Housing, Regeneration and Planning

The Scottish Government

What does the literature tell us about the social and economic impact of housing?

Report to the Scottish Government: Communities Analytical Services

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- The Scottish Housing Quality Standard has been important in stimulating economic activity and providing job opportunities for skilled tradesman and those in construction-related work.

- The impacts of new housing investment vary by tenure. Private renting provides a more flexible tenure which can contribute importantly to labour mobility. Investment in social housing can improve people's lives. Investment in owner-occupation has larger employment and consumption impacts.

- The location of new housing is important. The impacts will be greater if it is located close to expanding markets rather than declining ones.

- New house building plays a significant role in supporting city competitiveness by attracting and retaining a skilled workforce.

- The nature of housing tenure in the UK impedes labour mobility. Levels of mobility in social rented and owner-occupied sectors are relatively low. Private renting is also relatively low compared to the USA, where there is a larger private rented sector.

- A large body of research on housing and health show that in general, poor housing condition in terms of overcrowding, poor heat insulation and air quality problems lead to poor self-assessed physical health as well as stress and mental health problem. However, the relationship between poor housing and poor health may reflect an accumulation of problems where poor housing is just one, but not the only, factor that causes health problems.

- An increase in housing investment will not necessarily reduce crime. Increased investment in other social policies, particularly those addressing poverty and unemployment, is more likely to reduce crime but also to protect existing housing investment.

- Mixed communities have been found to reduce the stigma of a neighbourhood by 'thinning' indices of deprivation. However, little evidence has been found to show that residents have improved their economic prospects merely by living in mixed communities.

- Housing regeneration projects help to stabilise neighbourhoods in decline. But housing renewal alone is not enough to secure regeneration, economic strategies for job creation and improving market demand are also necessary.

- In terms of both economic and social aspects of housing, tenants of community housing (housing associations) fare better than public (council) housing tenants.

1. Introduction

The aim of this paper is to provide a review of current literature relevant to the subject of the social and economic impact of housing. The review will form part of a larger review of the links between the Scottish housing sector and the economy more generally.

In this review, we focus on

- Direct economic impacts of investment in housing: GDP, local employment, multiplier effects, housing policy, new construction, impacts of investment in different tenures and the consequences of a fall in new housing supply
- Indirect economic impacts at national, city and household levels; micro and macro impacts of low cost market against public housing; and the opportunity cost of investment
- Social impacts: market failure, links between housing and health, education, crime, regeneration, and mixed communities
- How these impacts vary between housing tenures
- Links between economic and social impacts
- Gaps in knowledge and understanding of the economic and social impacts of housing investment

The review concludes by drawing together the key findings in relation to the following set of questions that the research set out to address:

First order (direct)
Links from housing investment to wider local and national economic impacts (e.g. jobs, local businesses, productivity, economic growth etc.)
How do the impacts vary by tenure sector, looking separately at private sector, the social rented sector and intermediate sector?
How do these impacts compare with spending the same money elsewhere (i.e. opportunity costs)?

Second order (indirect)
Positive short and longer term economic micro and macro impacts and the differences in these derived by tenure (e.g. evidence of better housing leading to better economic position of household, impact on local and national economy, better production for example)
How do these impacts compare with spending the same money elsewhere?
The two-way links between the Scottish housing market more widely and the local and national economy (e.g. wealth effects, equity release and interest rates)

In addition
How do economic micro and macro impacts, direct and indirect, vary with geography of investment? Are there differential impacts from investment in regeneration and pressured areas?
What are the likely potential economic consequences of new housing supply falling foe to the credit crunch and potentially lower spending limits?
How does Scottish housing policy more generally impact on both the local and wider economy?

The links between investment in affordable housing and social benefits such as health, educational attainment (children's life chances),culture etc.
How do these benefits vary by tenure sector, looking separately at private sector, social rented sector and intermediate sector?
Differences in the social benefits derived from lower cost private versus public housing.
How does Scottish housing policy more generally affect social outcomes at both local and national level?

2. Direct economic impacts

Key points

- The construction industry is a significant contributor to the Scottish economy. It contributed around 10% of Scottish GDP in 2009.
- The construction sector employed about 126,900 or 5.4% of the total workforce in September 2009. It also makes a crucial contribution to improving the skills level of the workforce in Scotland.
- The input-out tables for Scotland for 2004 showed that the construction industry had a much larger economic impact on Scottish economy than other industries.
- A fiscal stimulus for additional housing investment in Scotland to combat the effects of the recession has saved private sector jobs and enabled public agencies to retain skills in the construction industry.
- The Scottish Housing Quality Standard has been important in stimulating economic activity and providing job opportunities for skilled tradesman and those in construction-related work.
- The most important impact of additional house building is to improve affordability.
- If new houses are taken up by people moving from less to more desirable housing or areas, there will be no net impact on employment or income.
- Additional dwellings in a local area may induce the formation of additional households; however, these households could be located anywhere in the wider region.
- The impacts of new house building on prices and affordability vary between high growth, high demand and low growth, low demand areas.
- The options to demolish or to refurbish residential stock also vary by type of settlement and type of dwelling. But negative environmental impacts between renovation and rebuilding can be offset.
- The impacts of new housing investment vary by tenure. Private renting provides a more flexible tenure which can contribute importantly to labour mobility. Investment in social housing can improve people's lives. Investment in owner-occupation has larger employment and consumption impacts.
- The location of new housing is important. The impacts will be greater if it is located close to expanding markets rather than declining ones.
- Current housing market instability and macroeconomic uncertainty present an opportunity for policy-makers to support a stronger private rented sector.

2.1 Investment in housing

The first order impacts of housing investment – regeneration, decent homes, repairs and maintenance as well as new construction – vary by tenure, location and timescale.

Taking new construction first, in principle, other things remaining equal, increased investment in new housing supply relative to demand would cause house prices to fall. This would make housing more affordable to people aspiring to buy, and some new households would form because they can now access a separate home. However, as noted in the *Barker Review of Housing Supply* (Barker, 2003, 2004), the new construction story is a long run story, because new construction is only 2% of the total housing stock. This means that the short run impacts on price are virtually zero, as house builders only build what they can

sell at what they have estimated as the going price (Adams, *et al.*, 2009) – they will offer white goods and other incentives before they will reduce prices, and they will allow sites to remain half completed rather than complete and sell at a loss (until they are forced into liquidation in which case the whole site is sold at a loss). Any short to medium term impact is on new household formation, as additional new housing allows new households to form rather than remaining living with parents or sharing with friends (Meen and Andrew, 2008).

There is a different impact if the new homes are used as second homes or holiday lets, for example in rural areas (Communities Scotland, 2005). The loss of rural employment has caused many villages to struggle to maintain local services, and new dwellings would be expected to help support school rolls, etc. But if these are used as second homes there will be no impact on school rolls and the impacts on the viability of local services and facilities will depend on whether holiday visitors spend locally or, if self-catering, bring their provisions with them.

House prices fall in the short run when there is an economic or housing market downturn, not simply because of new supply. The current recession was led by a fairly sudden credit crunch, whereby even those able to afford to purchase could not get mortgages, and developers similarly could not get the short term bank funding that they needed. The impact of falling house prices is that there will be less investment in new housing, and so in the long run house prices will rise again because there will be a shortage of supply.

The repairs and maintenance – and decent homes in the public sector – aspect is more helpful in terms of economic impacts at the local level, supporting jobs and skills over the medium to longer term.

2.1.1 Impact on GDP

The impacts on GDP work through

- investment in housing – including new build, remodelled existing buildings, manufactured components, intermediary fees and repairs and maintenance.
- consumption spending on housing services – including rent, service charges and utility services, and also owners' imputed rent.
- the labour and consumption multiplier effects of housing investment on employment and economic growth.

In Scotland, construction is a significant contributor to the Scottish economy. Despite the ravages of the recession, it employed over 126,000 people and contributed around 10% of Scottish GDP in 2009.[1]

Table 1, taken from the latest report of the *Profile of Scottish Construction Sector*, shows that the total turnover in the Scottish construction sector increased by 59% between 2000 and 2007 (from £9.8 billion to £15.6 billion). In the same period, Scottish construction gross value added (GVA) increased by 65% (from £3.9 billion to £6.4 billion). This was twice the contribution of the agriculture sector and almost three times that of the combined utility services. Its GVA was around 47% of total manufacturing GVA in 2007 (Scottish Government, 2009f).

[1] Extracted from Mr. Levack's (the Chief Executive of the Scottish Building Federation) keynote speech to the 2010 Scottish Construction Conference at (http://scottishbuilding.com/UserFiles/File/Microsoft%20Word%20-%202010%20Scottish%20Construction%20Conference%20January%2028th%202010.pdf).

Table 1 Outputs and employees in the Scottish construction sector, 1998–2007

Year	No. of Business Units	Total Turnover £m	Gross Value Added £m	Total Employees	Gross Value Added Per Employee £
1998	14,200	8,400	3,200	138,000	23,200
1999	14,200	9,500	3,600	132,700	27,000
2000	14,300	9,800	3,900	133,000	29,000
2001	14,100	9,600	3,800	119,100	31,500
2002	14,000	9,900	3,900	119,400	32,700
2003	14,000	11,000	4,400	117,600	37,500
2004	14,200	11,900	4,700	122,500	38,000
2005	15,000	13,300	5,300	129,600	40,600
2006	15,400	14,700	6,000	126,600	47,700
2007	16,300	15,600	6,400	127,300	50,100

Source: Scottish Government (2009f) *Profile of Scottish Construction Sector (SIC45).* (http://www.scotland.gov.uk/Topics/Statistics/16170/Construction). Last update September 2009.

In the construction sector, 97% of businesses were Scottish-owned and accounted for 76% of turnover and 80% of GVA in 2007. By comparison, in manufacturing, only 89% of businesses were Scottish-owned and accounted for only 37% of turnover and 41% of GVA in the sector (Scottish Government, 2009f). Table 2 shows that in 2007, Glasgow City and Edinburgh City together accounted for around 20–25% of the construction sector in terms of turnover (24%) and GVA (20%). These two local authorities together with Aberdeenshire, North Lanarkshire, South Lanarkshire and West Lothian accounted for around half of Scottish construction output.

Table 2 Geographical split: Top 6 local authorities in terms of construction GVA, 2007

Local Authority	No. of Business Units	Total Turnover £m	GVA £m	Total Employees	GVA Per Employee £
Glasgow, City	1,120	2,070	740	15,600	47,600
Edinburgh, City	1,090	1,680	510	9,900	51,200
Aberdeenshire	1,210	940	450	6,800	65,900
North Lanarkshire	950	1,080	440	10,000	43,800
South Lanarkshire	1,020	1,090	430	9,400	46,000
West Lothian	530	730	380	6,100	61,400
Scotland	**16,310**	**15,570**	**6,370**	**127,300**	**50,100**

Source: Scottish Government (2009f) *Profile of Scottish Construction Sector (SIC45).* (http://www.scotland.gov.uk/Topics/Statistics/16170/Construction). Last update September 2009.

2.1.2 Impact on local employment

House building generates substantial local economic activity. It creates construction and housing-related jobs (such as legal services, real estate, housing management, etc.), and service jobs to supply the new residents (education, health, retail, leisure, transport and local government services). In the US, the National Association of Home Builders (NAHB) has developed a model to estimate the economic benefits of the construction activity on the local economy. It estimates that 324 local jobs will be created in building 100 single-family private homes for owner occupation in a typical metropolitan area during the construction stage and 53 jobs when the new homes are occupied. In the case of 100 private rental apartments, the estimates are 122 construction and 32 local jobs, respectively (NAHB, 2009). This suggests that owner occupied family homes have a greater economic impact than smaller rental apartments. The impact probably reflects the way the different types of housing are built and

the consumption spending of the eventual residents – owner occupied households tend to be larger and better off than private renters.

Scotland has the highest employment rate of the four countries in the United Kingdom. The employment rate in Scotland has been steadily increasing since the mid 1990's, reaching a peak of 77.0% during the second calendar quarter of 2007 (Apr-Jun). Scotland has an employment rate of 73.9% for the latest calendar quarter (Jul-Sep 2009; Scottish Government, 2009a). Employment in the construction sector now accounts for slightly over 5% of all employees (Scottish Government, 2009g). The construction sector employed about 152,700 or 7.2% of total workforce in September 1981, and has steadily declined over the years to 5.4% (126,900) in September 2009. However, Munro and Karley (2005, p.10) are cautious about these statistics as they underestimate the importance of the economic activity of the sector in Scotland. This is because self-employment is not included, which is, of course, of particular significance in the construction sector. It is estimated that in the UK one third of all those working in construction are self-employed. What these figures cannot do, though, is to identify the types of construction activity that are specifically tied to housing, nor to identify housing-related employment as a whole.

