

**Re-use of Previously Developed Land: Housebuilder Adaptation to a
Changing Context**

Thesis submitted in partial fulfilment of the requirements for the degree of Doctor of
Philosophy (Ph. D.) from the University of London
by
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ABSTRACT

Recent changes in UK urban policy are important contributors in shifting the way the built environment in the UK is produced. The thesis examines the effect this policy push has on the housebuilding sector, on the types of dwellings and developments produced and the efforts of two major London housebuilders to adapt.

Since the mid 1990s, UK governments have emphasised the need to accommodate new housing provision on previously developed land, predominantly in urban areas. This changing business environment forces housebuilders to adapt. Opportunities open up as new inner city markets emerge, whereas obtaining planning permission for sites on previously undeveloped land is becoming increasingly difficult. These new markets and new types of land input require housebuilders to re-organise their development practices. New types of dwellings and developments have to be designed, financed, produced and sold.

Aggregate statistics for the housebuilding sector reveal that housing development is transforming: dwelling production in metropolitan areas is increasing, the proportion of flats is rising and densities are increasing. The examination of two firms and two of their projects also shows that both firms are responding to their new business environment. The first response puts emphasis on flexibility and has led to sustained growth whereas the other response, focused on spreading development risks geographically and amongst different markets, is proving to be less successful at the moment.

Although this transformation is still unfolding, the insights from the research can already prove useful to policy makers and housebuilders. An examination of housebuilding based on ideas deriving from a combination of institutionalist and evolutionary approaches can open new pathways in the way we understand the housebuilding industry and therefore in the way we understand processes of production and consumption of the built environment and the significance of planning policy as an instigator of change.

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CHAPTER 1

Introduction

1.1 The thesis' problematic

Redevelopment of previously developed urban land (PDL) is once again a major consideration for everyone engaged with the way we produce, consume and experience the built environment. Almost 12 years ago, in 1995, the introduction of quantitative targets for the percentage of new dwellings to be built on brownfield land triggered a series of policy initiatives that affected the business environment that the housebuilding sector is currently operating in. History tells us changes like those currently occurring in the supply and type of land available for housebuilding have significant effects on the way housebuilders operate and the way the built environment is produced in the UK.

Concern over the course of urban development has not suddenly emerged as an issue during the last few years. Throughout its history, UK planning policy has been concerned with it in one way or another, albeit with varying degrees of intensity during different historical periods. Whatever direction policy was taking at a given historical period there were significant effects on the development industry and thus on the way the built environment was produced¹.

The introduction of the sustainability agenda during the last three decades brought to the fore considerations of balancing economic growth with environmental and social concerns. One of the effects it had on urban policy in a UK context was a renewed attempt to bring development back into the cities, to promote compaction, urban living and sustainable communities.

Furthermore, as the emergence of the sustainability agenda coincided with worsening housing affordability conditions (JRF, 2004) and with increasing negative externalities of the suburban way of living, it brought issues of social and economic sustainability to the fore. It is not only urban areas that are expected to benefit from this turn in urban policy, since the return to the cities is largely driven by

¹ Urban redevelopment was tied to broader policy goals and agendas from 19th century's 'beautification' and 'sanitisation' to present day's 'social cohesion'. Since those early days of urban planning, suburbia has become ingrained in the British way of life and it remained the lifestyle of choice and an aspiration for Britons throughout the 20th century.

considerations for the preservation of the countryside, reduced energy consumption and reduced air pollution.

Interestingly, policies supporting the turn towards urbanism also started in earnest during the mid 1990s. In 1998 the re-use of so called 'brownfield sites' moved to the core of government urban policy but steering development towards the cities has been met with partial success so far. Urban living is now an alternative which many British households would seriously consider and more new dwellings in denser developments are built on PDL land since the policy change begun. However, the shift into developing urban PDL appears to be more difficult a policy goal to achieve than anticipated, in spite of a booming urban residential property market providing strong price signals to the industry.

These policy effects are not the only influences on the housebuilding sector. The 1990s were a time when the lift of restrictions in the transnational movements of capital and goods continued apace, resulting in a dramatic increase of transnational flows of factors of production (inter alios Sassen, 1991). Since then most of the advanced capitalist economies are witnessing unprecedented asset price inflation and drop in yields. In the UK, prime property prices were particularly affected by these trends, in London and the South East but also in many major English cities².

Interestingly, policies supporting the turn towards urbanism also started in earnest during the mid 1990s. In 1998 the re-use of so called 'brownfield sites' moved to the core of government urban policy but steering development towards the cities has been met with partial success so far. Urban living is now an alternative which many British households would seriously consider and more new dwellings in denser developments are built on PDL land since the policy change begun. However, the shift into developing urban PDL appears to be more difficult a policy goal to achieve than anticipated, in spite of a booming urban residential property market providing strong price signals to the industry.

The last ten years have seen a dramatic rise in the prices of dwellings, nevertheless, dwelling construction in England was dropping every year from 1995 to 2001 and only picked up since then, especially in London but also in other

² Anecdotal evidence indicate that, for some developments, more than 50% of the dwellings produced are bought by overseas investors who rarely occupy them or rent them out. Financing for those capital investments rarely comes from UK mortgage lenders and is combined with discounted 'off-plan' sales, completely reversing the traditional financing model of UK dwelling production. These investors are often concerned with the capital appreciation of their dwelling thus very often the dwelling is never offered in the rental market. The Borough of Kensington and Chelsea, seriously affected by this trend, contemplated imposing a ban on such purchases.

metropolitan areas. The reasons for the perceived reluctance of the housebuilding industry to quickly follow the Government's imperatives and the market's price incentives are as elusive today as they ever have been. The pattern of early slump and the fact that housebuilding in metropolitan areas is rising hints at a significant adjustment at least in terms of the geographical location of dwelling production.

This elusiveness gave rise to a significant amount of research and argumentation about the way the built environment is and should be produced, the provision of affordable housing as well as the nature of the housebuilding industry and its capacity to innovate. An important dimension, in terms of academic research, is the examination of the changing practices and strategies of the housebuilding industry and therefore of the types of built environment produced. On balance it seems that the rather ambitious policy drive may have thus far unpredictable consequences. This in turn would make the aspirations for an urban renaissance and the success of the much wider sustainability agenda in the UK uncertain. This thesis will explore some of the responses of housebuilding firms in the face of this new business environment, especially with regard to planning policy.

A basic tenet on which this research will be based is that the redevelopment of PDL, as any policy imperative, has a strong normative element attached to it. Changing societal norms and aspirations, such as the push towards sustainable development, expressed and reinforced through changes in government policy are reshaping the broad framework framing the production and consumption of the built environment and housing development in particular.

Bearing that in mind, it is also worth exploring what brownfields mean. The term was only recently coined to replace terms like 'vacant' and 'derelict' but more recently it was replaced by the term Previously Developed Land (PDL) which embraces practically all types of urban land if not the whole country, since most land in England has had development on it at some point in history.

Seen under that light, 'insufficient' brownfield redevelopment that so much troubles today's UK policy makers and environmentalists is a concept defined in relation to normative policy targets and has a production process dimension to it. The whole problematic is shaped by societal goals and aspirations and not necessarily by positive economic theory.

There was indeed a lot to be achieved with regards to brownfield redevelopment for the new policies to be deemed successful but the mere fact that we are now

increasingly pursuing densification policies in contrast to the decentralisation policies of previous decades signifies that the reasons for our concern have a lot to do with changing social attitudes.

Research shedding some light into the ‘whys’ and ‘hows’ of the current state of affairs in PDL housebuilding is not only useful, but essential in many ways in providing a variety of stakeholders with a clearer picture of the way the production of the built environment is changing. This understanding satisfies the primary goal of this type of research which is to substantially enhance our knowledge of the complexities and the causal mechanisms currently permeating the production of the built environment. Better understanding of these processes can assist policy makers in drawing the future course of policy intervention. It is important to the housebuilding industry’s competitiveness as it amplifies the effectiveness of existing or future business strategies. It is also pertinent to a wider audience interested in property development as it facilitates more targeted community participation in the development process but also generically, since better informed citizens can make more informed decisions.

To shed more light into the processes affecting housebuilders and their attitudes towards the redevelopment of PDL we need to ask questions in a different way: In particular, instead of wondering why the industry is not responding to price signals by increasing PDL production we will try to see in what way it has responded to the changes in its environment. In our view it is impossible for a whole industrial sector to remain unresponsive to changes affecting its future in a fundamental way. It is anticipated that our approach could uncover elements of the structural change that should be occurring in the housebuilding industry, its processes and products and thus in the way the built environment is produced and the new configurations of space that are emerging.

