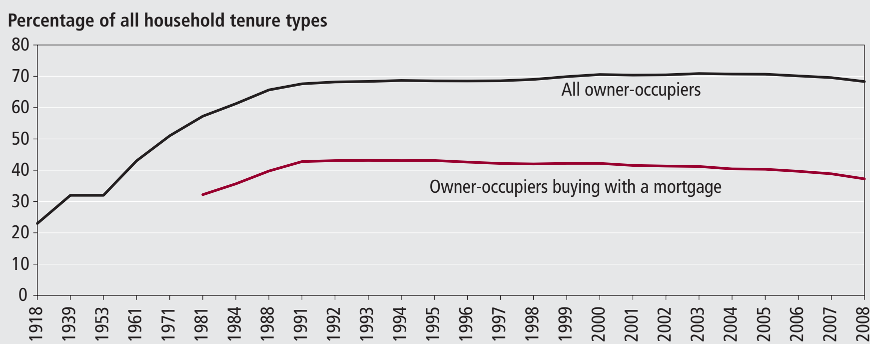
The recession in the UK housing market has not just manifested itself in prices but also volumes. **Figure 11** plots a long history of data on mortgage approvals and also more recent numbers of recorded property transactions. Both have moved in tandem in the recent downturn and are at their lowest ever recorded levels. Mortgage approvals in the first quarter of 2009 were half the number of the year before, and less than a third of the peak. Property transactions have showed the same pattern, slowing down considerably in the last year and well below the peak number in 2006.

Although not all property transactions are financed by mortgages, clearly there has been a strong pass-through from mortgage approvals to actual transactions. It is unclear to what extent the fall in approvals is demand or supply related, but both are likely to have played a role. Uncertainty over future house prices and a weakening job market is a large deterrent for households considering taking on debt. Especially as the short term movement in the market could be downwards meaning buyers face immediate losses in equity.

On the supply side, mortgage availability has been tightened considerably, making it very difficult to obtain mortgages with high loan to value ratios. Falling prices mean that anybody with only a small amount of equity in their property would be at risk of falling into negative equity. Therefore, the type of mortgage deals that used be achieved with the traditional 10 per cent deposit now require a 25 per cent deposit. And better rates typically available for those with a 25 per cent deposit will now require a 40 per cent down payment.

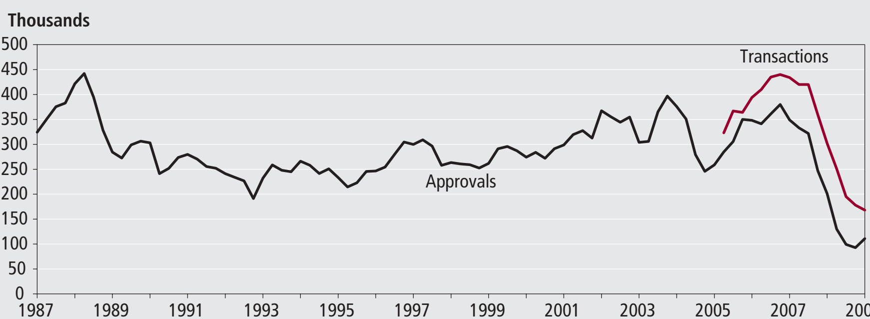
The global credit crunch has also encouraged banks and building societies to cut back on lending in order to rebuild balance sheets and hoard liquidity in the face of large and uncertain losses in

Figure 10
Homeownership at the crossroads



Source: CLG

Figure 11
Mortgage approvals and property transactions



Source: Bank of England Financial Statistics and CLG

financial assets based on residential and commercial property loans.

Figure 12 shows both consumer lending (unsecured) and lending for dwellings (secured) to the UK household sector. After a period of very strong growth in lending, driven by rising house prices, loans secured on dwellings were cut back sharply in 2008. Consumer credit on the other hand has been falling back since 2005, both as a result of a tightening in credit conditions and due to lower appetites for more expensive consumer debt. In fact there is evidence that households had been increasing their secured debt to pay down their more expensive consumer debts.

The sharp rise in lending secured on dwellings between 1998 and 2007 followed the rise in house prices and is consistent with the data on advances in Figure 7 and mortgage approvals in Figure 11. Strong house price growth, by generating equity for the borrower and security for the lender, improves the quality of loans on bank and building society balance sheets and encourages an expansion in profitable lending – especially because there were plentiful and cheap sources of wholesale funding in very liquid financial markets. Therefore the evidence in Figure 12 is that between 1998 and 2007 the financial system accommodated rising house prices by increasing the availability of secured lending.