The construction industry also makes a crucial contribution to improving the skills level of the workforce in Scotland with one third of all Scottish apprentices employed in the construction sector and an additional 15-20% working in associated trades. The Scottish Building Federation reports on its website that the Scottish Building Apprenticeship and Training Council registers 2,800 new apprentices a year, and if the entrants to the electrical and plumbing trades are included, this total is consistently in excess of 4,000, a 42% rise over the last four years – in fact, 45% of all construction apprentices are trained in Scotland. Thus, amongst the total employees in the construction industry, 90% of those employed are skilled professionals (Scottish Building Federation, undated).

2.1.3 Multiplier effects

In addition to job creation, house building generates additional income for existing residents, and additional revenues for local governments. For example, NAHB provides an estimate of a one-year impact that includes both the direct and indirect impact of the construction activity itself, and the impact of local residents who earn money from the construction activity spending part of it within the local area. The estimated one-year local impact of building 100 single-family private homes in a typical metro area in the US includes $21.1 million in local income and $2.2 million in taxes and other revenue for local governments. The equivalent figures for 100 private rental apartments are $7.9 million in local income and $827,000 in taxes and other revenue for local governments (NAHB, 2009). Unfortunately no similar modelling exists for Scotland.

In the UK, Munday, Pickernell and Roberts (2004) used input–output tables to establish the multiplier effect of the construction activities to other sectors of the Welsh economy. Using the same technique, Munro and Karley (2005) calculated the multiplier effects of construction and financial industries to the Scottish economy in 2001. They found that 39% of inputs to the construction sector were drawn from within Scotland (Munro and Karley 2005, Table 13). For the latest set of input-output tables, for 2004, Table 3 presents the industry multipliers for the construction industry in terms of creating demands for other Scottish goods and services and compares these with a selection of other sectors.

Table 3 Multipliers: broader economic effects of the construction, housing-related and non-housing related industries, Scotland, 2004

	Type I multiplier				Type II multiplier			
	Output multiplier	Income multiplier	Employment multiplier	GVA multiplier	Output multiplier	Income multiplier	Employment multiplier	GVA multiplier
Housing-related industries								
Construction	1.59	1.61	1.58	1.62	1.88	1.91	1.93	1.95
Owning & dealing in real estate	1.39	1.54	2.55	1.27	1.59	1.82	3.65	1.43
Letting of dwellings	1.37	5.24	2.85	1.27	1.46	6.19	3.38	1.34
Estate agent activities	1.40	1.38	1.20	1.34	1.72	1.63	1.37	1.61
Non-housing-related industries								
Motor vehicles	1.20	1.22	1.19	1.33	1.40	1.44	1.45	1.71
Retail distribution	1.40	1.28	1.16	1.34	1.73	1.52	1.33	1.63
Hotels, catering & pubs etc.	1.20	1.11	1.07	1.13	1.53	1.31	1.20	1.39
Banking & finance	1.38	1.50	1.54	1.34	1.63	1.77	1.93	1.57
Education	1.22	1.12	1.14	1.16	1.74	1.33	1.42	1.54
Health & veterinary services	1.16	1.10	1.10	1.12	1.62	1.30	1.36	1.46

Notes: Type I multipliers sum together direct and indirect effects. Type II multipliers include direct, indirect and induced effects.
Source: Scottish Government (2009d) Input-Output Tables (http://www.scotland.gov.uk/Topics/Statistics/Browse/Economy/Input-Output/Downloads)

There are basically four types of multipliers: output, employment, income and GVA multipliers.

- Output multipliers measure the ratio of direct and indirect output changes to direct output changes due to a unit increase in final demand.
- Employment multipliers measure total (i.e., direct and indirect) changes in employment due to a unit increase in direct employment (number of full-time equivalent (FTE) jobs).
- Income multipliers measure changes in direct and indirect changes in income (i.e., compensation of employees) due to a change in final demand.
- GVA multipliers measure changes in total (i.e., direct and indirect) changes in GVA as a result of a direct GVA change, due to a unit increase in final demand.

All these multipliers are grouped into two types. Type I multipliers are the combined multiplier impacts of the direct and indirect effects. The direct effects are the direct contribution to the Scottish economy due to an increase in output and employment in the construction industry, as producers react to meet an increase in demand. As these producers increase their output, there will also be an increase in demand on their suppliers and so on down the supply chain of the construction industry; these are the indirect effects. Type II multipliers additionally include the induced effects, the impacts from those directly and indirectly employed in the construction industry using their earnings to buy other goods and services.

According to Table 3, the output multipliers (Type I and Type II) for the construction industry were estimated to be around 2.0 in 2004. This means that for every £1 increase in final demand for construction, an additional £0.88 (Type II) was generated through the supply chain, including through the impact on households' income and expenditure. Similarly, the employment multipliers are interpreted as showing that every extra job generated directly in the construction sector would support a further 0.58 jobs (Type I) directly and indirectly through supply effects, and ultimately an additional 0.93 jobs (Type II) were created in Scotland. The Type 1 GVA multiplier showed that the GVA created per £1 from the additional direct and indirect employment was £0.62 (Type I) to the Scottish economy, and £0.95 (Type II) if the induced additional employment is included.

Official statistics do not disentangle the purely housing-related activity from other activity within the construction and real estate industries. For comparison purpose, Table 3 also presents the multiplier effects of some housing-related and non-housing related industries. Output multipliers (Type I and Type II) for the construction industry in 2004 were, in general, much larger than those for other housing-related and non-housing related industries. The activity in the lettings of dwellings had a bigger impact on income multipliers (Type 1 and Type II) and on employment multipliers (Type I). But, GVA multipliers (Type I and Type II) showed that the overall impact was still the highest for the construction industry. Banking and finance was the only non-housing related industry where all the different multiplier effects were close to those in the construction industry. In contrast, health and veterinary services presented the lowest multiplier effects in terms of output (Type I), income (Type I and Type II) and GVA (Type I).

With limited data availability to obtain an input-output table for Scotland for 2009, the overall results using the 2004 input-output tables confirmed that the construction industry had a much larger economic impact on Scottish economy than other industries. Compared to other housing-related and non-housing related industries, the construction industry exhibited significantly large overall output and GVA multipliers – a unit increase in final demand generating output growth and productivity growth throughout the Scottish economy.

2.1.4 Housing policy

The overall goals of Scottish housing policy include raising the quality of homes, building sustainable communities and ensuring that an affordable home is within everyone's reach. This includes increasing new housing construction as well as improving the quality of the existing stock, both of which impact on employment and incomes locally and nationally. Recent figures show that the number of new government funded affordable homes rose to 7,701 in 2008-09, the highest annual figure since the government introduced its Affordable Housing Investment Programme in 2000. These figures reflect the Scottish Government's decision to accelerate investment in affordable housing which speeded up the supply while at the same time supporting the construction industry in terms of jobs and skills and its impact on the wider economy.

<u>Investment stimulus</u>
Housing policy can be an explicit part of economic policy (Munday, Pickernell and Roberts, 2004, pp.222-223). They argue that for example in the Welsh context, direct and indirect government financial assistance (through grants, loan guarantees, partnerships and council house repair schemes) for housing repairs, tied to conditions of upgrading skills and training levels in construction (possibly through courses supplied through economic development initiatives) would improve both the demand and supply sides of housing construction, and generate economic growth.

In the USA, the Homebuyer tax credit in the Housing and Economic Recovery Act of 2008 was aimed at generating economic effects to stimulate home buying so that

- some housing currently being rented will become owner occupied;
- vacant units on sale will be sold more quickly; and
- new construction will be stimulated.

The new construction will in turn generate income and employment in a range of industries, and tax revenues for national and local governments. The additional home purchase activity will generate fees for legal and financial professionals, and additional spending on new appliances, furnishings and removals.

Shelter Scotland published a paper in early 2009 on the case for a fiscal stimulus for additional housing investment in Scotland (Shelter Scotland, 2009). It noted that in order to combat the effects of the recession, the Scottish Government redistributed some of its spending on housing, bringing forward some investment earmarked for the next year. This has saved private sector jobs and enabled public agencies to retain skills in building that would otherwise have been lost. But unless entirely new funds are found, this action will mean that there will be less money for next year.

In a second paper, *Building Solutions*, Shelter Scotland outlines its ideas about how a sustained programme of housing investment can bring the economy out of recession. Shelter argues that in total, over the three years 2008-11 the amount secured for housing was well below what was needed. The Shelter submission to the Comprehensive Spending Review argued for 10,000 affordable rented homes per annum were needed. An illustrative estimate of what this would cost is given as £650m, just under 2% of the total Scottish budget. Since £450m has already been allocated to affordable housing, the Shelter proposals would cost an additional £200m. In turn this would lever in additional money from private finance: for every £64 of public money spent by a housing association on new rented housing, £36 is brought in through loans from financial institutions, something that does not occur with most other types of public investment, so housing is a good investment in this respect. The paper goes on to argue that such investment would act as a brake on future inflation, it would sustain many jobs and skills in the construction industry and it could help dampen housing market volatility which has had an impact on wider economic volatility in the past.

Scottish Housing Quality Standard

Another important housing policy that can stimulate economic activities is the setting of quality standards, in Scotland the Scottish Housing Quality Standard (SHQS). In 2004, the Scottish Executive took the decision to set a SHQS, which all social housing providers were required to meet by 2015. This is similar to the Decent Homes Standard in England which has recently been expanded to cover private housing. About 64% of dwellings (1,503,000) in Scotland failed the SHQS in 2008, of which 1,115,000 dwellings were in the private sector and 387,000 dwellings were in the social sector. The majority of dwellings that failed the SHQS failed on the energy efficiency criterion because of the more exacting energy efficiency standards (Scottish Government, 2009b). There was also a higher level of 'extensive disrepair': 79% of dwellings in Scotland have some disrepair. Older dwellings are more likely to have some form of disrepair with 90% of those built before 1919 having some disrepair compared with 50% of dwellings built after 1982. Around three quarters (77%) of private sector dwellings have some form of disrepair, compared to 83% of dwellings in the social sector. In just under half of dwellings (48%) with some form of disrepair, that disrepair is urgent. Tackling disrepair in the private sector, supported in part by Repairs and Improvement Grant funding, will provide job opportunities for skilled tradesmen and those in construction-related work. If this type of renovation project is managed over an extended period, there may be opportunities for creating new construction trade skills development processes.

In the social rented sector, with the expansion of Large Scale Voluntary Transfers, more repair and maintenance work is required to bring previous council houses up to the level of the SHQS. Despite the extent of such relatively poor state of the housing stock, the target to meet the SHQS helps to sustain jobs in the construction industry (Munday, Pickernell and Roberts, 2004, p.214). A consequence of such improvement programmes is the provision of warm, well-insulated homes. This can mean that households spend less money on energy consumption and therefore have a higher level of disposable income to spend in the local economy. This in turn can help create and maintain local jobs.

2.2 New construction

2.2.1 Price impacts

The degree to which an increase in new housing supply impacts on average house prices depends on whether house prices are determined by trade within the existing stock or whether the flow of new housing has a direct impact on prices (the 'stock versus flow' issue in the literature). A traditional textbook view is that because new building is such a tiny proportion of the existing stock, it cannot affect market prices directly, and developers are seen as 'price takers' in a competitive industry. However, Bramley (2003) and others argue that only a small proportion of the existing stock is actually traded at any one time, so that new housing coming onto the market can have a direct impact on price. The model used in CLG's (and now NHPAU's) affordability analysis (ODPM, 2005) suggests that both stock and flow effects are significant, but that the long run price is determined by the stock, whereas the speed of adjustment is affected by the flow.

From a housing market point of view, the most important impact of additional house building is to improve affordability. This enables more households to be 'priced back' into the market. The problem in assessing the impact of affordability in the long run is that there is no estimate of how many households would be priced back into the market if affordability is improved.

2.2.2 Population

If people move from their current (inadequate or less desirable) housing into the new housing, there will be no net impact on employment and income. The exception would be if there are important non-linearities, i.e., if people behave differently in terms of consumption, investment and savings, employment and commuting, in the new location compared with their previous location. One example might be if poorer households moved into a more middle class area and began to behave differently, such as spending more on car travel or leisure activities. The evidence from the literature does not provide much basis for believing this, because consumption and investment patterns are determined far more by the type and age of the household than by its location. The only difference might be if incomes rose in the new location, for example, by providing access to better paid employment. This difference is however very important in terms of decisions about where new housing should be located. If individuals can access better paid work by living in the new housing, this would have stronger multiplier effects on the local economy.