1.2 Research background: The limits of the expansionist paradigm

We have already made passing mention to the link between the turn of urban policy in favour of 'centrism' and the growing concerns over the 'sustainability' of Britain's urban development patterns. These patterns are affected by almost one century of suburban and overspill development which, it will be argued, have tuned the production of the built environment towards expansion into new non-urban space (see Chapter 5 for a relevant discussion).

The combination of urban expansion with containment has been linked to a series of diseconomies, like extended travel patterns and thus higher energy consumption (Hall et.al., 1973; Ota, 1995), increased land and water pollution from pesticides and fertilisers used in gardens as well as inefficient energy use for heating and lighting purposes. On the other hand, property values positively reflect the increased amenity created (Brueckner, 1995; Cheshire and Sheppard, 1995) by the preservation of open access land, the preservation of valuable natural habitats and an aesthetically pleasing natural scenery.

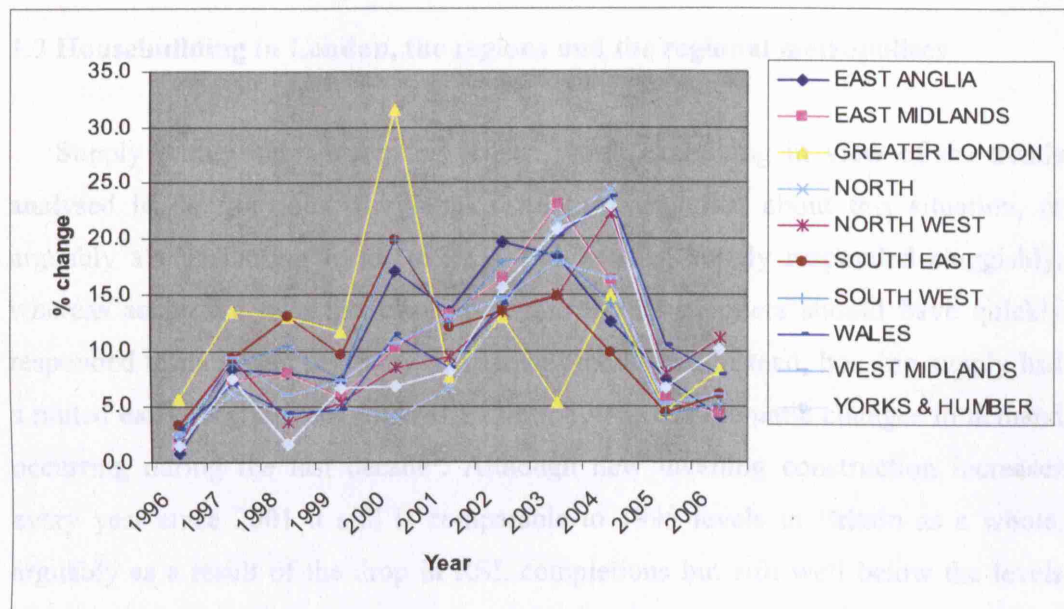
Another major consideration relating to the present state of affairs is the price of housing. Describing the situation "from the standpoint of households and firms seeking accommodation" in London (which may well apply in many other British towns and cities), Hall, Edwards and Robson (1999, p.14), see:

- A severe lack of land available for development.
- Real income growth for a major proportion of the population.
- High income elasticity of demand for housing.

They claim that these three characteristics combined, lead to price inflation, which either promotes salary increases and undermines competitiveness or causes impoverishment or, in fact, both for different sections of the population. According to the same authors, as well as Evans (1988) and Cheshire (1995), it has a series of other results such as underinvestment of households in the maintenance of their homes, bad value-for-money for private and social housing production due to increased land cost and long distance regional decentralisation. Most importantly though, pressure is created for 'densification and infilling of suburbs, re-use of abandoned or derelict land', a process well described by Evans (1988, pp. 25-28, 1991), Bramley (et.al, 1995), Cheshire and Sheppard (1989), DoE (1992), and Edwards (2000b).

During the last few years housing price inflation has not only accelerated in London and the South East but has also picked up in the other regions. Cities like Leeds, Manchester and Newcastle are witnessing the rebirth of their inner city quarters which attract residents, tourists and shoppers from all over the UK and even Europe. Consequent to a series of increases in interest rates by the Bank of England the market is experiencing a slowdown and house price inflation figures for English regions converged to a relatively narrow range between 4% and 11.1% year on year for the 2nd quarter of 2006 (see Figure 1.1).

Figure 1.1: Nominal dwelling prices' year on year change Apr-Jun 1995 to Apr-June 2006



Source: www.landreg.gov.uk

These increases in house prices, which were not combined with similar increases in household incomes have severely adverse effects on affordability. Recent research by the Joseph Rountree Foundation (JRF, 2004) shows that the ratio of average household income to house prices in London, the South East, South West, the East of England and even some hotspots in the North had in 2003 by far exceeded the mortgage advance to household income ratio which rarely is more than 3.5 to 1. Indicatively, for households aged 20-39 the ratio was on average 4.69 in London and 4.66 in the South West but reached 6.17 in areas like Westminster and 6.80 in West

Somerset (see Figure 1.3). A recent report by the National Housing Federation (NHF) corroborated these findings (National Housing Federation, 2005).

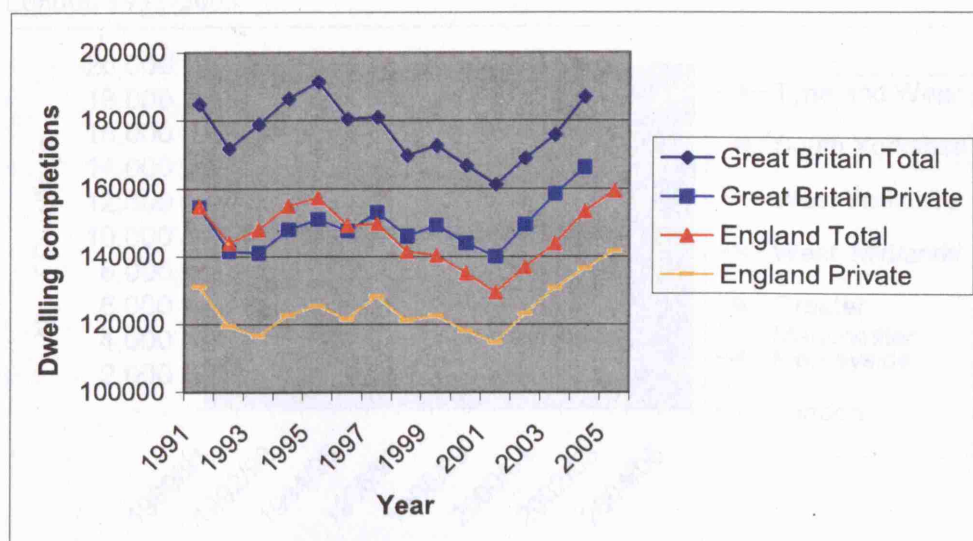
Evans argued that more greenfield development was necessary if severe deterioration of living standards were to be avoided as a result of these trends. This deterioration was also noted by Ball (1985) who claimed that the intensive use of pre-existing stock is encouraged by cost, location and poor quality of new housing. This process raises a great amount of tension since it is seen by the existing residents as a threat to their living standards. Since this form of intensification is unplanned and fissiparous it may well lead into even greater environmental and social problems in the future, through the degradation of the living and working conditions in cities.

1.3 Housebuilding in London, the regions and the regional metropolises

Supply is the other interesting aspect, worth examining in view of the trends analysed in the previous paragraphs. The surprising fact about this situation, or arguably a contributing factor to it, is that housing supply responded sluggishly, whereas according to mainstream economic theory suppliers should have quickly responded to increased prices by increasing production. Instead, housing supply had a muted early reaction (see Figures 1.2, 1.3, 1.4) to the dramatic changes in demand occurring during the last decade³. Although new dwelling construction increases every year since 2001 it still is comparable to 1995 levels in Britain as a whole, arguably as a result of the drop in RSL completions but still well below the levels that would satisfy the increasing demand. London however is the exception to this as we shall see.

³ We should mention here the last few years Britain's cities are witnessing a growing economy and inward migration so, for example, planners in London have to put growth management back to their agenda.