Of course, the sudden contraction in lending in 2008 reflects a sharp reversal of these developments. First, falling house prices reduces the quality of loans on bank balance sheets and raises the risks of further lending. Banks have also been forced to cut back lending in order to rebuild balance sheets after making losses on bad loans. Second, the plentiful and cheap sources of wholesale funding that drove much of the expansion in mortgage credit dried up as a consequence of the global credit crunch. The collapse of Northern Rock, which had accounted for much of the increase in UK mortgage lending, was also a direct consequence of this. Future regulatory reforms to the financial system may focus on reducing the pro-cyclicality of the credit system. For example, Goodhart and Hoffmann (2008) suggested that the loan to value ratio might be used as an additional monetary policy tool aimed to protect against house price bubbles.

Housing supply

New housing stocks

Although it has been accepted that UK house prices were overvalued in recent years it was also acknowledged that the market was in undersupply and this may provide a floor to the extent that prices fall.

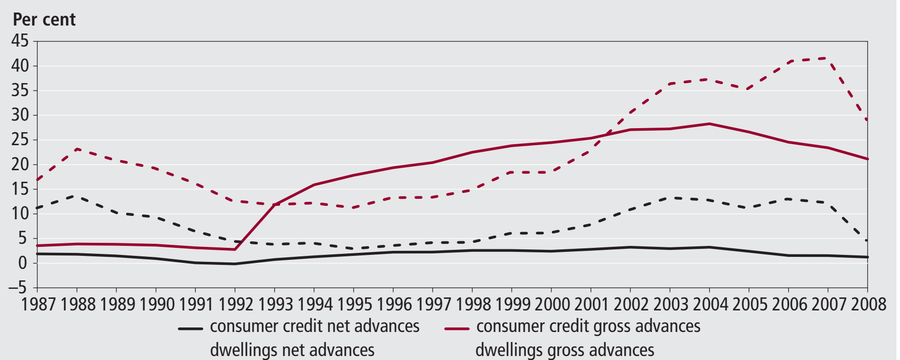
Figure 13 shows even though the number of housing completions each year has picked up since 2001 they remain relatively low by historical comparisons and still below the required numbers identified in the Barker Review (see Barker 2004). In fact, Meen and Andrew (2005) argue that housing supply in the UK is almost completely insensitive to prices, meaning that changes in demand for housing generate large price but almost no volume responses. In the US for example, housing supply is much more elastic with respect to price, which therefore dampens overall swings in house prices as supply reacts more readily to demand patterns.

There have been suggestions (see Barker 2008 and Cheshire 2008) that the poor response of housing supply to price signals is a reflection of an overly complex planning system. Being a timely and costly process it favours large companies reducing competition in supply, as evidenced by the high concentration in the UK house building industry. It has also raised suspicions of 'land banking' – where developers sit on permissions in order to reduce the supply of housing to the market and raise prices – although there is little evidence to support this. Of course, housing could also be held back by factors that are not really planning at all such as necessary improvements to local infrastructure and drainage.

The system of local government finances may also act as a disincentive to accept new developments. Because central government grant allocations tend to lag population changes the immediate impact of new developments is to put pressure on the existing infrastructure. Perhaps by making the local tax base more responsive to population changes and allowing local councils to levy a planning charge or a windfall tax on the premiums gained from planning permissions would reverse this.

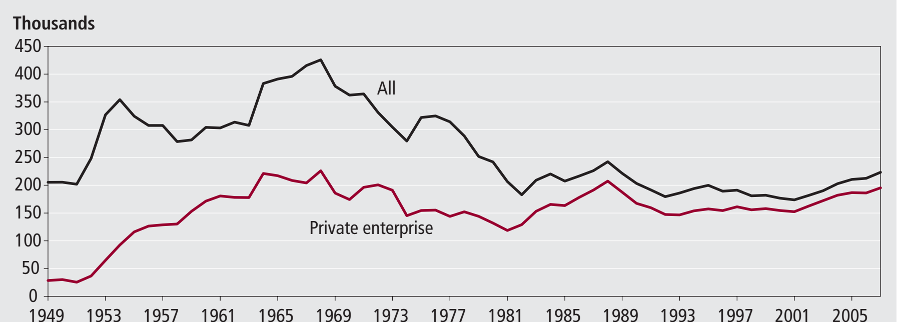
A further issue is the growing mismatch in recent years between the types of dwellings being constructed and the types demanded. **Table 3** shows that in the last decade there has been a sharp rise in the proportion of 1-2 bedroom flats at the expense of houses (particularly 3+ bedrooms). Barker (2008) though reports that in the UK there is a strong preference