2.2.3 Households

It is likely that additional households will form as a result of the additional dwellings, as evidenced by increased housing provision during the 1970s when new household formation rose. Also reduced housing provision in recent years has seen a fall in new household formation, a rise in the average age of leaving the parental home and an increase in sharing. The problem is that the relationship between new household formation and additional housing supply is not clear, although some implications can be drawn from the model developed for ODPM (2005). That model concluded that 100,000 additional dwellings would produce extra 30-35,000 new households at a national and regional scale. However, while 100 additional dwellings would create 30 to 35 new households, these households could be located anywhere in the wider region.

2.2.4 Tenure

The evidence for differences in employment and unemployment in relation to tenure is not strong, although there is some information concerning those on incapacity benefit in the social sector. Certainly those on incapacity benefit are more likely to be living in the social

sector and to have multiple disadvantages including numeracy and literacy problems, no recent work experience and no access to private transport (Ashworth et al, 2001). They also tended to be older and most commonly male. However, these people are not disadvantaged because they live in the social sector; they are in the social sector because of their multiple disadvantages. Nevertheless, much depends on the allocation system and on the extent to which access to a decent home is associated with access to training and/or employment.

2.2.5 Location

A significant amount of the effect on affordability will depend on where the new housing is located, as many of the impacts vary by location. Thus for example, the impacts of investment in an area of relatively low demand will depend on whether the wider region is also low demand, or whether the rest of the region is high demand. When additional housing is provided in a high growth location, making housing more affordable, this can act as a catalyst to further economic growth by removing a constraint on labour supply. To locate new housing in the lower priced parts of the region would make that area more attractive because it would be cheaper so provided there was sufficient suitable transport infrastructure, the impacts would be positive in terms of the existing housing market as well as the new homes themselves. However, the additional jobs created could draw in labour from other areas (and abroad), which would fuel house prices in the locality, thus removing the improvement in affordability there.

There is an important issue over whether different household structures or different housing locations generate different likelihoods of being employed. This is sometimes termed the 'people attributes versus place attributes' question. For example, Tower Hamlets is one of the most deprived boroughs in London, with above average unemployment rates among its residents, yet it contains the Docklands re-development which is booming. Clearly its residents are not being sucked into the expansion of employment which has occurred in the borough. This would suggest that 'people attributes' are more important than 'place attributes'. However, an early study by Ashton and Maguire (1986) of young males in Sunderland and Reading matched for age and educational attainment found that those in Reading had experienced several temporary spells of employment whereas those in Sunderland had been on several training programmes. This suggests that even if on average the place effects are not important, they can clearly be very important to particular individuals.

The implication for investment in housing in Scotland is that it will make a difference to employment probabilities and life-chances of individuals if the new housing is located close to expanding labour markets rather than declining ones. For example, locating new housing within easy access to growth sectors such as high tech (Cambridge) or financial services (City of London) enables those with the right skills to obtain employment or to improve their careers. New housing developments almost anywhere in Surrey also enhance individual's life chances, especially near to Heathrow and Gatwick. Similarly development along the M4 corridor beyond Heathrow has proved successful in generating employment opportunities as well as housing.

However, investment in new and refurbished housing in regeneration schemes can still make a difference to people's lives, provided that there are good transport links to expanding labour markets or a strong job creation programme in the regeneration area itself. In some cases such regeneration can turn whole areas around, although it is always difficult to ensure that the original residents do benefit from this. Thus for example, London's docklands are today recognised as a regenerated area, yet Tower Hamlets where much of the regeneration was located remains one of the most deprived London boroughs with persistent high unemployment. The problem here was mainly one of non-transferable skills so that local people were unable to take advantage of the growth in employment in the financial

services sector. However, one aspect of the successful regeneration was the Docklands Light Railway which attracted employment uses because it enabled people from all over London to take up the new financial services jobs.

In Scotland, the Glasgow Eastern Area Renewal scheme is generally seen as a success although like London Docklands it has not been without criticism. Again a crucial aspect is ensuring that the original residents improve their lives. Early regeneration schemes were criticised for lack of consultation and involvement of the residents and today housing renewal programmes involve much more consultation, sometimes leading to consultation saturation and making it difficult to encourage residents to get involved (e.g. the Bristol case study for the Mixed Communities Demonstration Projects evaluation currently being undertaken by a team from LSE, Cambridge, Warwick and Shared Intelligence). Nevertheless, residents' involvement can lead to different outcomes from those originally proposed. For example, one estate in Newcastle was due for a regeneration package involving whole scale demolition and rebuilding, but about half the residents said they wanted to stay. The rest were moved on, and the failing school and local shops were refurbished along with around half the dwellings, with very successful results. The rest of the land was cleared and sold for private development (unpublished Geography student dissertation, Anglia Ruskin University, 1998).

2.2.6 How impacts vary by location

The model of the impacts of new house building on prices and affordability developed for ODPM as part of their response to the Barker Review (Barker, 2003) showed how the impacts of increased housing supply vary by location (ODPM, 2005). The example used relates to Reading (a high growth, high demand area) and Knowsley (low growth, low demand) but the findings are relevant more widely. In the modelling, the two districts were each allocated a share of new housing pro rata to their share of actual new housing construction in 2001. By chance, the fall in the affordability ratio (which was much higher for Reading) in percentage points was exactly the same. But the reasons were very different.

Table 4 Local effects of the high growth scenario allocated across all regions (differences from baseline, 2016)

	Reading	Knowsley
Affordability (points)	-0.26	-0.26
In-migration (numbers)	1151	59
Out-migration (numbers)	374	85
Net regional migration (numbers)	777	-28
Households (numbers)	3697	224
Completions (numbers, 2007-2016)	4050	791

Source: Based on ODPM (2005) Table 15.

In Reading, the cumulative increase in completions is 4,050 over ten years but the increase in households is only 3,697. Most of the new housing is taken up by migrants, so that affordability only improves by a small amount. In Knowsley the increase in completions has little impact on migration and the net flow is negative. Such a small increase in completions has a very limited impact on affordability. The main difference from Reading is that 70% of the homes would have to be filled by demand from existing residents.

The two examples can be seen as a 'before' and 'after' situation. A low demand area in Scotland would currently be similar to Knowsley, but once the infrastructure and employment has been added, it becomes much closer to Reading. The main driver is migration – the new housing will allow labour to move to where jobs (whether existing or new) can be accessed easily.

Work on what happens to new housing shows that it either goes to new households, or creates vacancies as existing households 'trade up' into the new dwellings (ODPM, 2005). The location of the new dwellings is important – econometric modelling shows that new housing located in the most pressured areas allows new households to form but prices do not fall because people migrate in from lower demand areas. New housing in the lower demand areas causes vacancies to be created in the existing stock. However, if all the new housing is located in the high demand areas, vacancies will still be created in lower demand areas because of the migration impact. These are medium to long run impacts.

2.3 Demolition or renovation/retrofitting

In the past, when deciding whether is it better to retrofit a building as opposed to demolishing and rebuilding it, the focus was on the monetary costs and benefits. But the shift towards sustainable development in developed nations has changed the focus to the environmental impacts of retrofitting compared to rebuilding. Given that new construction can be much more energy efficient than most of the existing building stock, it is questionable whether it would be more beneficial for the environment to retrofit or renovate existing buildings rather than replace them. Through a study of a typical four bedroom detached house in Toronto, Dong, Kennedy and Pressnail (2005) reported that over a 40-year life cycle, the rebuild option has lower life cycle energy, global warming potential and air pollution, which are predominantly associated with the building operation. But the retrofit options have lower water pollution, solid waste generation and weighted resource use, associated with material flows. The retrofit options also have lower life cycle economic costs than rebuilding. Nevertheless, they suggested that there are ways to overcome the trade-off in negative environmental impacts between retrofitting and rebuilding, such as the use of renewable energy sources or the re-use and recycling of deconstruction and demolition materials in new construction.

A recent Masters thesis addressed the options between demolition and refurbishing UK residential tower blocks from an energy use perspective. Livingstone (2008) looked at some recent and ongoing examples of high rise refurbishment contracts in London and Norwich. He used thermal simulation to model energy use and heat losses in tower blocks under a variety of scenarios. Results indicated that the costs of improving energy efficiency can be high because of the access equipment required to carry out works to improve the thermal performance of high rise blocks, paying particular attention to the basics of insulation and double glazing. But the relatively simple form and layout of tower blocks are actually conducive to the fitting of external insulation and double glazing without much practical difficulty. Calculations of embodied energy in demolition, refurbishment and replacement dwellings found that tower blocks can be very energy efficient dwellings when compared with an energy efficient new building. Overall, decisions about refurbishment or demolition will continue to local ones in which local conditions prevail. Town by town, block by block, and house by house, architectural and structural, climatic, economic and social circumstances contribute to these decisions. But it is important today to include an energy performance assessment as part of the decision making process.

2.4 Impacts of investment in different tenures

The impacts examined here have mainly concentrated on the private, owner occupied sector. Information on investment in the private rented sector is limited. The number of Buy to Let mortgages has been increasing at least until 2008 and mortgage lenders remain optimistic that the market will remain buoyant because it is currently low geared – only 19% of the 2.7 million properties are mortgaged (Grandin, 2009). However, the CML statistics suggest that many Buy to Let mortgages were for existing properties rather than solely on

newly built units so that it is not an accurate guide to the size of the sector. Private renting has always provided a more flexible tenure than either owning or renting in the social sector. It thus contributes importantly to labour mobility (Muellbauer and Murphy, 2008).

Other than mortgage loans, it is difficult to establish how much investment in the private rented sector has taken place, whether new build, refurbishment or simple repairs and maintenance. Any property owner can decide to let out their dwelling at any time and the security of tenure for tenants has now become limited to a six month lease. Survey data consistently shows that the private rented sector performs badly in terms of state of repair and unfitness, so investment to address this would create better homes especially at the cheaper end of the market where it would directly help poorer households.

The social rented sector has received considerable investment from government, both directly through grants and indirectly through the use of public sector land. In addition, investment in social housing via a housing association allows private finance to be levered into the sector. The benefits of such investment are mainly social, covered in the next section. The employment creation impacts are similar to those arising from owner occupation – direct employment during construction of new dwellings and refurbishment of existing dwellings, consumption and employment impacts arising from the households that live in the dwellings – but the latter impacts are dampened compared with owner occupation because household incomes are lower, often significantly so.

2.5 The likely/potential economic consequences of the fall in new housing supply

Current housing market instability and macroeconomic uncertainty reflect the links between housing markets and wider economic trends identified in the previous section. This will have important implications for housing delivery and sub-national economic performance, but the precise impact will depend on the strength of the economy in question.

In terms of direct implications, increased market uncertainty and the collapse of liquidity in the credit markets has significantly reduced effective levels of housing demand. Annual housing completions were on an overall upward trend in Scotland, which peaked in 2004-05 at 26,500 completions. However, completions for 2008-09 were 21,400, a decrease of 17% on the previous year. The latest quarter (April-June 2009) shows a 22% decrease on the same quarter in 2008. The number of starts decreased in the latest year, by 26% from 26,900 in 2007-08 to 20,000 in 2008-09. In the latest quarter starts were 55% lower than in the same quarter the previous year (Scottish Government, 2009c). This has resulted in business activity associated with the housing market losing work, most notably in the construction sector, with subsequent employment and share price losses.

The loss of house-building capacity will have long-term implications for the Government's housing growth plans. Declining land prices will also mean that joint ventures (such as local asset backed vehicles) and planning mechanisms (such as Section 106 agreements – otherwise known as section 75 in Scotland – and the proposed Community Infrastructure Levy) will have significantly less utility. Further uncertainty will be placed over infrastructure delivery, which in turn will restrict housing and economic growth – placing particular constraints on high demand areas.

There are reports of builders struggling to sell on existing schemes and delaying work on future development phases, leaving projects incomplete and unsightly gap sites which can further knock economic confidence. Regeneration projects in the initial stages of development and on more marginal, complex development sites – where the risk to the private sector is highest – will be most vulnerable. As a result the Scottish Government has followed the Homes and Communities Agency (HCA) in making additional funds available to

stimulate the housing market and to assist 'stalled' schemes (HCA, 2009). ATLAS, the planning advisory service team dealing with large planning applications, has issued guidance on what local authorities should be doing in the downturn (ATLAS, 2009).