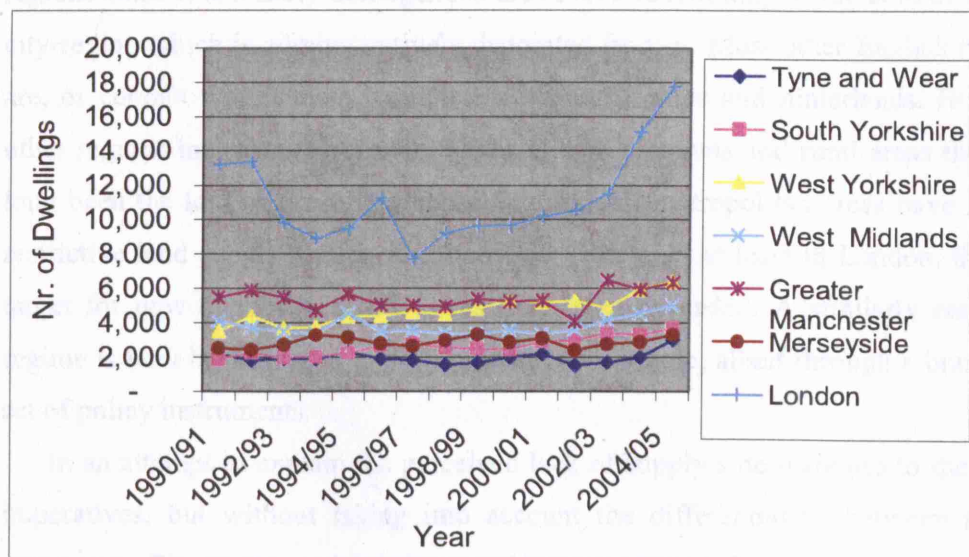
Figure 1.2: Completions of dwellings in Great Britain and England, 1991-2005



Source: www.odpm.gov.uk

As we just mentioned, from 1995 when the quotas for new dwellings on brownfields were first introduced and up to 2001, housing supply in England had been declining steadily. However, since then the trend has reversed and production is slowly increasing although it is still close to historically low levels (see Figures 1.2 and 1.7). In London however, the supply of new dwellings slumped in 1996/97 but began to increase immediately afterwards and has more than doubled since then (Figure 1.5). Although this increase is apparently not sufficient to satisfy demand for dwellings in London it is however much more significant than the increases occurring in most other metropolitan counties and the country as a whole. This is notable in itself since London is confined by the greenbelt and therefore most if not all of the new supply of dwellings will have to come from PDL redevelopment. It is in such a confined situation as is the case in London that the industry seems to have been most responsive, undermining the argument that housebuilders are not reacting to policy and price signals.

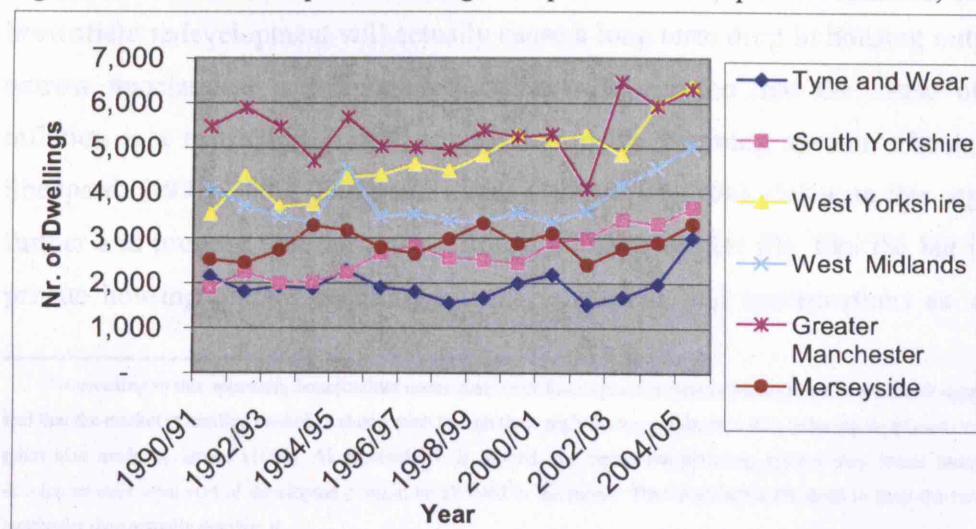
Figure 1.3: Private enterprise dwellings completed in metropolitan counties and London 1991-2005



Source: www.odpm.gov.uk

Construction of new dwellings in many metropolitan counties (for example West Midlands, South and West Yorkshire) seems to have entered a growth period (Figure 1.4). This reversal of trends which first appeared in London and has more recently affected other British cities confirms that many of them are now beginning to exit their prolonged period of decline. If that is the case then the lag in the early days of the new policy is very likely to signify a shift in the geographical location of new dwelling production and a structural adjustment in the housebuilding industry.

Figure 1.4: Private enterprise dwellings completed in metropolitan counties, 1991-05



Source: www.odpm.gov.uk

It should be noted here that London is different to other statistical/administrative regions since it is a fairly homogenous urban area functioning as the core of a wider city-region which is administratively disjointed from it. Most other English regions, are, or contain within them, complete systems of cities and hinterlands. However, other regions include urban metropolises as well as towns and rural areas that have long been the loci of greenfield housebuilding. All metropolitan areas have faced a restrictive land supply regime for almost 50 years and, at least in London, the 60% target for new dwellings on PDL has long been exceeded. A similarly restrictive regime is now beginning to apply to the UK as a whole, albeit through a brand new set of policy instruments.

In an attempt to explain the perceived lack of supply-side response to the policy imperatives, but without taking into account the differentiation between regions apparent in Figures 1.3 and 1.4, Pryce (1999, p. 2301) tried to estimate the elasticity of supply for housing and land in the UK and he argues that the "...supply was concave in both periods and 'bent backwards' during the boom". He shows how the elasticity of housing supply was lower in periods of housing price inflation (boom) dropping noticeably to 0.58 from 1.03 during the 'slump'. Interestingly enough though land supply elasticities remain relatively stable during both periods. So, in essence, he argues that in periods of high price inflation the supply of housing becomes less responsive to price changes whereas at the same time the response in the supply of land remains stable.

Pryce's explanation of this apparent paradox is based in Mayo and Sheppard's theory of supply under uncertainty⁴. He argues that increased emphasis on brownfield redevelopment will actually cause a long term drop in housing output. A narrow neoclassical interpretation for this is to assume that the cause of price inflation is a restriction in land supply due to the planning system. Cheshire and Sheppard, (1995, 2000, 2001) and Evans (1988,1991,1996) elaborate this argument further and propose that the cause of most housing market ills, like the lag in total private housing output, declining amenity standards and specifications as well as

⁴ According to this approach, housebuilder uncertainty over future price increases forces them to hold back supply if they feel that the market is heading towards a slump even though they might be too pessimistic thus reducing supply unnecessarily, a point also made by Evans (1996). Alternatively, it is argued, the restrictive planning system may create uncertainty to developers over what sort of development might be allowed in the future. Thus it is better for them to keep the land in their landbanks than actually develop it.

price inflation, is the restrictive planning system and the declining supply of greenfield land. Other proposed causes, except the inhibitive planning system, are: environmental legislation which increases the risks, the lack of government funding assistance. This account is not exhaustive, the proposed reasons will be examined in detail during the literature review.

However, the work of Bramley (1993a, 1993b, 1996) and Brueckner (1990) counters the view that the solution to the problem of affordability and housing undersupply would be to relax containment restrictions. The effects on prices, they claim, would be minimal whereas the main effect would be on house types and sizes. Relaxation of planning controls would probably lead primarily to increases in plot and secondarily in house size according to Cheshire and Sheppard as well (1989) and thus to explosive expansion of urban areas but not significant price decreases (in total, not per sq.m.) (Bramley, 1993a, 1993b; Brueckner, 1990). The same prediction is made by the DoE (1992). These findings are based on studies of change in current market conditions and therefore, enduring relaxations might produce stronger price effects⁵. However, a review of the literature by White and Allmendinger (2003, p. 966) on research done on the topic concludes that

“The results suggest that, even after a significant increase in land supply, house prices would fall by only about 5 per cent and new housing output would increase by only 10 per cent.”

