Housing requirements and the impact of recent economic and demographic change

NHPAU

Building Awareness For The Future

Housing requirements and the impact of recent economic and demographic change

May 2009

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Introduction

The last year has seen a changing economic context, with the country entering recession, restrictions in credit markets, tightened mortgage lending criteria, and a major contraction in building industry output.

In light of these developments the NHPAU has frequently been asked about the continuing validity of our housing supply range advice, issued in June 2008.[1] With such a gloomy economic outlook, will the country still need the same level of new housing? If money is not available to potential purchasers, won't the demand for housing be much reduced? If there's no chance of the industry delivering higher levels of housing, shouldn't we reduce the scale of our ambition?

This paper addresses these issues at an England level, investigating their likely impact on housing requirements, affordability, and availability. As with our supply range advice, we take the medium and long term view to model potential scenarios. We also take advantage of the release of updated datasets, notably the recent 2006 based household projections.

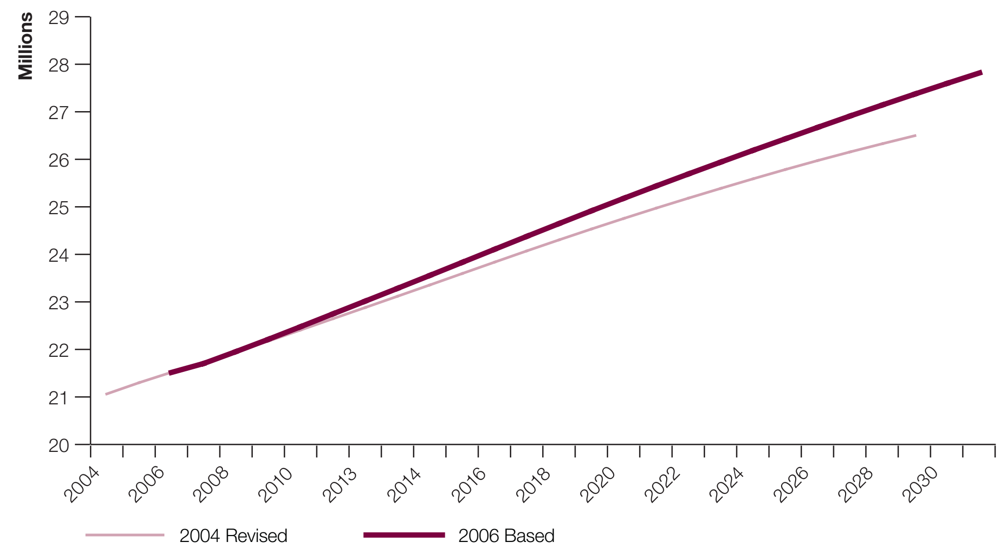
Our original advice consciously took a conservative view of long term future earnings growth and pent up housing demand. In the light of recent developments, we now consider the balance of risk in our advice in terms of under supplying or over supplying against housing requirements and the impact of this on housing market volatility.

We conclude that the only policy lever available that both moderates long term house price growth and improves housing accessibility, is housing supply. It is not the only factor that affects house prices, but its effects are structural rather than cyclical. It reflects more people being housed in decent homes, rather than the current state of the economy and level of available finance.

New household projections

2006 based household projections were released by Communities and Local Government (CLG) in March 2009. Although the subject of some debate, particularly in terms of migration trends assumed in the population projections, they are the definitive starting point of any analysis into the likely growth in future housing requirements. They project a higher level of household growth compared to the previous

Figure 1: 2004 and 2006 based household projections (England)



[1] NHPAU, *Meeting the housing requirements of an aspiring and growing nation: taking the medium and long-term view*, June 2008

Table 1. –2004 vs 2006 based household projections at regional level

	Annual average (2006 – 2026)	
	2004 based	2006 based
North East	6,117	8,574
North West	25,618	28,324
Yorkshire and Humberside	23,332	30,586
East Midlands	22,079	28,201
West Midlands	18,385	21,534
East of England	29,786	34,286
London	32,983	34,426
South East	35,813	39,860
South West	28,741	32,148
England	**222,853**	**257,939**

2004 based projections (see Figure 1 and Table 1). This is primarily driven by the higher level of population growth projected by the Office for National Statistics (ONS).