Despite these problems, there are significant opportunities to deliver new housing through the private rented sector – particularly in high-demand areas. Falling property prices will slow the 'buy-to-let' trend, and could encourage developers to adopt a longer-term investment model, raise standards, and diversify supply. Current market conditions present an opportunity for policy-makers to support a stronger private rented sector (Glossop, 2008).

3. Indirect economic impacts

Key points

- There is a strong positive correlation between housing wealth and self-employment.
- Housing is the most valuable asset in UK. The housing wealth effect largely works through the 'credit channel': high collateral values give better access to credit and so raise consumption. However, the housing wealth effect favours older households, who tend to be owners, in contrast to the young, who tend not to be owners.
- New house building plays a significant role in supporting city competitiveness by attracting and retaining a skilled workforce.
- The nature of housing tenure in the UK impedes labour mobility. Levels of mobility in social rented and owner-occupied sectors are relatively low. Private renting is also relatively low compared to the USA, where there is a larger private rented sector.
- It is possible that living in better housing could improve the economic position of the household, but evidence is lacking.
- There are differences between the micro and macro impacts of low cost home ownership (with shallow subsidy) and social housing (with full subsidy). Low cost home ownership tends to help lower-paid working couples and single persons without children to access a better home than they could afford in the private market.
- Housing policies influence the risk of old-age poverty. Although home-owners have a significantly lower risk of being income poor, the poverty-reducing effect of being a home-owner diminishes significantly as the home-ownership rate increases, because there are more low-income homeowners.
- Because inequality in housing wealth is often transmitted into differential access to health, education and transport, a lack of investment in housing will tend to amplify market inequality and social exclusion.

3.1 At the national/macro level

3.1.1 Productivity

Economic prosperity depends both on the productivity of workers and the proportion of the workforce employed. The productivity of workers is also a key determinant of economic prosperity. An economy's productivity performance ultimately underpins its ability to grow. The Government has identified five drivers of productivity growth as follows (DTZ, 2006, p.2):

- Skills
- Investment
- Enterprise
- Innovation
- Competition

Housing wealth (measured by house prices) can provide new business collateral. Gallant, Sturman and Jallab (2007) show spatially a strong positive correlation between housing wealth and self-employment in Tyne & Wear. This also explains why business start-up rates are the highest in Southern England where high house prices have given people the opportunity to build up more equity in their homes (DTZ, 2006). However, there is evidence

that high housing costs are creating problems for a small (but still significant) proportion of private sector businesses: 12% of businesses are experiencing labour shortages and recruitment difficulties due to high housing costs in South East England. The main difficulty is recruiting workers at the lower end of the pay scale.

3.1.2 Housing wealth and consumption

The interaction of housing, housing finance and economic activity has for years been of central importance for understanding the behaviour of the economy. The US sub-prime crisis has refocused attention on the role of credit both in helping to drive house prices and in influencing consumption, which serve as channels transmitting house-price fluctuations to economic activity. In the UK and in the USA what is often called a housing wealth effect is a misnomer: it should really be called the housing collateral effect (Muellbauer and Murphy, 2008, p.2).

Existing literature has demonstrated clearly that, with liberal credit markets, the housing wealth effect largely works through the 'credit channel': high collateral values give better access to credit and so raise consumption (Aron, Muellbauer and Murphy, 2006; Benjamin and Chinloy, 2008). Thus, in 1970 to the mid 1990s, a rapid increase in house prices (green line; Fig. 1) was accompanied by rapid growth of consumption (red line). More recently, house price inflation accelerated but the rate of growth of consumption steadied (although these figures do not yet reflect the impact of the credit crunch and housing market downturn).

Figure 1 Real house prices and household spending, 1975–2007
Source: Bank of England (2008) *Inflation Report* May 2008.
Notes:

(a) House prices are average of Nationwide and Halifax from 1983 onwards. Prior to that the Nationwide measure is used. Real house prices are calculated as the nominal house price measure divided by the consumer expenditure deflator (including non-profit institutions serving households).
(b) Chained-volume measure includes non-profit institutions serving households.

Empirically, Bostic, Gabriel and Painter (2009) assembled a unique matched sample of household data from the Survey of Consumer Finance and the Consumer Expenditure Survey and estimated the consumption effects of housing wealth in UK. They report relatively large housing wealth effects. Among homeowners, the housing wealth elasticities are estimated in the range of .06 over the period of 1989–2001 (compared with .02 for financial wealth)[2]. Similarly, and on the flipside, there is a negative impact when housing wealth falls. For example with respect to real GDP growth, a 10 % decline in housing wealth from 2005 levels translates into a 1 percentage point decline in real GDP growth. Such results indicate the significant economy-wide risks associated with the recent fall in house prices.

Despite the market downturn, detailed figures on the UK's wealth show that the most valuable asset continues to be housing, with a total value of £3,923 billion. This is equivalent to 56% of the nation's wealth, and is down 9% on the previous year. The value of housing stock belonging to the household and non-profit organisations sector was worth £3,693 billion (Office for National Statistics, 2009). However, the housing wealth effect favours older households, who tend to be owners, and away from the young, who tend not to be owners. Campbella and Cocco (2007), using micro-level data from the UK Family Expenditure Survey over the period 1988 to 2000, report a large positive effect of house prices on aggregate consumption for the cohort of older households who are homeowners, and an effect that is close to zero for the cohort of young households who are renters.

There may be a case for enabling those who rent to be able to invest in market housing and so share in some of the housing related wealth (Smith, 2011).

3.2 At the city level

3.2.1 Urban competitiveness

At the city level it has been argued that a sufficient housing supply, underpinned by new housing investment, helps to support a vibrant urban system and contribute to urban competitiveness. In delivering healthy and attractive communities, housing can contribute to the development of a knowledge-based economy and plays a pivotal role in attracting and retaining the most talented and skilled members of the workforce that will be the catalysts of economic growth in the future (Glossop, 2008). Using 1996–2006 housing data from the UK government's Land Registry, Liu (2009) presents spatially the effect of house prices on economic competitiveness within the region of Yorkshire and Humberside. It demonstrates that the competitiveness index increases significantly with a decrease in the price gap between local house prices and the regional average. The marginal increase/decrease in the competitiveness index would be 4 points (when the competitiveness index of UK = 100), if the change in the average local house price is £10,000 (p.6).

An earlier study by Bramley and Morgan (2003) in Central Scotland (Edinburgh and Glasgow) also confirmed the significant role of new house-building in supporting city competitiveness. It is argued that new housing increases the competitiveness of cities in three main ways:

- Ensuring an adequate and responsive supply of housing
- Providing a high quality living environment
- Promoting urban vitality

[2] In other words, an increase in housing wealth of say £100 will tend to increase consumption by £6 compared to £2 for financial wealth.

They found that new housing is particularly important for mobile workers, especially those with higher skills, partly because of its relatively easy purchase process as there is no chain.

3.2.2 Labour mobility

The type, price and quality of housing can have a significant impact on the attractiveness of cities to different types of workers. DTZ (2006) provide a literature review on the relationship between housing and labour mobility. It argues that the nature of housing *tenure* in the UK impedes labour mobility because:

- There is low mobility among tenants in rented accommodation in the social sector.
- Levels of owner occupation are high and rising (where mobility is relatively low).
- Levels of private renting (where mobility is high) are low. Some believe this is an important reason for the low mobility of manual workers in the UK compared to the US, where there is a larger private rented sector.

There is also a negative relationship between regional house prices and migration in Britain, which creates a 'labour mobility trap' characterised by (p.24):

- 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 may be unable to afford to move back.
- Once house prices do start to fall, people become reluctant to move into areas with falling prices, because investment in property seems unwise.
- A downturn in property prices making it difficult to sell also discourages people from moving.

The review suggests that it may be owner occupied housing, rather than social housing that is emerging as the major barrier to labour mobility in the UK, particularly for those in lower level occupations. This is because levels of owner occupation are now so high and lower income households have the highest levels of housing costs as a proportion of their overall incomes.

3.3 At the family/household level

The impacts of new housing on the family include the possibility that living in better housing could lead to a better economic position of the household. For example, a move to an area of expanding employment could enable family members to get a better paid job (or to get a job). This is particularly likely for social tenants, who previously may have lacked a permanent address, causing them difficulty in accessing basic services that others take for granted such as overdraft facilities or even bank accounts.

There is also a possibility that people buying a new or better home might over-stretch themselves, putting their economic position in jeopardy. This is a risk for shared owners, social renters purchasing their home through Right to Buy, and first time buyers generally. It is not known how significant these effects are, although there is some evidence from rural areas to suggest that those with unstable or variable incomes from seasonal employment may be particularly vulnerable (Monk et al, 1999) Certainly housing associations take care to ensure that purchasers of shared ownership properties spend no more than 30% of their income on housing costs (Clarke et al, 2007).

3.4 Differences between micro and macro impacts of low cost market vs. public housing

These differences reflect the difference in the level of subsidy. If a household in need is in the private rented sector, they will receive Local Housing Allowance and income support, the landlord gets a rate of return and makes a market decision – whether or not to let. If the same household is in social housing, they get a rent controlled home and the (social) landlord gets social housing grant, but the household may also need income support and Housing Benefit as well. Value for money of assisting people in the private sector rather than by direct provision depends on whether the government is targeting people in the social sector and maintaining it into perpetuity.

However, if low cost market housing is referring to low cost home ownership, shared ownership, HomeBuy and other forms of low cost home ownership that are defined as part of affordable housing and generally provided publicly, then the question is about differences between provision with full subsidy or with shallow subsidy. The micro impacts will be very similar, in that a household will be housed, although the incomes will differ by tenure and so the consumption multiplier will be higher for the low cost home owners than social tenants. However, social housing allows the poorest households to access decent housing and reduces housing waiting lists, whereas low cost home ownership simply helps lower paid working households to access a better home than they could afford in the private market. Evidence from England (Monk and Whitehead, 2010, forthcoming) shows that the successful applicants to low cost home ownership are couples and single persons without children who are able to live in a better location and enjoy more bedrooms than a social tenant household. If these are what are termed key workers, i.e., public sector employees such as nurses, teachers and police, there is a strong case for providing such housing in order to retain their services in the local area.

Overall, providers would argue that low cost home ownership will pay for itself in the long run, as the housing association benefits from the uplift in house values and receives the value of the other share when the purchaser sells the home.

3.5 Opportunity cost of investment

3.5.1 Pensions

In principle, a house is a house, and housing as an investment is no different from any other kind of investment. The opportunity cost of a Scottish pound spent on housing could be almost anything, but perhaps a sensible comparison might be with spending that pound on pensions. In fact, housing wealth can be converted into additional income, and thus alleviate income poverty among home-owners, especially in later life. Using data from Wave 8 (2001) of the European Community Household Panel (ECHP) study for 10 European Union Member countries (Denmark, Belgium, The Netherlands, France, Austria, Ireland, Italy, Spain, Portugal and Greece), Dewilde and Raeymaeckers (2008) examine how both pension and housing policies influence the risk of old-age poverty for those aged 65 or more years. They found that at the individual level, being a home-owner effectively shielded older people from different forms of poverty: home-owners had a significantly lower risk of being income poor, of being deprived and of being cumulatively deprived. However, the poverty-reducing effect of being a home-owner diminished significantly as the home-ownership rate increased, because as more households own their own home, there are more low-income homeowners. They also found that the policy that most reduced the risks of all types of old-age poverty was the provision of social housing.

It is argued that people use the equity in their house as part of their pension, or at least reduce savings because of their investment in a house (Muellbauer and Murphy, 2008). However, it is found that the take-up of equity release schemes in most European countries is limited. Furthermore, British research has shown that because of the positive association between income and home-ownership, the poverty-reducing potential of these schemes is

limited: older people with the lowest incomes either do not own their own home or the value of their property is too low to secure a loan, and the increase in income is often offset by the loss of means-tested benefits (Hancock, 1998).

3.5.2 Employment creation

Another comparison in terms of opportunity cost might be with spending that same pound on creating employment. There are wider benefits from increasing employment, including potentially reducing the need for social housing from unemployed households who then become employed and are able to access market housing, but also more general benefits from increased tax income to government as well as savings in the costs of welfare benefits, training programmes and other services to unemployed people. However, there are also benefits, including employment creation, from investing in housing. So the opportunity cost of investing in housing as compared with investing in employment creation directly would need to be estimated by measuring the value of the benefits of each investment – a research project in itself.