Figure 12
Secured and unsecured lending as a proportion of gross household disposable income



Source: Bank of England Financial Statistics and ONS Economic Accounts

Figure 13
Permanent dwelling completed in the UK



Source: CLG

Table 3
Proportions of each dwelling type in all new permanent dwelling in each financial year

Per cent

	Houses			Flats		
Financial year	1–2 bedrooms	3+ bedrooms	All	1–2 bedroom	3+ bedrooms	All
1991/92	*26*	*48*	*74*	*25*	*1*	*26*
1992/93	*27*	*49*	*76*	*23*	*1*	*24*
1993/94	*28*	*52*	*80*	*19*	*1*	*20*
1994/95	*27*	*55*	*82*	*17*	*1*	*18*
1995/96	*26*	*56*	*82*	*17*	*1*	*18*
1996/97	*22*	*62*	*84*	*15*	*1*	*16*
1997/98	*20*	*65*	*85*	*13*	*2*	*15*
1998/99	*19*	*65*	*84*	*15*	*1*	*16*
1999/00	*18*	*65*	*83*	*16*	*1*	*17*
2000/01	*16*	*64*	*80*	*18*	*2*	*20*
2001/02	*11*	*66*	*77*	*21*	*2*	*23*
2002/03	*11*	*62*	*73*	*25*	*2*	*27*
2003/04	*9*	*57*	*66*	*32*	*2*	*34*
2004/05	*8*	*51*	*59*	*40*	*1*	*41*
2005/06	*8*	*46*	*54*	*45*	*1*	*46*
2006/07	*8*	*45*	*53*	*46*	*1*	*47*
2007/08	*8*	*44*	*52*	*47*	*1*	*48*

Source: CLG

for houses over flats – the exact opposite to what is actually being supplied. This mismatch is likely to lead to further supply side and affordability constraints as the prices of favoured houses are bid upwards leaving a glut of smaller apartments on the market.

The impact of the current recession though has been to critically reduce new housing starts exacerbating the long-term problem of undersupply. **Figure 14** shows that new residential housing orders have fallen to their lowest level since the series began in 1964. The house building sector has been hit in two ways. First, falling house prices and tighter credit constraints have reduced demand with house building firms unwilling to construct stocks of unsold properties. Second, commercial loans typically used to fund new developments have become scarcer and more expensive as a result of the global credit crunch.

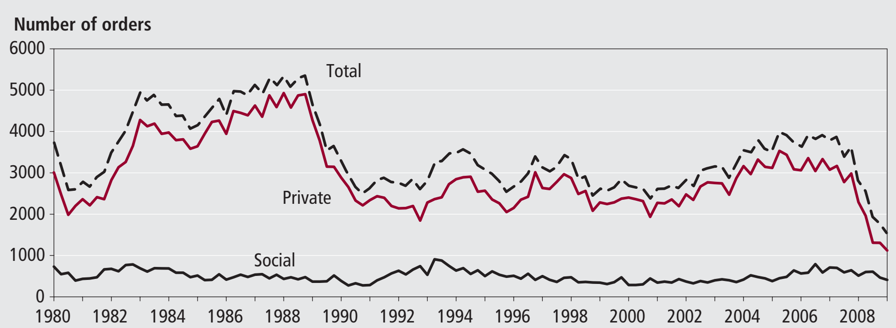
Demographic changes and the housing supply

Looking to the future, demographic factors are likely to play an important role in underpinning the demand for housing. Due to increasing longevity and greater net-immigration, UK population forecasts have recently been revised upwards. The UK population is expected to rise steadily over the next two and half decades from 58.8 million in 2001 to 66.2 million in 2021. Rising population is important due to its impact on household formation, but as **Table 4** shows, UK household numbers are expected to increase substantially over the same period because a falling average household size means there is a greater propensity to form more households out of a given population. Specifically, **Table 5** shows that there are projections for a steep rise in the number of one person households. Total household numbers in the UK are forecast to reach 30.3 million in 2021 up from 24.6 million in 2001.