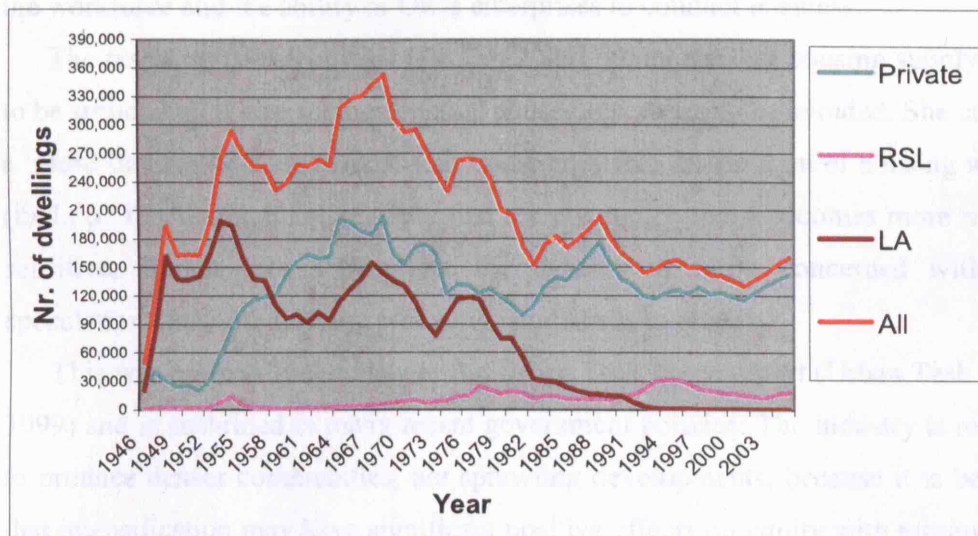
Another argument points at a combination of macroeconomic and structural factors that can provide hints as to what the possible causes for the current housing price inflation might be. There are significant demand factors affecting the industry and the UK economy as a whole, that could be called in to explain the behaviour of the housing market.

⁵ The experience from the US also suggests that affordability and undersupply problems are not necessarily a consequence of containment. The argument behind the recent surge in ‘growth management’ measures in sprawling US cities was similar and the experience of Portland suggest that growth boundaries do not have easily predictable/attributionable results (Phillips and Goodstein 2000; WBCSD 2001, pp. 3-22). Even though the land provision regime in the US is far more relaxed than that of the UK, house price in the States have risen significantly during the last few years as well. Furthermore, from 2001 onwards, supply seems to be picking up despite the fact that few things have changed in the factors that have been called in to explain its initial lack of responsiveness.

The historically low risk premiums required by investors have lead expected property yields down and consequently contribute to an upward movement in housing prices. This is combined with global trade shifts that put pressure on national economies thus leading into increased liquidity⁶ which is then channelled into the non-traded sector of the economy, such as property.

Finally, contributing to the upswing in prices is the transition from a 'universalistic redistributive' approach towards a 'residualist redistributive' approach to housing (Arbaci, 2006; Balchin, 1996). The marginalisation of social housing production without any attempt to restructure the 'speculative' structure of provision has essentially halved total housing production (see Figure 1.5) without any consideration about possible compensatory measures. The last point has also been elaborated by the CPRE (2004).

Figure 1.5: Permanent dwellings completed, England 1946-2005



Source: www.odpm.gov.uk

Bearing in mind these wider forces in action, a sluggish supply response may not at all indicate lack of housebuilder understanding of their environment but rather it may show that housebuilders have learned a lesson from the previous booms and busts. If price inflation is driven by cheap credit and global investment flows, a less

⁶ At present the usual policy response of a central bank aiming at price stability when faced with a conjunction of goods price deflation, slowing GDP and high unemployment is to increase money supply in the economy by lowering the base rate. The standard (Keynesian) government response when faced with a downcycle in the economy is to boost demand by increasing government spending.

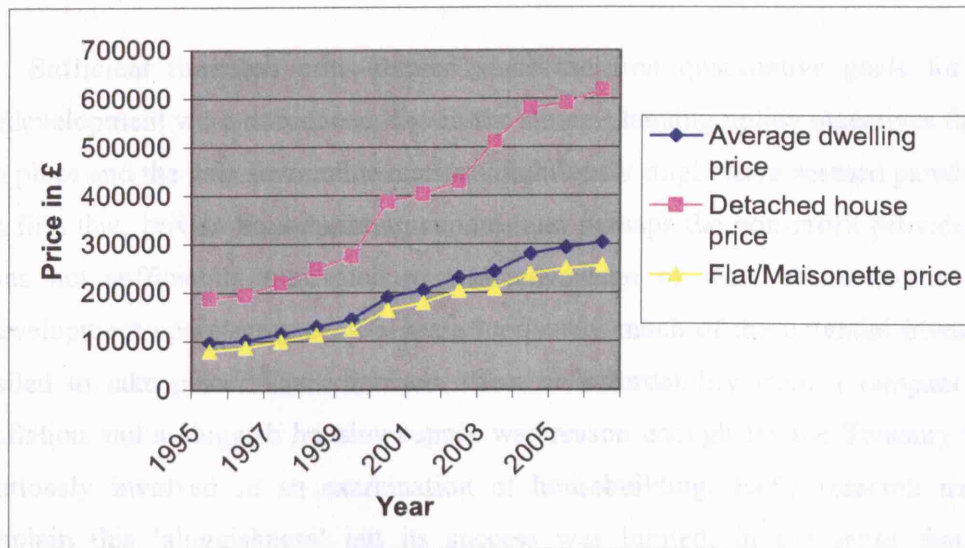
risky way to reap short-term benefits is actually to keep supply steady, focus on efficiency gains and cost control and present shareholders with a healthy annual increase in profits and profit margins without exposing the firm in the risks deriving from an expansion of production. This is especially true if at the same time other important factors in the business environment, such as land supply are dramatically changing, as they are doing today. Even these interpretations however cannot account for the fact that housebuilding in metropolitan areas is indeed responding despite the restrictive land supply regime and although market conditions are not sharply different between metropolitan areas and the rest of the country.

Whatever the details, the situation has become so serious that the Treasury became concerned. The macroeconomic effects that rampant house price inflation might have on the UK economy are definitely one consideration. Suddenly, issues like the entry to the eurozone appeared to depend on the performance of the housing market. However, one can also witness a deeper concern about the reproduction of the workforce and the ability of UK's enterprises to conduct business.

The resulting Barker review (Barker, 2004) points out that housing supply needs to be spruced up if dire socio-economic consequences are to be avoided. She calls for a 'more flexible housing market' and 'more equitable distribution of housing wealth' (ibid., p. 1). Although she requests that the planning system becomes more market-sensitive, Barker also argues that the industry is more concerned with land speculation than with housing production and needs to reform.

This was essentially the view of the Urban Task Force report (Urban Task Force, 1999) and is enshrined in many recent government policies: The industry is required to produce denser communities, not sprawling developments, because it is believed that intensification may have significant positive effects on equity with minimal loss (or even gains) in efficiency. In order to benefit from such a process a different approach is required that would combine an increase in densities of produced built space with a minimal loss of amenity. One way to achieve this would be the use of ingenious urban design principles combined with a reduction to the space that is devoted to the car, as Llewelyn-Davies recently proposed (Llewelyn-Davies, 2000). This however has to take into account the strong price incentives for housebuilders to build specific development types (Figure 1.6).

Figure 1.6: Nominal dwelling prices in London Apr/Jun1995- Apr/June2006



Source: www.landreg.gov.uk

Units in low density developments command higher prices per unit on average, especially in London. This in turn indicates that housebuilders may have a strong incentive to build detached houses and thus maintain the low density non-PDL dwelling production in order to tap into a very lucrative niche. It also seems that there is scope to significantly increase the number of units per development and therefore build higher density developments with more but lower priced units.

Following the discussion in this paragraph a question arises about the current problematisation surrounding the redevelopment of PDL. An often repeated description of what is happening is that the policy is changing pushing towards housing development on PDL but because of restrictions of the planning system, the deficiencies of the housebuilding industry and some factors that remain unknown we have a series of adverse effects like low dwelling production and therefore price inflation. There are however strong indications that change is indeed happening, dwelling production in metropolitan areas is rapidly growing and that the planning system's restrictions have little to do with the lack of housing supply in the country as a whole. It is useful then to introduce another dimension to the PDL redevelopment problematic, namely to examine what we mean by the term brownfields and to view PDL redevelopment as a process of transformation of space.

1.4 Conclusions: The way forward and new research questions

Sufficient time has now elapsed since the first quantitative goals for PDL redevelopment were introduced. Given the strong planning policy incentives that are in place and the very favourable market conditions it might have seemed paradoxical at first that, private housebuilding capital (and perhaps the non-profit provider too) was not sufficiently motivated to take advantage of what seems to be a big development opportunity or, if it were motivated, much of the potential investment failed to take place. The combined effect on affordability from a rampant price inflation and a sluggish housing supply was reason enough for the Treasury to get seriously involved in an examination of housebuilding. Early research tried to explain this 'sluggishness' but its success was limited, in the sense that little agreement exists about what the causes are and even more so regarding the appropriate responses.