The value of a pound in the private sector is the basis for private decision making. But in the public sector, it will be a political decision as to whether to spend a public pound. So government needs to make a case for why housing is different from other forms of investment, and this case will involve the social impacts, or benefits, of housing.

3.5.3 Costs of not investing

An alternative way of looking at opportunity cost might be the costs of NOT investing in housing. In this case, public investments on health and education can affect the intergenerational distribution of welfare; but the redistribution from an increase in average house prices is towards the haves from the have-nots. Because access to a clean environment and publicly funded goods, such as transport and education, is reflected in land or house prices, as Muellbauer and Murphy (2008, p.27) explain, inequality of income and wealth is often transmitted into differential access to such goods. Thus, not investing in housing will tend to amplify market inequality and social exclusion.

4. Social Impacts

Key points

- Government intervention in the form of social housing addresses market failure by providing decent homes for poorer households. Direct provision of affordable housing has other benefits, notably as part of creating mixed communities.
- A large body of research on housing and health show that in general, poor housing condition in terms of overcrowding, poor heat insulation and air quality problems lead to poor self-assessed physical health as well as stress and mental health problem. However, the relationship between poor housing and poor health may reflect an accumulation of problems where poor housing is just one, but not the only, factor that causes health problems.
- There is strong evidence to support the relationship between poor housing, run down estates, homelessness and low educational attainment.
- An increase in housing investment will not necessarily reduce crime. Increased investment in other social policies, particularly those addressing poverty and unemployment, is more likely to reduce crime but also to protect existing housing investment.
- Housing regeneration projects help to stabilise neighbourhoods in decline. But housing renewal alone is not enough to secure regeneration, economic strategies for job creation and improving market demand are also necessary.
- Mixed communities have been found to reduce the stigma of a neighbourhood by 'thinning' indices of deprivation. However, little evidence has been found to show that residents have improved their economic prospects merely by living in mixed communities.
- There has been little research that links housing, social networks and employment outcomes, especially in relation to social housing.
- There are significant gaps in knowledge or understanding in relation to the economic and social impacts of housing. This is mainly because of the lack of relevant housing data on the economic impact, and the difficulty to disaggregate other factors in measuring the impacts of housing on health, education and so on.

4.1 Individual under-investment by those on lower incomes

It has been argued that low income individuals tend to under-invest in housing partly because of problems of financing and also uncertainties as to the long term value of the asset. If markets worked perfectly, individuals would have full information about the value housing gives them and as a result the correct level of investment would be achieved at the lowest possible cost. The total quantity of resources would reflect their relative value, and the last pound's worth of resources used for housing would provide the same benefit to society as the last pound spent on food or anything else (Barr, 1998). But there are many reasons why markets do not work well. The case for government intervention is not just about redistribution of income and equity between individuals, but about the efficient use of scarce resources (Le Grand. *et al.*, 1992). Simply giving poorer households more money, so that they can afford adequate housing for themselves, will not produce the amount of housing required (Whitehead, 1998).

Housing is an investment, so many of its benefits are in the distant future and people have to borrow in order to buy it. This brings in issues of finance markets which may not operate efficiently as well as problems of assessment of risk and attitudes to risk. People may not be able to borrow even if the investment is worthwhile (see e.g., Smith and Easterlow, 2004 for evidence of lenders refusing to lend to households with disabilities even though they had sufficient income). People may also be afraid of getting into debt or feel that it is too expensive and they are not sure what they are getting for their money – house prices go down as well as up, and during recessions negative equity, arrears in repayments and repossessions all rise.

Housing is also a very complex good and it can be difficult to work out its value. This is true not just of investing in a house in the first place, but also repairs and improvements. Is it worth replacing the roof now, or later when it will have suffered further damage? People may also have little incentive to maintain their home in good repair when much of the benefit goes to the surrounding neighbourhood – the so-called 'prisoner's dilemma' (Harrison, 1977) which is the problem of making decisions under conditional uncertainty caused by the lack of information about the decisions of those who can affect the outcome (Oxley, 2004, p.76). In these circumstances, coordinated informed decisions are better than uncoordinated uninformed ones. Thus for example individual home owners will not wish to invest in their homes because each thinks that the others won't invest and therefore the value of their property will reflect the poor quality neighbours rather than the value of the investment. But if they all invested, the whole street would improve, with benefits both to themselves and the wider society (ibid).

Equally, as Whitehead (1998) points out, the value of the investment may accrue to the next generation rather than the current owners. These problems mean that leaving decisions to the market is likely to result in under-investment, and where people do invest, this is likely to reflect immediate problems such as a leaking roof rather than longer term benefits.

Individuals may also fail to take into account all of the value to themselves and their families of good quality, well located housing (Whitehead, 1998, p.10). They may not appreciate some of the positive externalities of housing such as benefits to health, children's education and local services. Since these relationships are themselves complex, it is not surprising people may not be able to take them fully into account.

Many of the external benefits of housing relate to the value of investment in housing to the community as a whole rather than just the individual. If well designed housing means less crime that benefits the whole neighbourhood, and if it means better health for the whole community, this reduces the cost of providing health services. Housing is associated with spatial spillovers, whereby the costs and benefits of individual investment decisions spill over onto those not making the decisions. Housing is also extremely important to the built environment, as it accounts for up to 60% of land use in urban areas (Whitehead, 1998). If these wider benefits are undervalued and investment does not take place, the impact will be very large. Housing investment needs to be considered in relation to the costs of failing to invest as well as the benefits of investing.

It is true that in the UK most people aspire to home ownership and will strive to purchase the most expensive housing that they think they can afford, which seems contrary to the arguments above about individual under-investment in housing. However interpreting this aspiration is complex. It may partly be related to:

- the removal of security of tenure (and earlier, controlled rents) from private renting
- the relative tax position of private landlords, making it a less attractive investment compared to other possibilities such as shares

- the rapid increase in house prices, causing individuals to want to 'get a foot on the ladder' before it becomes too expensive, as well as making home ownership an important form of wealth

As a result home ownership has been strongly promoted by government in an attempt to meet aspirations and hence retain popularity. Yet survey data shows that many people say they would like to own their own home if they could afford to, who clearly from their income and employment position have almost no likelihood of ever being able to do so. Indeed, it could be argued that it would be irresponsible to encourage such households to enter home ownership, even on a shared equity or shared ownership basis, as they are highly likely to get into arrears and face repossession, leaving them homeless.

Finally, it is fair to say that society has views about the standard of housing that people should live in, and it is prepared to pay towards this via the tax system. But if society regards certain housing standards as the minimum, whether or not the individual can or wishes to pay, the value of housing investment is not fully reflected in individual decisions (Whitehead, 1991).

4.2 Government intervention

The market failures and inefficiencies discussed above might on their own be good reasons for government intervention in terms of housing investment. There are also distributional, or equity, reasons for doing so. One is that government is not as good at redistributing resources through cash benefits as it is at providing resources directly to ensure that adequate standards are achieved. The second is that the market can be slow in responding to increased demand, so that if people are simply given additional cash all that happens is that prices rise. This is particularly true of housing, where the high rate of house price increase in the years prior to the current recession did not produce anything like the amount of new house building achieved during the 1970s, for example. Providing more housing directly may be more effective, both immediately and in terms of the use of public assets in the long run (Whitehead, 1998). Third, while direct provision has been criticised as paternalistic, there is a case for this, to ensure that everyone has access to the basic necessities of life, not just because of the direct benefits of housing or health services, but to enable them to act as good citizens and participate in society.

The planning system is often argued as having a role in preventing the housing market from responding to increased demand by raising supply (see for example Barker, 2004; Evans and Hartwich, 2005). Planners tend to respond by arguing that while they may alter the location of new development from that preferred by the market, they are not reducing the amount of that development. Central planning policy requires local planning authorities to ensure that at least a five year supply of housing land must be available, allocated in local plans. However, housebuilders constantly argue that this is not the case in practice, as allocated land may be unsuitable, face constraints such as ownership problems, or unviable. The increased use of s106/75 to secure developer contributions, particularly for affordable housing but also for education, health, transport and community facilities, is also argued to be a burden on economic viability and profitability although in principle the cost should be born by the landowner in the form of reduced land values (Monk et al, 2005).

The housebuilders have argued further that s106/75 of itself reduces the land supply by removing a portion of the land that would have been used for market housing and replacing it with social housing (Stewart, 2002; HBF Affordable Housing Group, 2007). They argue that 's106 agreements do not increase total housing supply and so in a general sense do not make housing any more affordable' (page 9). In addition, because affordable housing

demands are not usually applied to non-residential development they distort land values, putting residential schemes at a disadvantage compared to alternative uses of land. Certainly while there is a strong case for intervention in land markets, and most developed countries have some form of land use regulation in place, it would appear that the local nature of the UK planning system creates additional pressures. Planning in the UK is a national policy but it is mediated and implemented at local level. This means there is always opportunity for NIMBYism and local councils can oppose development, particularly affordable housing development. This may be a further element in the UK's low price elasticity of supply.

The case for government intervention to provide additional housing and to invest in improving the quality of the existing stock is based on efficiency, equity and public choice arguments. To be relevant in practice requires an evaluation of the relative strength of these arguments including looking at the evidence on housing and health, education, community and regeneration, as well as the social value of housing and the role of social and intermediate housing in mixed and sustainable communities.

In principle, social housing addresses market failure by providing decent homes for poorer households. However, this market failure could be addressed in other ways: through income support and Housing Benefit. In practice, in Scotland all three approaches are used for the poorest households. Direct provision of good quality housing is considered preferable to taxpayers because income supplements might not be spent on housing. Housing benefits and Local Housing Allowances that can only be spent on housing are more popular, but there are additional costs of ensuring that the housing that is accessed is adequate. Direct provision of affordable housing has other benefits, notably as part of creating mixed communities.

4.3 Housing and health

Lowry (1990), writing from a medical practitioner point of view, agrees that 'it is difficult to prove that housing harms health but if we choose the World Health Organisation's concept of health as a state of emotional and physical wellbeing the effects are obvious. …… Providing more and better housing is a cost effective way of improving people's health'.

Firm Foundations, the 2007 consultation document on the future of housing in Scotland, opens with the statement, 'Our wellbeing, as individuals and families and as a society, depends heavily on our ability to find a decent house that we can afford in a place where we want to live' (Scottish Government, 2007, p.2). This puts housing at the forefront of an agenda that aspires to meet people's basic needs and demands. Indeed, it is taken for granted that without decent housing, people's wellbeing will suffer – no research evidence is required because this seems so obvious and logical to all of us.

There is growing evidence of a relationship between poor housing and poor health. There is also evidence that people often face an accumulation of problems where poor housing is just one, but not the only, factor causing health problems. This makes it difficult to attribute direct causality. The main aspects of housing and health are overcrowding, cold, damp, air quality, stress and mental health and the experience of homelessness. These problems are related to the physical characteristics of housing and its location as well as difficulties of access and affordability. But even where a relationship can be found, it is difficult to ascribe a causal link. Too many other factors are involved, such as poverty, unemployment, poor diet, smoking, and lack of exercise and so on.

The effects of overcrowding, often in temporary accommodation and houses in multiple occupation but also in social housing, are mainly in terms of increases in infectious diseases

(cholera and typhoid epidemics during Victorian times and earlier) and domestic accidents. Thus the risk of death by fire was found to be at least six times higher in bedsits than for adults in self-contained accommodation, although bedsits are gradually being eliminated from the social sector – between 2001 and 2008 the number of bedsits in housing association stock in England fell from 52,000 to 38,700 (RSR, 2001, 2008 – no equivalent data available for Scotland). However the evidence of significant health costs from general overcrowding is not strong and the most important group affected are those in temporary accommodation whose health is worse than average for a number of reasons, especially poverty.

The main sufferers from cold related health problems are older households who are vulnerable through heart attacks, hypothermia and more general ill health. There have been many studies of 'excess winter deaths' that have tried to assess whether housing is responsible in some way. Britain has around 40,000 more deaths in winter than in other months, much higher than most other European countries or Scandinavia despite Britain's comparatively mild winters. A part explanation for this may be that the quality of our housing stock is less thermally efficient than in most other European countries and so provides less protection against the cold. A study published by the Joseph Rowntree Foundation (Wilkinson, *et al.*, 2001) found that much of the excess winter deaths could be attributed to cold. It was greater in older people, but there was a rise in all age groups. The risk of excess winter death varied very little by socio-economic group.

