Urban land re-use and the challenges for the UK private housebuilding sector.

Nikos Karadimitriou
Bartlett School of Planning, University College London
Wates House, 22 Gordon Street, WC1H OQB, London.
e-mail: n.karadimitriou@ucl.ac.uk


Summary. This paper presents the main arguments and some first preliminary results of a PhD thesis examining the process of urban brownfield land re-use in London. It summarises some basic housebuilding trends and tries to place them within the wider context of housing provision in the UK with the help of a brief review of the theoretical background of the thesis. It hypothesises that recent changes in British urban policy, related to the types of land and types of development desired, will have significant effects to the structure of housing provision and production in the UK. Some indications of those changes are already visible, particularly in London. Finally, the paper concludes with the future topics that the research will cover.

1. Introduction

Recent changes in UK urban policy, affecting the type of land that comes forward for housebuilding and the way it is released are probably going to cause significant structural changes in the housebuilding industry. After the introduction, this paper examines some of the consequences of the current state of affairs in UK housing markets. Section three briefly presents the theoretical background underpinning the ensuing analysis of those changes while section four goes into the details of the new policy environment. Section five maps out the spatial characteristics of the current ‘structure of housing provision’ whereas the uniqueness of the case of London and the first indications of the industry’s response are presented in section six. They are followed by the future areas of research in section seven.

2. The implications of the current state of affairs.

Currently, the UK housing market as a whole and London in particular, are characterised by rampant price inflation to which, however, the supply side remains almost totally unresponsive. The social and economic consequences of the current imbalance in the housing markets are far-reaching. To name just a few: new households are finding it increasingly difficult to enter homeownership, huge amounts of income and capital are transferred from new buyers and renters to sellers and landlords,
labour mobility and recruitment is obstructed and households get false perceptions of their wealth from the rapid appreciation of their property assets. There are dangers ahead for the housebuilding industry’s long term prosperity as well.

As things stand today, the major source of revenue for housebuilders is land speculation (Barlow & Duncan, 1994). For many housebuilders, market share growth comes through mergers and acquisitions, in a market where output remains relatively static. There are limited incentives for the industry to base its profitability on efficiency and productivity gains in its actual production process. Should the selling price inflationary process reduce its pace, housebuilders will be faced with rapid decline in their profits. This day may come sooner rather than later, as older land bought at lower prices is developed and will have to be replaced by new, higher priced plots.

Building on brownfield may be a mixed blessing but it may be the only way out of the current crisis. Vacant or derelict land may be cheaper to buy in some cases but then it usually requires significant preparation costs. Even without that extra cost, there is at the moment great uncertainty around issues such as the profitability and marketability of the final product (usually flats), not to mention any future liabilities concerning decontamination (or the lack of it). Making a swift change from greenfields to brownfields would therefore be easier for an industry which would be more capital intensive and would base its profitability on efficiency and productivity gains. Costs could come down as know-how from land acquisition to construction would develop while prices and market shares could go up if the marketing skills were there.

3. Theoretical background.

Impinging on the current analysis are ideas, concepts and principles borrowed from evolutionary and institutional theorising about economic change. Evolutionary approaches take differences and variations in behaviour as a given. Innovations constantly “introduce new varieties of behaviour into the nexus of existing competitive relations” (Metcalfe, 1998: 7). According to the same author, an evolutionary approach “is concerned with explaining how the relative importance of specified entities changes over time” (ibid:22). This explanation is based on the principles of variation (with respect to characteristics held to be significant in the selection process), heredity (existence of mechanisms that ensure intergenerational continuity) and selection (certain entities are better adapted to the prevailing conditions and hence increase in significance relative to less well-adapted entities of the same population). These ideas echo in literature on competitive strategies and competitive advantage of industries, especially in Michael Porter’s writings (Porter, 1980, 1985, 1998). Porter asserts that the only way for a business to perform better than its rivals is to “establish a difference that it can preserve” (Porter, 1998:40). He therefore concludes that “Competitive strategy is about being different. It means deliberately choosing a different set of activities to deliver a unique mix of value” (ibid:45).

