The Role of Housing in the Economy

A Final Report by Regeneris Consulting and Oxford Economics
The Role of Housing in the Economy

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Regeneris Consulting and Oxford Economics would like to thank all those individuals who gave up their time to provide extremely useful comments on the lines of enquiry covered by this study. We are also grateful for the comments on earlier drafts from the Steering Group of Homes and Communities Agency officers. The views expressed in this report are those of the authors and any errors and omissions remain our responsibility.
1. Introduction

1.1 In March 2010 Regeneris Consulting and Oxford Economics were appointed by the Homes and Communities Agency (HCA) to review and update the evidence base on the relationship between housing and fundamental drivers of productivity and economic growth.

1.2 The Homes and Communities Agency was created by the Housing and Regeneration Act 2008 to:

- Improve the supply and quality of housing in England;
- Secure the regeneration or development of land or infrastructure in England;
- Support in other ways the creation, regeneration or development of communities in England or their continued well-being; and
- Contribute to the achievement of sustainable development and good design in England, with a view to meeting the needs of people living in England.

1.3 The UK is just emerging from one of its most severe recessions in living memory. During the recession the HCA has played an important role in supporting the housing market and maintaining supply, especially of affordable housing (and hence supporting the economy and ameliorating some of the worst potential aspects of the recession). However, the HCA needs to set out clearly the economic role of investment in housing as part of future discussions with central government on HCA funding and priorities in the summer of 2010 and onward. Hence it has decided to commission this review to update the evidence base on the role of housing in the economy.

1.4 Since our study commenced there have been significant developments in relation to public finances and the public deficit. The new Coalition Government has embarked on a process of reviewing spending both within 2010/11 and in future years. As it stated in the Spending Review framework it is “committed to a significant acceleration in the reduction of the structural deficit over the course of the Parliament”.¹ This means that there will be a root and branch review of all areas of public spending, including of course housing. Most departments face an average 25% cut over four years. The Spending Review sets out a number of key criteria such as:

- Is the activity essential to meet Government priorities?
- Does the Government need to fund this activity?
- Does the activity provide substantial economic value?
- Can the activity be targeted to those most in need?

1.5 At the same time, whilst it is widely recognised that there needs to be a reduction in public spending, there is a lively debate over how cuts can be made in a fair way so as not to prejudice the recovery that is underway. The recent forecasts of the UK economy and the deficit by the Office of Budget Responsibility (OBR)\(^2\) identified a significant structural deficit and a central forecast that the UK economy was likely to grow by just 1.3% in 2010 and then by 2.6% in 2011. However, there was a significant possibility that growth rates could be lower than this.

**The study brief**

1.6 The study brief describes the three objectives of the study as:

1) To review the evidence base for housing’s role in the economy, with particular reference to the role of housing in supporting productivity and economic growth;

2) To refresh the model for the relationship between housing and the economy; and then, drawing on 1 and 2

3) To review emerging evidence and economic forecasts on the economic recovery to identify key issues that should be reflected in the HCA’s business planning and corporate strategy going forward.

1.7 The brief states that there is a view of housing that focuses on the importance of the:

- Housing market to macroeconomic stability; (the key original rationale for the Barker Review of housing supply)

- Housing supply for labour market flexibility; and

- Contribution that housing growth and maintenance, and their associated supply chains, make to overall economic output.

1.8 These roles of housing (or at least the first two) were summarised in the HM Treasury/ODPM review of housing policy as follows: “Achieving a more responsive long-term housing supply can play a major role in helping people meet their housing and asset-owning aspirations, as well as helping deliver macroeconomic stability and more flexible labour markets”.

1.9 The brief then describes a wider view of housing’s potential role in the economy which takes into account the:

- Role of housing in supporting the key drivers of productivity;

- Costs of the negative externalities that arise from housing market failures (for example costs that arise from the health effects or climate change effects);

- Relationship between housing supply and market affordability, which in turn affects competitiveness; and

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\(^2\) Office for Budgetary Responsibility (2010) “Pre-Budget forecast” June 2010
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Role of housing in supporting householders’ wealth and asset accumulation, and associated enterprise, household savings and consumer spending impacts.

1.10 The brief for the work did not cover impact of housing or access to housing on inequality of life chances and on the distribution of wealth between generations; although the HCA acknowledges that these are very important issues and the source of much debate.

The lines of enquiry

1.11 Following an Inception Meeting we produced a Methodology Report which was fine-tuned in light of comments from the HCA. This report proposed that we structure our review of the evidence along certain “lines of enquiry”. These are summarised in Table 1-1 below.

<table>
<thead>
<tr>
<th>Table 1-1: The Role of Housing Investment in Economic Performance - Suggested Lines of Enquiry</th>
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</thead>
<tbody>
<tr>
<td>Broad Area</td>
</tr>
<tr>
<td>-------------</td>
</tr>
</tbody>
</table>
| A. Macro-Economic Stability | 1. What is the role of the housing market in contributing to, or limiting, macro-economic stability?  
2. What is the role of housing supply in contributing to, or limiting, macro-economic stability? |
| B. Sectoral role | 3. What is the contribution of housing sector activity (new build and refurbishment) on the economy? |
| C. Labour market flexibility and skills supply | 4. What is the role of housing in contributing or restraining inter-regional labour market flexibility and mobility?  
5. What is the role of housing in the local/sub-regional supply of skills and business competitiveness? |
| D. Housing as an asset | 6. What is the role that individual investment in or ownership of housing assets plays in macro-economic performance (linked to 1 above)?  
7. What is the role that individual investment in or ownership of housing assets plays in enterprise?  
8. What is the role of housing wealth to support consumer investment expenditures (e.g. on education)? |
| E. Housing in regional and local economic development & regeneration | 9. What is the role of housing in attracting or deterring investment into an area?  
10. What is the role for housing in helping local areas and residents become more competitive and successful? |
| F. Housing and poverty | 11. What is the role of housing in influencing patterns of poverty and social-mobility? |
| G. Housing and health | 12. What role does housing play in a healthier population and workforce? |
| H. Housing and sustainability | 13. What is the role of housing investment in impacting on environmental sustainability? |

1.12 The groups of issues in the table above can be thought of as three main categories (and it is shaded accordingly):

- The role of housing that may have a direct impact on overall national economic performance (A to D);  
- The role of housing in regional and local economic development (E), which of course may not impact on overall national economic performance but rather the distribution of activity; and
• The role of housing in terms of its external effects that in turn may have economic impacts (either directly or indirectly) (F, G and H).

1.13 The work in this report is based on a review of the existing literature (see Appendix A) and consultations with a selection of those involved in the field either in terms of policy or research (see Appendix B). Regeneris Consulting and Oxford Economics are very grateful to all those who aided us in our work.
2. **Summary Findings**

2.1 There is a large and complex body of evidence on the economic role of housing which we have attempted to summarise in this report. There is also a degree of overlap between the different aspects of the economic role of housing. In this section we draw out some of the highlights from the rest of the report.

**Longer term trends...**

2.2 There have been a number of important longer term trends in the supply of and demand for housing prior to the start of the 21st Century that are a backcloth to this review:

- The real growth in house prices over many decades
- The increase in importance of home ownership
- Increasing mortgage debt relative to incomes until the onset of the recent recession and credit crunch
- The increase in the population and in particular the number of households
- The continuing linkages between housing booms and the economic cycle
- The fall in the size of the social rented sector and the increasing polarisation of the sector as a place where people who are economically inactive or on the lowest incomes are concentrated.

**Features of the most recent period...**

2.3 If we move forward in time and look at the period since 2000 there are a number of interesting features that have impacted on the economic role of housing:

- The supply of cheap and accessible credit for house purchases – which fuelled house price inflation across all parts of the UK.
- The narrowing of regional house price differentials – as the supply of credit was a national phenomenon and the nature of economic growth (especially the role of the public sector) led to regional patterns of stronger relative growth in the north and midlands. This combination of circumstances may of course be temporary in nature with house price differentials.
- This has led to a general increase in the problem of affordability across nearly all parts of England limiting entry into owner-occupation, especially for those without family wealth behind them.
- The supply response has been very sluggish given the level of historic real house prices.
• The large increase in the size and relative importance of the international in-migrant workforce in all regions and occupations, but especially in the lower paid occupations and in the tightest labour markets.

• The dramatic drop in new housing activity since 2007 but a relatively limited fall in house prices from their 2007 peak.

• The fall in the rate of owner-occupation, most dramatically for younger cohorts.

**So what has been the recent economic role of housing?**

2.4 In macro-economic terms the evidence shows that:

• The way the UK housing market operates has undermined macro-economic stability – this is due to a combination of how the credit market operates as well as the sluggish supply response.

• Housing impacts on the macro-economy in two main ways – by the impact of activity in the housing sector and via the role of housing wealth in affecting consumption behaviour.

• The recent fall in housing activity has contributed to a 1% fall in GVA. Oxford Economics estimate that impact of the fall in house prices on consumer spending has contributed a further 1% fall. Put another way, the impact of changes in the housing market contributed to around a third of total fall in UK GDP from 2007 to 2009.

• Housing therefore matters in macro-economic terms, especially as the overall national multiplier is one of the highest of any sector (due to the relatively low import content of housing output).

2.5 Housing also affects the labour market as all workers require some form of housing to carry out their job effectively (even remote and tele-workers need home-based offices). The evidence on the effect of how housing supply operates on labour mobility is complex.

• Most job moves do not require a house move and the vast majority of housing moves (around 90%) are not job-related. It is possible therefore to exaggerate the impact of housing on labour mobility.

• Although there is some evidence that labour mobility is lower than in the US (mainly amongst lower skilled workers), the UK does not appear to have low labour mobility by European standards or amongst managerial/professional workers.

• However, the evidence is that mobility is far lower among owner-occupiers than among those in the private rented sector.
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• The way the social housing sector now operates is widely recognised as not contributing positively to labour mobility for tenants and indeed is acting as a brake on it. This is supported by the evidence and, if anything, is becoming more of a problem. However, the number of people who are employed or who are economically active in the sector is relatively small and, importantly, the social rented sector has concentrations of people who are less likely to move for employment reasons.

• There are vastly different rates of mobility between tenures. However, this is not surprising as the characteristics of people in different tenures vary so widely. The private rented sector has grown substantially in recent years and is marked out as the tenure most associated with those people moving for employment reasons, who tend to be young, on relatively higher incomes and without families. The private rented sector now accounts for nearly half of longer distance moves (45% of those over 20 miles) even though it only accounts for just 12% of all households. Clearly the role of students moving from place of study/residence to their first job is a significant factor here.

• Relative house prices between regions (and rate of house price change) as well as straight affordability issues have been identified as adding a frictional element to the labour market. However, more recent experience suggests that these effects may have been mitigated by the recent compression of regional house price differentials during the last decade. This is not to say that the effect of regional price differentials acting as a deterrent on inter-regional migration may not return.

2.6 The way housing links to the labour market is also through its role in place competitiveness. There is a lack of firm quantitative evidence on the role of housing quality on place competitiveness. This is almost certainly due to the complexity of the impact of quality of life (of which housing plays one part) on economic competitiveness at a regional, city or local level. However, some ongoing research for HCA suggests that housing quality (as proxied by various measures) is a significant explanatory variable associated with levels of worklessness and GVA per employee at a local level.

2.7 There is some evidence on the role of a lack of housing affordability on local economies via effects on skills supply in the private sector, although it is not statistically very robust and tends to be based on case studies. Much of the literature notes that the effects of poor affordability have led to more commuting and to some extent a demand response (concealed households and overcrowding). It is not clear how far these responses (which have indirect unsatisfactory economic, social and environmental effects) offset any adverse local economic effects. There is ample evidence that affordability impinges on the ability to recruit and retain many public sector workers (key workers) in areas of high house prices. What is less clear is what impact this has on local economic performance; although some research shows that, given the existence of national wage scales, there is a negative impact on the quality of public services delivered in such high housing cost areas.

2.8 There may be particular concerns at a UK national level of housing affordability issues impacting on the ability of certain key competitive locations that provide unique productivity opportunities to the UK (such as Cambridge).
2.9 The review has found that the role of housing wealth and assets plays a powerful role in the economy via consumption, investment and indirect effects on enterprise. Given the market failure issues around information asymmetries, housing collateral plays a role in facilitating the flow of finance to productive investment opportunities. The key issue here is that access to net housing wealth, which accounts for a large share of total personal wealth, is highly unevenly distributed meaning that there is relatively inefficient (and inequitable) access to collateral for business start-up.

2.10 Perhaps the firmest evidence on the economic role of housing is in relation to the more enduring impact it has on human capital formation and life chances. Put simply, families living in poorer quality, less desirable housing stock face lower life chances and health costs associated with poorer quality stock itself.

2.11 The role of social housing policies and, in some cases the operation of private market, also tends to lead to a sorting process and greater neighbourhood segregation by income and social class. This has been a pronounced feature of changes in social housing since the early 1980s. There is now a very different economic contribution from those living in social rented housing, who are much more likely to be economically inactive or in low paid jobs, than other tenures. There is an ongoing debate in the UK as to whether these impacts arise in part from the external “neighbourhood effects” created by certain types of housing, or whether they simply reflect the characteristics of those who are “sorted” into social and lower cost private housing.

2.12 Research on house price hedonics shows that access to good schools, locations with low levels of environmental pollution, good transport and other public infrastructure is priced into the housing market. As average house prices have risen relative to incomes, largely because of lack of supply, so less wealthy families find themselves increasingly priced out of the more advantageous locations. This makes relative poverty matter even more than before for life chances and for access to opportunities whether for education, health or employment.
3. Implications for the Future

3.1 This section explores some of the findings of the review of the evidence and considers the implications for HCA and others going forwards.

**Broad Policy Implications**

3.2 There are a number of clear implications that emerge from this review:

1) The longer term positive benefits in terms of health and related economic outcomes from ensuring that **decent quality homes** are provided for all irrespective of income. The evidence on the impact on children’s life chances and the cost to the health service of poor heating, dampness and overcrowding is quite clear. This evidence has been accumulated over a number of years and is familiar for the HCA. It supports intervention in the social and private rented sector where housing quality remains an issue.

2) The **environmental externalities** arising from the design and construction of housing and its location are important. There is a strong case for public sector intervention to reduce environmental externalities, although there appears to be a lack of a rigorous cost-benefit analysis of the case for different forms of intervention.

3) **Housing affordability** for those on low and middle incomes emerged in the 2000s as a major policy issue. There is, however, a lack of firm evidence one way or the other on the economic effects at a local or regional level. As we note, there are a number of labour market adjustment mechanisms at play that mitigate the effects. It is clear, however, that there have been costs created in terms of the quality of public services delivered in high housing cost areas and tight labour markets. Key worker initiatives are a targeted response to such effects. Looking ahead, as we note below, there is no reason to suppose that housing affordability and access to owner occupation will not continue to be major issues.

4) We have been struck by the importance of the **private rented sector** in labour market flexibility terms. Its role has been relatively under-researched and unheralded in the literature. It is undoubtedly the case that its role arises from its inherent flexibility and therefore the decisions of households to select the tenure**, so it is occupied by the young and those who are more mobile. It has also seen substantial growth in recent years and now plays a key role in providing a flexible means of moving home locally or by region often linked to labour market flexibility. We believe that there is a case for the HCA to better understand the social and economic role the private rented sector plays, or could play, and different types of private renting (providing a continuum of security of tenure for instance). For the reasons set out below (see para 3.25), this sector holds out the prospect of offering a substantial increase in supply.

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3 Of course this decision may in practice be one forced on many individuals and households due to lack of effective choice in terms of accessing either social housing or owner occupation
5) The role of social housing and of neighbourhoods of concentrations of relatively poor housing and low income households is an area of some disagreement in the literature. What is clear is that the economic (and other) outcomes in these areas and in this tenure are very poor. If anything, the increased polarisation of the housing market and tenures has worsened the relative outcomes in recent years. However, there remains a debate in the UK as to whether this is a housing or a poverty problem (i.e. how large are the neighbourhood effects). Related to this debate is what is the best form of intervention – housing based (creation of mixed neighbourhoods) or income based (direct measures to tackle poverty at a household level).

6) The role of housing as an asset is, we have identified, important in economic (and social) terms. However, it is less clear what the policy implications are. There would be strong equity and some economic efficiency arguments for ensuring that housing wealth was more equally shared around. However, in practice we fail to see how this could be achieved. It may be that there are better ways in dealing with the role of housing wealth as collateral for those starting businesses – for instance via credit support schemes to offset the advantages of housing wealth. More generally, there is a case for reducing the role of housing as a form of asset investment or at least put it on an equal footing with other asset classes, but this is a wider debate about the taxation of housing wealth.

7) In terms of its macro-economic role, the recent recession showed the importance of housing as a contributor to economic output and via its indirect effect on consumer investment (collectively contributing an estimated 2% points of the overall 6% points fall in GDP in the recent recession). We discuss below how it may be possible to expand new housing supply and so contribute to economic growth.

3.3 The evidence on the role of housing in place competitiveness is less clear cut and the evidence is more equivocal, this is largely because of the wide range of complex factors at play. Under the emerging new sub-national policy framework, there is an important policy issue as to whether the new Local Enterprise Partnerships (LEPs) should be concerned with housing supply (quantity, price/accessibility and quality). The evidence we have gathered in this report suggests that, in some circumstances, inadequate housing supply could become a constraint on local economic growth and, perhaps more importantly could lead to adverse environmental and social consequences from growth.

Towards a new model of the economic role of housing

3.4 One of the objectives in the study brief is to “refresh the model for the relationship between housing and the economy”. As we identified in the introductory section, this refresh of the relationship needs to be placed in the context of the new challenges facing the public sector: the steep and severe recession from which we are now starting to emerge; and the massive challenges in choosing future public spending priorities in the light of the need for typically 25% departmental cuts over the next four years. We have therefore considered a way of looking at the economic role of housing that plays into the debate about enhancing the recovery and ensuring value for money in public expenditure terms. In setting out this model, we note that historically the main rationale for intervention in housing has been for sound social policy reasons. We consider that this will continue to be the case.
3.5 As this review shows, the economic role of housing is complex. It is influenced by the quantity of the stock of housing; the quality and location of the stock of housing; the rate of new house-building; the price of privately owned housing and how this varies by region and locality; the different role of housing tenures; and the tax/benefit treatment of these tenures. Variations in any or all of these factors separately, or more often in combination, can have economic effects.

3.6 We believe that a helpful way of thinking about the economic role of housing is as follows (and as summarised in Figure 3-1):

1) **Impacting on economic recovery - short term macro-economic effects.** As we have seen the decelerator effects from a reduction in housing investment have had serious and rapid impact on UK GDP (direct effects of the order of one percentage point), the fuller effect of the reduction in house prices and investment are likely to have contributed to around two percentage points reduction in GDP.

   The increased public sector investment and support, especially for social housing led by the HCA, to some extent offset the contraction in private sector house-building. This reduction did not occur from a position of housing investment and new house-building being at some inflated and excessive level⁴. Indeed during the housing boom of the last decade what was surprising was the relatively modest increase in house-building. By the same token, housing investment has the potential to lead the economic recovery – as we discuss later in this section there are various possible policy instruments that could be used to ease the supply side and increase the rate of new house-building, which is a very effective source of demand for labour.

2) The other economic roles linked to the existing stock of housing are unlikely to impact on the growth rate of the economy in the short term. The exception to this is the wealth or collateral effect of house prices on consumption (and increase in house prices could encourage greater levels of consumption). However, for the reasons set out later on in this report, deliberately targeting an increase in house prices would not be desirable.

3) **Medium term productivity effects.** As this report shows there is some evidence that there can be some effects on productivity via the role housing plays - as in effect a complementary good to labour - via both its **cost and the flexibility of movement within and across tenures.** People have to live in houses to work and many job moves can involve a change in residence. The three main effects are:

   ➢ The role of different forms of housing tenure on labour mobility – there is some evidence that owner occupation and social rented housing create modest frictional impacts on inter-regional labour mobility. However, the evidence does not suggest these effects are particularly strong and they may have been substantially lessened in the last decade due to a different pattern of regional house price changes and the effect of a new pattern and scale of international in-migration.

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⁴ There is a contrast here with the Republic of Ireland and Spain where a speculative boom has clearly led to a position of oversupply which has exacerbated the contraction in the economy and led to a much sharper correction in house prices.
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- The effect of housing affordability (mainly for owner occupation, but also for the private rented sector) on the ability to recruit and retain key staff.

- Building more housing in areas that attract skilled workers may contribute to increased overall labour productivity.

Finally, we have identified the significant role of housing equity as an asset in providing access to business investment funds and other investments, although the primary effects are the profound distributional ones.

4) Longer term productivity and economic/social effects. Finally, there are some important roles that investment in the quality of the existing housing stock can play in longer term economic, social and environmental improvements (here the economic benefits may take decades to materialise). These relate to:

- The location and nature of the new (and potentially retro-fitted) housing stock which can contribute both positively and negatively to UK’s CO₂ emissions and other environmental impacts. To the extent that housing can reduce its carbon footprint this will, in the longer term, reduce the costs of adaptation in the rest of the economy.

- The quality of the housing stock in terms of factors such as overcrowding, dampness and heating does impact on the health and life chances of residents both in the short and long term (e.g. over a generation or more). There is plenty of evidence that the past post-World War II investment in ensuring access to decent homes has positively impacted on the health of current generations.