However, the winter excess was greater in people living in poorly heated dwellings and in those dwellings with low energy efficiency ratings. There was also a risk associated with the age of the property. Absence of central heating and dissatisfaction with their heating was also associated with excess winter death. The findings suggested that people in poorly heated homes are more vulnerable to winter deaths than those in well heated homes. More modern dwellings are more energy efficient, and the study concluded that measures to improve thermal efficiency of dwellings and the affordability of heating them would produce substantial public health benefits.

Lowry (1989) summarised the risks as temperature falls as follows:

21° C	Room temperature recommended by the British Geriatrics Society in the winter of 1988
18° C	Parker Morris standard for living rooms; comfort level for most people
16° C	Respiratory problems become more common
13° C	Parker Morris standard for kitchens
12° C	Cardiovascular changes increase the risk of myocardial infarction and stroke
5° C	Significant increase in the risk of hypothermia

Source: Lowry (1989) p.1326.

But cold is not always the outcome of housing conditions and deaths from cold are only the most obvious cost: general ill health and greater dependence on care both generate financial costs and this is likely to affect the elderly in particular. Cold also affects homeless people sleeping rough, and one of the main problems is the price and accessibility of accommodation for homeless rough sleepers (Social Exclusion Unit, 1998a).
Dampness is associated with location – it is higher in Scotland and the North of England – and also with design. Thus for example Easthall, part of the Easterhouse area of north east Glasgow, has had more than its fair share of problems with damp. In 1984 residents set up a Dampness Group which discovered that many of the homes were badly affected. The housing department offered a temporary repair job with fungicidal washes which worked for about three months, or dry lining of the walls, which worked for about a year (Lowry, 1990). Eventually European funding was matched by the council and the blocks have been

refurbished. Damp is linked to respiratory problems although causality is difficult to establish. Self-reporting suggests a stronger relationship than that based on matched groups of households (Carr-Hill, 1997). The fact that people see a relationship has an impact on both the use and value of the housing to the occupier. Condensation and poor ventilation also reduce that value, affecting the benefit of past and potential future investment.

Air quality problems are concentrated in the home but most studies relate to the workplace. Radon is a particular problem for around 75,000 homes in England. More general problems are thought to be associated with gas appliances and central heating, through the relationship between poor internal air quality and asthma and allergies. But the relationships are not all one way – there are also linkages between central heating and cleanliness (lack of dust) and respiratory problems as well as between poor quality housing and health. So the picture is not straightforward.

There has been a large body of research into the links between the built environment, including housing, and physical, mental and social wellbeing. Defra's 2007 Survey of Public Attitudes and Behaviour showed that health was regarded as the second most important issue affecting people's lives in the United Kingdom, and equally the second most important issue for government (Hayward, *et al.*, 2007). The equivalent survey for Scotland (Davidson, *et al.*, 2009) showed very similar results to the Defra study. Satisfaction with life was lowest among people living in a flat, people in social rented accommodation, people in the lowest social groups, those living in the most deprived areas and people living in single adult and single parent households.

Respondents were asked what changes would improve their wellbeing, and here 'improving my health' came second after 'earning/having more money'. Living in a nicer neighbourhood came tenth. Overall, people in Scotland were satisfied with their lives, although levels of satisfaction were lower among particular groups, most notably those living in deprived areas, in social rented housing and single parent and single adult households. It is important, therefore, to look more closely at the relationship between housing and wellbeing, particularly physical health but also mental health and social wellbeing.

Poor housing is seen as related to stress and mental health through a range of factors including physical quality, design, size, sound and heat insulation. But it is also strongly related to socio-economic group and it is difficult to disentangle the effect of poor housing from household attributes such as poverty and employment status. There are also relationships between stress and struggling to maintain home ownership – again based on subjective self assessment (Burrows and Nettleton, 1998).

A Scottish study using information on housing and health in Scotland from the 2002 Scottish House Condition Survey (*Housing and Health in Scotland,* 2002) found small but statistically significant associations between housing and health, but no conclusions could be made about causality.

The study examined four measures of health outcomes: the respiratory health of children; the respiratory health of adults; self-assessed health; and psychosocial wellbeing using the GHQ12, a survey instrument designed to assess potential psychiatric morbidity. At the time of the survey, approximately 27% of Scottish households with at least one child include one or more children with respiratory problems such as asthma. Significant predictors of child respiratory problems included heating usage within the dwelling; respondents' satisfaction with their heating; tenure; and dwelling type. However, central heating, fuel poverty, overcrowding and level of disrepair of the dwelling were not associated with child respiratory health.

The picture for adult respiratory health was similar. In approximately 29% of households at least one adult had respiratory problems. Significant predictors were heating usage; satisfaction with heating; whether someone was home all day; tenure; and dwelling type. Fuel poverty, disrepair, extent of central heating and type of heating were not associated with adult respiratory health.

Self-assessed poor health was similarly associated with tenure, the energy rating of the dwelling, satisfaction with home and satisfaction with the neighbourhood. Disrepair, fuel poverty, fuel type, number of children and overcrowding were not associated with self-assessed health. Approximately 2% of respondents assessed their health as 'very bad'.

Approximately 18% of respondents scored 4 or above on the GHQ12 instrument. Significant predictors were tenure, location (urban or rural), satisfaction with home, satisfaction with neighbourhood and satisfaction with heating. Age, overcrowding, disrepair, fuel poverty, dampness and dwelling type were not associated with GHQ12 scores.

The only significant predictor across all reported health outcomes was tenure, and this remained significant after controlling for income, age and gender. But it was still not possible to infer a causal relationship between tenure and health. Factors that were not included in this study are diet, lifestyle (exercise, stress), genetic predisposition and environment (dust mites, pets). However, relative level of heating usage was found to be important for both adults and children, more so than the presence or extent of central heating.

The most significant relationships appear to be the experience of homelessness and temporary accommodation and health, both physical and mental. Living rough and homelessness in general are associated with problems accessing health care, especially GP services. But even here it is difficult to establish causality. Perhaps the most likely explanation is that they are interactive – people with poor health are likely to live in poor housing or find it difficult to access secure housing at all. Poor housing and accommodation problems worsen health. Finally, poverty and inequality affect both housing and health (Wilkinson, 1999).

Overall, the above literature review confirms the need for more general work on housing and health (including mental and social well-being) in relation to the built environment.

4.4 Housing and education

In the 1960s and 1970s two landmark studies (Coleman, 1966; Jencks, et al., 1972) showed that homes and communities play a larger role in determining educational attainment and life success than schools. This implies that the only way to change educational inequality is to change what happens outside schools (MacBeath, 1997).

Forty years on studies have consistently sought to re-investigate this conclusion and most find the same – school effects on education and life opportunities are somewhere between 7% and 15%, while 85%to 90% of variation between school A and school B, or pupil A and pupil B, are accounted for by external factors. The London Research Centre (1998) confirmed this with clear evidence that there are other very important factors in play that have to do with pupils' backgrounds. Most research focuses on children living in poor quality housing, homelessness, overcrowding and how housing plays an indirect role in magnifying educational inequalities.

Indeed the strongest research concerns the relationship between homelessness and education, through difficulties in finding schools, transferring between schools or in travelling to the old school (Power, *et al.*, 1995) as well as more general problems of overcrowding,

particularly in temporary accommodation. Increased competition in the education sector, such as the emphasis on league tables, is seen as having worsened problems of exclusion and poor performance (Social Exclusion Unit, 1998b).

Perhaps obvious is that where popular schools are oversubscribed, education authorities typically use place of residence as their allocation criterion. This has led wealthier parents to buy homes within the catchment area, pushing up prices, and further excluding children from poorer households from the 'best' schools.

The relationship between poor housing, run down estates and homelessness and low educational attainment and exclusion is clear. The implication for housing investment is to address the issues associated with the most socially excluded estates and to ensure access to adequate housing for all families (Whitehead, 1998).

4.5 Housing, crime and antisocial behaviour

The evidence suggests that areas with high rates of crime are:

- Mixed inner metropolitan areas with poor private rented and owner occupied housing.
- Non-family areas with a mix of affluent homes and private rented housing in multiple occupation.
- The poorest local authority estates, both inner city and peripheral.

Areas of multiple deprivations disproportionately bear the burden of both household and personal crimes.

There has been a considerable amount of literature on 'designing away crime'. This started with Newman (1972) who argued that the build environment could be designed to promote natural surveillance and defensiveness. Coleman (1985) also emphasised the influence of design on offender rates. Bad designs, such as blocks of flats with covered walkways, or 'hidden' areas under stairs or behind walls, were seen as contributing to crime. This was also seen to be the case for the traditional Scottish design of walk up tenement blocks. Indeed, it has been argued that the single greatest mistake in building the outer estates of Glasgow was to reflect what was seen as the vernacular in order to avoid tower blocks which previously had been in ill repute and dangerous (e.g. the Ronan Point disaster). Today, it is more likely to be seen as associated with poor quality construction rather than the nature of tower blocks per se, and similarly some of the older Glasgow tenements that were not demolished have been refurbished and are now popular living places.

Other literature has focused on informal social control shaping behaviour and attitudes towards offending. The absence of Neighbourhood Watch schemes provides opportunities for potential burglars and other criminals (Bottoms, 1984).

So far, the evidences are fairly weak. More fruitful research has focused less on the quality of housing development and more on cycles of decline. The combination of crime and fear of crime has a bad effect on the quality of the residential environment. This encourages people to leave the area, leading to a cycle of decline as the population becomes increasingly unstable. There are four main housing outcomes of this process:

- Crimes such as vandalism influence the rate of decline of the capital assets (housing stock) and gradually erode its value.

- Crime and fear of crime prevent landlords from maximising income. Estates with high crime levels deter potential tenants and lead existing tenants to leave. The result is vacancies, hard to let property and high turnover or 'churn'.
- Crime may impinge on the ability of housing agencies to attract investment into the areas.
- Repairing criminal damage and staff time dealing with crime victims place increased demands and costs on housing agencies.

A useful study of two estates, one refurbished in Paddington, one not refurbished in Stepney, found that crime was significantly higher on the Stepney estate, particularly violent crime against the person, burglary and theft, and public disturbances. The direct costs of dealing with these crimes was estimated at

Stepney	£325 per household per annum
Paddington	£79 per household per annum

However, an increase in housing investment will not necessarily reduce crime. It is too simplistic to attribute crime to buildings. Quality of housing has a weak association with the causes of crime. Increased investment in other social policies, particularly those addressing poverty and unemployment, is more likely to reduce crime but also to protect existing housing investment.

4.6 Housing and regeneration

There is a long history of geographically focused programmes to tackle deprivation in Scotland, and since 1999 regeneration in Scotland has undergone considerable evolution (Adamson 2010). Community regeneration has moved on strategically from the more localised Social Inclusion Partnership Fund, which supported Social Inclusion Partnerships (SIPs) over the period 1999-2005, to the Fairer Scotland Fund allocated to the local authority wide Community Planning Partnerships (CPPs), which themselves work within the framework of the recently introduced Single Outcome Agreements (SOAs). The FSF totals £435 million over the three year period to March 2011 and is being invested by CPPs to progress outcomes linked to assisting people living in poverty, tackling high levels of multiple deprivation concentrated in communities and overcoming barriers to work. CPPs have included how the FSF is contributing to the delivery of outcomes in their SOAs. As planned the ring-fence for FSF funding has been removed for 2010-11 and £145 million rolled-up with the general revenue funding for all 32 local authorities across Scotland. The FSF replaced a range of regeneration and employability funding streams, to allow CPPs more flexibility in utilising the collective power of resources and budgets to integrate services and deliver outcomes. The transition from SIPs to the FSF has seen the spatial scale move from neighbourhood to local authority level.

Earlier evaluation of these area-based regeneration policies has found that among the benefits of regeneration policies for low-income neighbourhoods, there was a strong focus on housing improvements in Scotland (McCormick and Harrop, 2010, p.10). Indeed, most of the benefits were to housing and neighbourhood conditions (e.g. local quality of life) rather than levels of poverty. Similarly, Adamson (2010) makes following observations on some of area-based regeneration policies in Scotland:

> "Considerable progress had been made in regenerating some of the most disadvantaged communities. Although intractable problems remained in some of the large urban estates, there was a very positive appraisal of major changes in key indicators such as the level of crime and substance misuse, compared with the late 1990s. …… A street conversation with a resident of an estate in Edinburgh spoke

very positively of change in the last ten years that had transformed both the quality of the housing and of life on the estate.