The greater upward pressures on household numbers are evident. The growth in households attributable to net in-migration accounts for approximately two fifths of the total in the 2006 projections. They are not just trend based extrapolations but also include judgements on the likely continuation of trends. Some anecdotal evidence suggests that in-migration is falling given the economic climate, or that recent in-migrants are returning home, but this is only a partial and unreliable picture. Economic conditions have also deteriorated in traditional countries of origin, and the effect of current economic conditions on levels of in- and out-migration of British nationals is often ignored. Recent work by National Institute of Economic and Social Research (NIESR), on behalf of CLG, suggests that net migration could be towards the low variant population projection.[2] Under this variant, household growth is still projected to average 221,000 per annum.

Given these upward revisions to projections, the balance of risk is towards a greater under supply of housing in the future. This is especially the case given likely levels of housing delivery in the short term.

Current levels of house building

CLG annual figures for net additions show that 207,000 units were added to the housing stock in 2007/08. However, figures for later quarters indicate a sharp decline in house building starts and completions. There is much uncertainty around forward projections, but indications are that these levels could be halved by 2009/10.[3]

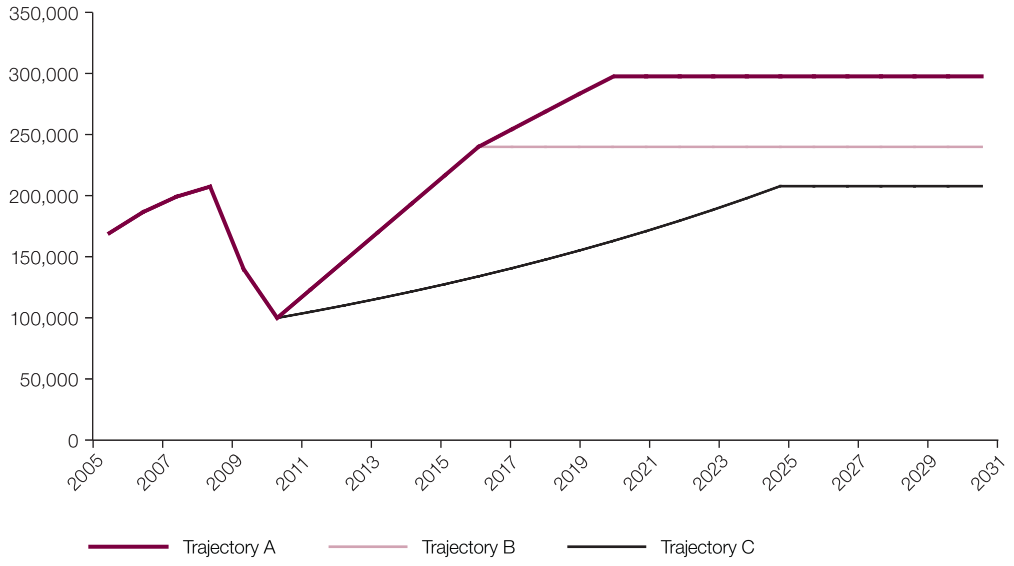
Clearly the scale of the delivery challenge has increased. However, the pressures being stored up, in terms of levels of pent up demand and access to housing for current and future households, will be greatly increased by any period of historically low delivery.

It is a commonly stated view that the industry is not capable of increasing output long term by more than 5% a year, but there is potentially a big difference between recovery from a dramatic drop in output,

[2] CLG, *Projections of migration inflows under alternative scenarios for the UK and world economies – Economics paper 3*, April 2009

[3] For example the Construction Products Association estimates housing 'starts' falling to 70,000 this year

Figure 2: Alternative housing supply trajectories



and long term assumptions about the scope for output growth. If, however, this view of output growth were applied to some basic assumptions about delivery in the next couple of years, it would be 2025 before more than 200,000 homes a year were again added to housing stock. This will result in a massive under delivery of housing, further amplifying the structural long term under supply in terms of pent up demand and market volatility.