5) Finally, there is an ongoing debate about the role of housing and housing tenures in contributing to neighbourhoods and the effects of the sorting role that social and poorer quality housing has in creating concentrations of certain social problems. There is still no consensus as to whether these so-called neighbourhood effects (negative externalities linked to crime, aspirations and educational achievement) can be placed at housing policy’s door.

3.7 Others have looked at housing through the lens of the “five drivers of productivity” model and used this framework to consider its potential contribution (see Figure 3-2). The use of such a policy framework is not, in our view, the best way of considering housing’s economic role for the reasons set out in our framework above. However, even using this framework, our view of this earlier assessment is that it:

- Potentially understated the role of housing in relation to the supply of skills;

- Understated the important role of housing equity as a means of raising or acting as collateral for business finance. This role, in turn, indirectly aids enterprise and so potentially innovation (albeit in a way that is not equitably distributed geographically or generationally);

- Did not distinguish between the medium (more modest) and longer term (potentially more significant) impact of housing on productivity and economic competitiveness.
Figure 3-1: A New Model of the Economic Role of Housing

<table>
<thead>
<tr>
<th>Type of Role</th>
<th>Main Impact</th>
<th>Subsidiary or less certain Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Short Term in Economic Recovery</td>
<td>• Macro-economic boost from building new housing (multiplier effect)</td>
<td>• Wealth or collateral effect on consumption from an increase in house prices (short term benefit, but with potentially adverse long term consequences)</td>
</tr>
<tr>
<td>B. Medium term productivity role</td>
<td>• Labour market and geographical flexibility from relative housing costs and access to tenures</td>
<td>• Investment effect from scale and distribution of housing equity</td>
</tr>
<tr>
<td></td>
<td>• Impact on economic competitiveness, quality of public services and, in some instances, productivity of certain high cost housing locations from lack of affordable housing (and potentially in some locations lack of range of housing choices)</td>
<td></td>
</tr>
<tr>
<td>C. Long term productivity and economic effects</td>
<td>• Poor quality stock and overcrowding impacting on health, education and life chances</td>
<td>• Possible adverse neighbourhood spillover effects from concentrations of low quality or social housing</td>
</tr>
<tr>
<td></td>
<td>• Energy efficiency of new and existing housing impacting on UK CO₂ emissions (and so wider economic costs of mitigation for the economy as a whole)</td>
<td></td>
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</tbody>
</table>

Source: Regeneris Consulting

Figure 3-2: DTZ’s View on the Impact of Housing on Main Drivers of Productivity Growth in the UK

<table>
<thead>
<tr>
<th>Productivity Driver</th>
<th>DTZ Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>Low/Some</td>
</tr>
<tr>
<td>Investment</td>
<td>Some</td>
</tr>
<tr>
<td>Enterprise</td>
<td>Some</td>
</tr>
<tr>
<td>Innovation</td>
<td>Low</td>
</tr>
</tbody>
</table>


Looking to the Future - the Microeconomic Role of Housing

3.8 Going forward there are some clear messages for policy relating to the microeconomic role of housing: the various roles linked to future productivity and so economic growth nationally or in localities. These messages are:

1) **Addressing longer term economic externalities**: investing in or facilitating changes in the current (and future) housing stock where they are linked to the impact on the environment and human health. The appropriate policy responses will be a mixture of regulation, public investment and, in the case of the environmental impact of housing work, facilitating the market response. The economic, environmental and social pay-back from these changes will be long term (several decades) and so there may be a temptation to delay or defer investment. In the case of environmental regulation there is, potentially, a trade off here between increases in the cost of new house-building linked to environmental regulations (Code for Sustainable Homes) and the short term role of an increase in housing investment to help the economic recovery.
2) **Expanding the role of the private rented sector:** the real increases in house prices relative to incomes over the last coupled with the recent changes in mortgage lending and much more cautious lending criteria (especially in relation to deposits for first time buyers), have made access to owner occupation very difficult for the majority of low and middle earners (unless they have access to wealth through inter-generational transfers). The recovery and future patterns of economic growth are likely to lead to changes in the distribution of economic activity. This in turn will require housing growth and changes in the labour market in certain parts of the country. The contribution of the private rented sector to labour mobility is one of its most noticeable features. All this adds up to a strong case for considering ways of expanding the sector, especially in forms that offer a range of security of tenure and types of housing (i.e. moving beyond the city centre apartment model that typified the 2000s). This is discussed later on in this section.

3) **Facilitating the expansion of housing in growth hotspots:** the ability of housing supply to grow in response to economic growth in particular locations is affected by a mixture of planning policy, land supply, costs of new infrastructure and the housing market drivers. The evidence in this review suggests that there may be a case for a more active policy of intervening to facilitate housing growth in certain locations.

3.9 From an economic and labour market perspective, we consider that the evidence points to encouraging new policies to increase mobility within the social rented sector as being a second order consideration. Similarly, the evidence on the economic benefits of policies to encourage tenure diversification and mixed neighbourhoods is equivocal. In both cases there would not appear to be particularly strong cases for intervention on economic grounds. Nevertheless, there are may be strong social policy reasons for such interventions. However, a proper policy analysis would also consider whether some of the issues could be better tackled by other interventions linked to poverty alleviation or skills development.

3.10 Additionally, the evidence is not clear-cut on the case for investment in a wider range of housing to drive economic growth in locations that have struggled to attract investment in the past. Poor quality housing appears to be one of many factors which explain poor economic performance and indeed may be a symptom of poor economic performance.

**Looking to the Future – the Macroeconomic Role of Housing**

3.11 We are still in the midst of the fallout from the credit crunch and it is unclear how things will eventually turn out in the housing market. The most likely scenarios are either a return to pre-1980 style credit rationing or a revival of mortgage funding. The latter scenario would lead to a renewed bout of house price inflation, and the associated debt build up, given the likely ongoing imbalance between supply and demand. Neither of these scenarios leads to ideal outcomes and both are likely to be associated with an end to further increase in the share of owner occupation and a search for alternative tenures and housing finance models.
3.12 It is widely acknowledged that housing supply has been constrained by the difficulties of the planning system and weaknesses in the house building industry. These challenges are likely to continue. The impact of the recession on housing supply has been particularly severe and the next few years are likely to be characterised by a mixture of problems that hold up the recovery of house building activity. These include the lack of availability of finance to house builders, the costs associated with conforming to the Zero Carbon Homes Initiative, the potential impact of jobs cuts on the ability of local authorities to process planning applications and the policy uncertainty caused by the election of a new Government – though the latter offers opportunities as well as threats.

3.13 The implications at the macroeconomic level are that there is likely to be a **substantial ongoing shortage of new housing in the future**. This will mean the continuation of the associated problems of affordability, social exclusion and potential macroeconomic instability (if real house price inflation persists into the future) identified in this review of the evidence.

3.14 The inelasticity of housing supply means that increased economic growth is always likely to feed into higher house price inflation in the UK, credit market conditions permitting. Housing market conditions can feed into inflation through their impact on consumer demand and the impact on house building as well as the possible direct impacts on wages. There is growing concern that this issue of inflationary pressure stemming from the housing market may re-emerge as the economy emerges further from recession given the lack of new supply of housing.

3.15 The only ways around this problem are to either increase the elasticity of supply of housing or to ration credit availability in some way (which could happen either through ongoing funding problems for banks or through the possible new Bank of England caps on high loan-to-value mortgages), or to limit other sources of demand. Other potential ways of limiting demand growth include restrictions on immigration and the use of property taxes to stabilise house prices, see Muellbauer (2005), Posen (2009).

3.16 The recent boom and recession was different from the experience of the late 1980s and early 1990s. In the earlier periods, a build up of inflation (in housing and consumer prices) led to a sharp increase in interest rates which led to a house price crash and a recession. In the recent episode, there was little evidence of house price inflation feeding through into the general level of inflation. There was, however, a massive build up of mortgage debt as a direct consequence of the house price boom which left UK borrowers vulnerable to the contraction of credit markets. Increasing affordability problems were also a feature of the house price boom.

3.17 The 2000-07 house price boom was driven by a period of increased credit availability where international funds flowed into the housing market through the vehicle of securitisation, as well as by a rise in real incomes and in the number of households relative to a modestly expanding housing supply. There is some uncertainty about what will happen in the future.
If UK mortgage providers eventually have to survive on retail deposits alone as a source of funding we will effectively return to pre-1980 style credit rationing and house price inflation may be curtailed. The Council of Mortgage Lenders (2010) takes a relatively gloomy view of the funding constraints on UK mortgage provision for the next five years. On the other hand, we cannot rule out the entrance of new retail lenders or the return of foreign lenders and a new wave of financial innovation that will once again draw international funding into the UK mortgage market.

The balance between demand and supply will either be reconciled by renewed house price inflation, leading to restrictions of access to housing through its price or through a shortage of mortgage finance. The former would represent a return to the characteristics of the housing market in the decade leading up to the onset of the credit crunch in 2007. The latter would represent a return to pre-1980 style credit rationing, and would lead to lower house price inflation. It might mitigate some of the adverse impacts of the housing market on affordability and macroeconomic stability. It would not, however, deal with the underlying shortage of housing.

On balance, we consider it most likely that mortgage credit markets will eventually be freed up and that new ways of channelling international wholesale finance into mortgages will be found. This means that mortgage provision will not be limited by retail deposits and that we will not be going back permanently to the days of credit rationing. On the down side, this means that the main issues going forwards will, once again, be debt and affordability, if supply constraints bite and, as is likely, persistent real house price inflation resumes leading to inflationary pressure elsewhere in the economy.

UK house prices have proved to be surprisingly resilient despite the experience of the credit crunch and recession although turnover remains low. If we were to return to an era of rising real house prices financed by borrowing, the issues of high and rising borrowing and increasing affordability problems would soon re-emerge. What then are possible solutions?

**Increasing the Supply of Housing Land**

One option is to find ways of increasing residential land release through changes to the planning system. A significant issue with the planning system is the lack of financial incentives for local authorities to grant planning permission. The new Government is getting rid of housing targets driven by Regional Spatial Strategies and will increase the devolution of planning powers to local authorities. They are also committed to using improved financial incentives for land release by local authorities in order to generate the increases in housing supply ‘relevant’ to local communities. The plan to match local authorities Council Tax receipts from new housing for several years is a step in this direction. How exactly the policy will evolve and work in practice remains to be seen but there is a clear case for reviewing the financial incentives that local authorities have to grant planning permissions so that there is a way for local authorities to share in the “planning gain” in a clear, effective and attractive (to local authorities) way (Ball, 2010).

In addition, there is a role of the use of land already in public ownership to help facilitate the supply of housing, building on existing work of HCA and others.
3.24 Another issue concerns the supply of finance to facilitate house building. At present, house builders find it difficult to borrow and first-time buyers find it difficult to raise mortgages or to save for the required deposits. Even if credit markets return to normal and house builders’ confidence revives there is a distinct possibility that owner occupation as a percentage of total occupation has peaked.

**Expanding the Private Rented Sector**

3.25 Under these circumstances it makes sense to look for alternatives to owner occupation both to facilitate increased affordability, increased supply and the increased flow of finance into the sector. The other options are some combination of increased provision from the private and social rented sectors. In the current climate of fiscal contraction Registered Social Landlords (RSLs) will find it difficult to get access to increased government grant funding. In any case, RSLs cater for a distinct part of the housing market and RSL supply is not usually seen as a substitute for owner occupation. This means that if housing provision is to increase substantially, the private rented sector will have to undergo a considerable expansion. Shared equity is also an option but this tends to be relatively small scale and, in any case, can still be subject to funding problems.

3.26 As noted earlier and later on in this report, the private rented sector has played an increasingly important role in providing accommodation for the most economically active and geographically mobile parts of the workforce. As housing affordability problems for owner occupiers have worsened, the average age of those in the private rented sector has increased.

3.27 The private rented sector has expanded in recent years and is the obvious source of further expansion for the future. Recent expansion, however, has been driven by the boom in the buy-to-let market and there are reasons to be wary about expecting further rapid growth. These include the funding problems that buy-to-let investors face as mortgage companies are now even more wary about them than they are about first time buyers. There is also the concern that buy-to-let investment has been disproportionately concentrated on two bedroom apartments in tower blocks often in inner city areas which in some cases has led to a glut of this type of property – although this may have been due as much to planning policy and government imposed density requirements as it was to the preferences of investors.

3.28 Another potential issue for buy-to-let investors is the new Government’s rent announcement of an increase in the Capital Gains tax rate to 28%. However, although this will reduce the absolute attractiveness of buy-to-let investment it will not affect the relative attractiveness as it applies equally to alternative investments.

3.29 The big scope for expansion, however, could come from wider investor participation in the housing market. This could take two forms – one that encourages retail savers to enter the housing market (to supplement buy to let investors) and one that encourages further institutional investment.

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5 This section has benefitted substantially from correspondence with Professor John Muellbauer of Nuffield College, Oxford and Professor Peter A. Kemp of St Cross College, Oxford.
Encouraging retail investors into the private rented sector

3.30 The Business Expansion Scheme (BES) of 1988-93 gave tax relief (including an exception from CGT after a five year holding period) on the purchase of shares in new rental housing companies letting assured tenancies. Despite being introduced just as house prices were set to fall, the scheme led to the acquisition of 81,000 dwellings at a cost of £1.7bn in tax relief.

3.31 The BES had flaws, particularly the CGT exception period that encouraged investors to exit after five years which meant that there was a limited long-term impact on the private rental market. A new style BES with tax relief on the dividends rather than capital gains could encourage a new wave of retail savers into the housing market. Any scheme would need careful design to avoid the pitfalls of it being used as a way of financing luxury developments, to focus it on assured rather than shorthold tenancies and to encourage the formation of large rather than a proliferation of small schemes (as with BES) but all of these issues can be addressed.

3.32 The channelling of retail savings through a new-style BES would have several advantages over further measures to encourage buy to let. “Rental Housing Companies” can achieve the economies of scale that are not possible for small investors and would be more willing to grant assured tenancies than small investors who are keen to protect themselves against bad tenants through shorthold tenancies. Buy to let investors are also largely dependent on the mortgage market which is currently in a fragile state whereas Rental Housing Companies would tap directly in to retail savings and, further, retail savers would be able to directly access the housing market without the management burden and risks associated with buy to let investments.

Encouraging institutional investors into the private rented sector

3.33 There is also a need to attract institutional funding into the market⁶. This would require a new form of residential real estate investment trust (REIT). Conventional REITs⁷ have been successful in attracting institutional funds into commercial property and modified residential REITS could help to do the same for residential investment. Yields on rental housing are usually lower than those on commercial property but the same is not necessarily true for total returns since, as the recent recession has highlighted, the capital value of residential property is far less volatile than that of commercial property and offers better long-term capital growth. The tendency of house prices to move more in line with wages than the general price level is also attractive to many pension funds whose liabilities can also rise in line with wages.

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⁶ According to information from the HCA, only 1% of institutional property funds are currently held in housing. The private rented sector in England is dominated by small investors: over 50% of all landlords own fewer than 5 properties, and nearly 75% are private individuals or couples rather than companies

⁷ A variation on the existing REIT legislation would be required because some of the existing rules, such as those relating to Stamp Duty, are not suitable for investment in rental housing.
3.34 Attracting pension funds into housing investment would substantially boost the funding available to the UK housing market and would push the funds towards the expansion of the private rented rather than the owner occupied sector. There is also no reason why such investment would not also be attractive to non-UK based wholesale funds. It is the collapse of access to wholesale funds following the discrediting of securitisation that has done most to restrict the flow of funds into UK mortgages since the onset of the credit crunch. If residential REITs could reverse that decline it would go a long way towards rebuilding housing finance in the UK. There may also be a case for selective government loan funds and guarantees (Ball, 2010).

3.35 The HCA recognised this opportunity for some time and has been working in conjunction with prospective investors to look at the creation of new investment funds for the private rented sector. It launched its Private Rented Sector Initiative (PRSI) in 2009\(^9\). Under the PRSI, the HCA has been brokering relationships between investors, landlords and to generate interest from investors that are new to the housing market. The aim is to support the growth of a new generation of private rental property that meets the increasing demand in many localities for good quality and serviced rental property. We understand that up to £5bn of institutional money could be attracted in the next couple of years from those investors in discussion with the HCA.

**Conclusions**

3.36 We are currently at a cusp in housing policy formation. The recession has exposed the major housing problems faced in the UK and the election of the new Coalition Government provides the chance for a thorough policy review. In our assessment the key housing policy challenges going forward are:

1) Encouraging additional new house building in the short term to help the UK economy emerge from recession (given its clear multiplier effects). In the world of very tight public sector resources this means seeking the most effective use of any public sector resources to facilitate new housing investment.

2) Searching for solutions to attract new private sector finance into the housing market to help increase investment levels (especially in the private rented sector)\(^9\).

3) Recognising that continuing affordability issues, access to deposits and so mortgage finance is likely to constraint entrance to owner occupation. Hence the need to explore ways of enhancing a good quality stock of private rented housing, which also help maximise labour market flexibility.

4) Continuing to explore ways of making new housing supply more responsive to market signals, especially in hotspots of economic growth where housing supply may act as a constraint on economic growth and/or lead to unsustainable patterns of growth.

\(^9\) [http://www.homesandcommunities.co.uk/private_rented_sector_initiative](http://www.homesandcommunities.co.uk/private_rented_sector_initiative)

\(^9\) The report by the Housing Finance Group set up by the HCA and chaired by Nigel Hugill "Meeting the challenge: market analysis" (March 2010) explored the issues facing finance for housing
5) Recognising that the long term policy goal of providing decent quality housing for all remains important in terms of long term impacts on productivity and life chances of adults and children.

6) The need to consider the role of housing in the new sub-national economic development architecture being developed that is to be set out in the forthcoming White Paper (e.g. the new LEPs). It would be a mistake to ignore the role of housing, positive or negative, in work on actions to make areas more competitive.
4. Housing’s role in Macro-Economic Stability

Why Does the Housing Market Affect Macroeconomic Stability?

4.1 Housing related activity makes a substantial contribution to GDP. Averaged over the past 10 years, rents (actual and imputed) contributed an estimated 13.8% to household spending (or 8.6% of GDP); dwellings contributed 20.4% of total fixed investment (3.6% of GDP) and value added generated by house building contributed an estimated 2.2% of GVA (see Section 5). Size alone, however, does not necessarily make the housing market de-stabilising. De-stabilising implies that the housing market in some way magnifies the impact of economic shocks on the economy and there are a number of reasons why this tends to occur in the UK.

4.2 At the heart of the problem are the relative elasticities of the supply and demand for housing. Since the price elasticity of demand is generally considered to be less than one, and housing is generally considered to have an income elasticity of demand of around one (Meen and Andrew, 1998, Meen 2001), this means that prices tend to increase faster than incomes. On the other hand, the reaction of supply to prices is muted, if it exists at all (Barker, 2004, 2006a, 2006b, 2008, Cheshire, 2008). This means that when the economy grows, house prices tend to grow at a more rapid rate.

4.3 Rapid house price inflation can destabilise the economy in a number of ways, through the impact on:

- Consumer Spending
- Investment
- The financial system
- Inflation and interest rates.

4.4 Each of these is considered below.

House Prices and Consumer Spending

4.5 The main channel through which house price inflation can affect the rest of the economy is through the impact on consumer spending. The hypothesised positive relationship between house prices and consumer spending can come through ‘the housing wealth effect’, whereby consumers’ are inclined to spend more simply because they feel wealthier (or because of a ‘collateral effect’, by which access to credit, and hence spending is increased by higher house prices.

4.6 Basic consumer theory, however, suggests that the ‘wealth effect’ is small or could even be negative. When the prices of consumer services (or goods) increase it impacts aggregate spending through the income effect. This means that rising prices decrease real incomes and this is expected to lead to a fall in the aggregate consumption of goods and services. This is the opposite impact of the hypothesised wealth effect.
4.7 Another way of looking at this is to say that when house prices rise, there are beneficiaries (house owners) and losers (would be house purchasers) and the effects largely net out. This also has a generational aspect as home owners are more likely to be older, and buyers - particularly first time buyers - are likely to be young. Under certain conditions, first time buyers have to save more, and for longer, in order to raise a deposit for house purchase, which leads to lower consumer spending when house prices rise.

4.8 The argument for little or no impact from house price inflation on consumer spending is built into the Bank of England Model (Benito et al, 2006) which has no long-run relationships between house prices and consumer spending and also fails to incorporate any credit channel, despite the importance of debt for UK households.

4.9 The argument for a positive relationship between house prices (housing wealth) and consumer spending in the UK is based partly on empirical observation and partly on the incorporation of credit markets into the theory.

**Figure 4.1: Household Spending and Wealth**

4.10 Figure 4.1 shows the household spending ratio\(^ {10} \) plotted against the housing wealth to income ratio\(^ {11,12} \). Higher house prices, through their impact on housing wealth, do appear to be associated with a higher propensity to consume, especially after 1980 although the turning points do not always coincide. The increase in the propensity to spend since 1996, in particular, appears to be closely related to the big increase in house prices and housing wealth and the down-turn in the housing market can be seen to have preceded the downturn in consumer spending by a year.

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\(^{10}\) Defined as 100 minus the household savings ratio.