In my personal assessment, there has been observable impact on the **atmosphere** of disadvantaged communities in Scotland. In three visits to Scotland I met no one who believed that things had not changed since 1999. The general alleviation of income poverty in Scotland during that period will have had observable impact in many communities; this, coupled with a clear sense of improvement in key quality of life indicators such as crime, community safety and substance misuse, has considerably improved perception at community level. In North Edinburgh, community workers were proud of past achievements in their community. They were looking into the future with plans to develop social enterprises to tackle employment issues in the community and to provide for a sustainable future for their organisation. Similarly in Glasgow, it was felt that young people were less likely to be involved in substance misuse than previous generations. However, there was a general pessimism about community involvement and the ability to influence emerging structures. Interviewees were especially concerned about the future of regeneration and local anti-poverty projects in the context of a non-hypothecated local authority budget.

Landscape changes have also occurred, largely as a result of housing improvement. The continued link between housing and regeneration in Scotland has clearly brought benefits to the physical renewal of communities. Improvements in community and youth facilities were evident in North Edinburgh as were the development of local shops by the City Council. In Glasgow, housing improvement of low-rise accommodation was also evident in the area visited, but the predominance of high-rise dwellings still presented a challenging landscape. The area was also more evidently 'postindustrial', with areas of dereliction and cleared land. Retail-based regeneration was evident in close proximity to the community, but it was difficult to establish the impact on local residents." (pp. 27-28)

Overall, the impact of area-based policies on income poverty is complicated by UK national policies, including the Tax Credit system, the benefit system and the National Minimum Wage. Furthermore, wider economic processes have had a major impact as the labour market responds to economic growth and recession (Adamson, 2010, p.5). Nevertheless, improvements in housing, the physical environment and public spaces have helped to stabilise neighbourhoods in decline.

The evidences on the linkages between housing and other services, and between housing and regeneration, point to the need for more comprehensive approaches to social investment. As well as its direct benefit, additional housing investment can help maintain the viability of the existing stock, have a positive impact on the local economy and increase the value of other infrastructure investment. However, housing renewal alone is not enough to secure regeneration, economic strategies for job creation and improving market demand are also necessary. Successful regeneration depends on effective partnerships and community involvement, and housing is often an important starting point for such involvement.

4.7 Mixed communities and social benefits

More than half of the lowest income group live in the social rented sector; and this reflects the larger size of the sector (a quarter of the total housing stock) in Scotland. Wilcox *et al.*, (2010, p.20) note that the degree of tenure related social polarisation is far less marked in Scotland than in the other three countries – England, Wales and Northern Ireland. Nevertheless, the Scottish Government, like its counterparts in the rest of the UK, has recognised that areas in which there is a concentration of disadvantaged households will have a negative effect on people's life chances. The creation of mixed communities has

become a central objective of housing policy: the aim is to create neighbourhoods that are able to attract and retain households on a wide range of incomes and avoid segregation through providing a range of different housing types and tenures (Glossop, 2008).

Mixed communities have been found to reduce the stigma of a neighbourhood and lead to a reduction in crime, the provision of better services and amenities (supported by a wider range of incomes), increased neighbourhood satisfaction and quality of life (Tunstall and Fenton, 2006). Allen *et al.*'s (2005) study of three mature mixed tenure communities over 20 years reported that mixing tenures had produced 'ordinary' communities and countered tenure prejudice. Despite some deprivation associated with tenants of affordable housing, demand for housing in all tenures and all three localities remained high. The study concluded that some of the claims made for mixed tenure were probably exaggerated, and there was little evidence of transfer of know-how between neighbours or that owner occupiers acted as role models. But many of the children interviewed had friends from different backgrounds and others stressed that they had a broader outlook because of the mix of people they knew at school. This raises the question of whether it is school mixing, rather than simply tenure mixing, that makes the key difference. On the other hand, it is believed that by introducing owner occupation into deprived social housing estates, it would help to 'thin' indices of deprivation. In fact, Bramley and Morgan (2003) have found that new private building in Greater Glasgow has been quite successful at diversifying tenure in some sectors previously dominated by social housing, and hence at shifting middle-income residents into poor areas (p.468; see also Webster and Binns, 2005).

However, little evidence has been found to show that residents have improved their economic prospects merely by living in mixed communities. Using data from the Survey of English Housing, Bramley and Power (2009) examined the relationship between key aspects of urban form, density and housing type, and selected social sustainability outcomes, while taking account of other socio-demographic factors. The study found that more dense (compact) urban forms, and their associated housing types, tend to be associated with somewhat worse outcomes in relation to dissatisfaction with the neighbourhood and perhaps more strongly with the incidence of neighbourhood problems. It also confirms other work showing that neighbourhood concentrations of poverty, and social rented housing, are often more strongly associated with adverse social outcomes than urban form per se. In other words, who lives where within the urban form, and with what resources and choices, may be critical to making urban communities work (p.46).

Cheshire (2007) also finds surprisingly little evidence that living in poor neighbourhoods makes people poorer and erodes their life chances, independently of those factors that contribute to their poverty in the first place. There is evidence from the US that moving people from deprived neighbourhoods to more affluent ones does not improve their economic prospects. His review of the existing evidence strongly suggests that not only does mixing neighbourhoods not effectively help the poor but it also detracts from the welfare of the better-off because it makes it more difficult for them to find neighbourhoods populated by other compatible households with similar tastes and lifestyles (see also Watt's (2009) analysis on middle-class disaffiliation in London's eastern suburbs).

The benefits of social housing are that more poor people will be housed in affordable, good quality housing. However, addressing social mix and social exclusion at the local level by providing a mix of tenures involves a trade-off between housing the poorest households and housing those who are better off and so require fewer subsidies. The implication is that the local implementation of sustainable communities policy probably requires greater resources than simply providing market and social rented housing and hoping that people in the intermediate market are 'priced back in' to the market as affordability improves.

The question of whether tenure mix does actually contribute to reducing social exclusion and increasing social cohesion is inconclusive. It is clear that large council estates have benefited from being broken up into different tenures in a number of well-documented examples. The same is true in America where the HOPE VI programme has been very successful in breaking up some of the most severely distressed public housing estates with measurable impacts on incomes, education and crime. While tenure mix and hence social mix enhances an estate's reputation and desirability as a place to live, there is no real evidence that lack of tenure mix or social mix in other contexts, for example, in gated communities and other enclaves of high and middle income groups, is not sustainable. The main argument for tenure mix in these situations appears to be social justice. There is an argument about reducing racial segregation, but it is not clear how this can be done except by social engineering. It is unlikely to be possible simply through providing mixed tenure developments although these may at least allow the possibility of racial mix in areas where ethnic minorities are in evidence and in need.

Providing social housing in mixed tenure developments also enables greater movement within the system, takes people out of unsatisfactory neighbourhoods (and improves those neighbourhoods) and improves people's life chances. On balance therefore it seems clear that mixed tenure schemes are preferable to single tenure.

Finally, good housing for all is integral to the sustainability of communities over the longer term. Government sets housing standards, both to provide information and as a basis for public spending and policies. Yet space standards of new housing have fallen significantly over the last thirty to forty years. Statutory physical standards for a decent home have improved recently, and lack of amenity has almost been banished but unfitness is still a concern. New standards for safety and energy conservation will take time (and investment) to be achieved.

4.8 Scottish Government policy and housing

The Scottish Government's overall purpose is to focus government and public services on creating a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth. To this end it has 15 National Outcomes or policy goals with 45 national indicators that enable tracking of progress towards these outcomes and delivery of the purpose (Scottish Government, 2010).

Particular National Outcomes (and associated national indicators) most relevant to housing include:

10. Sustainable places
- Increase the rate of new housebuilding
- Increase the percentage of adults who rate their neighbourhood as a good place to live
- Increase the proportion of journeys to work made by public or active transport

11. Communities
- Reduce overall crime victimisation rates by 2 percentage points by 2011
- Increase the percentage of adults who rate their neighbourhood as a good place to live
- Increase positive public perception of the general crime rate in local area

2. Employment opportunities
- Improve the business start-up rate
- Reduce number of working age people with severe literacy and numeracy problems

6. Healthier lives

- Decrease the proportion of individuals living in poverty
- Increase the average score of adults on the WE Mental Wellbeing Scale by 2011
- Increase healthy life expectancy at birth in the most deprived areas
- Increase the percentage of people aged 65 and over with high levels of care needs who are cared for at home
- Increase the proportion of adults making one or more visits to the outdoors per week

Building new homes to higher standards and implementing quality standards to existing homes will go a long way towards achieving some of these outcomes. Others require specific investment initiatives e.g. increasing the proportion of older people who are cared for in their own homes. Encouraging adults to visit the outdoors regularly will be easier if new housing is designed with attractive, accessible outdoor places while specific investment in transport facilities may be required to encourage those in existing neighbourhoods that lack outdoor spaces.

5. Links between economic and social impacts

Key points

- Economic and social impacts are linked although the links are not well covered in the existing literature.
- Potential links include those between housing and social networks, and social networks and employment, and housing and social capital.
- Home ownership provides wider benefits to the community not just to the individual household.
- However the benefits of home ownership are greater, the lower the income of the home owners.
- But it is not clear whether this is a function of the type of home or the nature of the locality.
- In terms of both economic and social aspects of housing, tenants of community housing (housing associations) fare better than public (council) housing tenants.

The economic and social impacts of housing work closely together. There is a body of literature that explores the relationship between social networks and employment outcomes, and a separate literature on the relationship between housing and social networks (which is largely concerned with homeowners). However, there has been little research that links all three aspects, especially in relation to social housing. It is a general belief that because of their relatively low socioeconomic status, social tenants have a low level of social capital, in terms of social trust, norms and networks that people can draw on to solve common problems (Harper, 2001). Communities with strong social capital, where residents know neighbours' names and look out for local children, have lower crime rates. Areas with high social capital are less violent, both in terms of street fights and homicide rates (Bowling, *et al.*, 2006).

There is a large literature on the potential benefits of home ownership most of which focuses on external benefits to the wider community. It is argued that home owners are more responsible citizens and that because they own (some of) the equity in their house they are keen to maintain its value, thereby contributing to the local community in some way. A review produced for the Clinton administration by the Department of Housing and Urban Development (HUD) looked at the literature on home ownership and personal wellbeing, neighbourhood stability and economic growth and concluded that 'although research on some key points remains inconclusive, the preponderance of the existing scholarship confirms the validity of many of the benefits popularly attributed to home ownership. It is a key source of individual wealth and national prosperity. Overall, home owners seem to be more contented with their own lives and more likely to participate in the life of their neighbourhood' (HUD, 1995).

However the same review found that the benefits of home ownership were greatest for households who currently have least access to it. Ethnic minority groups obtain a greater share of personal wealth from owning than whites. Home ownership seems to make a particularly significant difference to the physical condition of low income neighbourhoods, and perhaps in the lives of low income children as well. Therefore the review concluded that the American government could make a real difference in people's lives by improving access to owner occupation.

Rossi and Weber (1996) found that there were strong equity grounds for providing assistance towards home ownership, but they conclude that whether there are significant

benefits to home owners themselves or to the wider society is problematic. . Looking at differences between owners and renters as recorded in national US surveys, they find that for many factors such as greater community participation or lower child drop out rates, it is difficult to determine whether this is because of the tenure or because of the locality. Asking questions to a sample of households about how they value the many attributes of the house and the locality, including tenure, seemed to show that it was the type of house, not the tenure, that was important. Home ownership may be popular in America because the type of dwelling typically offered for sale is more attractive than the type available to rent (see also Shlay, 1985).

Ziersch and Arthurson's (2005) study in metropolitan Adelaide, South Australiais found that, overall, those in community housing (equivalent to housing association in UK's content) appeared to fare better, in terms of employment-conducive networks, than those in public housing (UK's council housing). This provides a starting point for further research to examine the way in which housing tenure may affect social network formation, and considering the ways that these networks can impact on job attainment.

6. Gaps

Key points

- There is a lack of research relating particularly to Scotland.
- The 2004 input output tables for Scotland need updating.
- There is a lack of data on the housing impacts as opposed to construction as a whole.
- Independent research showing employment and consumption multipliers is needed.
- Better city-level statistics would be useful.
- Modelling of the supply response to house prices in Scotland is a gap.
- Similarly there is a gap in terms of the costs of demolition/rebuild versus refurbishment.
- There is little information about housing investment and productivity growth.
- On social impacts, research using objective measures of improved health would be useful.
- Because the intermediate market is so small there is a lack of information about its impacts on shared owners and more widely.
- There is a need for research on the links between economic and social impacts of housing investment.