The emphasis and focus moving forward has to be on how to get delivery moving. Critical to this will be having the right plans in place to provide the framework within which solutions can be found and enabled. These plans should be for long term future requirements, not distorted by current events.

In order to model the effects of different housing supply trajectories, three alternatives are shown in Figure 2. The pessimistic scenario outlined above, where supply only grows slowly from the low point of the recession, with not even a partial ‘bounce back’, informs Trajectory C. Trajectories A and B plot a quicker return to pre-recession levels of delivery, with both reaching 240,000 net additions by 2016. Trajectory A builds on this recovery, to reach approximately 300,000 by 2020.

A note on modelling

The following sections utilise the CLG Affordability Model to consider market outcomes for different economic, finance, and housing supply scenarios. The model captures the relationship between housing supply and affordability through the interplay of demographic trends, incomes, the labour market and the housing market. The results from the model are based on the actual decisions of buyers and sellers over the last thirty years.[4]

The central indicator of affordability in the model is the ratio of lower quartile house prices to lower quartile incomes. For example, if the lower quartile (25th percentile) house price is £125,000 and the lower quartile income is £25,000, the ratio would be 5:1.

Any single affordability measure can give only a partial picture of overall housing affordability and accessibility. It is important to interpret changes observed in the measure in terms of what is driving them. House prices and incomes, on which the measure is based, will fluctuate due to many variables. Market equilibrium prices for housing are the result of the relationship between housing

[4] A fuller summary of the model is available in Appendix A of the NHPAU June 2008 Housing Supply Range Advice

availability and housing demand backed with money. Demand backed with money is determined by factors including: household budgets and access to savings; the availability and cost of finance, and; expectations of future price levels. When modelling, we can isolate variables to investigate the effect of each in turn.

We are currently working on the development of a wider suite of indicators. These may include indicators of housing stress, such as social housing waiting lists, or measures of pent up housing demand, for example in terms of levels of overcrowding and sharing. They may also include other measures of market affordability and accessibility, such as the proportion of income spent on servicing a capital repayment mortgage, or the average deposit required by first time buyers.