\(^{11}\) The denominator used is the published ONS series of household gross disposable income. Theory implies that the denominator for both the spending ratio and housing wealth ratio should be non-property disposable income. However, as no published official series exists for non-property disposable income, total disposable income is used instead, This makes little difference to the observations made.

\(^{12}\) Housing wealth is calculated as the net capital stock in dwellings in 2005 prices multiplied by the CLG house price index rebased to 2005=1.
4.11 The existence of liberal credit markets makes a number of differences to the house price-consumption relationship:

- If credit is freely available, first time buyers may still be able to get on to the housing ladder with a lower deposit as a proportion of the price (higher loan-to-value ratio) when house prices rise rather than having to save more and consume less.

- Liberal credit markets create a housing collateral effect. The increase in housing wealth can be used as collateral against which to borrow to finance consumption. This is closely associated with the phenomena of housing equity withdrawal\(^\text{13}\) which has been closely associated with fluctuations in the spending to income ratio over the past thirty years.

4.12 Housing wealth is not the only driver of the savings rate or the average propensity to consume. The ratio of stock market wealth to income, expected income growth, the change in the unemployment rate and changes in interest rates are also major drivers. Muellbauer (2007) and Aron et al (2010) find that a mixture of credit market conditions effects and housing wealth explain much of the fluctuations in the spending to income ratio in the UK between 1980 and 2006. This is also true of the US but not of Japan, where the evidence is that there was almost no liberalisation of household credit.

4.13 Credit liberalisation in the UK started with the removal of exchange controls in 1979 followed by the removal of constraints on bank lending (the “corset”) in 1980. This was followed by the emergence of centralised lenders in 1985 and the final removal of any constraints on Building Societies in 1986. This helps to explain the closer correlation between the spending ratio and the housing wealth ratio after 1980 in Figure 4-1. A similar relationship between housing wealth and consumer spending is found in the USA and other “Anglo-Saxon” economies with the impact of higher house prices in the USA , Aron et al (2010).

4.14 Another link between house prices and consumer spending that can persist for some time is through the impact of inter-generational wealth distribution. Higher house prices means that older people can finance their retirement by downsizing and living off their capital gains rather than by saving more during their working lives. At the same time, younger people have to borrow more to finance house purchases. In the short and medium-term this increases borrowing and consumption, although in the long-run, increased borrowing need to be serviced and repaid so there will be little impact on consumption (Weale, 2007). Weale has compared the impact of house price appreciation in the UK on the intergenerational distribution with the impact of sustained fiscal deficits. On the assumption that between 1987 and 2007 ‘excess’ house price appreciation was 1.9 per cent per annum, Weale (2007) argues that this appreciation was roughly equivalent, in terms of intergenerational redistribution, to a government deficit \textit{per annum} over these years of 4 per cent of GDP.

\(^{13}\) Also known as mortgage equity withdrawal or MEW.
The Role of Housing in the Economy

4.15 There is also a link between housing turnover (rather than prices) and some types of consumer spending. High rates of housing turnover (house moving) appear to be linked to increase spending on household durables such as furniture, carpets and major appliances as consumers use moving into a new home as an opportunity to renew various items. There is also a possibility that consumers use housing equity withdrawal when moving home to finance some of these purchases.

House Prices and Investment

4.16 We have already argued that a low elasticity of supply is one of the main reasons why house price inflation increases during periods of economic growth. Nonetheless, fluctuations in housing investment can have a marked impact on GDP even if the investment itself does not have a big impact on the aggregate supply of housing. Figure 4-2 shows that the peaks in real house prices in the late eighties and in 2007 were indeed associated with booms in residential construction. A 91 % increase in real house prices between 1999 and 2007 was accompanied by a not insubstantial increase in (constant price) residential investment of 42.3 %.

4.17 Although the 42.3% increase in real residential investment between 1999 and 2007 was substantial in its own right, it only accounted for some 1.5 % points of the overall increase in GDP of 24 % over the same period, so it cannot be said to have made a material contribution to the long upswing in GDP or to have contributed much to macroeconomic instability, or at least not in the upswing.

4.18 Real residential investment fell by 26.6 % between its 2007 peak and 2009. This means that the fall in residential investment contributed 1.1 % points to the overall fall in GDP of 4.1 %.

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**Figure 4-2: House Prices and Residential Investment**

- **Prices, 2005=100**
- **Investment, %**

Source: ONS, CLG, Oxford Economics calculations

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14 Where the contribution is calculated as $100 \times (\text{Residential Investment}_{2009} - \text{Residential Investment}_{2007}) / \text{GDP}_{2007}$.

(Note: Residential Investment in 2007 = £52,476m Residential Investment in 2007 = £38,742m; GDP in 2007 = £1,322,842m Contribution to change in GDP = $100 \times (38,742 - 52,476) / 1,322,842 = 1.06\%$ of the total 4.4\% fall in GDP between 2007 and 2009)
4.19 Although the quite rapid growth of residential investment may not have contributed that much to the boom, it looks like it made a major contribution to the slump. The fall in residential investment also contributed 0.8 % points to the 1.4 % fall in GDP in 1991. The pattern is, therefore, one of a long slow build up in the residential investment to GDP ratio in economic up-turns followed by a steep fall in the recession, which contributes to the overall severity of the recession in the economy as a whole.

Figure 4-3: Private Residential investment, 2006-2010

<table>
<thead>
<tr>
<th>% change, constant prices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ireland</td>
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<tr>
<td>USA</td>
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<tr>
<td>UK</td>
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<tr>
<td>Spain</td>
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<tr>
<td>France</td>
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<tr>
<td>Germany</td>
</tr>
</tbody>
</table>

Source: OECD

4.20 The UK is not the only country to have seen steep falls in residential investment over the past few years. Figure 4-3 shows the fall in private residential investment since 2006 for a number of countries. The fall in private residential investment has been more pronounced in the USA and Ireland though, perhaps surprisingly, the UK fall exceeds that of Spain which experienced a major housing and construction bubble. The contrast with the relative stability of France and Germany is, however, clear.

Impact on the Financial System

4.21 The housing market has both a structural and cyclical impact on the UK’s financial system. On the structural side, the size of the market distorts domestic financial services towards residential mortgage provision compared with other countries. On the cyclical side, an increasing amount of finance is drawn into residential mortgage provision in the upswing while increases in defaults can impact on banks’ balance sheets in downturns which can inhibit their ability to lend to the economy as a whole. The latest crisis has also seen a shortage of mortgage finance, which is different in many ways from previous recessions (see below).
4.22 High house prices and a large owner-occupied sector mean that the stock of residential mortgages relative to GDP in the UK is far higher than in most other countries. The UK also has a relatively low level of business investment relative to GDP, though it is difficult to prove causality between the large size of the mortgage market and the relative low rate of business investment. However, it is possible that interest rates have been higher to restrain credit and consumer spending driven demand growth in the UK. The higher levels of the exchange rate this may have induced would have reduced the size of the export sector and associated business investment compared to what would otherwise have been the case. Note, also, that the mortgage market largely finances the purchase of existing dwellings rather than residential investment and that the ratio of residential investment to GDP is not particularly high by international standards and is low compared to countries like the USA, Spain and Ireland.

4.23 Both lending and bad debt are highly cyclical. Figure 4-4 shows that there is an inverse relationship between housing repossessions (an indicator of bad debt) and mortgage lending growth and non-mortgage lending growth. This might imply some link between bad mortgage debt and the provision of finance to the economy as a whole and not just the provision of mortgage finance. The relationship is much more apparent in the early nineties where the surge in repossessions coincided with a fall in non-mortgage lending. There are, however, major causality issues. The surge in interest rates in the late eighties could have driven both the collapse of lending and bad debt. Note also that banks’ losses on lending to commercial property were far worse than their losses on lending to residential property.

**Figure 4-4: Lending Growth and Repossessions**

<table>
<thead>
<tr>
<th>Year</th>
<th>Mortgages (per cent p.a.)</th>
<th>Repossessions (thousands)</th>
</tr>
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<tbody>
<tr>
<td>1981</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>1982</td>
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<td>1995</td>
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<td>80</td>
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</tbody>
</table>

*Source: Bank of England, Council of Mortgage Lenders*

4.24 Figure 4-4 also shows a far less obvious relationship in recent years. Repossessions turned up in 2005 but non-mortgage lending growth remained robust, partly due to continued low interest rates for most of the period.
4.25 A major interaction between the housing market and the economy has been seen in the recent credit crunch. The relationship was, however, very different from that seen in the early nineties. Although, as Figure 4-4 shows, repossessions had been rising for several years they did not get anywhere near the 1991 peak and bad mortgage debt has not been the main problem facing the banking system. In 2009, £984 million of bad mortgage debt was written off in the UK. This compares to write offs of £8.4 billion for unsecured consumer credit and £5.9 billion for non-financial corporate debt. To put this further into context, the 2009 mortgage write offs were worth far less than the ordinary, pre-crunch, level of write offs of unsecured consumer debt. Mortgages are, a relatively secure form of lending in the UK, though the recent limited increase in bad debt and re-possessions was due, to a large extent, to the ability of the Bank of England to take radical policy actions to lower interest rates to stabilise the interest sensitive parts of the economy. A raft of other interventions, such as the mortgage pre-action protocol, and more generous income support for people with mortgage payment difficulties also helped in this respect.

4.26 The recent crisis was more a funding crisis than a bad debt crisis (in part thanks to radical policy interventions). Securitisation was increasingly used as a method of raising wholesale funds from around 2000 onwards together with other forms of non-retail funding. The onset of the US sub-prime crisis exposed the risks inherent in securitisation and effectively closed off this form of funding. This exposed the banks who made heavy use of securitisation and also those who were perceived to have high-risk mortgages usually because of the large number of high LTV or self-certified loans on their books. Most notable of these was Northern Rock which became the first to go under. All of the former Building Societies eventually succumbed largely because they had all made liberal use of wholesale funding to drive rapid growth and had found themselves unviable once this source of funding was cut off. Even in these banks’ losses due to bad mortgage debts have not been particularly high.

Impact on Inflation

4.27 One of the main concerns regarding the interaction of the housing market and the wider economy is the impact of house price inflation on the general level of inflation in the economy.

4.28 There are a number of ways that house price inflation can feed through in to broader measures of inflation. These include the pressure of demand created by increased consumer and investment spending and the direct feed through into wages since, when faced with higher housing costs, workers press for higher wages. There may also have been an indirect effect whereby high house price inflation led to interest rate increases which in turn pushed up the mortgage interest component of RPI which then fed through in to wages.

4.29 In practice, these effects can be difficult to distinguish but, as Figure 4-5 shows, there does appear to have been something of a link since the late seventies with house price inflation tending to lead wage and price inflation. This was particularly apparent in the late seventies and late eighties, but probably declined with the weakening of trade union power.
4.30 Figure 4-5 also shows that the relationship was much less apparent over the decade to 2007 when high house price inflation appeared to have little impact on either wage or price inflation, though this may have been partly masked by falling import prices associated with a rising share of Chinese and other Asian exporters in UK imports.

**Consequences of Housing Market Induced Instability**

4.31 The main concern that policy makers have had over the housing market surrounds the potential impact of high house prices on the general level of inflation. Although house price inflation as such is not, and never has been, targeted by the monetary policy authorities, the concerns mentioned above have made them wary of periods of high house price inflation.

4.32 There have also been concerns that the rapid increase in indebtedness associated with house price booms could eventually be destabilising, leading to calls for pre-emptive increases in interest rates, although this does not appear to have been a major driver of policy in the past.

4.33 The authorities’ reaction to the threat of high house price inflation feeding through into general inflation is to raise interest rates. Higher interest rates have a number of impacts on the economy:

- They dampen down both consumer and investment demand by raising the cost of finance and by making saving more attractive in the case of households

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15 This depends on the treatment of housing costs in the consumer price index. In the US, since 1983, owner-occupiers’ imputed rents and rents paid by renters together account for a weight of around 30% of the CPI. Because of a slow feed-through from house prices into rents there is then a predictable and stable relationship between house prices and the CPI or consumer expenditure deflator, useful for forecasting, together with data on unit labour costs and foreign prices, see Aron and Muellbauer (2009).
They increase the cost of financing house purchase. Standard house price theory (Murphy and Muellbauer, 2008) then suggests that this will reduce house prices or, at least, reduce the rate of house price inflation. Studies suggest that a one per cent point interest rate increase in the UK reduces house prices by around 1.2% (Blake and Muellbauer, 2009).

Higher interest rates may strengthen the exchange rate leading to a reduction in exports.

4.34 By reducing nominal house price inflation, higher interest rates may have a double effect if they also reduce expected house price inflation. This will increase the user cost or the real interest rate (the nominal mortgage interest rate less expected house price inflation) by more than the increase in nominal interest rates. In some circumstances, house prices will be expected to fall which will lead to sharp increases in real interest rates and a further depressive impact on house prices.

4.35 This was the experience in the early 1990s in the UK. Initially, the expected continuation of high house price inflation in the late 1980s muted the impact of higher interest rates. Eventually, however, the impact of high interest rates (directly and through their impact on domestic demand and employment) brought actual and expected house price inflation down, pushing up real rates and leading to a abrupt levelling off of nominal house prices and a sharp fall in real house prices.

4.36 These sharp fluctuations and their associated impact on the real economy have been a major concern in the UK. They have been associated with sharp rises in unemployment, company liquidations and bad debt and have a destructive impact on the process of capital accumulation, not least in the residential sector.

**Has the Experience of the Recent Recession Been Different?**

4.37 The recent recession saw the biggest recorded post-war fall in UK GDP although the impact on a number of other indicators, notably unemployment, has been less severe. In this case there have been obvious links with the housing market but the chain of events and causality has been different to that of earlier episodes, particularly the early nineties.

4.38 There were concerns over the build up of household debt (not solely mortgage debt) after 2000 and the potentially deflationary impact of increasing interest rates on highly indebted households. As in the 1980s, the build up of mortgage debt and the house price boom were associated with shifts in the supply of credit, only this time it was driven by the increase in wholesale funding associated with securitisation rather than by financial de-regulation (Murphy and Muellbauer, 2008, Blake and Muellbauer, 2009).

4.39 In the event, interest rates did rise modestly until mid-2008, driven more by concern over rising commodity prices than over house price inflation. As mentioned above, however, the house price boom was punctured by a funding crisis rather than by high interest rates. Bank rates actually fell steeply from late-2008 onwards in the most radical monetary policy action ever seen in the UK, as the authorities attempted to stabilise the economy and the banking system.
4.40 Lower interest rates benefited many parts of the economy, particularly home buyers with tracker mortgages and banks, who were able to use the opportunity to re-build their margins and reserves (as, with the exception of tracker mortgages, Bank of England interest rate cuts were not passed on in full to borrowers). House prices, however, still declined as funding restrictions, characterised by banks insisting on lower loan-to-value ratios, particularly for first time buyers, more than cancelled out the impact of lower mortgage rates. Lower interest rates did help to reduce the increase in bad debt and repossessions. This was a key difference between the experience of 1991-2 and 2008-9, see Aron and Muellbauer (2010).

4.41 Although the UK housing market may have been only indirectly related to the recent recession it does not mean that housing market fluctuations did not have a major impact on output and employment. We have already shown that the fall in residential investment between 2007 and 2009 contributed 1.1 % points to the fall in GDP of 4.1% over the same period. There is no consensus regarding the impact of falling house prices on consumer spending but the Oxford Economics Macroeconomic Model suggests that the fall in housing wealth since the end of 2007 contributed a further 1% fall.

The Impact of the Recession on the Prospects for Housing Supply

4.42 One area where there is a disturbing possibility that the recent recession will have a similar impact to comparable episodes in the past is the impact on housing supply. The lack of availability of credit applies to house builders as well as house buyers. An increased risk assessment of house builders and a lack of competing institutions providing finance means that SMEs, and new entrants in particular, have problems in accessing the finance for new developments This is important for housing as around half of new housing is provided by such enterprises (Ball, 2010).

4.43 These constraints tend to take a long time to unwind. After the late eighties boom when housing starts exceeded 200,000 for eight years in succession, it took another five years before starts reached that level again and then it was only for a single year.

4.44 House builders are also faced by a daunting regulatory burden as well as the weaknesses in the planning system. The zero carbon regulations could prove to be a major impediment to new house building. The original aim was to allow a period where house builders could experiment with new technologies before the regulations came in but the recession has meant that few private houses have been built in that period and that house builders have been in no mind for experimentation and now face uncertainty and increased costs which may hinder the recovery (Ball 2010).

4.45 The reduction in the number of planners employed by local authorities in the recession may also hinder the up-turn and public sector constraints make it hard for them to increase the size of their workforces.
Conclusions and Issues

4.46 There is a fundamental mismatch between the underlying growth of the demand for housing, which is driven by rising population, incomes and aspirations and the weakness of the supply response. The inelasticity of housing supply means that increased economic growth is always likely to feed into higher house price inflation in the UK, credit market conditions permitting. Housing market conditions can feed through into inflation through their impact on consumer demand and the impact on house building as well as the possible direct impacts on wages.

4.47 The only ways around this problem are to either increase the elasticity of supply of housing or to ration credit availability in some way or a combination of the two.

4.48 The recent boom and recession was different from the experience of the late eighties and early nineties. In the earlier period a build up of inflation (in housing and consumer prices) led to a sharp increase in interest rates which led to a house price crash and a recession. In the recent episode, there was little evidence of house price inflation feeding through in to the general level of inflation. There was, however, a massive build up of mortgage debt as a direct consequence of the house price boom and which left UK borrowers vulnerable to the contraction of credit markets. Increasing affordability problems were also a feature of the house price boom.

4.49 The main issues going forwards are debt and affordability, if persistent real house price inflation resumes. UK house prices remain surprisingly high despite the experience of credit crunch and recession although turnover remains low. If we are to return to an era of rising real house prices financed by borrowing the issues of high and rising borrowing and increasing affordability problems will eventually re-emerge.

4.50 The 2000-07 house price boom was driven by a period of increased credit availability where international funds flowed into the housing market through the vehicle of securitisation and not just by a supply-demand imbalance in the housing market. There is some uncertainty about what will happen in the future. If UK mortgage providers eventually have to survive on retail deposits alone as a source of funding we will effectively return to pre-1980 style credit rationing and house price inflation may be curtailed. On the other hand, we cannot rule out a new wave of financial innovation that will once again draw international funding into the UK mortgage market.

4.51 On balance, we consider that mortgage credit markets will eventually be freed up and that new ways of channelling international wholesale finance into mortgages will be found. This means that mortgage provision will not be limited by retail deposits and that we will not be going back permanently to the days of credit rationing. On the down side, this means that a renewed sustained phased of real house price is a possibility as the economy recovers and as supply constraints bite.

4.52 Both credit shortages and renewed house price inflation are likely to increase demand for alternative tenures to owner occupation. These will include the private and partial rent sectors and social housing although the latter depends on future public spending policies.
5. **Housing’s Sectoral Role**

5.1 Housing makes a direct contribution to the economy through new build and repairs and maintenance which together make up residential investment. These provide a picture of housing activity and can again be compared to the economy as a whole to assess the relative significance of housing’s role within overall economic activity.

5.2 Consumer spending on rents is an often neglected aspect of housing’s interaction with the rest of the economy. Rents, however, form a large part of consumers’ expenditure. Calculations of actual housing costs, which include the debt service costs of owner occupiers, show an even larger figure than the National Accounts rents definition.

5.3 The cyclical nature of some aspects of housing activity and the impact of the recent recession mean that it is also important to consider housing within the broader context of long term trends.

**Imputed owner occupied rental income**

5.4 Spending on rents in the National Accounts comprises of two parts – actual and imputed rents. Imputed rent relates to owner-occupiers. It represents the amount of rent that would have changed hands had the owner and occupier been different people. Without imputation, shifts between the rental and owner occupied sectors would have an impact on GDP even though the provision of housing services in the economy would be unchanged.

5.5 The method currently used to calculate imputed rent in the United Kingdom is that of “stratification”. This uses information on the number of owner-occupied UK dwellings, disaggregated between various strata. Estimates of the rents that would be paid in each stratum (if they were rented housing) are then carried out. Stratification is performed using a number of housing characteristics, such as the region and the number of rooms. Regression modelling is then used to model estimated rentals, controlling for factors outside the stratification variables.\(^\text{16}\)

5.6 Imputed owner occupied rental income as a proportion of GDP has risen steadily in the years since 1962 in current prices. They are largely driven by increases in the residential capital stock and rises in house prices and actual rents (which inform the assumed deflator for imputed rents).

5.7 A flat period in the mid-1980s was followed by a period of substantial growth later in the decade, accompanying the housing boom of the time. A steady rise has also been evident in the period since 1996, although the sharp upturn in 2009 largely reflects the impacts of the recent recession (i.e. a fall in the denominator, GDP) rather than a sudden upturn in rental income per se.

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5.8 The RPI for rents suggests that housing rents tend to be relatively “sticky” - i.e. they do not tend to fall dramatically and can rise even in downturns. During the recent recession, the RPI for rents dipped during 2009 but still reported 2 per cent growth at the UK level; stronger growth than reported in 2003. However, the RPI rental series is dominated by social housing rents. Private sector rents may well be more flexible; indeed it has not been uncommon to find local market rents falling 10-20% during 2008 as a result of local over-supply.