Most of the literature and the examples are not about Scotland, so this is an important gap, although the UK and international findings are often applicable to the Scottish case.

The lack of relevant housing data on the economic impacts is a gap. The available data relate to all construction, so we cannot assess the actual impact of housing on the economy, employment, etc. Nor can we distinguish between all the different aspects of housing investment in the input-output tables – repairs, professional fees, etc. The most recent input-output tables for Scotland relate to 2004, so they are already quite dated.

Most of the work on the economic impacts of housing as opposed to construction has been conducted by or for the house builders who have a strong vested interest in demonstrating large impacts. There is a need for independent research in this area.

Also, economic impacts vary between pressured areas and low demand areas, e.g. Edinburgh and Glasgow. There is a need for more city-level statistics to assess the local impacts, etc.

We still do not know exactly why the supply response to price increases is so weak in the UK compared to other countries. If it had been more elastic, it might have had a more positive impact on the economy. There does not seem to be an equivalent model of Scotland to Meen and others' model of the housing and labour markets undertaken for the Barker Review of Housing Supply. Bramley and others' work on Scotland has been mainly about housing need.

There has been no recent study on the costs of demolition/rebuild compared with refurbishment and how these might vary between types of area (pressured/less pressured, inner/outer city etc.).

There is little information about housing investment and productivity apart from the general point that timber frame housing is more efficient than other methods. But even so, recent work by Adams and Leishman (2009) shows that housebuilders will only build as fast as they can sell, so on large schemes the opportunity for productivity savings tends to be wasted.

Flats are different since they have to be built all at once regardless of sales rates, but builders prefer to sell ‘off-plan’ and will spend considerable resources promoting their schemes in order to maximize advance sales.

For the social impacts, existing literature has highlighted the difficulties in measuring the impacts of housing on health, education and so on, where causality is a problem (and for health, where self assessment may be biased). Research that was able to use more objective measures would be useful.

Because of the relatively small size of the low cost homeownership (LCHO) sector (including shared equity and shared ownership), there is little research to assess how this type of housing affects low-income homeowners economically and socially. Recent research by CCHPR (2008) has explored the effects of current economic downturn on LCHO buyers. More follow-up research is required to assess the long-term economic and social impacts of this particular group of homeowners.

Finally, there is a need for further research to look at the links between the economic and social impacts of new housing.

7. Conclusions

Key points

- Investment in housing has major impacts on the national economy, economic growth, employment, income and skills.
- New build investment has a national impact while investment in repairs and maintenance has a more local effect.
- The lack of responsiveness of housing supply to increased house prices has created affordability problems for many, while at the same time increasing the gap between those who share in housing wealth and those who do not.
- There are important differences in labour mobility between tenures. Private renting is the most flexible yet compared to other countries the private rented sector in the UK is very small.
- A lack of investment in housing (by government) will tend to exacerbate existing inequalities and increase social exclusion.
- Housing wealth can provide collateral for new businesses. Housing wealth favours older households who are more likely to be home owners and works against younger and poorer households who are likely to rent.
- The location of housing investment is extremely important in terms of whether the area is one of high or lower demand.
- New homes located in or near growth areas can act as a catalyst for further growth by removing a constraint on labour supply. It can also make a difference to individual life chances if new housing is located close to expanding labour markets rather than declining ones.
- Regeneration can also make a difference provided there are good transport links to expanding labour markets or a strong job creation programme within the regeneration area.
- Investment in public housing benefits the poorest households by directly providing decent homes at controlled (affordable) rents, whereas investment (by government) in the private sector involves housing benefits and a market choice made by the landlord. Value for money depends on whether government wishes to target the social sector and whether standards are sufficiently high in the private sector.
- Falling supply in the market sector will create a loss of skills and capacity for future recovery. It will make s106/75 (England/Scotland) unviable and spending cuts will reduce affordable housing further. However, opportunities for housing associations to buy cheap land from house builders could mitigate this effect.
- There is also an impact on new household formation, as new supply enables households to form.
- Housing policy contributes to economic growth (or mitigates decline) both directly, through a housing stimulus package and indirectly via grants, loan guarantees and council house repairs. Quality standards also stimulate economic activity that would not otherwise have taken place.
- Direct provision of affordable housing addresses market failure by providing decent homes for poorer households. It also contributes to mixed communities.
- There are links between poor housing and poor health, lack of educational attainment, and crime. However, increased investment will not necessarily address these outcomes, as they have multiple causes of which only one is poor housing.
- Scottish housing policy aims to increase the amount of new housebuilding and improve the quality of existing homes. Its mixed communities policy reduces the stigma of a neighbourhood by averaging out indices of deprivation. There is little evidence that residents have improved their economic prospects by living in mixed communities.

What are the first order (direct) impacts of housing investment (both new build and repairs and maintenance) on employment, local businesses, productivity and economic growth?

Investment in housing has major impacts on the national economy, economic growth, employment, income and skills. The key impacts are amplified via the multiplier. New housing construction supports employment in the building industry with further consumption multiplier effects, plus employment and consumption impacts from the residents once the housing is completed. Investment in repairs and maintenance has more local multiplier effects. Employment is created both in public services (education, health) and through local businesses (private services, leisure). Both new build and repairs and maintenance support a supply chain, again creating employment and income. The impact of housing investment on productivity, however, is not clear. New construction contributed around 10% of Scottish GDP in 2009 and has contributed more in boom years. It is difficult to separate out the contribution of housing, whether new build or repairs, from construction as a whole.

There is a serious lack of responsiveness of new housing supply to house price increases. This is thought to be related to the operation of the planning system. The resulting under supply has created affordability problems for many and at the same time increased the gap between those who share in housing wealth and those who do not.

How do they vary by tenure?

The tenure differences relate mainly to the incomes of the residents. Thus to generalise, owner occupiers tend to be better off than private or social tenants and can therefore spend more on consumption, contributing to local multiplier impacts. The construction multipliers vary by dwelling type (detached houses, apartment blocks) rather than by tenure. There are large differences in labour mobility between tenures, which are important because the lack of a mobile labour supply that can move to areas with growth sectors acts as a constraint on that growth. Private renting is the most flexible tenure and social renting the least. Yet the private rented sector is relatively small compared with other countries especially parts of Europe.

What are the opportunity costs of new housing investment?

These depend on what alternative investment might have been made. One area is pensions, whereby home owners may be using their housing wealth to supplement an otherwise inadequate pension. But the evidence suggests low take up of equity release schemes where these exist. Another comparison in terms of opportunity cost is employment creation, so that if the money spent on housing (by government) were spent on job creation instead, this would enable more people to access market housing and reduce the need for social housing.

An alternative way of looking at opportunity cost is the cost of not investing in housing. Investment in alternatives such as health and education tend to benefit the haves rather than the have-nots. Because access to these benefits are reflected in house prices, inequality of income and wealth is transmitted through differential access to education, health etc. So not investing in housing will tend to exacerbate inequality and social exclusion.

What are the links between the Scottish housing market and the local and national economy – such as wealth effects, equity release and interest rates?

Housing wealth can provide collateral for new businesses. Research reports large wealth effects, but also sizeable reverse wealth effects reflecting the high risks associated with volatility of house prices. However the housing wealth effect favours older households who

are more likely to be home owners and works against younger households who are likely to rent.

How do these impacts vary with the location of the investment?

Location is extremely important in terms of whether the area is one of high or low demand. When additional housing is provided in a high growth area, over the longer term an improvement in affordability can act as a catalyst to further economic growth by removing a constraint on labour supply. But within a growth region, locating new housing in the lower priced parts of the region would make that area more attractive because it would be cheaper for both businesses and residents. However, additional jobs created could draw in labour from outside the area if the local residents lacked the relevant skills.

There is debate about 'people versus place'. For example Tower Hamlets includes Docklands with booming financial services yet local residents remain unemployed, suggesting people attributes are more important than those of place. However an early study of young males showed that those in booming areas did better, matched for age and skills, than those in depressed areas. So even if on average the place effects are not significant, they can be very important to particular individuals. The implication for Scotland Is that it will make a difference to individual employment probabilities and life chances if new housing is located close to expanding labour markets rather than declining ones.

Despite this, investment in regeneration areas can also make a difference to people's lives provided there are good transport links to expanding labour markets or a strong job creation programme within the regeneration area.

What are the positive micro and macro second order impacts of new housing investment and how do they vary by tenure?

New housing plays a significant role in supporting city competitiveness by attracting and retaining skilled labour. However, there are tenure differences in labour mobility. The private rented sector offers the most flexibility yet compared to other countries this sector is small in the UK.

What are the differences between lower cost market housing and public housing?

If the cheaper end of the private rented sector is considered as low cost market housing, then if a household in housing need is housed there they will receive Local Housing Allowance and income support, while the landlord gets a rate of return and makes a market decision whether or not to invest. If the same household is in social housing they get a rent controlled home and the social landlord gets the housing grant. The household may need income support and housing benefit as well. Value for money of housing people in the private sector rather than the public sector depends on whether or not the government is targeting the social sector and maintaining it in perpetuity. It also depends on whether housing quality in the private rented sector is satisfactory, and achieving this may require regulation.

If the low cost market housing is low cost home ownership such as HomeBuy, then the question is about differences between full and shallow subsidy. The micro impacts will be similar, but social housing allows the poorest households to access decent housing and reduces waiting lists, whereas low cost home ownership assists lower paid working households to access a better home than they could afford on the market without subsidy. If such households are key workers, there is a strong case for providing such housing in order to retain them in the local area.

What are the impacts of falling supply due to the credit crunch and lower spending limits?

The immediate impacts of falling supply are uncertainty and lack of confidence. All business activity related to new housing have been losing work, with subsequent employment and share price losses. This loss of housebuilding capacity will have long term implications for government housing growth plans. Falling land prices will make affordable housing through s106/75 unviable and public spending cuts will reduce directly produced affordable housing. In view of these impacts the Scottish Government has followed the HCA in making additional funds available to stimulate the housing market and assist stalled schemes. In the previous recession affordable housing output increased both because of additional subsidy and because housing associations were able to buy cheap land from house builders.

Falling housing supply also impacts on household formation. New housing allows households to form, so a lack of supply will reduce household formation, and young people will remain living with family or sharing with friends for longer.

How does Scottish housing policy impact on both the local and wider economy?

Housing policy can contribute explicitly to economic growth whether directly by housing stimulus packages (such as those in Scotland, England and the USA) or indirectly via grants, loan guarantees, partnerships and council house repairs, especially if the government assistance is tied to conditions on upgrading skills and employing local people.

The Scottish Housing Quality Standard also stimulates economic activity that would not otherwise have taken place.

What are the links between investment in affordable housing and social benefits such as health, crime and educational attainment?

Direct provision of affordable housing addresses market failure by providing decent homes for poorer households. It also has wider benefits such as contributing to mixed communities.

In terms of health, there is a large body of research suggesting that poor housing conditions such as overcrowding lead to poor health outcomes as measured by self-assessment. However the relationship between poor housing and poor health may reflect a range of factors of which housing is just one.

The relationship between housing and education is stronger, particularly between poor housing, run down estates, and homelessness.

However, increased housing investment will not necessarily reduce crime. This is better addressed by other social policies such as those addressing poverty and unemployment.

Housing regeneration helps to stabilise neighbourhoods in decline, but successful regeneration also requires economic strategies to improve employment opportunities and stimulate market demand.

How does Scottish housing policy impact on social outcomes at local and national level?

Scottish housing policy aims both to increase the amount of new housebuilding and to improve the quality of existing dwellings. Its mixed communities policy is associated with new development and regeneration projects where opportunities arise to rebalance neighbourhoods. There is considerable stigma associated with large social housing estates

which quickly get a bad reputation associated with high levels of perceived crime. There is evidence that mixed communities reduces the stigma of a neighbourhood by averaging out indices of deprivation. However, there is little evidence to suggest that residents have improved their economic prospects by living in mixed communities.

What are the links between the economic and social impacts of new housing investment?

While there is a lack of information on these links, there is a literature on social capital, and on the relationship between housing and social networks and between social networks and employment outcomes. These are largely related to owner occupation. In mixed communities there is little evidence that mixing tenure is associated with social mixing, nor that so-called demonstration effects from wealthier to poorer households have any impact.

What are the gaps in knowledge and understanding of these issues?

The main gap is in literature relating to Scotland. There are also data gaps such as detailed information on the housing sector as opposed to the construction sector as a whole. The 2004 input output tables need updating.

There is a need for research into health outcomes using an objective rather than subjective measure of health.

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