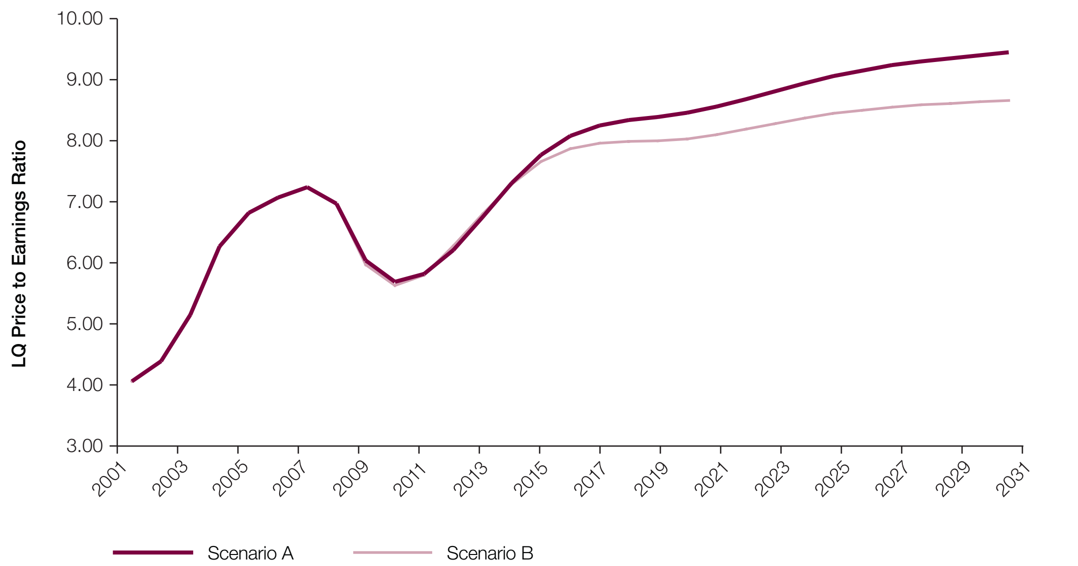
The impact of recession

It is not for the NHPAU to predict the future health of the economy, or to comment on the likely effect of current Government interventions. We do not know how deep the recession will be or what the shape of recovery will look like.

Lower earnings growth and rising unemployment will exert a downward pressure on house prices, but upward pressures on affordable housing need. In a market, demand backed with money is not fixed but depends on economic factors. If the economy is in recession, people have a lower budget, which excludes them from the market either completely, or at a lower price than previously. Whilst house prices are in decline an illusion of improved housing affordability is created, but these declines in prices are brought about by corrections in the market and an inability or unwillingness to enter it.

As in our housing supply range advice, we can model the impact of alternative labour market scenarios. They have an important impact on house prices and the lower quartile house price to earnings ratio. The analysis shown in Figure 3 models the impact of different long term growth rates in real earnings, all other things being equal. This analysis includes a short term correction in prices to reflect our current point on the cycle of market volatility. It also assumes the pessimistic delivery trajectory of 5% growth in net additions per annum from a low of 100,000 in 2010.

Figure 3: Output from the model showing alternative earnings growth scenarios



Under scenario A real earnings growth is set to zero in 2008/09 and 2009/10, 0.5% in 2010/11, and 1.5% in 2011/12 before returning to its long term trend of 2.5%.

Under scenario B real earnings growth is set to zero from 2008/09 to 2010/11, 0.5% in 2011/12 and 2012/13, and then maintained at 1.5% from 2013/14. This reflects the conservative long term assumption for real earnings growth we used in our supply range advice (1.5% per annum).

The differences between the two scenarios reflect differences in households' ability and willingness to pay, and hence the equilibrium point in the market. They do not indicate that housing accessibility has improved. No more households are able to access the housing they need in Scenario B than in Scenario A.

The impact of credit constraints or 'mortgage rationing'

A key factor behind the global recession has been the credit crunch. As banks moved to shore up their balance sheets and ensure adequate capitalisation, lending between them and to large numbers of customers effectively dried up. This factor, in conjunction with a collapse in market confidence, has led to the lowest levels of mortgage lending since Council of Mortgage Lenders (CML) records began over thirty years ago. Deposits required for mortgages are at historically high levels (averaging 25% compared to the long term average of 10%), with punitive arrangement fees and interest rates applied to the few mortgages available at higher loan to value ratios.

A consequence of the requirement for higher deposits, or for higher arrangement fees and interest rates with higher loan to value mortgages, is to reduce demand backed with money. This reduces the market equilibrium price.

The existence of mortgage rationing is not new. We are able to model its effect on house prices and hence the lower quartile price to earnings ratio in the latest version of the affordability model. We can do this by altering the growth in net mortgage lending.

In the last 25 years, mortgage supply has broadly matched the demand for mortgages from those households satisfying a 10% deposit requirement and a loan to income ratio of approximately 3:1. We can alter this assumption by, for example, saying that there will be no net increase in mortgage lending, or that only a proportion of new mortgage demand will be met. In Figure 4 we show the results of modelling three different mortgage availability scenarios, all other things being equal. This analysis builds on the previous analyses above by taking the most pessimistic delivery trajectory and the more conservative earnings growth projection (scenario B).