**Figure 5-1: Change in Housing Rents (% pa)**

![Graph showing change in housing rents](image)

*Source: ONS*

**Figure 5-2: Imputed owner occupied rental income as a proportion of GDP**

![Graph showing imputed owner occupied rental income](image)

*Source: ONS, Oxford Economics calculations*
Total rents

5.9 Actual and imputed rentals can also be combined into a single figure (total rents). This total rental figure can then be expressed as a proportion of GDP and of household spending (both measured in current terms). As indicated, below, total rents have generally risen as a percentage of both GDP and household spending over the last 50 years, largely reflecting the impact of higher house prices and actual rents. Ultimately, this reflects the increasing scarcity of a fixed resource (land) within the UK in the face of growing population pressures, although changes in consumer choice (i.e. a decision to dedicate a higher proportion of income to housing) may also have played a role. The “spike” at the end of both series in 2009, is due to a recession-induced fall in GDP and discretionary household spending.

![Figure 5-3: Total rents as a proportion of GDP and household spending](image)

Source: ONS

5.10 To put this in perspective, total spending on rent (imputed and actual) was over twice as large as spending on food in 2009.

A broader measure of housing costs

5.11 Although imputed rents form a large part of the National Accounts definition of consumer spending they are an artificial construct and do not represent every day experience of housing costs. In reality, owner occupiers either face no housing costs (other than maintenance and property taxes) if they are out-right owners or they face debt service costs if they have mortgages.

5.12 Our estimate of the sum of owner occupiers housing costs\(^1\) and actual rents peaks at 21 per cent of disposable incomes in 2008 before falling back to 20.1 per cent in 2009.

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\(^1\) The sum of interest paid and capital repayment. Capital repayments are assumed to be one twenty-fifth of the outstanding value of mortgages. In reality, this calculation is complicated by early repayment and the existence of endowment and other forms of non-repayment mortgages.
New housing build spending and maintenance

5.13 Public and private housing new build and maintenance spending can be shown separately (as in the chart below) or combined to form a measure of “total housing output”. Housing repair and maintenance costs (and improvements) concerns work which is either repairing something which is broken, or maintaining it to an existing standard. For housing output, this includes repairs, maintenance, improvements, house/flat conversions, extensions, alterations and redecoration on existing housing. For non housing this includes repairs, maintenance and redecoration on existing buildings, which are not housing, such as schools, offices, roads, shops.

5.14 Figure 5-5 shows total housing output, split into new build and repair and maintenance as a percentage of GDP. In 2007 this ratio stood at 3.6% (i.e. housing output valued at £50.2 billion), though with the recession, it had fallen to 2.9% (i.e. housing output valued at £40.5 billion) by 2009. Both of these terms are measured in current prices. It should also be noted that housing output is measured in gross terms whereas GDP is a net figure.

5.15 Total housing output as a whole is characterised by peaks during the housing boom of the late-1980s (4.2%) and again in the early 2000s (3.6%). In contrast, the 1990s saw an extended period in which the ratio varied between 2.7%-3.0%. At least part of this is explained by the impact of recession during the early part of this period. Likewise, the recent recession has also seen a decline in the ratio due to lower housing activity.

5.16 The cycle is more evident in new build than in repair and maintenance. Almost all of the fall in activity since 2007 has been in new house building rather than repair and maintenance work.

Figure 5-4: New builds and repair and maintenance as a percentage of GDP

[Diagram showing changes in housing output over time]

Source: ONS
The housing output statistics are a gross measure (i.e. they include the value of goods and services bought in by contractors) so comparing them to GDP exaggerates the relative size of the house building industry. As an alternative, we have calculated housing construction and maintenance Gross Value Added (GVA), which can be compared to total economy GVA, as indicated below. By this measure, housing has varied between roughly 2-2.5% of total GVA over the past 25 years. A downturn in housing GVA relative to total economy GVA is evident at the end of the series (i.e. 2009).

**Figure 5-5: Housing GVA as a proportion of total GVA**

![Graph showing Housing GVA as a proportion of total GVA from 1985 to 2009.]

*Source: ONS, CLG, Oxford Economics calculations*

**Dwellings contribution to investment**

A slightly different approach to reviewing the role of housing is to compare the proportion of investment in dwellings to total investment. This is indicated in the chart below. The series generally oscillates around 20% of total investment, however the recent housing boom saw it peak at 23.5% (£53.3 billion) in 2005 before falling back (to 19.0% or £39.5 billion) with the advent of the recession in 2008.

**Figure 5-6: Dwellings investment as a proportion of total investment**

![Graph showing Dwellings investment as a proportion of total investment from 1964 to 2008.]

*Source: ONS, CLG, Oxford Economics calculations*
Indirect and induced effects and the “housing multiplier”

5.19 Within the Standard Industrial Classification (SIC 2003), housing construction is classified as a part of the construction industry (SIC 45), contributing to GDP as recorded by National Accounts data.

5.20 The contribution of housing goes beyond its direct contribution to GDP and employment from housing construction and maintenance. Housing construction involves purchases from of a range of suppliers of goods (e.g., concrete, glass metals) who in turn purchase from their own suppliers. These are termed housing’s indirect, or supply chain, effects on the economy. In addition, there are the induced effects – which arise from the fact that activity in the housing and supplier industries, means increased demand for labour and that additional wages are paid to households. Workers then use this income to purchase additional goods and services, supporting additional businesses and jobs.

5.21 The sum of the direct, indirect and induced effects can be termed the total economic impacts. The relationship between the direct impacts of a pound’s worth of spending and the total economic impacts is known as the “multiplier”.

5.22 Different industries have different multipliers. Housing is not separated out as an industry in the National Accounts – it is classified under “Construction”. However, the multiplier for the Construction industry may be taken as a proxy for it.

5.23 The construction multiplier is higher than that for many other industries because of lower import propensities, as indicated in the table below. In particular, it is higher than multipliers for chemicals (2.2), computers (2.2) and financial intermediation (2.1). In fact, construction has the 4th highest gross output multiplier of any industry in the UK. Arguably, housing may have an even higher multiplier then other parts of the construction industry as it has a lower share of imported raw materials (e.g., structural steel) than other parts of construction.

5.24 Multipliers are based on 1995 input-output tables – the latest available for these purposes. This means that that construction spending will result in a relatively high level of spending across the economy as a whole. A construction output multiplier of 2.6 means that for every £1 of spending on construction, £2.60 in gross output will be generated across the economy as a whole. Increased import propensities since 1995 mean that multipliers for all sectors will now be lower but the relative position of construction is unlikely to have changed.

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19 National statistics is moving to a SIC 2007 basis over the course of the next year. This change is expected to impact on estimates of the construction sector. See www.statistics.gov.uk/methods_quality/sic/downloads/SIC2007explanatorynotes.pdf
Table 5-1: Multiplier Ranking Table: Top 5 Gross Output Multipliers and selected others

<table>
<thead>
<tr>
<th>Rank</th>
<th>Industry</th>
<th>Gross output multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supporting and auxiliary transport services; travel agency services</td>
<td>2.7</td>
</tr>
<tr>
<td>2</td>
<td>Health and social work services</td>
<td>2.7</td>
</tr>
<tr>
<td>3</td>
<td>Food products and beverages &amp; tobacco</td>
<td>2.7</td>
</tr>
<tr>
<td>4</td>
<td>Construction work</td>
<td>2.6</td>
</tr>
<tr>
<td>5</td>
<td>Electrical energy, gas, steam &amp; hot water</td>
<td>2.5</td>
</tr>
<tr>
<td>30</td>
<td>Other business services</td>
<td>2.3</td>
</tr>
<tr>
<td>36</td>
<td>Retail trade services</td>
<td>2.2</td>
</tr>
<tr>
<td>37</td>
<td>Chemicals</td>
<td>2.2</td>
</tr>
<tr>
<td>38</td>
<td>Computer services</td>
<td>2.2</td>
</tr>
<tr>
<td>40</td>
<td>Financial intermediation services</td>
<td>2.1</td>
</tr>
</tbody>
</table>

5.25 In reality multipliers are actually lower than this because there are further linkages though taxation. On the other hand, housing productivity is thought to be lower than that for construction as a whole, meaning that jobs density for a given amount of spending is likely to be higher than for other forms of construction work.

5.26 These issues were explored in recent research undertaken by Savills and Oxford Economics (The Case for Housing, 2010) where it was indicated that the construction of 100,000 new homes would result in 228,000 new jobs in the construction sector (or 2.3 person years of direct employment for every new house built) and an equivalent number in other sectors (or a total of around 4% person years of employment in the economy for every new house built. The estimate of 228,000 direct jobs created was based on a bottom-up estimate of manpower needed for house building while the broader, economy wide, figure was based on simulations using the Oxford Economics Model20.

5.27 Alternative estimates from Construction Skills show a required input of 17.65 man-years per £1 million pounds worth of house-building (averaged across all types of house-building). The CITB estimates also give a breakdown by occupation. This breakdown also gives a flavour for the wide range of skilled manual work required for house-building.

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20 The macro model approach was used as a convenient way to capture the broader impact on tax, spend and public finances although it does not have a construction specific approach to housing multipliers.
Table 5-2: Person-Year Input per £1m of New Housing investment (2000 prices)

<table>
<thead>
<tr>
<th>Type of Skill</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Trades &amp; Interior Fit-out</td>
<td>2.69</td>
</tr>
<tr>
<td>Electrical Trades &amp; Installation</td>
<td>1.67</td>
</tr>
<tr>
<td>Bricklayers &amp; Building Envelope Specialists</td>
<td>1.35</td>
</tr>
<tr>
<td>Plumbing &amp; HVAC Trades</td>
<td>1.31</td>
</tr>
<tr>
<td>Labourers nec</td>
<td>1.26</td>
</tr>
<tr>
<td>Other Professionals/Technical Staff &amp; IT</td>
<td>1.12</td>
</tr>
<tr>
<td>Construction Managers</td>
<td>1.10</td>
</tr>
<tr>
<td>Office-based Staff (excl. Managers)</td>
<td>1.10</td>
</tr>
<tr>
<td>Painters &amp; Decorators</td>
<td>1.07</td>
</tr>
<tr>
<td>Construction Professionals and Technical Staff</td>
<td>1.02</td>
</tr>
<tr>
<td>Business Process Managers</td>
<td>0.53</td>
</tr>
<tr>
<td>Non-construction Operatives</td>
<td>0.45</td>
</tr>
<tr>
<td>Plant Operatives</td>
<td>0.38</td>
</tr>
<tr>
<td>Roofers</td>
<td>0.37</td>
</tr>
<tr>
<td>Floorers</td>
<td>0.36</td>
</tr>
<tr>
<td>Plasterers &amp; Dry Liners</td>
<td>0.33</td>
</tr>
<tr>
<td>Specialist Building Operatives nec</td>
<td>0.33</td>
</tr>
<tr>
<td>Civil Engineering Operatives nec</td>
<td>0.29</td>
</tr>
<tr>
<td>Plant Mechanics/Fitters</td>
<td>0.23</td>
</tr>
<tr>
<td>Steel Erectors/Structural</td>
<td>0.19</td>
</tr>
<tr>
<td>Scafholders</td>
<td>0.19</td>
</tr>
<tr>
<td>Logistics</td>
<td>0.16</td>
</tr>
<tr>
<td>Glaziers</td>
<td>0.14</td>
</tr>
<tr>
<td>Senior &amp; Executive Managers</td>
<td>0.02</td>
</tr>
<tr>
<td>Total</td>
<td>17.65</td>
</tr>
</tbody>
</table>

Source: Horner (2006)

Regional variations

5.28 Housing’s role within regional economies varies across the country. Analysis based on ONS data indicates that housing has particular significance in areas such as the South West and East of England, accounting for over 3.5% of regional GVA. Housing’s role is smaller in London and the North-West, accounting for little over 2.5% of GVA in these regions.
The Role of Housing in the Economy

Figure 5-7: Housing GVA as a% of total regional GVA 2007

Source: ONS, Oxford Economic calculations

Conclusions and issues

5.29 Housing related spending and activity makes a major contribution to the economy. In addition the low import content of housing means that it has a large “multiplier” effect and the relatively low rate of labour productivity means that increases in house building and maintenance have a disproportionate impact on employment particularly amongst skilled and unskilled manual workers.

5.30 Housing construction and maintenance-related indicators all provide clear indications of the end of the housing boom, with substantial declines in activity, leaving a housing sector that is considerably smaller in 2009 than in 2007. The falls in housing-related activity, particularly new build, are proportionally much bigger than the 4½ % contraction seen in overall GDP between 2007 and 2009.

Figure 5-8: Changes in GVA, Investment and Spend

Source: ONS, Oxford Economics calculations
5.31 This can be seen as a “return to normal” in some respects, when viewed against the long term cyclical nature of activity in the housing sector. Nonetheless, the fall-off in housing activity due to the recent recession is clear. Housing’s relatively high multiplier implies that this fall off in activity is likely to have had particularly significant effects on the rest of the economy.

5.32 By the same token, the low import content and high multiplier associated with housing investment mean that any increase in house building, whether by the public or private sector, will have a significant impact on stimulating economy activity across the economy.
6. **Housing’s role in Labour Market Flexibility**

**Line of Enquiry**

6.1 The question being addressed in this section is what is the role of housing in contributing or restraining inter-regional labour market flexibility and mobility?

6.2 We address the role of housing in contributing to local/sub-regional supply of skills and so business competitiveness in the next section.

**Context**

6.3 There are several potential roles of housing in relation to the labour market:

- For the UK economy as a whole, a well functioning and efficient labour market would be facilitated by a well functioning housing system. This would be a system where housing costs or supply do not add significant “friction” to the labour market by impeding the process of people moving jobs and so best matching skills supply and demand. If housing (for whatever reason) impedes labour mobility then it may reduce overall national productivity.

- Most analysis in the UK has tended to look at the issue at the inter-regional level. We presume that this is because intra-regional jobs moves can often be accommodated by changes in commuting patterns rather than migration and so do not necessarily need housing changes (also due to data sets).

- However, it is important to point out that the geography of labour markets and regions is complex: an inter-regional move out of London to the South East can easily be accommodated by commuting into London; a move within the Eastern region from Norwich to Ipswich, or the South West from Bristol to Plymouth would necessitate a house move – so the inter and intra-regional distinction is in practice blurred.

**What are the impacts of housing on labour mobility?**

6.4 The starting point for much of the debate is the supposition that labour mobility which involves a change of housing location (i.e. some form of migration within the UK) is sub-optimal in the UK. As far as we can see this analysis is based on a comparison with the United States which appears to show that the UK has lower migration rates linked to jobs moves than the US\(^{21}\). However, we would note that compared to many other European countries, mobility rates in the UK are either similar or above average (e.g. France, Austria, Netherlands).

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\(^{21}\) Performance and Innovation Unit (2002) “Geographic Mobility” analytical paper authors: Nick Donovan, Tony Pilch, Tracy Rubenstein, July 2002
6.5 The role of housing in adversely impacting on labour mobility is a well researched subject. The issues were well summarised in the review of the literature by DTZ (2006)\textsuperscript{22}.

- The UK was characterised by low labour mobility amongst lower occupational groups – in contrast to the US (but not necessarily Europe). Research in the past has suggested that persistent inter-regional unemployment rate differences for lower and intermediate level skills suggest that limited labour mobility exists at these levels (McCormick (1997))\textsuperscript{23}.

- There are clearly a complex set of reasons for these differences including the role of the welfare system, benefits traps and cultural differences. However, the review of the literature indicates that housing is one factor explaining this relative stickiness of intermediate to lower skilled labour.

6.6 Two main culprits have been identified:

- First, the \textbf{inflexibilities associated with the role of social rented tenure} and moving within this tenure (or out of the tenure). This issue here is that allocations policies pretty much preclude a transfer of a social housing tenant across local authority boundaries. A related point is that those in work or who have not been on a waiting list are less likely to be able to access social rented housing in an area if they are not currently in social rented housing. Linked to this point, the effect of the benefits trap for those in social rented housing but moving to the private rented sector in most regions with a job is prohibitive (Hills (2007))\textsuperscript{24}.

- The analysis by Hills of the effective subsidy of social rented housing by region compared to market rents is instructive. In the North East in 2004 this amounted to a 20% subsidy\textsuperscript{25} for local authority dwelling and just 10% for housing association stock, whereas in London the subsidy was 50% for both type of social rented housing. The annual value for the subsidy in London was around £3,600 per social rented dwelling. This illustrates the challenges for those on low incomes or with relatively low earning potential to move from an area of low to high effective subsidy of social rented housing.

- Second, the role of regional (and potentially sub-regional) \textbf{house price differentials} for owner occupation. There are two issues here

  - First, the affordability issues for home owners moving from a low to high housing cost region or area.
  
  - Second, the disincentive effects from a housing investment view of moving from a high to low cost area (as a return back to a high cost area in the future may be impossible).


\textsuperscript{23} McCormick (1997) “Regional Unemployment and Labour Mobility in the UK” European Economic Review 41


\textsuperscript{25} Defined as the difference between an estimated market rent and the actual rent paid by tenants
Interestingly, the transaction costs associated with moving house for owner occupiers was relatively low in looking at international comparisons (DTZ (2006)) and does not seem to be identified in the literature a significant source of labour market friction.

6.7 The most recent work we have reviewed indicates that the house price differential effects work in a complex way and that the effect of house prices in high cost regions (e.g. the South East) was not necessarily acting as a deterrent for existing home owners in other parts of the UK. Cameron et al (2005) found that high house prices do not necessarily reduce migration, as the expected rate of (investment) return on housing was also a factor that influenced movement, so the South East continued to attract households despite rising prices because of its perceived good investment opportunity. However, it is important to note, as identified below (see Figure 6-3), that over this period relative house price inflation rates were actually broadly similar across regions.

6.8 The more recent work on housing migration has also brought out the complexity of links between migrations, housing costs and commuting. Some of this work has noted that there is evidence of migration taking place into areas of relatively lower house prices adjoining high house price areas (see the review in Wallace et al (2009)).

How often do households move?

6.9 Although the economics literature focuses on the role of tenure in labour mobility it is important to recognise that the main reasons for moving house are not job-related (see Table 6-1):

- Overall, job related moves only account for around 11% of all housing moves in England. As around 11% of households move every year this means that roughly one in 100 householder moves every year for a job related reason (around 200,000 households in total).

- However, of the inter-regional moves (which are just 17% of all moves), around a third are related to jobs so that interregional job related moves account for well over half of all job related housing moves (fluctuating year to year in the range 55% to 60%).

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27 Wallace, A et al (2009) "Rapid Evidence Assessment of the economic and social consequences of worsening housing affordability” May 2009, Centre for Housing Policy, The University of York for National Housing and Planning Advice Unit
6.10 The English Housing Survey also identifies the distance moved by tenure. In 2007/8 of those who have moved into a new social rented dwelling only 9% had moved more than 20 miles, for owner occupiers with mortgages this was 14%, but for the private rented sector this was 25% (see Figure 6-1). However, what is also very interesting is that:

- First, overall the distance moved has been falling over the last 10 years across all tenures.
- Second, the fall in the proportion of longer distance moves has been most noticeable for private renters (from 35% down to 25%).
- Third, although the proportion of longer distance moves has fallen amongst private renters the absolute share of all longer distance moves has increased over the period (from 39% in 1999/00 to 45% in 2007/8). So the private rented sector, because of its expansion and inherent greater mobility, has grown in importance as a source of mobility. The data also suggests that, as the private rented sector has expanded, it is being filled by tenants who are somewhat less geographically mobile that the previous average for the sector. To that extent the sector is becoming more average as it expands.