Although the wishes of policy makers had not been fulfilled to the desired extent in the early days, housing development on PDL seems to be attracting more interest and housing production is on the increase. Apart from the country's metropolitan areas, this is especially true in London, where housing production has more than doubled since 1995-1996, signifying that housebuilders can indeed adapt to the new circumstances and potentially deliver dwellings suited to the new policy requirements.

Quantitative goals such as the percentage of dwellings built on PDL relative to total output may have been achieved but the pattern that total output follows hints at some deeper, structural changes occurring as well. Many questions can be raised as to why housebuilders were at first so reluctant to undertake land re-use projects and there is possibly no single answer to them. This is partially due to the complexity of the issues and partially because of the lack of research. This chapter provided a quick outline of current debates and various arguments that could be called in to explain what might be happening.

Whatever the case might be, in London the economy is at risk because both employers and employees cannot find affordable accommodation, the housebuilding sector is accused of failing to respond adequately to the challenge of providing cheap dwellings and the state in its various guises has chosen to 'extract' affordable housing through ever increasing quotas on new development. In our view, when such

a problem occurs then research should shed more light into issues of the organisation of production. Explanations emphasising constraints to development or macroeconomic aspects, to the detriment of the other aspects of housing production may provide some useful insights but do not address the transformations necessary for the housebuilding sector to deliver what is required, especially in view of a rapidly changing business environment.

It is quite reasonable to assume that the negative outcomes of what could be called ‘the current housebuilding *paradigm*⁷’ will not be alleviated unless there is a *paradigm shift*. This point was recently made by Adams (2004) and as will be argued in the following chapters, the industry is undergoing important transformations which are altering the nature of supply. 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 both in quantitative and qualitative terms.

In the case of PDL housebuilding our argument is that government policy changes in land provision have triggered changes in the way housing is developed in the UK. Eventually, accumulation of experience, knowledge diffusion and learning will make PDL housing redevelopment available and appealing to wider market segments. However, the firms that can get or have got there first will enjoy an advantage against their competitors.

Before elaborating further into these aspects, the next chapter (Chapter 2) reviews the twists and turns of UK planning policy with special attention to the latest focus on PDL redevelopment. Chapter 3 explores the existing research on PDL redevelopment, the main approaches to the (re)development process and the relevant literature on business strategy and the property development process. Chapter 4 explains the methodological approach followed and the hypotheses this thesis tries to prove. Chapter 5 explores the expansionary character of housing provision and production, the changes occurring and the link of those changes to policy change. Chapter 6 delves into the case studies to see how two selected firms have strategically responded and Chapter 7 examines how these responses have transformed into changes in their production processes. Finally, Chapter 8 concludes with the major points raised, a revisiting of the original hypotheses, the theoretical

⁷ See chapter 4 for a definition of a technological paradigm.

implications and the future areas that research could cover following the questions raised in this thesis.

Finally it should be mentioned that during the course of this research the author has used material and/or text to publish other papers and reports, therefore parts of this thesis have been replicated in these documents. More specifically, the following papers and reports should be mentioned.

Edwards M., De Magalhaes C., Karadimitriou N., Rehman K. (2004) *The funding and development of the built environment. The research agenda*. London: RICSF

Edwards M., Karadimitriou N., (et.al.)(2003) *Sustainable Urban Development: How we could produce it. How we could pay for it*. London: RICSF

Karadimitriou N. (2005) "Changing the way UK cities are built: The shifting urban policy and the adaptation of London's housebuilders" *Journal of Housing and the Built Environment* **20**(3) pp. 'Online First'

Karadimitriou N. (2003) 'Urban land re-use and the challenges for the UK private housebuilding sector', Paper presented at the *ERES 2003* and the *post-AESOP 2003* Congress.

Karadimitriou N. (2002) 'Urban regeneration: An examination of the barriers to the redevelopment of urban land and ways of attracting private investment', Paper presented at the *ERES 2002* and *AESOP 2002* PhD Workshops.

CHAPTER 2

Brownfields and redevelopment in urban policy

2.1 Redevelopment of previously developed land in recent UK planning history

Policies related to the redevelopment of urban space are essentially about managing change and managing change has been at the core of urban policy for centuries. Urban policy on the other hand always carries with it a strong element of normative interpretation about what a society should strive for in terms of living conditions. Urban decline and the redevelopment of urban space is almost a permanent preoccupation of British urban policy. In fact, the discipline of planning owes its birth exactly to the need for drastically improving the urban environments of the late 19th century British cities. The fact that today urban policy is focusing on 'brownfields' should therefore be seen within this wider context of persistent state intervention in urban areas with the aim of reshaping them in accordance to wider societal goals. Interestingly, these goals were usually translated into various policy configurations swing like a pendulum between densification and decentralization/sprawl.

Urban land redevelopment as a policy option came to the fore at certain points in time then receded to the background when other goals became a priority. There is no scope here for elaborating the evolution of British planning policy. Such an account can be found in Cherry (1996), Hague (1984), Hall (1973a; 1973b, 1992) and others. In very broad terms, planning authorities were concerned with achieving better standards of living and health, maintaining social order and promoting economic development to name a few of a series of interlinked goals, emanating from varying definitions about urban problems and problematics.

These goals were pursued through different policies like extensive clearance, suburbanization and containment. The variety in policies reflects the difference in stances towards the city, summarised by Breheny (1996) as 'centrism' and 'decentrism'. These stances were not mutually exclusive; after their first appearance they fell in and out of favour with planners and policy makers, resulting in a varying policy "mix" at different periods.

Much of the present-day archetypal British interpretations of urban or suburban living, were forged during the late 19th and early 20th century when the effort to turn “Garden City” into a reality for the many resulted in urban expansion and suburbanization. Certainly, the suburbs were not the utopian places that Howard originally had in mind. Instead of creating new, self-sufficient communities, suburbanisation created low-density urban environments, dependant upon the “old” city for jobs and leisure uses.

It was only after the second world war that a framework of containment policies began to be put in place with the 1946 New Towns Act and the 1947 Town and Country Planning Act. Hence the “garden city...idea was transformed into the new town concept” (Rydin, 1998). The New Towns were as close as official urban policy would ever get to Howard’s ideal. At the same time, many city centres had suffered severe war damage. Post - WWII comprehensive redevelopment schemes were attempting to tackle what essentially was an issue of urban land dereliction and to restructure the city and replace war damage in the process. Contrary to present day policy, an important objective of these policies was to reduce urban densities.

Economic change and counter-urbanisation, occurring from the 1960s onwards, accentuated the decline of many of Britain’s urban centres and made much of the post war redevelopment program appear redundant. Swathes of both urban and rural land previously used for economic production, goods distribution or consumption purposes became redundant to needs or seriously inadequate in relation to those needs. The potential problems of such a process were sporadically acknowledged, even before the second world war. However, it was only in 1954 that the Ministry of Housing and Local Government set up a working party on the issue of derelict land, which reported its findings in 1956 (MoHLG, 1956) establishing the problematic and the terminology that can still be found in use today. A dozen years later the Hunt Committee on old industrial areas (DoEA, 1969) was one of the first to propose a nationwide derelict land reclamation programme and a relevant agency, but at the time derelict urban land was not seen as a front page issue by governments and society more widely.

The research community in the UK increased its interest in the issue of land re use during the 1970s together with an increased interest in the so called ‘inner city problem’. Because of the efforts of individuals and institutions like the Civic Trust, the agenda of urban land re-use expanded to include considerations of land “lying

idle”, in “temporary use” and only “slightly damaged” or “completely undamaged” that could be brought back into use without substantial reclamation (Civic Trust, 1977). Parts of this type of land were later named ‘vacant land’ in official statistics.

Regeneration policies during the 1980s were driven by the push towards more supply-side liberalisation that was the landmark of the 1980s economic policy. They had a strong property redevelopment character and aimed at increasing economic competitiveness which was seen as the answer to reversing years of urban decline. The term “property-led” urban regeneration, widely used to describe the policies of that era, reflected the close knit ties between economic growth, urban regeneration and urban land redevelopment. As a result of that ‘liberalisation push’ the 1980s and early 1990s saw the rise and fall of bold initiatives such as the UDCs and the EZs. These top-down approaches to redevelopment in many cases managed to revitalise areas in decline and redevelop significant amounts of brownfield land but not without substantial social and economic cost and with highly contested governance models.