Figure 4: Output from the model showing different levels of mortgage availability

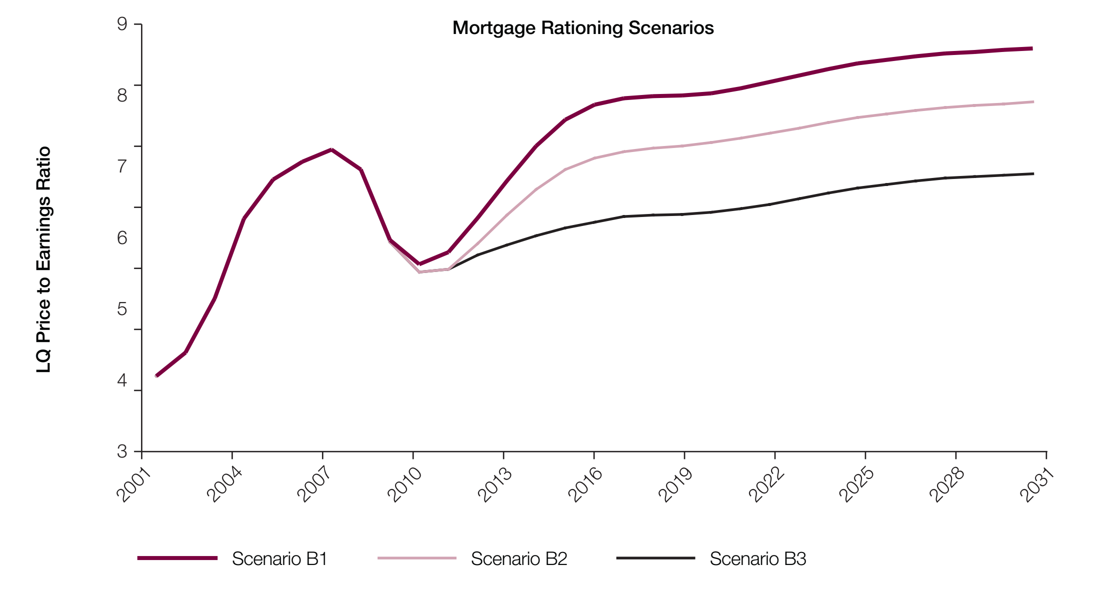
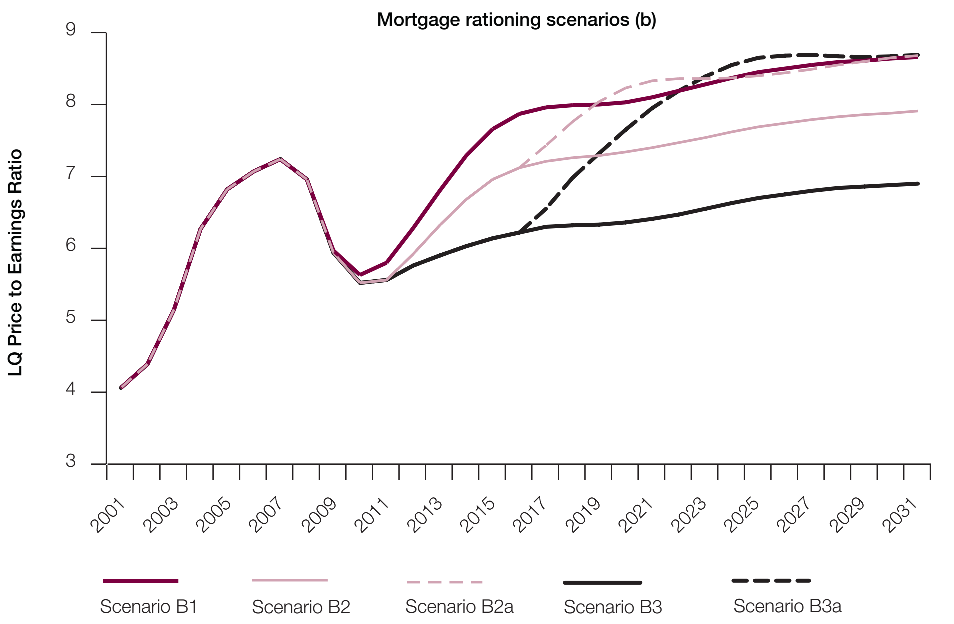


Figure 5: Lifting mortgage constraints



In Scenario B1, mortgage rationing ends by 2010. Scenario B2 models mortgage supply meeting two thirds of demand, whilst Scenario B3 reflects no net increase in mortgage lending for the whole period.