It follows that the only way which would allow for a new ‘structure of housing provision and production’ (as explained in the following paragraphs) to become commonplace would be for some companies to view it as a good basis on which to establish difference, a cornerstone of their competitive strategy. The new structures will become more widespread, through imitation or selection, only if they are indeed offering a competitive advantage to the business units that adopt them.
To analyse the housebuilding industry and the housebuilding process in those terms, it is important to look both at the macro (the whole industry or wider) and the micro (the business unit or individual development) scale. The tools to be used are qualitative as well as quantitative. Quantitative aspects include the analysis of macro trends and the structural changes of the sector. Qualitative aspects include the examination of different company strategies and the use of an institutional framework of the UK market housing provision and production, drawing on the work of Healey (1992), Ball (1998a,b) and Gruneberg & Ive (2000). The last authors place the housebuilding process into the wider social context using a ‘structures of provision’ approach to identify and describe the basic constituents of the system.

Ive & Gruneberg also recognise they have borrowed from Ball the notion that the ‘structures of provision’ approach “constitutes a methodology” that refers to a “network of relationships” as they are “embodied within institutions” (Ball, 1998b:129). On the other hand, they also recognise that their ‘structures of provision’ of land, knowledge, money and labour and the overarching ‘legal and political system’ are very similar if not identical to the ‘material resources’ and ‘rules’ which are key features of Healey’s structure/agency approach (Healey, 1992) but also quite close to Ball’s inputs into the housebuilding process (Ball, 1983:20).

With the help of that framework it is possible to bring many different aspects of the housebuilding process together in order to examine, following an evolutionary rationale, whether it is indeed the case that there are significant differences between a greenfield and a brownfield structure of housing provision and production in the UK. The idea is that as the competitive environment of the housebuilding industry changes (with significant regulatory changes affecting the structure of land provision) new business units will emerge, whose strategies are better adapted to this new environment.

These business units should be increasing their relative presence and the types of product they are producing should affect the composition and possibly the size of total output. London is the region where the policy environment now beginning to apply to the UK has been in operation for quite a while. It is therefore reasonable to assume that examining London will give us useful insights into the type of changes that will affect the whole of the UK shortly.

Figure 1: An outline of the Social System of Housing Provision.
4. Housing provision and the changing policy environment.

Growth of the housing stock in the UK during the past decades has mostly come through greenfield market housing, built by private housebuilders for owner occupation. This is a heritage of the pre-war period, when urban growth was left unchecked and resulted in ever-expanding conurbations with huge suburban areas. This ‘structure of provision’ is still today characterised by low densities, a trend rooted in the well-documented ‘idyllisation’ of rural living which, however, is self-defeating within a widespread suburbanisation context (see for example Ball, 1983).

This particular set of markets, firms, individuals, regulations and technical relationships (Gruneberg & Ivey, 2000) now singularly dominates housebuilding activity in the UK since the production of social housing has been marginalised. One should place this structure within the context of long-pursued containment policies, which have created an effective growth boundary around most major UK conurbations, certainly around London. Whatever its other causes may be, post-war counter-urbanisation can also be viewed from the perspective of an adaptation of the system of production of housing to a new policy environment, namely Containment. Thus the basic spatial premises of the ‘structure of provision and production’ remained unchanged, greenfield development continued to dominate but the geographical configuration of development changed, leading to ‘overspill’.

The main characteristic of the latest shift in UK Government urban policy, is a revived emphasis on city revitalisation. Two major components that drive the quest for an ‘urban renaissance’ are: i) the increase of the amount of houses built on brownfield land as a percentage of total housing production and ii) the reduction of the amount of land converted from greenfield to residential. These major pillars are not officially put in such explicit terms, however, what is explicitly stated is a target of building 60% of the total yearly housing production on previously re-used land by 2005.