Each and every one of these shifts in the direction of urban policy shaped the form of cities for years to come, the outcomes still visible today in the form of grand buildings and road axes, sprawling suburbs or the local authority housing estates of Britain’s metropolises.

2.2 The influence by the sustainable development agenda

Urban policy seemed to be on auto-pilot during the 1990s although today it is easier to appreciate that it reached a turning point at the middle of the decade. Nothing as ‘grand’ as the bold but contentious Thatcherite urban policies was envisaged to replace them. At the same time, the Brundtland Report (World Commission on Environment and Development, 1987) and the subsequent ‘Earth Summit’ in Rio were making their impact felt on policy discourse.

Governments all over the world were beginning to incorporate elements of UNCED’s ‘Agenda 21’ into their policies, slowly but steadily creating a “...focus of human endeavour in the twenty-first century.” (Meadowcroft, 2000). Meadowcroft insightfully also argues (*ibid.*), that the sustainability ‘project’ resolves, at the discursive level, the conflict between the social needs for economic growth, social equity and care for the environment. It achieves this by suggesting that it is not a

matter of 'either..or' but a matter of finding the appropriate way to balance all three elements in accordance with the prevailing local circumstances. Thus, it could be argued that sustainability offers a very attractive and flexible political platform to almost any political party in almost any part of the world.

As Maloutas (2003) notes, the 'sustainable development' project in a Western European context became an effective, albeit context-specific, vehicle for the social democratic agenda to re-enter and influence mainstream policy at a time when radical pro-market ideologies were usurping ideological hegemony, predominantly in the US and Britain. This might not have necessarily been a deliberate strategy of the European social democrats but in any case 'sustainable development' successfully highlighted issues of equity and social justice that would otherwise have been pushed to the background.

However, by the same token, the emphasis put on environmental issues created the preconditions for "de-socialising" the socio-economic consequences of capitalist economic growth. The "re-socialisation" (ibid.) of these issues is achieved through an environmental rationale which acts as a 'lens', focusing the discourse away "...from radical objectives of social equality and justice in favour of the less ambitious objectives of social cohesion, solidarity and inclusion" (ibid., p. 168).

The case of urban PDL re-use is one example of how this wider, global discourse was 'translated' and used at the national policy making level. In 1995, the DoE caused a shock with its projections of 4.4 million new households until 2016 (DoE, 1995c) later revised to 3.8 million new households until 2020 (DETR, 1999). These households would need new housing and the idea of millions of new homes 'concreting over' the countryside was not seen as a viable option. The policy response was to divert that growth back into the cities by setting a target for 50% of all new housing to be built on brownfield land by 2005 (UK Government, 1995).

The 'redevelopment of brownfields' project shares much of the same fluidity with the wider sustainability project. By setting the agenda in such terms the Conservative government was hoping to tackle a series of issues, from housing shortages to inner city decline and urban environmental blight. At the same time it relieved the pressure on the greenbelt thus 'protecting' the countryside from residential development. Furthermore, by drawing attention into brownfields the Conservatives were aligned with both the environmentalist lobby (Murdoch, 2004)

and much of their suburban electorate, which harbours strong NIMBYist feelings about housing development⁸.

Diverting housebuilding back into the cities therefore appeared to be a safe political bet, pleasing many while dissatisfying few. Yet one has to ponder at the changes that have occurred at the policy discourse level. Whereas the traditional political representatives of environmentalism (for example the Green party) have not significantly increased their appeal as far as voting patterns in national elections are concerned, some of their ideas and agendas have found in 'sustainability' a new vehicle that made them accessible and acceptable to a much wider audience. The willingness of a Conservative government to devise ways to promote sustainable development in 1995 is indicative of such a change.

In 1985 any notion that the government should divert market housebuilding or any other type of development activity from where market forces would tend to locate it (i.e in the greenfields) would have been dismissed out of hand as potentially stifling for economic development. In 1995 the idea of sustainable development had re-shaped the political agenda to such an extent that a Conservative government in one of Europe's arguably most neoliberally oriented countries was imposing restrictions on the workings of the market in a direct effort to achieve 'sustainability'.

Today, in most developed countries around the world very few people would question the 'commonsense' need for development to be economically, environmentally and socially sustainable attests to the pervasive influence of the sustainability agenda on policy discourse. Let us also make a small diversion here to explore the possibility that this shift in attitude was also affected by the increase in international flows of capital and labour. With them came new ideas and new attitudes towards risk and property investment. Although this thesis will not examine the extent to which cultural or other influences contributed in the changes in attitudes and policies it seems very plausible to assume that the return to the urban centres found willing funders in the form of international investors who were interested in prime property in central locations and were used to financing high density developments on a 'pre-sold' basis.

⁸ A recent MORI poll (Dewar, 2005) reveals that 69% of the residents of the South East suggest that new development should be located in built up areas and only 40% support the expansion of villages and 38% the expansion of suburbs.

Once sustainability was established as the ideal everyone should be striving for, then the discussion became one of degree: How sustainable certain practices are, what the different types of sustainability are, what sustainability means to different people and how it can be implemented locally. The reluctance of US governments to adopt that terminology and their preference for the term 'smart growth' is revealing. Smart growth may be the type of economic growth that takes non-economic factors into account but it is still about achieving economic growth, albeit 'smart', as opposed to 'not-smart'. At a discursive level, 'smart growth' is not about development, it is not about the process of compromising conflicting social, environmental and economic priorities with the aim of serving wider social needs. It is the outcome of a certain compromise favouring growth, probably based on the assumption that growth is a prerequisite for the success of social and environmental policies.

2.3 New Labour, the Urban Task Force and PPG3

Although the redirection of urban policy in the UK started before its ascendance to power, the Labour government tried to 'translate' the early principles into a coherent policy framework. This attempt requires policy-makers to transcend the traditional boundaries between different policy areas and it permeates all levels of governance. London's Spatial Development Strategy is a good example of this new 'spirit'. It has been drafted by a newly re-established Metropolitan Authority and its analysis and provisions bring together policy fields that were previously unconnected like regeneration and transport.

Shortly after taking office, in 1997, the Labour government initiated a re-think of urban policy although it took some time for the 'new' thinking to transform into more concrete measures. The turn towards PDL re-use was maintained as were the more contestable 'competitive' elements of urban policy. The brownfield housing target was revised to 60% by 2008 as it soon became apparent that 50% was not aspirational enough and would be achievable much earlier than 2005 (UK Government, 1996). In 1998 the government set up the Urban Task Force in order to uncover the causes behind the decline of Britain's cities and to come forward with ways to reverse that trend. The Urban Task Force's report 'Towards an Urban Renaissance' (Urban Task Force, 1999) together with the White Paper "Planning for

the Communities of the Future” (DETR, 1998) consolidated a new approach towards the way Britain’s urban space is produced.

In the UTF report, the city is treated as a valuable asset and ‘urbanism’ is considered to be a positively rather than a negatively laden term. “Planning for the Communities of the Future” complemented the UTF report by emphasising the prominent role brownfield redevelopment should have in housing production. Consequently the Urban White Paper “Our Towns and Cities: The Future.” (DETR, 2000) tried to grasp the multiplicity of urban problems and solve them through what the Government calls a “joined-up approach” based on “holistic” thinking. The underlying principle of the new approach is sustainability, understood as a balance between local economic development, better environmental quality and quality of life and more equitable access to, and distribution of, resources.

The principle turned into a programme of action in 2003 when the Sustainable Communities Plan (SCP) was launched (ODPM, 2003a). It would run alongside two other initiatives aiming at tackling social deprivation (Neighbourhood Renewal Unit and Social Exclusion Unit) and aimed at addressing a series of goals, namely housing shortage and affordability, low demand areas, social housing standards, urban environmental quality and countryside protection. In a rather contradictory way, it directs future housing growth in 4 major growth areas of which only the Thames Gateway has substantial PDL re use potential. Furthermore, the SCP associates brownfield redevelopment with the protection of the countryside rather more than with any of the other sustainability goals. However, the SCP further strengthened the push towards higher density developments by proclaiming that developments with densities below 30 dwellings per hectare would be faced with a very high probability of being called in.