We can also model the effect of these 'mortgage rationing' constraints being short to medium term rather than permanent in nature. In Figure 5 we do this by removing any constraints on mortgage availability from 2016 for those households satisfying historically standard deposit and price to income ratios. The results we get (scenarios B2a and B3a) indicate that the impact of mortgage availability constraints on house prices is temporary.

Again, whilst house prices are suppressed as a result of mortgage constraints, an illusion of improved housing affordability is created. The constraints are reducing accessibility to the market and deflating prices as a result. Our analysis shows that if mortgage availability improves, prices return to the levels they would have been if mortgage supply had always matched demand.

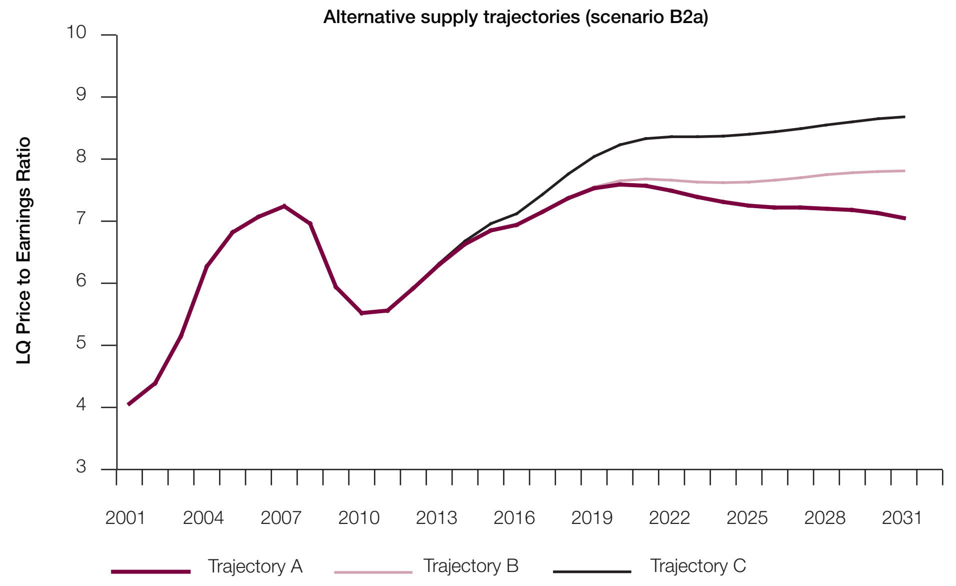
In these scenarios the number of houses supplied is a fixed input, with the supply assumption likely to constrain household formation. There is a distributional implication, with winners and losers in terms of who gets access to housing, rather than the number of people being housed. Demand suppressed by rationing doesn't go away; it just builds up in the shape of households that are inadequately accommodated or unable to form.

The effect of supply on house prices and affordability

We finally turn our attention to the question of different levels of housing supply. It is generally accepted that there has been a long term under supply of housing to meet the requirements of our growing and aspiring population. Whilst clearly the strength of the economy and the availability of finance are significant factors behind house prices, so too are levels of supply into the system.

There is a fundamental difference in comparing a price fall or price growth moderation brought about by a contraction in credit and a whole economy recession, to that generated by a sustained increase in supply. In the latter case, price rises moderate over the long term as more people are accommodated in decent homes. In the former, the need for more decent homes has not gone away, in fact it's still getting worse. Only the competition for housing has

Figure 6: The effects of supply



weakened, because people's means to compete are weaker. The same allocation mechanism is still in action, and it excludes from the market the same number of people, to reduce demand backed by money for the same housing stock. People's housing conditions do not improve. There might be changes in who wins the competition, but in general the winners are unlikely to be first-time buyers.