It would not only be a failure if the target of 60% is not reached. Reaching the target while housing output is declining would be at least a partial failure since it would mean that what the government is achieving is to choke greenfield development off without finding a replacement, thus exacerbating the housing shortage problem. It would mean that instead of a transformation of the housebuilding sector we are witnessing its decline. On the other hand, a reduction in land intake with a simultaneous increase in housing output would be a success but it would require, by definition, a substantial rise of densities and subsequently a change in the type of dwellings produced towards medium density flats.

These relatively recent changes in policy put great strain on the ‘greenfield structure of provision and production’. New ways of financing, new skills, new land acquisition techniques, new products and new marketing tools need to be developed by the housebuilding industry in order for it to respond successfully. An equally heavy burden is put on the planning system to adjust to the requirement for higher densities, mixed uses and land use intensification and to take advantage of the opportunities that appear. This would probably mean acceptance of higher density standards, less provisions for the car, flexible land designation & release and alternative ways to safeguard amenity outside the private sphere.
5. The ‘greenfield structure of housing provision’

This section draws heavily from the work of Ball (1983) and Gruneberg and Ive (2000). They broadly distinguish between a “speculative”/“owner-occupied” structure providing for the private owner-occupier market and a “contract” one for the social housing sector. They recognise as main actors of the “speculative” structure the owner-occupiers, the volume housebuilders, the labour-only subcontractors and the banks and building societies.

As we have mentioned previously a very important spatial characteristic of the post-war private housing production has been greenfield development at low densities. The Land Use Change Statistics (ODPM, 2002a; ODPM, 2003) show that for the period 1985-2002 half or more of the land that changed into residential use each year was previously in rural use or, even worse from a conservationist point of view, was an ‘urban greenfield’. There is a steady but slow trend towards proportionately more land re-use (Chart 1) and a slight increase in densities (Chart 3) but nothing that would indicate a fundamental shift.

The good news is that the percentage of the area of previously developed vacant and derelict land used for new housing in urban areas has increased from 18% (903 ha) of the land used for that purpose in 1991 to 24% (1013 ha) in 2001. Furthermore, the total amount of land changing into residential use has dropped almost 20%, from 5020 ha to 4020 ha during the same period, which mostly, but not exclusively, reflects a drop in rural and urban greenfield use. However, the amount of re-used previously developed land for housing is actually declining in absolute figures, from 2209 ha in 1985 to 2152 ha in 2001 (see Chart 2), although it is increasing as a percentage because of an overall drop in land intake for housing.
Despite the slow change, the available data indicate that housebuilding in the UK still is a process with an expansionary character, geared towards building in new, undeveloped land. It appears that the recent policy measures have put pressure on the supply of greenfield land (Chart 2) but probably at the expense of total housing output. The slightly higher densities were not able to compensate for the loss of land inflow into the production process and the subsequent reduction in output.

This has led some researchers (i.e. Cheshire and Sheppard, 1995, 2000, 2001; Evans, 1988,1991,1996), to propose that the cause of most housing market ills, like the drop in total private housing output, declining amenity standards and specifications and price inflation, is the declining supply of good, cheap greenfield land. There has been some evidence (Bramley, 1993a, 1993b, 1996;
Brueckner, 1990) countering the view that the solution would be to relax containment restrictions. The effects on prices, they claim, would be minimal whereas the main effect would be on house types.

It appears that the decline of the social housing sector is also very important in explaining today’s housing shortages. During the early 1980s it was anticipated that the private sector would actually be able to compensate for the eliminated social housing sector. What happened instead was that the output of the private sector rose briefly but then subsided to a roughly stable level during the 1990s. It looks plausible to argue (Chart 4) that much of the shortfall in output could also be attributed to the decline of the social housing sector and not only, or inherently, to the deficiencies of the private housebuilders.