A breakdown of the household projections for England in Table 4 by household type and age is shown in **Table 6**. Between 2006 and 2031 average household numbers are expected to grow by 252,000 per year, of which 163,000 will be in one person households. And a significant proportion of the average rise in household numbers, both one person and all types, is accounted for by growing numbers of older people which have a higher propensity to form smaller household sizes. Increasing numbers of one person households will also come from high divorce and separation rates. Although couples that split up will often go on to form other multi-person households the process takes time and some choose to continue living separately.

The combination of rising household numbers and low housing completions means that the stock of housing is going to struggle to keep pace with the population's needs. The Barker Review, based on an expected annual increase in household numbers in England of 190,000 per year between 2001 and 2021 argued that 215,000 new houses per year would be required (net output of 200,000 per year). Since then household projections have been raised upwards. Based on the figures in Table 4 household numbers in England are

Figure 14
New residential housing orders



Source: ONS new orders in the construction industry

Table 4
Household estimates and projections 1961–2031

Year	Thousands of households (UK)	Thousands of households (England)	Average household size (England)
1961	16,662	13,915	3.01
1971	19,027	16,012	2.84
1981	20,727	17,362	2.65
1991	22,886	19,165	2.45
2001	24,553	20,522	2.37
2006	25,751	21,515	2.32
2011	27,209	22,748	2.28
2016	28,784	24,107	2.23
2021	30,310	25,439	2.19
2026	31,716	26,674	2.16
2031	33,002	27,818	2.13

Source: CLG

Table 5
Projections of household structure in England 1961–2031

Percentage of total

Year	Married/cohabitating couples	Lone parent and other multi-person households	One person
1971	*71.4*	*10.0*	*18.6*
1981	*66.2*	*11.0*	*22.8*
1991	*61.0*	*12.4*	*26.6*
2001	*56.0*	*14.0*	*30.0*
2006	*53.8*	*14.5*	*31.7*
2011	*52.0*	*14.6*	*33.4*
2016	*50.4*	*14.5*	*35.1*
2021	*48.9*	*14.4*	*36.7*
2026	*47.6*	*14.2*	*38.2*
2031	*46.7*	*14.1*	*39.2*

Source: CLG

Table 6
Projections of English household numbers by age and type of household

Thousands

	All household types			One person households		
Age	2006	2031	Average annual change	2006	2031	Average annual change
Under 25	860	980	5	248	290	2
25 - 34	3,179	3,680	20	815	1,088	11
35 - 44	4,523	5,322	32	1,017	1,695	27
45 - 54	3,804	4,554	30	940	1,626	27
55 - 64	3,582	4,353	31	1,059	1,726	27
65 - 74	2,737	4,133	56	1,052	1,766	29
75+	2,829	4,796	79	1,692	2,708	41
Total	21,515	27,818	252	6,822	10,899	163

Source: CLG

now expected to increase by 246,000 each year between 2001 and 2021 meaning the required additions to the housing stock would have to rise considerably. This is far in excess of the current number of completions for Great Britain shown in Figure 13. The collapse in new housing orders (see Figure 14) will only add to supply pressures.

Concluding remarks

The key points from this article are as follows:

- UK house prices exhibited a strong rise between 1998 and the summer of 2007 before falling back in the current recession and financial crisis - although there is now some evidence that prices have stabilised
- the rise in house prices happened at a time of low general inflation, meaning the rise in real house prices was unprecedented
- average house price to income ratios have fallen back towards but are not quite at their long-term averages. But for first time buyers the ratio is still significantly above the long-term average
- low nominal interest rates have kept the ratio of mortgage payments to income at lower levels but this has encouraged a large rise in mortgage borrowing making the ratio more sensitive to smaller rate changes
- repossessions have not reached the same level as in the early 1990s, reflecting sharp cuts in interest rates and lenders treating possession as a last resort
- the proportion of first time buyers has fallen, but this might reflect changing preferences to homeownership as well as affordability constraints. Their presence in the market had been replaced by buy to let investors until the credit crunch limited funding,
- housing finance appears to be very procyclical – strengthening cyclical movements in the housing market, and
- the UK housing market continues to exhibit strong evidence of undersupply based on low house building, growing numbers of households and a mismatch between the types of properties demanded and supplied. The fall in residential new orders brought on by the current recession and credit crunch will exacerbate these supply issues

The impact of these housing market developments on household balance sheets, notably the sharp increase in housing wealth and mortgage debt, will be analysed in a future ELMR article.

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