<table>
<thead>
<tr>
<th>Table 6-1: Main reason for moving by whether or not a regional move England 2005/6</th>
<th>Changed region</th>
<th>Stayed in same region</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Different size accommodation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wanted larger house or flat</td>
<td>1</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td>Wanted smaller house or flat</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Personal reasons:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorce or separation</td>
<td>1</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Marriage or cohabitation</td>
<td>1</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Other personal reasons</td>
<td>2</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>To move to a better area</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Change of job / nearer to job</td>
<td>6</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>Accommodation no longer available</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Wanted to buy</td>
<td>0</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Couldn’t afford mortgage or rent</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>To live independently</td>
<td>1</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Other reasons</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>83</td>
<td>100</td>
</tr>
<tr>
<td>All households</td>
<td>863</td>
<td>4,288</td>
<td>5,151</td>
</tr>
</tbody>
</table>

Source: DCLG Survey of English Housing

6.11 Hills (2007) presents some fascinating evidence on the nature of job related moves across tenure and regions (see Table 6-2). This shows that a tiny proportion (1 in 200) of those who were unemployed three years previously in social rented housing found a job which involved moving to social rented housing in another region. The difference in job related moves by tenure were striking: 12% of those in private rented housing who had been unemployed and found a job had moved region, 4% of owner occupiers and just 2.5% of those in social renting.
Table 6-2: House moves among job finders, all unemployed individuals, and all individuals in England, 1991-2004 (%)

<table>
<thead>
<tr>
<th></th>
<th>Owner-occupied</th>
<th>Social rented</th>
<th>Private rented</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployed in year t and employed in year t+3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same property</td>
<td>86.7</td>
<td>79.9</td>
<td>50.1</td>
<td>81.3</td>
</tr>
<tr>
<td>Same tenure, same region</td>
<td>6.0</td>
<td>12.8</td>
<td>11.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Different tenure, same region</td>
<td>2.9</td>
<td>4.9</td>
<td>26.3</td>
<td>5.8</td>
</tr>
<tr>
<td>Same tenure, different region</td>
<td>2.5</td>
<td>0.5</td>
<td>9.3</td>
<td>2.7</td>
</tr>
<tr>
<td>Different tenure, different region</td>
<td>1.8</td>
<td>2.0</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

| Unemployed in year t and in year t+3 |                 |               |                |       |
| Same property                        | 89.3           | 82.9          | 59.4           | 83.6  |
| Same tenure, same region             | 5.4            | 12.9          | 13.7           | 9.5   |
| Different tenure, same region        | 3.7            | 3.0           | 20.4           | 5.0   |
| Same tenure, different region        | 1.0            | 0.5           | 4.1            | 1.1   |
| Different tenure, different region   | 0.6            | 0.8           | 2.4            | 0.9   |
| Total                                | 100            | 100           | 100            | 100   |

| All individuals in year t            |                 |               |                |       |
| Same property                        | 92.5            | 88.7          | 59.0           | 89.8  |
| Same tenure, same region             | 4.9            | 7.2           | 9.4            | 5.6   |
| Different tenure, same region        | 0.9            | 3.0           | 20.2           | 2.4   |
| Same tenure, different region        | 1.2            | 0.3           | 4.5            | 1.2   |
| Different tenure, different region   | 0.5            | 0.7           | 6.9            | 0.9   |
| Total                                | 100            | 100           | 100            | 100   |

Source: Hills (2007) Table 10.3

Figure 6-1: Distance Moved by Tenure, 1999/00 and 2007/8, moves over 20 miles

Source: Communities & Local Government, Survey of English Housing
Factors influencing mobility

6.12 The analysis above has clearly demonstrated the sharp differentials between tenures in geographic mobility and within this labour mobility. A person originally in private rented sector who had been unemployed and then found a job was 5 time more likely to have moved region than a previous unemployed social renter who found a job and 3 times more likely to have moved region than an owner occupier (see Table 6-2 above). However, we cannot conclude from this that by definition that it is housing tenure that causes these differences in mobility. It is clearly the case that there is an important element of selection of different socio-demographic characteristics by tenure here.

6.13 Table 6-3 compares some of the characteristics of people in different tenures. The key points are:

- The private rented sector is disproportionately occupied by younger people (both those in full-time education, but also those in their mid 20s to mid 30s (see Figure 6-2).
- Owner occupiers are on average in higher income groups, especially those with a mortgage and those with a mortgage are, not surprisingly, much more likely to be in work and have children.
- Income levels amongst private renters are below average; this is likely to reflect several characteristics – the importance of students, the relatively young age profile and the low incomes of those private renters not in work (whose characteristics are much more like social renters).

6.14 These differences by tenure (and within tenure for socio-economic categories) are clearly a major cause of the different mobility characteristics of tenure types.

<table>
<thead>
<tr>
<th>Characteristics*</th>
<th>Owner Occupiers</th>
<th>Social Rented</th>
<th>Private rented</th>
<th>All Tenures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Own Outright</td>
<td>Mortgaged</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Aged under 35 (%) 2006-7</td>
<td>2</td>
<td>24</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Aged under 35 (%) 2006-7</td>
<td>2</td>
<td>24</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>Average mean income (£000s) 2006-7</td>
<td>£26</td>
<td>£44</td>
<td>£36</td>
<td>£14</td>
</tr>
<tr>
<td>Average mean income (£000s) 2006-7</td>
<td>£26</td>
<td>£44</td>
<td>£36</td>
<td>£14</td>
</tr>
<tr>
<td>Working (%) 2007</td>
<td>36</td>
<td>93</td>
<td>67</td>
<td>32</td>
</tr>
<tr>
<td>Working (%) 2007</td>
<td>36</td>
<td>93</td>
<td>67</td>
<td>32</td>
</tr>
<tr>
<td>With children 2006-7</td>
<td>7</td>
<td>44</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>With children 2006-7</td>
<td>7</td>
<td>44</td>
<td>28</td>
<td>33</td>
</tr>
<tr>
<td>Median length of residence (years) 2006-7</td>
<td>22</td>
<td>7</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Median length of residence (years) 2006-7</td>
<td>22</td>
<td>7</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>Movers per year per 1,000 h/h 2006-7</td>
<td>70</td>
<td>122</td>
<td>481</td>
<td>130</td>
</tr>
<tr>
<td>Movers per year per 1,000 h/h 2006-7</td>
<td>70</td>
<td>122</td>
<td>481</td>
<td>130</td>
</tr>
</tbody>
</table>

Source: Housing Statistics 2008, CLG

Notes: * characteristics relate to "household reference person"
As mentioned earlier, the degree of immobility in terms of propensity to move varies widely by tenure. The low rate of mobility of social renters has been mooted as a problem in terms of labour flexibility. The “fault” is often seen a reflecting issues linked to the nature of the tenure and the benefits trap faced by many tenants. Some interesting research on attitudes of social rented tenants was carried out for a group of housing associations in 2009 (Broomleigh Housing Association 2009)\(^{28}\). This involved a survey of around 1,300 social housing tenants and found that 37% wanted to move and 17% wanted to move “a lot”. Of the latter group around one in five wanted to move out of their region (to other socially rented housing), or around 4% of the overall sample. This suggests that the desire to move inter-regionally amongst social rented tenants may be higher than the actual rate of moves, suggesting that there are factors other than the characteristics of tenants reducing the rate of moves (such as the tenure inflexibilities already mentioned).\(^{29}\)

\(^{28}\) Broomleigh Housing Association (2009) “Mobility Matters: Exploring mobility aspirations and options for social housing residents” November 2009, research carried out by Cambell Tickell on behalf of a group of Housing Associations (Affinity Sutton, Home, Metropolitan, Notting Hill, Places for People, Riverside, Sanctuary and Sovereign)

\(^{29}\) However, it is difficult to compare actual rates of mobility with expressed desires and the role of employment in being a reason for wanting to move was not clear from the survey.
What’s happened to regional house price differentials?

As noted above, periods of high house price inflation are usually associated with increasing regional disparities in house prices which can act as a barrier to migration between low and high house price regions. Regional house price differentials widened between 1998 and 2002, with house price growth in Southern regions averaging 15% a year, almost double the 8% average annual price rises experienced across Northern regions. A short strong period of catch-up ensued between 2002 and 2004 (after the Dot Com boom) with growth across Northern regions averaging 23% a year, almost three times the growth across Southern regions. House price differentials then stabilised between 2004 and 2008, although this narrowing is likely to be in part due to the particular pattern of regional economic growth over this period which was relatively similar across England and saw, for instance, some narrowing of relative regional employment rates.

![Figure 6-3: Regional house price differentials](image)

Source: Oxford Economics, CLG

The impact on house price differentials on regional migration

Household inter-regional migration is a consequence of a number of complex interactions and processes. A body of econometric evidence has now built up to suggest that high relative earnings and employment opportunities, along with other amenities, encourage migration to a region, while high relative house prices discourage it (see e.g. Muellbauer, Murphy and Cameron (MMC 2006) and Rabe and Taylor (2010)).

6.18 The mechanism for this negative effect of house prices on migration is shown to arise through cost-of-living differentials between regions and credit constraints operating through the mortgage lending system.

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6.19 Champion et al (1998), who conducted research for DETR on migration flows in England, reinforce this view by stating that it has generally been shown that there is a negative relationship between regional house prices and migration in Britain. They describe a ‘mobility trap’ characterised by:

- Homeowners from comparatively low priced regions that cannot afford to move to higher priced regions.
- Homeowners in regions with high house prices that are reluctant to move out because then they will not be able to afford to move back.
- Once house prices do start to fall, people being reluctant to move into areas with falling prices, because investment in property seems unwise.
- A downturn in property prices making it difficult to sell, thus discouraging people from moving.

6.20 An analysis of regional house price differentials and regional net migration between 1998 and 2008 demonstrates the negative relationship between regional house prices and migration in England. By way of illustration, Figure 6-4 shows that as house price differentials between the South East (a high house price region) and the England average narrow, net migration into the region accelerates.

![Figure 6-4 House price differentials and net migration - South East](image)

Source: Oxford Economics, CLG

6.21 In the North East (a low house price region), house price differentials relative to the England average widened in the late 1990s and early 2000s leading to a slowing of the outflow of population from the region, to the extent that net migration eventually exerted a positive impact on population. Subsequently, house price differentials started to narrow and regional net out-migration returned.
6.22 However, Muellbauer, Murphy, and Cameron (MMC, 2006) show that there are additional housing-market effects which can blur the causality between house price differentials and migration, namely:

- A more plentiful housing provision per unit of population will tend to attract migrants. This is because, outside the owner-occupied sector, quantity constraints are likely to matter, given controlled rents in the social housing sector and sticky rents in the market sector.

- In addition, uncertainty, risk aversion, expectations formation, and adjustment costs play an important role in migration and commuting decisions, as Mohlo (1984) and others have pointed out.

- Expectations of earnings growth and of house-price appreciation may overcome high house prices. The speed of response of migration to the basic labour- and housing-market forces may also be time varying.

6.23 By modelling gross and net regional migration rates in Britain using National Health Service register data for 1975–2003, MMC (2006) also report the different way in which regional migration to London and the Greater South East region operates. In particular, they show that the important role played by relative expected house-price appreciation and earnings growth helps to explain phenomena many have found puzzling: for example, why the greater South-East continued to attract net migrants in 1988/9 when house prices were rising very strongly relative to other regions and had become very expensive relative to earnings.
Moreover, the model also helps explain why foreign in-migration disproportionately shared by London has had less dramatic effects on London house prices than one might have expected: as the population in London rises relative to the housing stock, out-migration to the regions increases sharply, so dampening the impact on London house prices. This is a result reinforced by a more up-to-date study by the LSE (Gordon et al, 2007).

The role of factors other than house price differentials in determining inter-regional migration is clearly apparent in the case of London (Figure 6-6), where the negative effect of house prices on migration is not seen.

**Figure 6-6 House price differentials and net migration – Greater London**

![Graph](image)

*Source: Oxford Economics, CLG*

Figure 6-7 shows the pattern of inter-regional migration in the UK from 2001-02 to 2007-08. The key messages to take from the chart are:

- The level of net migration appears to be falling across the majority of regions.
- London continues to experience net outmigration, while the Southern regions, including the East Midlands, are experiencing a positive impact on population from net migration into their regions.
- The lower house price Northern regions, including the West Midlands, continue to see a drag on their population growth from net outmigration.
What has been the role of international migration?

6.27 The level of regional net migration is one of three key drivers of regional population change; natural changes (births over deaths) and international migration also influence population, household demand and labour supply. Figure 6-8 shows the components of population change by region for 2008. The key features of the data are:

- With the exception of the South West, population change is largely driven by natural change and international migration rather than within-UK migration.
- International migration is the major factor behind population growth in the North East, Yorkshire and the Humber, Scotland and Northern Ireland.
- Population growth in the South West is driven by within-UK migration, predominantly from the South East and London.
- The positive inflow of international migration into London broadly counterbalances the net outflow of migration to the rest of the UK.
6.28 International migration has increased very rapidly in the UK as has been widely reported and debated. As Table 6-4 shows:

- There has been an increasing role played by international migrants in the UK workforce across all occupational groups – the UK migrant workforce increased by more than 75% between 2001 and 2009, reaching 2.3 million and accounting for 8% of the UK workforce.

- However, there has been a pronounced shift from higher level occupations having the highest concentration of migrant workforce, towards lower level occupations such as elementary and personal services occupations.

### Table 6-4: International migrant workforce by occupation

<table>
<thead>
<tr>
<th>Occupational Level</th>
<th>2001</th>
<th>2005</th>
<th>2009</th>
<th>Change 01-09</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>000s</td>
<td>% of UK workforce</td>
<td>000s</td>
<td>% of UK workforce</td>
</tr>
<tr>
<td>Managers/senior officials</td>
<td>195</td>
<td>5.0%</td>
<td>206</td>
<td>4.9%</td>
</tr>
<tr>
<td>Professionals</td>
<td>197</td>
<td>6.1%</td>
<td>269</td>
<td>7.5%</td>
</tr>
<tr>
<td>Associate professional and technical</td>
<td>217</td>
<td>5.7%</td>
<td>255</td>
<td>6.4%</td>
</tr>
<tr>
<td>Administrative/secretarial</td>
<td>114</td>
<td>3.1%</td>
<td>136</td>
<td>3.8%</td>
</tr>
<tr>
<td>Skilled trades</td>
<td>112</td>
<td>3.4%</td>
<td>113</td>
<td>3.5%</td>
</tr>
<tr>
<td>Personal services</td>
<td>92</td>
<td>4.6%</td>
<td>126</td>
<td>5.7%</td>
</tr>
<tr>
<td>Sales/customer services</td>
<td>80</td>
<td>3.6%</td>
<td>102</td>
<td>4.5%</td>
</tr>
<tr>
<td>Process/machine operatives</td>
<td>84</td>
<td>3.7%</td>
<td>110</td>
<td>5.1%</td>
</tr>
<tr>
<td>Elementary Occupations</td>
<td>202</td>
<td>5.9%</td>
<td>288</td>
<td>8.7%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td><strong>1,294</strong></td>
<td><strong>4.7%</strong></td>
<td><strong>1,605</strong></td>
<td><strong>5.6%</strong></td>
</tr>
</tbody>
</table>

*Source: Labour Force Survey*
Changes in the migrant workforce by region will reflect both the occupational structure and job opportunities in those regions. One quarter of all international migrants employed in the UK are resident in London, with the South East and Eastern regions the next most highly concentrated regions (Figure 6-10). However, all regions have seen substantial increases since 2001.

6.30 The proportion of international migrants in the workforce increased across all regions between 2001 and 2009, with the fastest growth experienced in London, Northern Ireland, the North East and Scotland (Figure 6-11).
Conclusions and issues

6.31 This section has reviewed the latest evidence on labour mobility and housing; the key conclusions are:

1) The limited role that the social rented sector plays in labour mobility is particularly striking. The probability that a social renting tenant moves into a job in another region is very low indeed. This is clearly a result of several factors combined:

- The low skills base and poor employability record of the current mix of tenants in this sector - the result of decades of allocations policies and contraction in the stock as very well evidenced by Hills (2007) and others.

- The impact of the benefits traps which is particularly acute for those moving from low to high cost housing regions.

- The result of the current supply and allocations policies in the social rented sector which favour local residents and those in greatest housing need who are less likely to be those seeking a job-related move.

2) The overall impact of the limited role of the social rented sector on labour mobility from a wider economic perspective can be exaggerated. Due to the reasons above, the total number of economically active people living in the sector is limited and small proportion of the current labour supply. The evidence points to the main reasons for the low levels of mobility being associated with the characteristics of social rented tenants compared to owner occupiers or private rented tenants.

3) However, there are major issues associated with longer development of human capital and labour productivity losses associated with housing conditions and neighbourhoods dominated by social renting as we note in Section 9.
4) By default the housing sector that plays a disproportionate role in labour mobility is the **private rented sector**. By 2007/8 this sector accounted for 14% of all dwellings in England (just short of 3 million) compared to 18% (4 million) for the social rented sector. A total of 1.9m people in the private rented sector were in work in 2008 or 15% of the total compared to 1.4m or 11% in the social rented sector.

5) The evidence shows that geographical mobility has been falling across all tenures over the last decade or so (for reasons that are not entirely clear but might relate to the more balanced rate of jobs growth on a regional basis).

6) The role of **regional house price differentials** on labour mobility has been subject to considerable debate. The evidence seems to point to some negative impacts on inter-regional labour mobility, but we suspect that the importance has been overstated for recent years. In part, this is because recent immigrants from Europe are generally not actual or potential owner-occupiers and so are less affected by house prices. They have probably been willing to tolerate worse housing conditions than long-term UK residents and so have been able to supply labour in locations where previously housing would have been more of a constraint on labour mobility.

7) The most recent evidence shows that regional house price differentials have narrowed since the early 2000s whilst the econometric analysis indicates that there may be migration that takes place to areas surrounding high house price areas. Part of the story here of course is that the period from the early 2000s to 2008 saw a degree of catching up and the relative stability in house prices in the north compared to the south.

8) Nevertheless, given that around 75% of those in employment in England are owner occupiers any impact on labour mobility in this sector will have important implications for the labour market as a whole.

9) A key finding on the effects of house prices and affordability on labour supply in the last decade is of course linked to the important role played by international immigration. The data suggests that international migrants have largely, but not exclusively, filled relatively lower skilled and less well paid jobs. From a labour supply perspective this has offset to a significant degree issues of labour supply and housing affordability. There is a lack of evidence on the housing patterns of international migrants, but it likely they are concentrated in the private rented sector and are consuming significantly lower quantities of housing (i.e. are in overcrowded conditions) compared to non-migrants.

6.32 If the way in which housing contributes to labour mobility is to be enhanced this points towards: a further expansion of the private rented sector; intervention (if it is possible) to introduce more stability into house price changes nationally and as between regions; potentially changes to the allocations policies for social rented housing (although this is likely to only make a modest contribution to labour mobility given the nature of the majority of social rented sector tenants).
7. **Housing’s role in Regional and Local Economic Development & Regeneration**

**Lines of enquiry**

7.1 The questions being addressed in this section are the role of housing in:

- Attracting or deterring investment into an area
- Helping local areas become more competitive and successful
- Contributing to local/sub-regional supply of skills and so business competitiveness.

7.2 In practice we have considered these questions together as there is a significant degree of overlap between them. In practice nearly all of the literature about the role of housing in local and regional economic development ultimately relates to its impact on the supply of skills.

**Context**

7.3 These lines of enquiry are about the role it might play in sub-national area competitiveness, whether at a regional or more local scale. There could be an argument that, even if it is significant at a regional or local level, the role of housing influences the distribution of population and economic activity, rather than the overall productivity of the UK economy. However, as we shall see there is some evidence that housing plays a role in the competitiveness of locations and the productivity of workers that can contribute to overall UK productivity.

7.4 However, as we shall see, there is an argument that the UK has locations which are internationally competitive where the role of housing (positive or negative) might lead to a loss of overall international competitiveness for the UK economy.

7.5 To some extent this line of enquiry overlaps with Section 6 (housing and labour market flexibility) and Section 9 (on housing and poverty, given that poverty tends to be concentrated in neighbourhoods).
Potential role of housing in attracting or deterring investment into an area

7.6 There is a strand of evidence and research that we have come across that, put simply, states that housing can or could affect the ability of an area to attract investment: “Housing can enhance a city’s productivity, but if it is not of the right type, at the right price or in the right place for local people, it can impair and restrict economic potential”\(^{31}\). There are different strands in the arguments put forward about the role of housing, which can be summarised as:

1) **Quality places, including housing, are needed to attract skilled, mobile workers that are the key to the knowledge economy.** This argument is sometimes posited in terms of needing a supply of executive homes or a wide range of residential choices (i.e. the right type of housing). The argument can be about the need to attract mobile knowledge based workers or the firms that employ these workers. The key point is that housing is but one, albeit important, part of the quality of place offer, which it is argued is in turn one dimension of the overall quality of life offer.

2) **A sufficient quantity of housing in the right places is needed to match economic growth.** This is of course the background to many current Regional Spatial Strategies and developing Integrated Regional Strategies. This argument is based on the reasonable assumption at a regional level that economic growth and then labour demand needs to be accommodated by appropriate increases in the overall housing stock, related to where the economic growth will take place (i.e. within the relevant travel to work areas). This relates to housing’s role as a complementary good to labour.

3) **Housing affordability.** A third line of argument is that housing affordability per se impacts on the competitiveness of an area by impacting on employers’ ability to attract and retain staff or put another way the size and quality of the labour pool in an area.

4) **Housing growth and local economies.** A fourth line of argument advanced by some places is that an increase in housing numbers and so population does in itself bring economic benefits to an area in two ways: first the multiplier effects from having extra people and their requirement for private and public services; second, the effect of increasing population size in terms of reaching critical mass of workforce (creating agglomeration benefits) and population to attract certain more specialist services (such as department stores and leisure facilities)\(^{32}\).

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\(^{32}\) There is a large body of spatial economics literature on optimal city size which we do not cover in this review. At a practical level it has been advanced and considered by some cities and towns as they contemplate future population growth. In the academic literature the focus is on economies and diseconomies of agglomeration. It has been argued by some (see for instance Leining and Overman 2008) that this has important implications for where new housing is built and that it should respond to market signals (relative housing land prices) which are signals about unrealised economies of agglomeration in locations such as London, Oxford and Cambridge.
7.7 These issues are to some extent interlinked. Clearly housing affordability is to a significant degree caused by an imbalance between supply and demand for housing as a result of economic growth in an area. However, there are other important factors influencing affordability, most importantly the role of housing as an asset and the supply of credit and taxation of it.

7.8 To unpack these sets of issues further, the economic argument runs as follows:

- As an economy grows and the demand for labour increases this will tend to push up wage rates compared to other places, attracting new migrant entrants to the labour market and retaining existing residents that might otherwise migrate away. At the level of the UK this economic process has been most apparent in the recent role of economic migrants as the UK economy grew strongly during the 2000s (see Table 6-4 in Section 6).