![Chart 4: Permanent dwellings completed, England 1946-2001](chart.png)

Source: ODPM, 2002b

We could claim that, today, the system of housing provision is once more going through an ‘adaptation’ phase. With total housing production steady or dropping and land intake following a downwards trend it seems that the target of the Government for 60% of new homes to be built on brownfield land has been achieved with dubious effects on housing output. Most housebuilding firms are now faced with a requirement to significantly change their strategies and to develop new know-how in very short periods of time. It is only natural that some will not or can not do so. However, there are signs that some firms have adapted and are now experiencing unprecedented market growth where the market environment is favourable. The most characteristic such market is London.

6. The case of London

The unique exception to the prevailing structure of provision and production, as far as type of land used and type of output is concerned, is London. In London, most housing is built on land that was previously developed albeit not necessarily vacant or derelict. The following chart shows this extreme difference between London and the rest of England.
Not only are significantly more dwellings built on previously used land in London (between 80-90%), they are also built in denser developments (average 1997-2002 is 52 dw/ha in London as opposed to 25 dw/ha in England) and almost 58% of them are flats as opposed to 17% for the UK. This data is indicative of a significant divergence between London and the rest of England as far as the type of dwellings that are produced is concerned. The two variables, ‘percentage of flats built’ and ‘percentage of dwellings built on previously developed land’ appear to be strongly correlated. We have estimated a Pearson correlation coefficient of 0.884 between the two, significant at the 0.01 level. The following scatterplot visualises that correlation and shows that London is indeed a unique case whereas the East Midlands and the South West are at the other end of the spectrum.

2 Some of it however may be attributable to the unique character of London as a ‘city-region’.
Following an institutional approach we may suppose that this difference in the final outputs, and the fact that there is a correlation between the type of land input and the type of housing output, may reflect differences in the spatial configuration of the underlying structures of provision and production. We will try therefore to analyse those structures for London since we believe that recent changes in policy will create a spatial configuration for the whole country that is very similar to the one already applying in London for quite a while. It is important therefore to establish whether any structural shifts which have taken place in London can plausibly be expected to extend across the rest of the country.

In London, the industry ‘league tables’ from EmapGlenigan/Housebuilder Magazine (Menary, 2003) show that the top housebuilder company, based on applications to build, is Berkeley, followed by a distant second Wimpey. In comparison, Berkeley comes fourth in UK completions, behind Persimmon, Wimpey and Barratt (Wellings, 2002). Berkeley has long adopted a brownfield redevelopment strategy and its annual report vows to “…remain committed to undertaking today’s most exciting and challenging urban regeneration and renaissance projects.” (Berkeley Group, 2003).

League tables based on applications, show the intention to build not the actual completions. For the latter we would have to recourse to NHBC\(^3\) data which show that private housebuilding in London in 2002 was dominated by 4 housebuilders producing more than a thousand units per year and accounting for a bit more than 43% of the total output (see table 1 below), about as much as the next 36 housebuilders’ put together.