In our next analysis we show the difference in modelling the three different housing supply trajectories shown in Figure 2, all other things being equal. Figure 6 charts different outcomes in terms of the lower quartile house price to earnings ratio. All three trajectories take our more conservative earnings growth projection. They also assume that there will be no net increase in mortgage lending until 2011 when the supply of new mortgages will then meet two thirds of the demand. From 2016, the supply of new mortgages will fully satisfy demand.

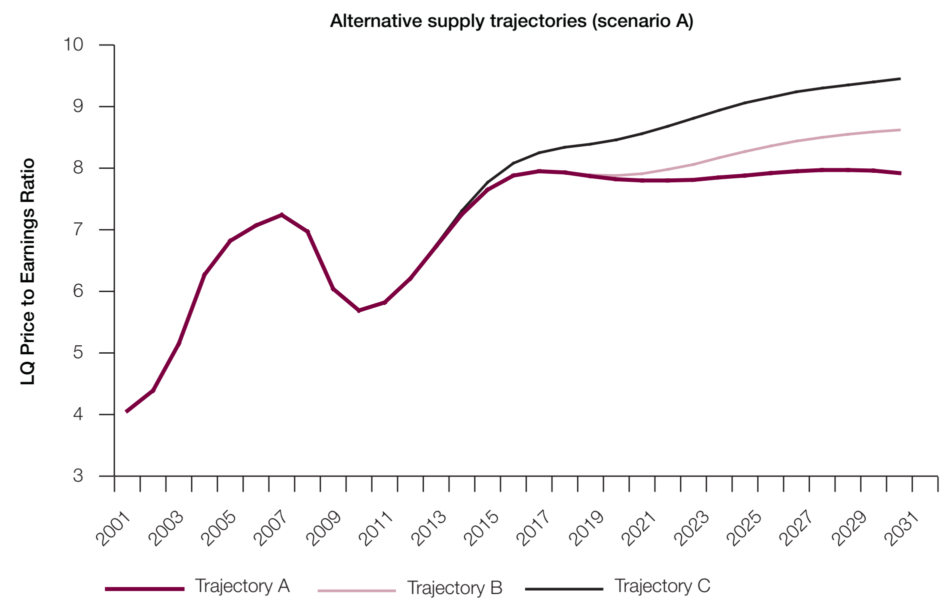
Housing supply affects house prices. It is not the only variable that does so, but through modelling we can isolate the effect of each variable in turn. For example, we can take an alternative set of earnings growth and mortgage availability assumptions and assess the effect of the same three supply trajectories. In Figure 7 we take the more optimistic earnings growth projection (scenario A) and assume that mortgage supply will match demand from 2011/12.

Increasing supply takes time and because in comparison to overall stock levels the increases are small, many of the effects take time to feed through to the market. However, the lever of supply is the only one available that also improves accessibility and removes excess volatility from the market by matching housing stock increases to housing requirements.

If long term house price growth can be moderated such that it does not outstrip earnings growth, then housing can once again be seen as serving the fundamental need for a place to live, as opposed to being an investment opportunity based largely on expected capital gains.

These ambitions should not be lost in a climate of short term uncertainty. Planning to undersupply will not create an environment that enables the growth of innovative house building and place making partnerships. Instead it will lead to greater affordability

Figure 7: The effect of supply (alternative version)



and accessibility problems, wasting the opportunity we now have to develop new strategies for delivery.

Conclusion

This paper has looked at four main areas of change in the last year; demographic projections; levels of house building; the recession; and mortgage constraints. It would be tempting to conclude that as house prices continue to drop, affordability is improving. This would be a false conclusion. Affordability for first time buyers in terms of their ability to pay is, if anything, getting worse. Accessibility to both the market and social sectors has dramatically contracted, whilst housing pressures continue to rise.