- An increase in demand for labour as a result of economic growth will therefore tend to push up both labour supply and wage rates (the relative share depending on the elasticity of labour supply). Leaving aside the possibilities of tele- and remote working, an increase in effective labour supply in any location will have implications for housing demand. Planning based models assume that, roughly, every extra job requires an extra house.

- The increased labour force would demand extra housing (housing acting as a complementary good to labour).

- If the supply of housing was elastic in response to price increase (which we know it is not) then the effect of the increased demand would be to push up price a little and supply a lot. Housing supply would have responded to the economic and price signals.

7.9 So what happens, therefore, if housing supply cannot expand to respond to changes in demand as a result of economic growth? Economic theory would suggest a relative increase in the real cost of housing in the region or locality, as there would be for any other factor where demand has increased and there is a limited supply response.

7.10 Table 7-1 illustrates the relative inelasticity of housing supply in response to employment growth from 1997 to 2007 in most English regions. The mismatch between growth in employment and in the total stock of housing is particularly noticeable not only in London and the South East, but also in the South West, Yorkshire & Humber, North West and North East.

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33 There are of course several factors linking employment change and housing change, in some regions part of the employment growth may have come about as a result of increases in the employment rate amongst the existing labour force (as in the North East).
7.11 Would there necessarily be adverse economic consequences of a relative increase in the real cost of housing in a particular location and supply not rising in line with increased employment and population? In practice the economy and housing market operates in a rather more complex way for a variety of reasons which would act to mitigate these factors:

1) **Travel to work patterns** complicate the relationship between the economy and housing, especially at a local or sub-regional level. Workers face a choice between housing costs, job availability and wages and travel to work costs and time.

2) **Consumption of housing.** There is not a one to one relationship between the amount of housing consumed and number of workers. Housing is a complex good with multiple attributes (price, quality, space and location). As housing costs rise relative to incomes in more successful locations, workers can choose to consume less housing per capita (in space or quality terms to offset higher costs). In some tenures, most especially the private rented sector, there is evidence of more crowded occupational levels. Also people can choose to stay with their family – a phenomena known as “hidden households” in response to housing affordability.
General Evidence on the Role of Housing in Local Economic Development

7.12 The evidence we explore later on in this section relates to those specific aspects of housing’s potential role raised above. There is some recently commissioned research for the HCA that adopts a different approach and tries to determine what factors (place-based and others) are associated with more or less successful local economies. This ongoing research (Amion & Pion (2010))\textsuperscript{34} assesses which variables are associated with better and worse performing local economies (defined by GVA per employee at a NUTS 3 level and worklessness at a local authority district level). The analysis shows that place-based assets are important factors in explaining differences in performance as well as people-based assets. In particular it shows that housing structure\textsuperscript{35} is the most important single factor associated with the highest and lowest performing areas in terms of worklessness and second most important factor in explaining difference in GVA per employee. However, as the report notes, the statistical analysis identifies that there is a strong statistical association between local economic performance and housing structure taking account of a wide range of factors; it does not necessarily imply causality.

Evidence on the role of housing quality and choice

7.13 We have reviewed the available evidence on the role of housing in affecting investment into an area. The review by DTZ (2006)\textsuperscript{36} concluded that:

- In terms of attracting business investment, “there is evidence that the quality of housing is an important consideration, both directly (in terms of the quality of life) and indirectly (in terms of the availability of a skilled workforce)”. They stated that “It is clear that while high quality housing alone may not be enough to attract significant inward investment, a lack of high quality of housing may preclude it.”

- The Regeneris (2008)\textsuperscript{37} review of the evidence concluded that “There is clear quantitative evidence on the current pattern of residential choices exercised by those with higher skills in higher paid occupations focused on areas with the best environments in the [North West] region.....However, all of the material we have reviewed for this study points to the complexity of the factors involved....[and that] it is difficult to establish the precise linkages between housing, quality of place and the ability of an area to attract and retain higher skilled workers”.

7.14 This subject has been reviewed at some length, albeit somewhat inconclusively. To summarise the conclusions from most reviews of the literature:

\textsuperscript{34} Amion Consulting and Pion Economics “Place-based interventions – Place and Performance” Discussion Draft, May 2010

\textsuperscript{35} An indicator based on: % of properties in Council Tax Bands A, median house price; stock of houses per 1,000 residents; and % of housing stock that is privately owned.


\textsuperscript{37} Regeneris Consulting “Housing and Economic Growth in the North West” May 2008 for the North West Regional Assembly
Quality of life factors have some influence on place/urban competitiveness (ability to attract new industries, jobs and moves to higher productivity economic activity). The review by Parkinson et al (2004) for ODPM\(^{38}\) concluded that, while none of the component parts of quality of life were individually significant, taken as a collective whole, quality of life was rising in importance as a driver of economic competitiveness.

Evidence from a review of location factors for innovation based companies reported in Llewellyn Davies Yeang (2006a)\(^{39}\) suggests that “Quality of Place and Residential Offer (Quality and Price) are of importance to companies and employees, but also in particular for start-up companies. Larger companies are in a position to compensate their workers with higher wages, whereas smaller companies are less likely to be able to. The evidence implies that Quality of Place and Residential Offer may be of disproportionate importance for those cities or regions seeking to accelerate a transition to a knowledge economy, where the existing base is limited”.

However, these place-focused views of factors driving economic competitiveness have their limitations. Llewellyn Davies Yeang conclude from their review of the literature that “the range and attractiveness of employment opportunities will remain the main influence on where highly skilled people live. Quality of life, the attractiveness of housing, arts, cultural or other leisure attractions will also be important, but .... serve as second tier drivers”.

**Evidence on the role of quantity of housing in economic growth**

As explained earlier, we expect there to be some relationship between rates of economic growth, increases in workforce required, supply response (or lack of it) changes in house prices, and consequent affordability issues. However, this relationship is extremely complex for the reasons set out above.

**Regional evidence**

At a regional level there is surprisingly limited evidence on the impact of worsening affordability issues on regional economic competitiveness. So far as we have been able to ascertain, the Roger Tym (2003)\(^{40}\) report on the economic impacts of housing affordability is the only study at a regional level in recent years. The research is useful, but the conclusions need to be caveated as: (a) the sample on which the report was based is relatively small (210 employers in public and private sector); and (b) the fieldwork was carried out in the second half of 2002, since then housing affordability issues have worsened considerably in the South East\(^{41}\).

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\(^{38}\) Parkinson, M. *et al* “Competitive European Cities- where do the Core Cities stand?” 2004, for ODPM.


\(^{41}\) The ratio of lower quartile house price to lower quartile earnings rose from 6.9 in 2002 to 8.9 in 2007.
7.18 Nevertheless the report did discover that in 2002, 12% of private sector employers reported recruitment difficulties linked to local housing costs (largely at the low end of the pay scale); although based on a small sample, recruitment difficulties were generally more widespread in the public sector and also high housing costs as an obstacle to recruitment (for jobs often on national salary scales). The report noted that there was some evidence of actual or planned disinvestment from the region (relocation to other parts of the UK or to lower cost locations abroad as a result of the impact of housing costs on labour costs).

7.19 Interestingly a study carried out in Scotland (Glasgow University, 2005\textsuperscript{42}) at a similar time reported: The broad conclusion, building on a range of evidence is that housing affordability is a contributory factor to recruitment problems but not a major issue relative to skill shortages in a number of key sectors and the difficulties of filling lower paid jobs in hospitality, retail and other sectors. However, this conclusion may be specific to Scotland, which has lower house price to income ratios than England and a relatively ample supply of social housing.

7.20 As noted in Section 6, there are concerns that homeownership reduces labour market mobility, but Wallace et al (2009)\textsuperscript{43} in their work for NHPAU conclude that recent studies have shown that homeowners do move for employment opportunities in high cost areas but do so by buying into contiguous less expensive regions and then commute into higher cost areas. Broader evidence for this type of behaviour was found by Cameron and Muellbauer (1998)\textsuperscript{44} in their study of regional commuting and migration.

7.21 A different approach was taken in an interesting econometric analysis by Meen (2002)\textsuperscript{45} that looked at the relationship between housing investment and industrial investment in the UK overall and by region. This found that, contrary to what might be expected\textsuperscript{46}, greater levels of housing investment were associated with greater levels of industrial investment (rather than housing investment crowding out industrial investment). Meen concluded that this was due to regional effects, where in the greater South East there was both higher housing and higher industrial investment. His conclusion was that “the direction of causality suggests that jobs move to workers” – in other words in areas that attract higher skilled workers building more housing enables the economy to expand and leads to additional investment.

\textsuperscript{42} Glasgow University (2005) “Affordable housing and the labour market in Scotland: do high housing costs create labour shortages?” February 2005, Training and Employment Research Unit.

\textsuperscript{43} Wallace, A et al “Rapid Evidence Assessment of the economic and social consequences of worsening housing affordability” May 2009, Centre for Housing Policy, The University of York for National Housing and Planning Advice Unit.

\textsuperscript{44} Cameron, G. and Muellbauer, J. (1998) The Housing Market And Regional Commuting And Migration Choices. Scottish Journal of Political Economy, 45, 420-446


\textsuperscript{46} That is to say that higher levels of housing investment crowded out productive investment
Local and sub-regional evidence

7.22 At a local and sub-regional level there is a developing body of research around the role of housing in supporting economic growth, especially in the context of the designated growth areas. Many local housing needs studies in areas of high house prices have highlighted issues of housing affordability. The recent review by Wallace et al (2009) of the evidence of the economic and social impacts of affordability for the NHPAU looked at the evidence in particular of the impacts of affordability on public sector workers and employers. It concluded that:

- There is strong evidence that in the recent period of rising markets that housing affordability negatively influenced recruitment and retention within some workplaces, mostly amongst public sector employers in hotspots in London, the greater South East and the South West⁴⁷. They note that levels of home ownership amongst key worker groups is also surprisingly high⁴⁸.
- Housing affordability has adversely affected many rural communities but they note that this may also be a product of a limited supply of rented alternatives.
- The evidence suggests that key workers assessed the value of their profession or their employment location by comparing work satisfaction to their ability to enter homeownership in their late twenties or early thirties. If key workers found home ownership was unattainable and job satisfaction low, they were likely to move to lower cost areas to fulfil their housing ambitions or, to a lesser extent, leave their profession altogether.
- Private sector employers also experienced some recruitment problems but the issues were less intense and many private companies had scope to improve staff benefits and salaries to attract the staff they wanted.

7.23 The area of housing affordability and the supply of key skills has been an area of considerable policy interest and some research. There is some evidence that in the public sector, with in effect national pay rates, recruitment difficulties and so quality of service are adversely affected in high cost areas. A national study of the relationship between nurses, external labour markets and housing costs found that areas of high cost tended to have poorer performing hospitals⁴⁹. Similar research on teachers found that the combination of high house prices in economically successful areas, with a public sector pay structure which is unresponsive to this (or very unevenly so) leads to a qualitative ‘crowding out’ of public sector work such as that of teachers, leading to lower quality provision (Gordon and Monastiriotis (2007))⁵⁰.

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⁴⁸ We assume that this is due to jobs held by the partners of key workers or the purchase of housing at an earlier stage of better affordability


7.24 There has been a particular focus on research on the Cambridge sub-region, where housing is seen by many local policy makers as a key factor impeding the growth of the economy and where housing affordability ratios are some of the worst in the UK. Our consultation with Cambridge Horizon’s Chief Executive indicated that the inability to expand the housing stock around Cambridge over the last decade is likely to have contributed to the slowing down of the rate of economic growth of the sub-region. This was the argument explored in the recent Centre for Cities report (2009) on Cambridge\textsuperscript{51}.

*Mitigating factors - housing consumption*

7.25 Hill (2007) presents some very useful information on the amount of space consumed by tenure and region. This shows that, as we would expect, that space per person is lower in London than other parts of the country, although interestingly there is less variation between more and less expensive parts of the country outside London than one might have thought. His report shows that the median floorspace per person in London was 9% lower than the average for England in 2004 in the private sector. Taking account of household income we suspect that the difference would be even greater\textsuperscript{52}.

*Mitigating factors - labour market stretching*

7.26 Research for the Cheshire area (Jarvis, 2007\textsuperscript{53}) found evidence that employers were facing difficulties recruiting labour, particularly at the lower skilled and lower paid end of the labour market. At the same time, it found evidence that travel to work areas for Chester were being stretched into North Wales as workers moved to find affordable property.

7.27 A study into affordability issues in Cumbria noted that among the findings of the study, employees often commute long distances from areas with cheaper housing, in many cases, outside of the sub-region (WM Enterprise, 2004\textsuperscript{54}).

7.28 The Roger Tym & Partners (2003) report on the economic impacts of housing affordability in the South East noted that when the survey was undertaken in 2002 “19% of private sector employers and 44% of public sector employers report that commuting journeys are extended due to high local housing costs ......longer commuting patterns tended to be concentrated in areas of high housing cost”.

7.29 The recent Centre for Cities report (2009) on Cambridge noted that “misalignments between housing availability and place of work in Cambridge have led to increased levels of car-based commuting to the variety of business parks around Cambridge, congestion and pollution”.

\textsuperscript{51} Centre for Cities , Lena Tochermann “Cambridge: Closing the Gap” March 2009 for Centre for Cities and Housing Corporation.

\textsuperscript{52} We would expect the amount of floorspace consumed per capita for those on similar incomes in the owner occupied and private rented sectors to be markedly lower in London than elsewhere for those on similar incomes.

\textsuperscript{53} Jarvis, J. “The impact of the lack of affordable housing on the economy of Cheshire and Warrington” for Cheshire and Warrington Economic Alliance, Cheshire Housing Alliance and the Northwest Development Agency, 2007

\textsuperscript{54} WM Enterprise Consultants (2004) “Affordable Rural Housing in Cumbria”
Conclusions

7.30 In terms of local and regional competitiveness the evidence we have reviewed points to several key conclusions:

1) There is a complex relationship between economic growth and the supply of housing. Clearly, having an adequate stock of housing is a necessary condition for economic growth in the longer term to ensure that workers are housed and that economic growth can be matched by an increase in the supply of skills.

2) Housing will affect local and regional economic competitiveness to some degree. However, the evidence we have seen does not identify the supply of housing as a primary driver of economic competitiveness compared to other key factors (rate of innovation by firms, sectoral composition, skills of workforce).

3) Emerging evidence, (Amion & Pion (2010)) however, points to the possibility that housing supply may have a stronger influence on local economic competitiveness than thought. This is an area for further investigation. It would chime with the increased importance of the knowledge-based economy and the role that agglomerations of highly skilled workers play in economic competitiveness.

4) There are really two strands in the literature about the role of housing (positive or negative) in place competitiveness that relate to the quality/choice on the one hand and affordability on the other (a consequence of supply not rising with demand).

5) In terms of quality arguments, these are not about housing per se but the quality of place at a local/neighbourhood or wider city level. The evidence we have seen is not really conclusive on the relative importance of housing quality/choice on the ability to attract investment (and knowledge workers) to a city. There is some evidence cited in the literature that it may be a more important factor amongst smaller firms seeking to recruit and regions/cities whose primary motor is as “knowledge hubs”. However, the empirical evidence is not particularly robust or conclusive.

6) However, within a labour market area it is undoubtedly the case that better paid, more skilled residents are attracted to higher quality housing areas. This confers comparative advantages on these locations due to local positive externalities (shops, leisure offer, schools, lower crime).

7) In terms of affordability and labour supply there is stronger evidence on the effect for key workers in the public sector, but even here as we saw in Section 6 the role of international in-migrants has complicated the picture. The costs of housing affordability issues for key workers have been identified as poorer public services in high housing cost areas.

Issues

7.31 Interestingly the literature says very little about the role of housing investment (or not) in the creation of wider societal costs that could result from a limited supply of housing not well related to growing centres of economic activity. These could include:
• The Role of Housing in the Economy •

• Costs of congestion and commuting (with associated environmental and social costs and eventually economic costs) associated with stretched commuting patterns.

• Costs associated with overcrowding (see Section 9).
8. **Housing’s role as an Asset**

**Line of enquiry**

8.1 The questions addressed in this section are:

- What is the role that individuals’ investment in or ownership of housing assets has on enterprise?
- What is the role of housing wealth to support consumer investment expenditure (e.g. on education)?

**Context**

8.2 Housing is a major component of household wealth and is marked out from other assets by being relatively fungible. That is, the cash value of housing wealth can be realised more easily than other forms of household wealth, since mortgage markets liberalised beginning in 1980. It is still difficult for households to liquidate that part of their wealth which is in pensions or life policies. However, since the 1980s it has been relatively easy for households to take out second mortgages or top-up mortgages against the collateral of accumulated housing equity (i.e. the asset does not need to be sold to access the wealth). However, the ability to access housing wealth in this way is likely to be less straightforward in the future as credit availability remains less easy than before mid-2007.

8.3 This raises the issue of the wider impacts of housing as an asset on the economy. There are a number of potential effects, including the impact of housing wealth:

- in providing access to finance for the purpose of starting or expanding a business (either as direct funding or as collateral)
- on consumption in general
- on the release of housing equity for other household investments, including provision for retirement income or education.

8.4 The impacts of housing as an asset only apply to

- Households and individuals living in owner occupied (or shared ownership houses)
- Individuals who have invested in holiday/second homes or buy-to-let properties.

8.5 The extent of impacts is clearly related to the uneven distribution of housing wealth. As a result of the uneven distribution of housing assets, rising real house prices means that homeowners’ wealth has increased compared to that of non-homeowners. While renting is more appropriate than owning for many, in particular younger or more mobile people, households without housing assets have been disadvantaged compared to home-owners in recent years.
8.6 There are therefore demographic aspects to the impact of housing wealth, including relative
distribution between social classes and age groups, as well as the geographic dispersion of
wealth between different parts of the country.

8.7 There is more evidence on some aspects of this issue than others. The distribution of
housing wealth is well documented, and there is also some fairly recent research on the
relationship between housing wealth and enterprise. Other impacts are relatively under-
researched however.

Review of the Evidence

How important is housing wealth and how is it distributed?

8.8 The 2005 HM Treasury review of housing policy noted that over recent decades, housing has
averaged around 35% of total household sector wealth. It also found that the total stock of
assets had risen significantly, with the net wealth position improving by around 50% since
1997. This large stock of wealth is unevenly distributed. There are different aspects to the
distribution of housing wealth in the UK as follows.

Distribution by socio-economic group

8.9 Housing assets are highly concentrated in the wealthier sections of the population. Research
by Thomas and Dorling (2004) based on data from the early 2000s found that the wealthiest
tenth of households possess over five times the housing wealth of the 10% of households
with least housing wealth. Much of this wealth is concentrated in the southern part of
England.

8.10 The Office of National Statistics Wealth and Assets Survey for the years from 2006 to 2008
provides a similar picture, finding that the wealthiest 10% of households were 2.4 times
wealthier than the second wealthiest 10% and almost 5 times wealthier than the bottom
50%. The wealthiest 10% hold more than 44% of all the wealth (including housing) in the UK.

8.11 The distribution of changes in housing wealth is also highly uneven between different socio-
economic groups. Thomas and Dorling’s research found that those at the top of the housing
ladder have seen their housing wealth increase by over 300% in the last ten years alone,
while those at the bottom of the ladder have accumulated no housing wealth at all. The
research found that:

- Over the previous ten years, housing wealth per child in the best-off 10% of areas had
  increased by 20 times more than that of the worst-off 10%.\(^5\)

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\(^5\) Housing wealth per child is calculated by: dividing the estimated housing wealth for each tenure type, in each area in
2003, by the number of dependent children for that tenure in that area. The resulting figures show the per capita
housing wealth for all children, not just those living in owner-occupied households.
The wealthiest tenth of households by area possessed over five times the housing wealth of the 10% of households with the least wealth.

**Distribution by age-group**

8.12 Housing assets are also very unevenly distributed across generations. Willetts’ (2010) estimates of the distribution of assets by age group show the 45 to 65 year old age group owns £3.5 trillion, compared to £0.9 trillion for the under 45s, and £2.3 trillion for the over 65s. In terms of housing wealth, the over 45s have £1.8 trillion of their own wealth compared to only £0.3 trillion for under 45s.