### Table 1: Profile of London’s top 10 private housebuilders in 2002\(^4\)

<table>
<thead>
<tr>
<th>Housebuilder</th>
<th>Private Housing output</th>
<th>% of total London priv. output</th>
<th>% flats</th>
<th>% terraced</th>
<th>% on brownfields(^5)</th>
<th>% on greenfields</th>
<th>Av. selling price (£000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1414</td>
<td>12.3</td>
<td>87.2</td>
<td>7.2</td>
<td>76.4</td>
<td>2.2</td>
<td>182</td>
</tr>
<tr>
<td>B</td>
<td>1386</td>
<td>12.0</td>
<td>89.9</td>
<td>3.1</td>
<td>63.9</td>
<td>0.9</td>
<td>344</td>
</tr>
<tr>
<td>C</td>
<td>1208</td>
<td>10.5</td>
<td>65.8</td>
<td>24.2</td>
<td>74.9</td>
<td>15.7</td>
<td>255</td>
</tr>
<tr>
<td>D</td>
<td>1006</td>
<td>8.7</td>
<td>59.5</td>
<td>25.8</td>
<td>72.4</td>
<td>14.5</td>
<td>203</td>
</tr>
<tr>
<td>E</td>
<td>619</td>
<td>5.4</td>
<td>57.8</td>
<td>27.6</td>
<td>80.9</td>
<td>9.4</td>
<td>289</td>
</tr>
<tr>
<td>F</td>
<td>479</td>
<td>4.2</td>
<td>75.2</td>
<td>18.1</td>
<td>80.0</td>
<td>19.4</td>
<td>216</td>
</tr>
<tr>
<td>G</td>
<td>435</td>
<td>3.8</td>
<td>53.5</td>
<td>37.9</td>
<td>92.4</td>
<td>0.5</td>
<td>222</td>
</tr>
<tr>
<td>H</td>
<td>358</td>
<td>3.1</td>
<td>88.5</td>
<td>9.8</td>
<td>69.3</td>
<td>30.7</td>
<td>253</td>
</tr>
<tr>
<td>I</td>
<td>254</td>
<td>2.2</td>
<td>67.7</td>
<td>28.3</td>
<td>63.0</td>
<td>32.7</td>
<td>227</td>
</tr>
<tr>
<td>J</td>
<td>233</td>
<td>2.0</td>
<td>40.4</td>
<td>13.3</td>
<td>42.1</td>
<td>5.2</td>
<td>272</td>
</tr>
</tbody>
</table>

Source: Own calculations using NHBC data.

Despite some problems (see footnote 4) it is rather obvious that the big London housebuilders build at high densities and predominantly on brownfield sites. Of particular interest is housebuilder B. This company builds proportionally more flats than anyone else and yet commands premium prices.

\(^3\) For confidentiality reasons NHBC data cannot be linked to housebuilder names.

\(^4\) The ranking in this table has no relation to other rankings referred to in the paper.
whereas housebuilder A is producing a similar mix but commands much lower prices. Further research is required in order to identify the builders and to establish the causes behind those outcomes.

The latest annual reports of Persimmon and Wimpey, the two top housebuilders in the UK in terms of output are quite telling of the new demands imposed on the industry and indicate the nature of things to come in the rest of the UK. Persimmon, that sell more than 90% of their homes outside London and the South East, witnessed “…continuing difficulties and delays in obtaining detailed planning consent for our developments.” (Persimmon, 2003:2) As a result, they do not expect any growth in volumes for the first six months of 2003 but they expect improvements in their profit margins. Wimpey claim that their output of flats has risen from 11% of the total in 2001 to 18% in 2002 “as the higher density requirements of PPG3 and general demographic trends for smaller units begin to have an impact” while they “…have created teams with the skills appropriate…to exploit the growing market for inner city living” (George Wimpey, 2003:17).

7. Conclusions and future steps

The results of this preliminary analysis illuminate some of the difficulties of transition for UK housebuilders. There is little doubt that the current housing situation in the UK is socially and economically unsustainable but there is significant doubt as to what the way forward should be. Judging from just the top few we can assume that some housebuilders have begun to adjust their strategies to take the changing conditions into account, some others have not. The new set of circumstances in the ‘structure of land provision’ that now applies throughout the country has been affecting London’s housebuilders for longer. So far there have been significant differences between Greater London and the other GORs in the type of land used and the types of houses built on that land. The question is whether they will begin to converge.

The next step of the research will be to refine the quantitative analysis in order to strengthen the arguments we made. Even further, a closer examination of the qualitative aspects of change will also be undertaken with particular emphasis on the strategies of particular housebuilders and their new residential developments. This research will eventually allow for the proposal of new policy tools that will make that transition easier but this paper only presents the first results of that inquiry.

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5 This percentage and the greenfield percentage may not add up to 100 due to failure on behalf of the housebuilder to provide details on a number of sites.
Bibliography