The significance of these developments should not be underestimated. They mark a turning of the policy tide away from ‘anti-urbanism’ / ‘decentrism’ towards ‘urbanism’ / ‘centrism’ and city ‘compaction’ (Breheny, 1996). Government policy from then on promotes urban settlements with a wide social and land use mix, environmentally friendly development together with economic prosperity. Therefore, to the extent that they could be implemented and maintained⁹ they will have

⁹ The debate around the new draft PPS3 indicates that a change of direction is under consideration.

significant consequences for the production of the built environment and even more so for housing production in the UK.

Figure 2.1: Advertisement for new regeneration officers in an English LPA

Brown
is the new
Green

Environment and Regeneration Department
Planning and Regeneration

In this role, you will be responsible for the development and implementation of the Local Plan, which sets out the strategic vision for the area. You will be responsible for the development and implementation of the Local Plan, which sets out the strategic vision for the area. You will be responsible for the development and implementation of the Local Plan, which sets out the strategic vision for the area.

Planning Policy Unit

Source: "Planning", 25 March 2005, p.34

As far as housing and planning policy is concerned, this strategic shift was first and foremost expressed through the revision of Planning Policy Guidance 3¹⁰ (DETR, 2000a). The 2000 revision of the PPG3 requires Local Planning Authorities to carry out housing capacity studies, introduces the sequential approach to the release of land and requires LPAs to re-examine existing land allocations in their plans to fit the new brownfield policies. The result is that the steady flow of developable greenfield land that was replenishing housebuilders' landbanks is no longer forthcoming. Instead, previously developed land is now the only land where housebuilders know they stand a good chance of getting permission to build on.

Brownfield quota target percentages on new housing developments, as stated on the new PPG 3 (DETR, 1999), have been fiercely debated. Strong doubts have been raised on the feasibility and the desirability of increasing densities and promoting more intensive development patterns, with the TCPA launching a Regional Enquiry stressing the need to think the consequences through. On the other hand the Friends of the Earth suggested that the target should have been 75% rather than 60%.

¹⁰ The new Planning Policy Statement 1 also embodies the principles of sustainable development and sets out the key principles that should guide planning policies and decisions but came at a much later date, in 2005.

2.4 Redefining brownfields

An important element of any research agenda is the definition of the concepts under examination, in the case of the current research, brownfield sites and their redevelopment. In the previous paragraphs we have used the terms ‘brownfields’ and ‘PDL’ interchangeably but the exploration of the contradictions, inadequacies and misunderstandings surrounding ‘brownfields’ and ‘brownfield redevelopment’ may actually reveal a lot about the workings of policy-making, governance and the complex relationships between regulation, production and consumption of the built environment.

Brownfields and PDL might seem like straightforward notions, but they are actually difficult to define. The real issue has to do with the transformation of space, potentially any space, and the associated change in meaning attached to that space. No widely agreed definition exists and very few studies ever tried to clarify what the meaning of ‘brownfields’ is, most take it for granted. The term appeared relatively recently, in the UK anyway. In many studies, especially older ones, the term “vacant” or ‘derelict’ has been used instead (DoEA, 1969; MoHLG, 1956;).

From the various definitions that are proposed, none is without problems and deficiencies. To add to the complexity, the term ‘Previously Developed Land’ is beginning to replace ‘Brownfields’ in policy discourse and everyday use by regeneration professionals and the media. This definitional ‘fluidity’ is telling of a change in perceptions of the ‘problem’ and consequently, its solutions.

Not unexpectedly, this fluidity extends to issues of measurement. Despite the best of efforts from a number of agencies and research studies we still do not know how much ‘Previously Developed Land’ is out there. This is only partially due to changes in definitions and inconsistencies in measurement methods through time. Also affecting measurement is the vagueness in what exactly one is supposed to be measuring. The definitions that have been proposed so far are based on dualisms: ‘used/unused’, ‘brown/green’, ‘developed/undeveloped’, ‘occupied/vacant’ to name a few.

However, having shaped the problematic driving this research in terms of housebuilding and housing production and consumption we should re-define

brownfield land as land that is not included in mainstream networks of production and consumption (in our case for housing) and therefore requires significant resources (organizational, monetary, temporal etc.) in order to become marketable and useful to those networks, in this instance for dwelling production (Doak and Karadimitriou, 2007). This land however, might be in some sort of economic or social use already and there may be various interpretations as to how 'empty' and 'unused' it is and various views and visions as to what its future should and could look like.

In that sense 'brownfields' do not comprise only contaminated or otherwise problematic land although the commonsense definition of brownfields is related to obsolescence and urbanity. From the 1950s and until recently the terms that were used instead were 'derelict' or 'vacant' land. This phraseology reflected a rather narrow but still quite accurately specified problematic. Dereliction and vacancy directly referred to how this land was related to economic production processes. However, during the 90s these terms were slowly replaced by the term 'brownfields' reflecting the broader scope in policy intervention and the rising environmental concerns of British society.

As a result, this elusive metaphor quickly came to signify a particular category of land, 'brown' and unpleasant as opposed to the serene and precious 'greenfields'. When talking about brownfields what probably comes to most people's mind today is an obsolete, 'empty' urban site, probably contaminated but certainly unpleasant. Few would think of a disused quarry in the middle of the greenbelt as a brownfield, or at least this would not be their first thought.

In fact, the greenbelt and greenfields in general are also powerful metaphors: although they can be at least as 'empty' and underused as any brownfield site they have entered policy discourses as the idyllic opposite of the brownfields in what could be named the brownfields and greenfields dialectic, yet another facet of the century old city vs. the countryside 'clash', elements of which have been discussed previously in this chapter.

The concept of 'previous development' is the cornerstone of current government attempts to define brownfields because it is believed that this reflects a consensus practitioners have reached (POST, 1998, p. 2). Accordingly, brownfields include:

- i) “Derelict” land, which according to the DoE (now ODPM) is “land so damaged by industrial or other development that is incapable of beneficial use without treatment” (DoE, 1995, p. 3) and
- ii) “Vacant” land, which according to the NLUD means “land that was previously developed and is now vacant which could be developed without treatment”.

The Parliamentary Office for Science and Technology (POST) moves a step further by including under-used sites and land with poor ground conditions in the brownfield category. These definitions are a concrete example of how Brownfield land is treated either as ‘damaged’ and in need of ‘treatment’ or just ‘vacant’ and in no need of treatment in order to be ‘developed’ or put back in ‘beneficial use’. This reference to ‘beneficial use’ hints at the hidden potential of that land that somehow only can and should be unlocked through development.

Further amplifying the dereliction aspects of brownfields, the HBF (1998), quoting but not referencing the DETR, defines previously developed land as the land “which in the past has been used for the construction of buildings, and associated infrastructure”. According to the same quote this land “includes agricultural buildings and land used for mineral extraction and waste disposal and defense”. Similarly, the National Land Use Survey defines previously developed land as land “which is or was occupied by a permanent structure (excluding agricultural or forestry buildings) and associated fixed surface infrastructure”, but excludes derelict mines, quarries, spoil heaps, railway and military land.

On the other hand the UTF adopts an expansive definition of brownfields as “all the land that has been previously developed” and makes a rather useful account of various associated statistics (Urban Task Force, 1999, pp. 173-182). This terminology, of ‘previously developed land’ is becoming more and more widespread lately and indeed this is the term used in much of the present research. This change can be seen as an attempt to transcend the greenfields vs brownfields dichotomy at least at the level of rhetoric. Previously developed land does not carry with it the negative connotations of ‘brown’ land. In a sense this change in terminology ‘destigmatises’ and therefore makes it much easier for developers to promote developments on previously developed land in terms of marketing as opposed to developments built on brownfield sites.

In comparison the U.S. Environmental Protection Agency (USEPA) defines brownfields as “Abandoned, idled, or under-used industrial and commercial facilities” and emphasizes the “real or perceived environmental contamination” that inhibits redevelopment¹¹. This is a much more clear-cut definition that focuses on environmental issues and interestingly enough refers to perceptions affecting developers’ decision making.

The problem with this wealth of definitions is that the use of terms like dereliction, vacancy or contamination does not help much in describing real site situations in full. Such an approach implies that a site’s life cycle is somehow proceeding in a linear and sequential way, where one phase follows the other and eventually finishes with dereliction or vacancy and contamination. This, however, is not always the case in real life, although such a situation might occur in many instances. A site might be partially derelict to various degrees, partially vacant and partially in use for prolonged periods of time. One must also bear in mind that brownfields may be used for a multiplicity of economically low-revenue purposes (i.e car parks, storage, car servicing), without losing their capacity as a valuable social asset (i.e informal recreation, ecological habitats). This point has not been sufficiently addressed in any definition used for the discursive ‘construction’ of brownfields.