8.13 While it would be expected that older age groups would have higher levels of assets in general as well as housing assets, having had more time to acquire them, the discrepancies between age groups are much larger than those that would be expected from age alone. In terms of housing wealth per capita for instance, those over the age of 65 hold more than ten times the amount of those under 45, while those in the 45 to 65 age group hold nearly eight times the amount of those under 45.

| Table 8-1: Estimated distribution of UK household assets by age group |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Age Group       | Total (£trillion) | Per capita (£000) | % share by asset class |
|                 | liquid assets    | own housing     | other assets    | Pension          | total            | liquid assets    | own housing     | other assets    | Pension          | total            | liquid assets    | own housing     | other assets    | Pension          | total            |
| under 45        | 0.2              | 0.3             | 0.1             | 0.3              | 0.9              | 5.6             | 8.3             | 2.8             | 8.3              | 25.0             | 13%             | 14%             | 8%              | 17%             | 13%             |
| 45-65           | 1.0              | 1.0             | 0.75            | 0.75             | 3.5              | 64.8            | 64.8            | 48.6            | 48.6             | 226.8            | 63%             | 48%             | 60%             | 42%             | 52%             |
| 65+             | 0.4              | 0.8             | 0.4             | 0.75             | 2.3              | 40.3            | 80.6            | 40.3            | 75.5             | 231.6            | 25%             | 38%             | 32%             | 42%             | 34%             |
| Total           | 1.6              | 2.1             | 1.25            | 1.8              | 6.7              | 64.8            | 80.6            | 40.3            | 75.5             | 226.8            | 24%             | 31%             | 19%             | 27%             | 100%            |

*Source: Willets, D (2010)*

8.14 The proportion of wealth held by older generations also varies by region. Data in Figure 8-1 published by Key Retirement Solutions\(^{56}\) shows that in January 2010 over-65s in the South East owned un-mortgaged property worth £123 billion, compared with £116 billion in the South West. The property wealth owned outright by pensioners represents a potential source of income for the over-65s particularly when other sources of retirement income are under pressure from low interest rates and annuity rates.

\(^{56}\) Key Retirement Solutions’ Pensioner Property Equity Index
Geographic distribution

8.15 Table 8-2 shows the distribution of housing wealth by UK region and country in 1997 and 2007. The table illustrates the national scale of the house price boom, with housing wealth in most regions and countries rising by a similar proportion to the UK as a whole, with the major exception of Northern Ireland which increased at around twice the UK rate. It also illustrates a north – south divide, with the South West, South East and London accounting for 46% of the total in both 1997 and 2007. Similarly, the only regions/countries with above average per capita housing wealth were London and the southern regions of England, and Northern Ireland.

Table 8-2 Distribution of private housing wealth in the UK by region and country

<table>
<thead>
<tr>
<th>Region</th>
<th>Total (£bn)</th>
<th>% Change 97-07</th>
<th>% of UK total</th>
<th>Per capita (£)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>39</td>
<td>122</td>
<td>218%</td>
<td>3%</td>
</tr>
<tr>
<td>East Anglia</td>
<td>114</td>
<td>367</td>
<td>221%</td>
<td>9%</td>
</tr>
<tr>
<td>East Midlands</td>
<td>79</td>
<td>238</td>
<td>201%</td>
<td>6%</td>
</tr>
<tr>
<td>London</td>
<td>219</td>
<td>685</td>
<td>212%</td>
<td>17%</td>
</tr>
<tr>
<td>North West</td>
<td>118</td>
<td>354</td>
<td>199%</td>
<td>9%</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>24</td>
<td>123</td>
<td>404%</td>
<td>2%</td>
</tr>
<tr>
<td>Scotland</td>
<td>87</td>
<td>247</td>
<td>184%</td>
<td>7%</td>
</tr>
<tr>
<td>South East</td>
<td>256</td>
<td>746</td>
<td>192%</td>
<td>20%</td>
</tr>
<tr>
<td>South West</td>
<td>123</td>
<td>397</td>
<td>222%</td>
<td>9%</td>
</tr>
<tr>
<td>Wales</td>
<td>53</td>
<td>171</td>
<td>223%</td>
<td>4%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>108</td>
<td>317</td>
<td>193%</td>
<td>8%</td>
</tr>
<tr>
<td>Yorkshire and The Humber</td>
<td>81</td>
<td>248</td>
<td>207%</td>
<td>6%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>1,301</td>
<td>4,014</td>
<td>209%</td>
<td>100%</td>
</tr>
</tbody>
</table>


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57 Halifax research is based on data from the Halifax’s own house price survey, the Department for Communities and Local Government, the Scottish Executive and the Welsh Assembly. Per capita calculations have been added based on the Office for National Statistics 2006 Sub-national Population Projections for England
Relationship of housing assets and enterprise

8.16 There is an extensive body of literature which provides evidence around the role of housing assets on business creation and funding, although some of the research is now somewhat dated.

8.17 The ownership of housing assets by individuals is an important source of collateral to finance start up businesses in the UK. MacLennan et al (2000) note that UK banks place greater emphasis on collateral in their lending practices than banks in many parts of continental Europe where “relationship banking” is more important. The requirement for collateral reflects information asymmetries, a form of market failure under which lenders require guarantees due to limited information about borrowers’ businesses.

8.18 There is significant evidence in the academic literature that higher levels of housing equity are positively associated with business start-up rates. Based on data from the 1990s, Black et al (1996) found that a 10% rise in the value of unreleased net housing equity increased the number of new VAT registrations by around 5%. Businesses formed in response to increases in the value of housing assets also seemed to be of at least the same quality as other businesses, as measured by survival chances. The paper also found that shortages of collateral are a major constraint on the level of business starts. The authors noted that the banks behaviour in the provision of small business finance seemed then to be closer to that of pawnbrokers than of venture capitalists. While such behaviour might be rational for the bank, a consequence is a large pool of untapped entrepreneurial talent in the UK economy.

8.19 More recently, Disney and Gathergood (2009) found a link, albeit weak, between entry into self-employment and household net worth. Controlling for household characteristics, incomes, educational background and recent labour market experience an increase in net worth of £100,000 is associated with a 27% increase in the probability of entering self-employment. The authors made a significant caveat: the relationship between increasing housing wealth and propensity to enter self-employment is non-linear. In fact it only holds for households at the higher end of the wealth distribution.

8.20 Although there seems to be an established link between housing wealth and business start-up rates, the relationship with access to finance by already established businesses seems to be less relevant. Barlow and Robson (1999) found that a rise in collateral availability has a short-run effect in raising the level of bank lending to unincorporated businesses. The absence of a relationship between the levels of bank lending and housing equity, however, suggests that collateral constraints have not been binding in the long-run. During the period of their study (1982 – 1993) variations in bank lending to unincorporated businesses were largely driven by changes in the demand for bank finance.

8.21 Research by Ashcroft et al (2007) tested for the determinants of new firm formation in UK counties. This found that home ownership continued to be important explanatory factor in rates of new firm foundation in the 1990s, although perhaps less so than in the 1980s. The results of the estimations are presented in the table below.
The table shows that the most important determinant for new firm formation is the principal component coefficient, which consists of factors such as population density (underlining the importance of agglomeration effects), presence of immigrants and share of public sector employment. The proportion of managerial and professional workers in the population and home ownership are also found to be important factors in determining firm formation.

While housing wealth can provide an important source of collateral to underwrite business start-ups, the uneven geographic and generational distribution of housing wealth influences the scope of the effect. DTZ (2006) notes that this may be one of the reasons why business start-up rates are highest in Southern England, where high house prices have given people the opportunity to build up most equity in their homes. This is not the only reason why business start-up rates are high in Southern England however – skills levels in this part of the country are typically higher and may explain some of the difference in levels of enterprise.

Relationship of housing assets and consumption

There is a wide body of research on the impacts of housing wealth and consumption. Aron et al (2010) demonstrate that the level of housing wealth has an important long-term effect on consumption in countries with liberal mortgage credit markets. They find that the housing wealth effect largely works through high collateral values providing better access to credit, thereby raising consumption. The same effects also help to raise investment in small businesses and thereby support higher levels of entrepreneurship, as described below.

Campbell and Cocco (2007) also investigate the response of household consumption to house prices using UK micro data. They estimate the largest effect of house prices on consumption for older homeowners, and the smallest effect, insignificantly different from zero, for younger renters (as would be expected). In addition, they find that regional house prices affect regional consumption growth. Predictable changes in house prices are correlated with predictable changes in consumption, particularly for households that are more likely to be borrowing constrained.

The relationship between rising housing values and consumption suggests there may be some impacts on household investment decisions which would in turn have wider economic consequences. An obvious example would be investment in either adult education such as training courses, or child education, ranging from spending on books, computers and software, sports or music lessons through to private schooling. While press reports during
the economic downturn suggest anecdotal evidence for a decline in such investment (e.g. higher application rates for places in state schools) a review of the literature has not identified any systematic research in this area.

**Housing as a source of retirement income**

8.27 There is some literature on the withdrawal of housing equity to fund consumption in retirement. Hancock (2000) for instance provides some estimates of the extent to which housing equity held by older people could supplement low incomes, or be used to meet the cost of care in old age. This research notes however that there are limits on the potential to supplement low retirement incomes through equity release, and that the opportunity to do so seems likely to be more significant for those on low to moderate, rather than very low incomes.

8.28 This research divides the population into:

- The ‘house rich’ – those with more than £50,000 of housing equity, and the ‘house poor’ – those with less than this value of housing equity.
- The ‘income rich’ – those in the top three income quintiles, and the ‘income poor’, those in the lowest two income quintiles.

8.29 On this basis Hancock suggests that in 2000 there were approximately 2 million individuals aged 65 and over who were ‘income poor’ but ‘house rich’, whose housing equity might therefore help to provide retirement income. However, if a more restrictive definition of ‘income poor’ is adopted, i.e. those in the lowest income quintile, the estimate of those who are ‘income poor’ but ‘house rich’ falls to less than 0.4 million, suggesting much less scope for housing equity to supplement issues of retirement and care.

8.30 Sodha (2005) draws similar conclusions based on analysis of the English Longitudinal Study of Ageing 2002-03. The research found that:

- 4.2% of retired people had an income below 60% of median national income before housing costs, and equivalised housing equity of £100,000.
- 9% of retired individuals in a position to release housing equity would have reduced their benefit entitlements by doing so.

8.31 The research concludes that for those pensioners on low income but with significant housing equity, housing wealth has a significant role to play in increasing living standards. As these are a relatively small proportion of the retired population however, the author cautions against expecting that housing wealth can play a significant role in filling the ‘pensions gap’.

**Other impacts of housing as an asset**

8.32 The National Housing and Planning Advice Unit (NHPAU, 2007) points out home ownership not only provides a place to live, but also provides for a greater sense of comfort, security and affluence. Property can be used as collateral to secure loans, provides rent free accommodation in retirement, and can provide children with an inheritance. It gives people a stake in the community in which they live, which in turn promotes social capital.
The overview of housing policy by HM Treasury and ODPM (2005) highlights research carried out by the Institute of Public Policy Research (2001) which found that that access to financial assets can affect life chances. This is based on analysis of the National Child Development Study, 1958. Those who own or have access to financial assets in their twenties have better outcomes later in life – they spend less time unemployed, enjoy better health, and are less likely to get divorced. This fits with research by Gibbon and Machin (2008) showing how access to good schools, good environment and good transport is priced into local house prices, giving wealthier households and their children better life-chances.

The Treasury report also highlights that homeowners – and their children – may enjoy a greater sense of security and opportunity, and be more willing to invest for the future. Holding housing assets can also have other benefits. For example, property can be used as collateral to secure loans. Owning your own home can also provide a financial hedge against future housing costs, and rent-free accommodation in retirement. Investing in the quality of a home can be a form of saving, by increasing its value.

The IPPR (2001) report also emphasises that financial transfers from parents appear important in allowing people to improve their earning potential and life opportunities, for example through funding of education.

Conclusions and issues

Housing wealth in the UK is clearly unequally distributed. As a result, the benefits of and opportunities from owning housing assets are highly skewed.

The clearest evidence of the economic impact of housing as an asset lies in its role as collateral to finance business start-ups. This favours those in society who have been able to build equity in their houses. The benefit is unevenly distributed across geographical areas, social groups and age groups. In particular the role housing collateral plays would seem to disadvantage younger people, those in cheaper housing areas and from poorer socio-economic backgrounds in starting up businesses requiring bank funding (and collateral).

Given the relationship between rising house prices and consumption, there may also be a relationship between changes in the value of household housing assets and other investments such as education and training. This review has not however identified any research quantifying such effects.

It is important to note that the extent of wider economic impacts from housing assets are likely to be correlated with rising house prices, which have a range of negative economic consequences as outlined elsewhere in this report. To the extent that this is the case, it suggests that positive impacts on issues such as enterprise are a windfall which help offset significant negative economic impacts elsewhere.

The issue of fairness and the likely impact on productivity (as the distribution of housing wealth is unlikely to be well linked to latent entrepreneurial talent) raise several important policy implications about the taxation of housing wealth and UK bank lending practices.
9. **Housing and Poverty**

**Lines of enquiry**

9.1 The questions addressed here are around the role of housing:

- in influencing patterns of poverty and social-mobility, and
- on a wider set of welfare issues including health, employment and crime (that all have economic consequences).

**Context**

9.2 Sub-standard housing has been linked to a range of outcomes including poor health, educational under-achievement, poverty and lack of social mobility. Glossop (2008) for instance cites data from the Families and Children Study in 2005 that shows social tenants face a 6.8% greater risk of experiencing worklessness, poor quality housing, mental health problems and lack of qualifications relative to owner occupiers or private renters.

9.3 This relationship has several different aspects including:

- Low levels of housing mobility within the social housing sector.
- Disincentives to work created by the housing benefits poverty trap.
- The negative impacts on health and educational performance resulting from damp, poorly heated or overcrowded houses.
- The association of poor housing with crime and anti-social behaviour.
- Increasing segregation of people into sink areas in which social problems are concentrated.

9.4 Much of the debate focuses on the social rented sector into which those in greatest need have become concentrated in recent decades. Many of the observed effects also occur in cheaper private rented and also in owner-occupied stock however. While there is consensus on some issues, there is ongoing debate on the extent to which negative outcomes result from sub-standard housing, or instead simply reflect the fact that the people who live in it are poor. A similar debate focuses on the extent to which the concentration of poorer people in particular neighbourhoods does in fact create negative spill-over effects (so-called neighbourhood effects).
Review of the evidence

9.5 There is a broad consensus on the trends towards the concentration of poorer people into specific areas and tenure types in recent decades.

9.6 Economic restructuring and accompanying social and political trends over the last four decades have interacted with housing provision to entrench poverty and social disadvantage in particular locations. As Williams (2009) notes, since the Second World War, private rented housing has been replaced by social housing which has greater rigidities of tenure. With the disappearance of traditional industries, resident populations have been left in social housing in areas from which employment has disappeared. Structural changes in the economy have also reduced the number of low-skilled jobs available in inner city areas generally.

9.7 DTZ (2006) similarly notes that one side effect of right to buy legislation and the falling number of social homes has been that local authorities and housing associations have increasingly had to target only those in greatest need. This has led to increased dominance of social housing by those that are not in work. This has led to a greater concentration of poverty and deprivation in areas with the least attractive and poorest quality social accommodation.

9.8 This concentration of the poorest into social housing is highlighted by Hills (2007) who shows that by 2004-05, 34% of all social tenants were from the poorest fifth of the income distribution. Nearly half of all social housing is now located in the most deprived fifth of neighbourhoods, and this concentration appears to have increased since 1991. Andersen (2002) points out that a lack of investment in housing and infrastructure can lead to higher income groups moving away, further increasing segregation as residential sorting becomes a self-reinforcing process.

9.9 Insufficient supply of social housing has also created waiting lists in many areas, further exacerbating negative impacts on employment by making it difficult to move home to get a job once someone is a social tenant. Hills (2007) also points out that there is much less movement between dwellings than within the private rented sector, and more than 80 % of those living in social housing today were also within the sector ten years ago (if born by then).

9.10 Although trends in the relationship between poverty and housing (and social housing in particular) are widely acknowledged, the causal relationships are subject to ongoing debate. Lupton et al (2009) undertook research based on cohorts of people brought up in social housing born in 1946, 1958, 1970 and 2000. They found increasing associations between childhood housing tenure and later disadvantage but concluded that there was no firm evidence that inherent in social housing tenure that causes disadvantage, but rather that the social housing sector has become more disadvantageous as it become smaller and more targeted on the most in need. They also point out that it is extremely difficult to separate out ‘tenure effects’ from wider bundles of characteristics with which particular tenures are associated, including location, area, cost, quality and status.
9.11 The research found that for those born in 1970s there are a range of negative impacts associated with social housing tenure. However, the authors stress the need to be wary as these relationships might be due to other factors. For instance it is possible that there are significant place effects (where social housing is located in the wrong places for new location of economic activity) or more sophisticated impact of personal factors (people entering social housing often as a result of traumas in their lives). There is currently a lack of research on whether there are differences attributable to social housing as between the large mono-tenure estate or more pepper potted social housing.

**Relationship with employment**

9.12 There is a correlation between the concentration of poorer people into social housing and lower levels of employment and economic output. Hills (2007) indicates that the proportion of social housing tenants in employment fell from 47% to 32% between 1981 and 2006. The evidence does not however prove a direct causal link between tenure and employment.

9.13 Social housing can provide an important aspect of the poverty trap, in which the marginal gains from entering work are reduced to close to zero. Glossop (2008) cites evidence to show that the steep withdrawal of housing benefit once income rises is a major cause of worklessness among people living in social housing. It is important to note that the poverty trap is a function of people having low earning power (and related therefore to lower levels of workplace skills) rather than tenure itself.

9.14 Similarly, Hills’ research also highlights the relationship between social housing and job mobility. As pointed out earlier in Section 6, in 2005-06 just 3% of moves within the social housing sector were job related, even within the same area. In contrast 18% of such moves in the private rented sector were job related. Feinstein et al (2008) however point out that the idea that social housing tenure constrains mobility is contested, and that the strongest argument that can be made on the basis of the available evidence is that some people may be constrained in their mobility by tenure.

**Relationship with health and education outcomes**

9.15 There are a range of studies on the relationship between housing, health and education. Harker (2007) reviewed 100 research studies on the evidence of housing effects on children’s health, learning safety and behaviour. The results found strong evidence of a relationship between poor housing conditions and children’s health, and some evidence that growing up in sub-standard housing affects children’s performance at school. The evidence is complicated, as elsewhere, by difficulties in isolating the impact of housing as opposed to the characteristics of the people living in it.

9.16 MacLennan’s (2008) review of the North American literature found evidence of a strong, negative relationship between both frequent residential mobility and poor housing conditions on one hand and children’s educational performance on the other (but a lack of evidence on the costs of these adverse impacts).
9.17 Marsh et al (2000) found that housing deprivation experienced in childhood is associated with poor health outcomes later in life, even for people who live in better quality housing as adults. Their research found that multiple housing deprivation increased the risk of disability or ill health by 25%. Furthermore, higher levels of deprivation increased the probability of ill health later in life.

9.18 Easterlow et al (2000) found that people with health problems are disproportionately more likely to occupy the least healthy housing stock, which may exacerbate their health problems. Similarly, Hopson and Hunt (1996) find that depression, anxiety and generic psychological distress have been associated with living in unpopular housing areas and high-rise flats. Smith (1990) identifies a number of risk factors for bad health from housing including the degree of individual and neighbourhood deprivation, as well as the presence of multiple domestic hazards and the amount of time spent in the home.

9.19 Pevalin et al (2008) point out, however, that identifying the independent effect of poor housing on health is problematic because of the complexity of potential causal pathways and confounding factors. Nonetheless, they were able to provide robust evidence of a dynamic relationship between housing conditions and health using longitudinal data from the British Household Panel Survey. They find that worsening housing conditions, measured in three domains, are independently associated with deterioration in health, especially the number of reported health problems in women.

**Physical condition of housing and over-crowding**

9.20 There are a number of areas in which there is good evidence on the causal impact of poor housing on health. However, these are related to building condition (dampness and overcrowding for instance) rather than to tenure or location. Pevalin et al’s research for instance was able to highlight some areas in which housing can have a direct causal impact on health, resulting from physical housing conditions, such as hazardous or dysfunctional building materials.

9.21 Similarly Blane et al (2000) conclude that the physical quality of housing is important to respiratory health in areas with a harsh climate and Ayling et al (2001) find that cold houses, costing a lot to heat, contribute to excess winter deaths in the elderly, largely from cardiovascular and respiratory illness, seen more markedly in this country than elsewhere in Europe. Blackman et al (2001) present findings from a study of the effects of neighbourhood renewal on residents’ health. Before the renewal programme, damp and draughts had significant independent effects on respiratory health problems. Draughts and insecure neighbourhoods were associated with mental health problems. Following the renewal work, improvements occurred in both adults’ and children’s mental health, and smoking declined sharply.

9.22 Britten et al (1987) found that overcrowding (greater than two persons per room) at the age of two was one of only four significant explanatory variables in an analysis of respiratory problems in 36-year-old men and women. Rudge and Nicol (2000) also linked mental health problems, such as stress and alcohol/drug problems to poor building design, infestation and noise.
Research by the Office of the Deputy Prime Minister (2004) on the impact of overcrowding on child and adult health, including a clear link with meningitis and some evidence of impact on respiratory problems, tuberculosis and mental health. A number of other studies have linked specific health problems in children with overcrowded accommodation including a study in New Zealand that found the risk of children under eight contracting bacterial meningitis was ten times greater once other factors were taken into account.

Duffy et al (2009) cite data from the 2006/7 Survey of English Housing which suggest that 2.7% of households overall are overcrowded, with the rate varying from 3.2% in the south to 2.0% in the north. London has the highest rate, at 6.0%. A greater proportion of social and private rented stock (5.9% and 5.1% respectively) were overcrowded, though there was also significant overcrowding in owner-occupied housing in terms of absolute numbers (200,000 homes).

**Relationship with crime**

Friedman (2010) notes that the link between housing conditions and crime is less well established than that between housing and health and education. The debate about causation (whether poor housing is a cause of crime or simply an associated factor reflecting wider social ills) is also open.