We currently find ourselves in the situation where levels of building are dropping to historically low levels, whilst projections of future housing requirements are rising. Clearly the scale of the challenge in terms of deliverability is significant, but this is where the focus now firmly needs to be.

Pressure in the future, given projections for levels of delivery in the next couple of years, may well be for higher levels of annual delivery. Neither global recession nor a global credit crunch are candidates for improving affordability in terms of households' ability to pay or their access to housing. If chronic housing pressures are to be relieved and long term market volatility addressed, what's not delivered now will need to be delivered at a later date.

The balance of risk is that our advice remains as conservative, if not more so, than before. A lengthy period of substantial under delivery will only serve to make this situation worse. Whilst there's slack in the system attention must now turn to what's needed to kick start sustainable and viable delivery programmes, rather than allowing ourselves to be lulled into a false sense of progress by improved house price to earnings ratios that do not reflect any improvement in terms of access to housing.

Appendix A – NHPAU Board Members

Stephen Nickell (Chair)

Currently Warden of Nuffield College, Oxford, and a Board Member of the UK Statistics Authority. Previously he has held Economics Professorships at both LSE (London School of Economics) and Oxford and was President of the Royal Economic Society from 2000 to 2003. He was a member of the Bank of England Monetary Policy Committee from 2000 to 2006, and during this time he made a number of speeches on the housing market. He is a fellow of both the Econometric Society and the British Academy as well as being a foreign honorary member of the American Economic Association and the American Academy of Arts and Sciences.

Prof Glen Bramley

Professor of Housing and Planning/ Urban Studies at Heriot – Watt University in Edinburgh since 1994 leading research on planning, housing and urban policy. Prior to this he lectured in Urban Studies at the University of Bristol specialising in local government finance, housing and economic aspects of public policy. He has published papers and extensive research analysing the economics around housing affordability and its relationship with planning and house building.

Glen is the linked Board member for the South West and North East regions.

Prof Paul Cheshire

Has been Professor of Economic Geography at the London School of Economics and Political Science since 1995. Prior to this he was Professor of Urban and Regional Economics at the University of Reading and has spent time at Washington University in the USA. He has written extensively and conducted research on applied urban and regional economics, particularly the economics of housing, land markets and land use regulation.

Paul is the linked Board member for London and the East Midlands region.

Max Steinberg

Has been Chief Executive of Elevate East Lancashire, a housing market renewal pathfinder since 2003, following 25 years at the Housing Corporation where his roles included, Director of Investment & Regeneration for the North and Regional Director of the North West and Merseyside. He is a leading UK practitioner in Urban Regeneration and Housing. Max is Chair of the Board of Liverpool John Moores University European Institute for Urban Affairs and the Chair of Governors at King David High School in Liverpool.

Max is the linked Board member for the Yorkshire and Humber region.

Bob Lane

Bob is currently Chair of the London Thames Gateway Urban Development Corporation and a Board member of the Homes and Communities Agency. Until April 2008 he was Chief Executive for North Northants Development Company responsible for housing growth and regeneration in the area. His previous roles include Chief Executive of Speke Garston Development Company, Liverpool, Assistant Chief Executive of the Merseyside Development Corporation and roles at Oldham and Lambeth Councils managing urban programmes. He is a specialist in the delivery of complex urban regeneration projects, with more than twenty five years experience as a regeneration practitioner/manager.

Bob is the linked Board member for the East of England and the North West regions.

Dr Peter Williams

Is now an independent consultant on housing and mortgage markets. His clients include the Intermediary Mortgage Lenders Association and Acadametrics. He was previously Deputy Director General of the Council of Mortgage Lenders. Prior to that, he was Professor of Housing Management at Cardiff University, Deputy Director at the Chartered Institute of Housing and as an academic at the Australian National University and the University of Birmingham. He previously served on the Board of the Housing Corporation (1995 - 2002) and Housing for Wales (1989 to 1993). He is a Visiting Professor at the Centre for Housing Policy at the University of York.

Peter is the linked Board member for the West Midlands and South East regions.

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April 2009