He cites research by the John Rowntree Foundation (2002) which identified poor housing and disadvantaged neighbourhoods as being risk factors signalling possible future delinquency, criminal and anti-social behaviour. There is a body of research on the relationship between homelessness and criminal behaviour, and also some evidence that decent housing contributes to the prevention of crime. The Social Exclusion Unit (2002) noted that stable and good quality housing can considerably reduce re-offending rates, particularly for those leaving custody.

**Neighbourhood effects**

There is an ongoing debate on whether the concentration of poorer people in particular areas has additional negative spill-over effects. The view that this does occur has underpinned policy measures to create more socially mixed neighbourhoods in the UK and some other countries in recent years. The Greater London Authority’s latest Strategic Plan highlights the intention to “break down the walls of social ghettos by encouraging mixed tenure across all London’s estates” for instance. This is a highly disputed area however.

Silverman et al (2006) discuss a number of possible neighbourhood effects from concentrations of poverty and the assumed benefits of mixed communities as illustrated in Table 9-1.
9.29 The evidence for these effects remains the subject of ongoing debate. Stafford and Marmot (2003) found that collective resources in the neighbourhood (indicated by lower neighbourhood deprivation) are associated with better health. The effect may be larger for poorer people, possibly because they are more dependent on collective resources in the neighbourhood.

9.30 Feinstein et al (2008) found a significant residual effect when controlling for the characteristics of social housing tenants, illustrating the existence of area effects in explaining the disadvantage of particular populations. These can take the form of

- place effects - arising from poor infrastructure and services, lack of transport, and lack of local employment opportunities and
- people effects - relating to the damaging effect of living with a high proportion of other workless people, including limited information about jobs and lack of positive role models.

9.31 However, the authors also note that the case for many suggested neighbourhood effects remains to be tested. They advise caution in assuming that benefits from social networks or peer interactions across mixed communities will in fact appear. They also note that it has not been demonstrated that changing an area from a social housing area to a mixed income or mixed tenure one will remove the effects, rather simply than shifting people with the greatest needs to other areas.

9.32 Cheshire (2007 and 2010) argues that there is in fact scant evidence that making communities more socially mixed improves the life chances of poor people living within them. His work reviews longitudinal research from Canada and the UK which shows that the character of the neighbourhood people lived ten or twenty years previously has no impact on current prosperity. ‘Neighbourhood effects’ simply reflect the concentration of people on low incomes in specific areas. In other words, they reflect economic equality, rather than being a cause of it. Accordingly, tackling poverty is better addressed by redistributing resources from richer to poorer people than by trying to create more socially mixed areas.
Economic implications

9.33 Addressing the negative impacts of poor housing has been at the heart of housing policy since the nineteenth century. Policy has typically been defined in terms of social objectives - the need to provide decent housing to all sections of the population as an essential component of overall welfare. Only recently has housing policy started to focus on economic outcomes. However, in addition to lower overall levels of welfare, the health and poverty impacts may have other economic consequences including:

- Lower levels of participation in the workforce (and productivity of those in work) due to poor workforce health, leading to lower levels of employment and output in the economy as a whole

- The cost of the additional resources required to address housing-related health problems, anti-social behaviour and crime.

9.34 These wider “spillover effects” of housing were well summarised by MacLennan (2008) in his work for Toronto. In discussion with the author he identifies these indirect human capital consequences of patterns of housing as an important, but often neglected, factor.

### Spillover Effects from Housing Choices (in Toronto)

MacLennan points out that endogenous growth models include complex connections, feedback effects from investment, and spillover effects between sectors. At local levels where economic systems are more open, the economy is more “chaotic” or complex than traditional models of economic growth might suggest. The outcomes from housing, tenure, and location choices have spillover effects on growth performance through three main channels:

- The physical size and quality of the homes that individuals live in influence their physical and mental health, space for learning, and other contributors to well-being;
- The neighbourhood context that the household chooses jointly with housing may also influence health, learning, safety, and economic linkages;
- The location of the household affects access to sites for household activity, while the systematic sorting of similar income, age and ethnic groups in urban areas shapes wider metropolitan structures with spillover effects, most obviously the environmental effects of home-to-work travel.

*Source: MacLennan (2008)*

Economic costs

9.35 There is some literature valuing the economic costs of negative impacts from poor housing. This mostly focuses on the value of health benefits that can result from physical improvements in housing conditions. There is less than on the relationship between poor housing and health in general, and considerable variation in some of the findings however.
Work by Davidson et al (2010) estimates the cost to the NHS and to society as a whole from poor housing, defined as housing which fails to meet the statutory minimum standards as assessed by the Housing Health and Safety Rating System. Their research uses data from the English House Condition Survey to illustrate the effects of various scenarios and repair options. It allows all the hazards measured in the Survey to be compared, and identifies repair solutions which provide direct benefit to the NHS through reduced injury rates and treatment costs. This model estimates the total health cost of poor housing in England at more than £600 million per year, and the total cost to society at more than £1.5 billion per year.

Horton (2005) cites national annual estimates of the increased costs associated with those public sector homes considered unfit for habitation at £3 billion due to poor health (plus £1.8 billion due to increased crime and £120 million for the cost of fire services), twice the size of the estimate by Davidson et al.

Howden-Chapman et al (2007) found that insulating existing houses led to a significantly warmer, drier indoor environment and resulted in improved self-rated health, self-reported wheezing, days off school and work, and visits to general practitioners, as well as a trend for fewer hospital admissions for respiratory conditions.

A systematic review by Thomson et al (2001) identified 18 primary intervention studies and found that, while several demonstrated health gains from housing improvements, methodological problems meant that results were not generalisable.

Stockdale (2010) provides some evidence on the relative benefits of housing investment obtained using the Chartered Institute of Health’s Housing Health and Safety Rating System Costs Calculator. While not as robust as other studies, these estimates give an indication of cost benefit ratios.

- Every £1 spent adapting 100,000 homes where a serious fall is otherwise likely to occur saves the NHS £69.37 over 10 years.
- Every £1 spent improving 100,000 homes where residents are likely to require treatment due to excess cold saves the NHS £34.19 over 10 years.
- Every £1 spent dealing with overcrowding in 100,000 homes where it is likely to lead to health problems saves the NHS £6.71 over 10 years.

Conclusions and issues

Although the nature of causal effects is subject to debate in many areas, the academic literature clearly identifies associations between housing, poverty, social mobility and ill health. These will have very significant productivity implications in the longer term by affecting the productivity of adults living in poorer housing and poorer neighbourhoods, but also by the impact on the life chances of their children.
9.42 The findings provide a clear rationale for ongoing intervention to address the problems identified, on the grounds both of general well-being and improved economic competitiveness. Despite a shortage of robust longitudinal research, many studies suggest that housing investment can improve health outcomes, reducing the overall cost of healthcare and freeing resources for investment elsewhere.

9.43 The findings are relevant for the design and prioritisation of housing investment programmes. Areas for intervention include:

- An expansion of social housing in areas most at need of extra housing. This would have the effect of reducing concentrations of poverty and deprivation and reducing the scale of some of the associated effects. An increase in the supply of social housing would also make it easier to move between areas, increasing labour market flexibility.

- Making sure that future social housing developments are not located in the poorest areas environments characterised by poor services and transport connectivity and low employment.

- There is also scope to improve outcomes in existing concentrations of social housing by ensuring that a range of social policy measures are co-ordinated to tackle issues of multiple deprivation. This includes ensuring that regeneration programmes which focus on education and health issues as well as accessibility to centres of employment and other services.

- Reducing poverty trap effects by reducing the steepness of drop-off in housing benefits upon moving into work. There is similarly scope for making council tax less regressive so that the poverty trap implications of council tax benefit are also reduced.

- Taking account of good design principles in the creation of new and improvement of existing housing stock, including urban design of neighbourhoods as well as physical characteristics of housing e.g. improved insulation against cold weather and noise.

9.44 The findings are also relevant in highlighting the mismatch between the ongoing emphasis in national and regional policy and practice in creating mixed communities, and the contested evidence base on which such policies are founded.
10. Housing and Sustainability

Line of enquiry

10.1 This section addresses the role of housing investment in contributing to environmental sustainability.

Context

10.2 The environmental impacts of housing are typically assessed in terms of the externalised costs of production and consumption of housing. That is, costs to society that are not factored into the market prices of goods, except where regulation achieves this through direct measures such as taxes or indirect measures such as environmental construction standards.

10.3 MacLennan (2008) notes that research on housing and the environment generally includes three types of studies:

- Relationships between housing and energy or greenhouse gas emissions.
- Pilot projects on housing types that are more environmentally friendly than conventional housing.
- The impact of housing densities and transport patterns on urban sprawl.

10.4 The first type of study is most relevant to an assessment of the relationship between housing and the economy because of the economic costs of climate change. There are now a number of studies estimating the cost of carbon dioxide and equivalent emissions from housing, and the potential for reducing these through various means. Methods and findings vary however. The second and third types of studies are also relevant, to the extent that they contribute to the debate on the costs of climate change and how to abate them.

10.5 While the true value of the costs from climate change will only become clear over the medium and long term, it is anticipated that they may be catastrophically high. Stern (2006) for instance notes that in worse case scenarios they could equal those associated with the great wars and the economic depression in the first half of the 20th century.

10.6 Different localities and regions are likely to be affected in different ways. There are specific risks to London for instance from river flooding (as areas for water run-off have been developed for housing), and to a significant though lesser extent from sea floods. A combination of river flooding and a storm surge up the Thames would cause extensive damage.
There are other aspects of the relationship between housing and sustainability, such as the impact of housing on biodiversity, where externalised costs are also an issue. However, while there is extensive academic literature on the economic value of biodiversity, this is generally referenced against the impact of development in general, rather than housing in particular.

**Housing and greenhouse emissions**

Housing contributes to greenhouse gas emissions through the energy expended in their construction and ongoing use. Carbon dioxide equivalent units are used as a common measure with which to compare the impacts on the environment of a number of gases.

A substantial increase in the supply of housing in the UK overall and in areas of high housing demand in the south in particular has been a key target for the Government in recent years. Research by Friends of the Earth (2004) analyses the impact of three housing expansion scenarios including those recommended in the Barker Review. The report concluded that Barker’s recommendation, which amounts to 300,000 new dwellings per year being built in southern and central England between 2001 and 2016, would have very significant environmental consequences. The research estimated that in 2015-2016, carbon dioxide associated with construction could represent 5% of all current industry emissions. In the same year, carbon dioxide associated with use of the new dwellings could equal 12% of the total current domestic CO$_2$ emissions. These extra CO$_2$ emissions are identified as the biggest external cost of the plans.

The location of housing in relation to centres of employment, leisure, retail and other services also has implications for the volume of transport-related emissions. Where housing markets fail to meet labour market demands there are negative impacts such as environmentally more damaging commuting patterns. These points are reflected in the Treasury’s 2005 review of housing policy, which underlines the need to improve the environmental performance of buildings and developments during their planning, design, construction and use. Government policies on residential density in new construction and on brownfield development reflect the need to ensure that housing development takes place where it can be adequately supported by infrastructure and public services, including transport links.

**Review of the evidence**

Boardman *et al* (2006) undertook a literature review on the scope for the UK’s housing stock to be built or refurbished to higher environmental standards and also assessed the environmental impact of future housing projections. They draw a number of overall conclusions including the following:
• The housing sector is a difficult area in which to effect change because buildings themselves are long-lasting and expensive.

• Tighter building standards are essential for new build if the environmental impact of housing is to be reduced.

• On current trends, energy consumption and carbon emissions from housing will rise. Current uptake of energy efficiency measures is not sufficient to offset rising demand for housing and energy.

• If no action is taken on the housing stock, total decarbonisation of electricity supplied from the grid would not be sufficient to achieve the UK target of a 60% reduction of CO₂ emissions by 2050, and would not even result in a halving of carbon emissions.

**CO₂ emissions from domestic housing**

10.12 Figure 10-1 presents the scale of contribution of the UK to UK CO₂ emissions\(^\text{58}\). The figure shows that by 2007, residential uses accounted for 91 million tonnes of CO₂, or 26% of all UK emissions. Business and transportation accounted for 35% and 28% respectively. Between 1990 and 2007, total CO₂ emissions fell by 8%. Emissions attributable to residential users declined by 9% since 1990 (equivalent to 9 million tonnes). Those attributable to transport have risen by 9% however.

**Figure 10-1: CO₂ emissions from business, residential, transport sectors 1990 to 2007**

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\(^{58}\) Source: [www.defra.gov.uk/sustainable/government/progress/national/2.htm](http://www.defra.gov.uk/sustainable/government/progress/national/2.htm)
10.13 The social cost of carbon (SCC) set by the Government provides an estimate of the economic cost of CO₂ emissions. The price represents the full global life-time cost of the damage created by a tonne of carbon (or equivalent unit of another greenhouse gas). The SCC signals what society should in theory be willing to pay now, to avoid the future damage caused by additional carbon emissions.

10.14 Boardman et al’s literature review summarised the carbon cost per dwelling in existing and new dwellings as estimated in five studies. Methods varied in each of these studies but produced some interesting comparisons as indicated in Table 10-1.

<table>
<thead>
<tr>
<th>Table 10-1: Estimates of annual carbon cost per dwelling</th>
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<tr>
<td>Existing housing stock – average</td>
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<tr>
<td>Building Research Establishment (2005)</td>
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<tr>
<td>Environmental Change Institute (2005)</td>
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<tr>
<td>New dwellings</td>
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<tr>
<td>Bioregional (2003)</td>
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<tr>
<td>Horton (2005)</td>
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<td>Entec (2004)</td>
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</tbody>
</table>

Source: Boardman, B et al (2006); consultants’ estimates.
Note: SCC have been applied as per the baseline year indicated in the table; SCC for 1996 estimated on trend values for 2000 – 2007.

10.15 Different assumptions on how to account for the cost of carbon were used in each study. Nonetheless, results from four of the five studies are notable for placing the annual costs in the range £22.68 - £29.70. The Environment Agency’s estimate for new build is however nearly 50% lower than the bottom end of the range.

10.16 There is significant variation in energy use between different types of dwelling and therefore in the cost of the emissions they incur. Utley and Shorrock (2009) highlight the fact that domestic energy use is affected by the composition of the building stock in terms of age, type, tenure and regional distribution:
• **Household**: there is a trend towards smaller households, due to reductions in average family size and more single people living alone. While energy consumption is influenced by the number of people in the household, there is a minimum level of consumption related to running a house which is independent of household size.

• **Age of stock**: a number of age related factors influence the energy consumption of a building. Older properties are generally built to lower thermal standards.

• **Tenure**: Owner occupiers are more likely to invest in energy saving measures than those in private rented accommodation. In 2004 95.5% of dwellings with accessible lofts that were owner occupied had loft insulation while only 79.1% of those that were privately rented had loft insulation. Local authorities and registered social landlords have made efforts in recent years to improve their stock and in 2004 93.7% of local authority stock and 94.1% of registered social landlord stock had loft insulation.

• **Type of dwelling**: heat loss varies significantly for different types of dwelling. Detached houses have a greater surface to volume ratio and therefore suffer greater heat loss than other dwellings built to the same standard using the same materials. Detached houses are also likely to have greater floor area than other types of dwelling. Flats have a smaller surface to volume ratio and smaller floor area so have lower levels of heat loss.

• **Housing stock distribution**: Energy consumption will differ for identical houses in different regions because of climatic differences. Houses in Scotland on average require nearly 45% more energy to maintain a given temperature than the same houses in the South West.

10.17 Density of residential development also has an impact on relative levels of emissions. MacLennan (2008) cites a 2006 study by Norman et al from Toronto which showed that low density developments of single-detached dwellings used 1.8 times more energy for building operation than high density apartments.

**Value of reducing emissions in the existing housing stock**

10.18 The literature also includes a range of estimates of the cost savings from reducing emissions. Shorrocks (2003) examined the changes to carbon emissions in the United Kingdom domestic sector between 1970 and 2001, estimating a net reduction of 11.9 million tonnes (MtC) in total. Given that new dwellings only account for a small proportion of the total housing stock, most of this amount relates to reductions in existing housing stock.

10.19 Factors tending to increase the emissions relative to 1970 include:

• the number of households (accounting for 13.7 MtC)
• the level of service being demanded by households (37.0 MtC)

10.20 Factors tending to reduce the emissions relative to 1970 include:

• improved insulation standards (17.6 MtC)
The Role of Housing in the Economy

- improved heating systems (17.1 MtC)
- changes in the nature of electricity generation (14.1 MtC)
- changes in emissions due to the changing fuel mix of the domestic sector (12.1 MtC)
- higher external temperatures (1.7 MtC)

10.21 Based on the SCC of £27 per tonne in 2010, the net effect of increases minus reductions implies savings worth £321 million per year.

10.22 The Department for Trade & Industry’s 2004 Energy White Paper indicated that a reduction of 4-6 million tonnes of carbon per annum could be achieved through greater energy efficiency in our homes, implying an annual cost saving of between £108 and £162 million, around one third to one half the value of Shorrock’s estimates.

Value of reducing CO₂ emissions in new housing

10.23 A report by Entec (2004) for DEFRA on the environmental effects of new housing found that:

- Around 200 million tonnes of CO₂ emissions per year could be avoided if homes were built to ecohomes excellent standard, avoiding costs of the order of £2.9 billion. This is significantly higher value than the Shorrock (2003) and DTI (2004) estimates.

- Achieving this standard could result in savings from waste going to landfill of £19 million per year.

10.24 The Environment Agency (2005) also note that the baseline for energy use in new households is provided by the 2002 revision to the Building Regulations. These achieve significant energy savings compared to the previous (1990) iteration of the Regulations. A typical 3-bedroomed semi-detached house built to 2002 Building Regulations with a gross floor area of 100m² now produces around 0.47 tonnes of carbon emissions per year on average, compared to 1.8 tonnes for an average UK household. Based on the 2010 SCC this would represent a saving of around £36 per dwelling. The research points out however that around a third of new homes still fail to comply with the building regulations.
Other environmental impacts of housing

10.25 Horton (2005) estimated other environmental impacts associated with housing:

- Per capita consumption of water is around 150 litres of water every day. There is a shortage of water in many parts of the UK, so the geographic location of housing is important in terms of the local availability.

- Households produce about 6% of the UK’s total waste annually. It is expected that the number of new homes in the next 20 years would increase municipal waste by almost a third, but landfill space is already running out for existing levels of waste.

10.26 Higher density residential developments may also be associated with higher levels of public transport use and walking, implying not only lower relative levels of greenhouse gases but also other atmospheric pollutants. MacLennan (2008) cites a 2006 study by Filion et al, also from Toronto, which found a positive relationship between density and public transport use and between density and walking. Density however has a weak impact on transportation mode shares. For stronger effects it needs to be accompanied by other factors including proximity to high quality transit services, large concentrations of activities and an environment conducive to walking.

Conclusions and issues

10.27 Housing plays an important external role in two ways: first the buildings themselves as major sources of CO₂ emissions; second the location of housing vis-à-vis work and other transport generators (retail, leisure, education etc).

10.28 The design and materials used in houses have an increasingly important role to play in reducing CO₂ emissions from domestic uses, and the imposition of higher environmental standards is becoming a more formal part of the planning and building process. Estimates of the volume and cost of CO₂ associated with housing vary considerably however.

10.29 Although CO₂ emissions from the residential sector have been falling over the past few decades, future house building will increase the economic costs. The overall costs of climate change will only become clear over time, but are already beginning to be incurred (e.g. the Environment Agency’s multi-billion pound Thames Estuary 2100 project).

10.30 Boardman et al (2007) note that a combination of approaches will be required to deliver low carbon housing. A wide range of measures are been identified in the literature, including, for the current housing stock:

- Retrofitting stock with better insulation e.g. loft insulation, wall cavity fillings, double glazing and installing better quality, more energy efficient heating systems.

- Improving public transport connections to poorly connected residential areas to reduce car usage.

- Demolishing the most energy inefficient homes.
10.31 For future housing stock the following issues are relevant:

- Design and materials used in houses have an increasingly important role to play in reducing carbon dioxide emissions from domestic uses.
- Higher environmental building standards will reduce the economic costs of housing, but need to be enforced.
- The location and connectivity of new housing developments needs to be designed to minimise environmental impacts of commuting and other travel.
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Appendix B Consultees

The following individuals kindly consented to be consulted during the research:

- Glen Bramley, University of Edinburgh and board member of the National Housing and Planning Advice Unit (NHPAU)
- Kate Barker, member of the Monetary Policy Committee, Bank of England (and HCA Board member)
- Peter Bailey, HCA NW Region
- Michael Ball, University of Reading and Head of the CLG Expert Panel on the Housing Market
- Philip Callan, Director Housing Investment & Consultancy, Savills
- Paul Cheshire, LSE and board member of the NHPAU
- John Gleeson, Greater London Authority
- Adam Marshall, British Chamber of Commerce
- John Muellbauer, Nuffield College Oxford
- Steve Nickel, former Chairman of the NHPAU
- Alex Plant, Chief Executive, Cambridge Horizons
- Simon Rubinson, RICS economist
- John Stewart, House Builders Federation
- Rebecca Tunstall, LSE
- Christine Whitehead, Professor of Housing Economics LSE/University of Cambridge
- Peter Williams, current Chairman of NHPAU
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