Furthermore, by bringing the issue of use into the debate, the POST report rather complicates the situation. Questions arise as to what under-use is, when is a site under-used and what exactly is meant by vacancy. For example: Is an abandoned urban site, that has been taken over by vegetation and is used as children’s playground, a nuisance, a missed economic opportunity or a valuable asset that enhances amenity? Sometimes even a clean-up effort may have impressive results on the quality of a site or the local environment without much effort or cumbersome procedures. Indeed, much of the debate on brownfield sites is about their amenity value and their importance as natural habitats. It is quite possible therefore, that under-use is treated here as a synonym to “below full productive capacity” or “economically inefficient”.

The differences between the clear-cut but rather restrictive USEPA definition and the more inclusive but fuzzier UK attempts are also reflections of the differences in

¹¹ Definition coming from the USEPA glossary at <http://www.epa.gov/swerosps/bf/glossary.htm>

the problems that the respective government policies are trying to tackle. The UK problem is that developers would much rather still build on land that society believes is worth preserving while on the other hand there is an abundance of land that has been previously used, therefore society now sees as 'developable' but is considered 'undesirable' by developers.

In the UK, partially under the influence of the sustainability agenda, the land and property markets are not considered to be inherently efficient and therefore, by implication, state intervention is required. This intervention is deemed necessary in order to reshape the market, especially land supply and actively promoting certain 'acceptable' development models.

On the other hand, land supply is not an issue in the US and the only ideologically acceptable intervention in the markets is 'lifting the barriers' that stop the markets from performing efficiently, as they are supposed to be doing. Problems with the redevelopment of vacant and derelict land are therefore a matter of bad perceptions (i.e. lack of information) and the extra costs involved that make redevelopment unprofitable or risky (i.e. contamination).

In the US the role of policy is to make the 'optimal redevelopment rule' work as it should, in the UK it is implicitly accepted that this is inherently impossible although certain measures could indeed improve market efficiency. UK's adoption of the sustainability agenda means that government intervention is not only justified, it is required in order to achieve wider social goals and the market is just another factor to be taken into account. All this is very reminiscent of a social-democratic approach, albeit a watered down version of it.

In conclusion, it should be noted that underneath a superficial consensus on what exactly is meant by the term "brownfields", the situation is far from clear. Many issues remain to be resolved and, in fact, they might never be. However the reader should not be under the impression that when people talk about brownfields they all mean exactly the same thing. The meaning they attach to the term varies according to their social, scientific, ideological or national background.

The concept of brownfields and as a consequence their redevelopment is by no means a clear cut, settled matter. The land that today is more often than not called PDL was called vacant or derelict a few decades ago. This change in definition and their meaning has little to do with the substance of what this land comprises but more to do with how it is viewed by the actors involved in the development process or

even society more widely. In the past this land was viewed as the 'leftover' of economic development, industrial or otherwise. It was derelict and vacant. Later on, as brownfield land, it was juxtaposed against the green and pleasant greenfields. With time it came to be seen as a lost opportunity, a resource with great potential that could salvage precious acres of rural, 'natural and unspoiled land'. Brownfields became a resource and as such they were transformed again into the much more neutral Previously Developed Land.

A consequence of this course of changing meanings is the difficulty in accurately measuring how much of that land there really is even more so how much it has changed in quantitative terms. Older data refer to dereliction, later on they include vacant sites, then measure brownfields taking into account the fact that a site might actually be partially in use. Furthermore, the structuration of the debate around two polar opposites brownfields and greenfields has had a lot of negative consequences in terms of perceptions and therefore marketing. If brownfields are so bad and greenfields are so good then who would really like to buy a dwelling in a redeveloped brownfield site?

One could claim that today, it is impossible to measure Previously Developed Land because all urban land and much of the countryside would have to be counted in, thus rendering the whole measuring exercise rather nonsensical. In terms of insights however, the term PDL is an extremely useful leap forward in our understanding of the issues at hand. Redevelopment is about transformation of space, land that has been previously developed and is occupied by one range of uses. Characterising a piece of land as PDL is giving new meaning and thus a new range of possible futures by a set of actors that deem it feasible to engage with this process of transformation.

For the purposes of this research the "brownfield sites" that will be examined will include previously developed urban sites, which could arguably be regarded as capable of more "efficient" or intensive use through redevelopment. This approach is very close to that of Alker et. al. (2000a, p.12) who says:

"A brownfield site is any land or premises which has previously been used or developed, and is not currently fully in use, although it may be partially occupied or utilized. It may also be vacant, derelict or contaminated. Therefore a brownfield site is not necessarily available for immediate use without intervention."

This definition is indeed a partial view, but serves the purposes of this research very well. Both the sites selected as case studies in the present research are on prime riverside locations, did not have major contamination problems, were previously occupied by various uses and users and were also partially vacant/derelict. More importantly, they were like that for several years and in spite of occasional developer interest nothing had happened in terms of new development.

Nothing until very recently that is. These sites were by no means ‘hardcore’ brownfield sites, there was nothing insurmountably difficult or problematic about them and more importantly, their development potential was rather obvious yet never materialized until the government decided to re-orientate housing production and development in general. It is the lack of development in this type of sites that the optimal redevelopment rule, based on the standard economic approach (see Chapter 2) cannot easily explain.

It is therefore the case that, for the purposes of this research, a brownfield site includes: ‘Urban areas with various owners, various degrees of use including dereliction and vacancy. Their common characteristic will be their partial or complete exclusion from consumption and production processes which society and policy makers deem as a higher priority than their current use’.

2.5 Concluding remarks

The policy of redirecting development to PDL in principle runs contrary to the argument that ‘land vacancy’ is a ‘natural’ course of events in the production and consumption of the built environment and not necessarily a problem to be tackled by the state. According to this line of thinking prolonged vacancy may have serious negative externalities but the state should not intervene to affect the geographical location of development. Instead, the argument continues, any state intervention should focus on minimising the negative externalities of vacancy and dereliction and decrease information asymmetries. Essentially, any other type of intervention from the state would lead to less efficient use of resources and to less than maximum social welfare.

The initial response from housebuilders to their changing business environment, affected by changes in policy and attitudes, was rather reserved. They stressed the

need for policy makers to respect consumer preference for greenfield housing and outlined the possible negative effects that rapid readjustment might have for the industry, fearing a slump in housing supply (Stewart, 2002). From their point of view, this policy shift would require significant efforts to adapt to not only from housebuilders themselves but by everyone involved in the production and consumption of housing.

Recently, several years after the turn towards PDL re use was initiated, and with remarkably favourable marketconditions, housebuilders have finally begun to warm up to the idea. Most firms build a substantial percentage of their output on PDL and several firms that specialise on PDL housebuilding have emerged. However, housing production picks up very slowly after reaching a post war low during an era of unprecedented house price inflation. Maybe the original fears of the effects that the policy shift would have on housing supply were not unjustified. With these aspects in mind, important insights into the issues surrounding urban land re use could be gained from an analysis of how housebuilding production works and what response have housebuilders given to a new business environment that strongly favours urban land re-use.

CHAPTER 3

Theoretical approaches to redevelopment

3.1 Introduction

In the previous chapters it was examined how government policy has changed recently and what these changes signify at the level of discourse and at the level of the production of the built environment. Also, the serious issues underlying the recent turn towards the redevelopment of previously developed land and the potential effects for the housebuilding industry were contemplated. In the chapter that follows various theoretical approaches will be examined that might provide useful insights into the economics of redevelopment, the development process itself and business adaptation and strategy. In terms of the theoretical background on which they are based, approaches dealing with redevelopment can be divided into two- albeit interconnected- categories: rent based and ‘development process’ approaches.

Rent based approaches, underlined by theories primarily concerned with explaining how the market values of land and property become established, are either rooted into the neoclassical tradition or in Marxian rent theory. Development process approaches are also rooted in the neoclassical, Marxian and institutional/evolutionary traditions. Rent-based approaches highlight the cost factors associated with brownfield redevelopment and underpin much of the literature on ‘barriers and constraints’, meaning the blockages that do not allow the efficient operation of market mechanisms (contamination, lack of information etc.), usually conceptualised as factors increasing costs.

Albeit useful, these approaches are limited in scope and on their own they can provide us only with limited insights into the questions posed in the previous chapter. For example, in conditions of price inflation, as those we are experiencing at present, the extra costs associated with brownfield sites should not have been significant concern for developers yet these costs take a prominent position in rent-based approaches as explanatory factors behind the perceived reluctance of developers to move into PDL redevelopment. Similarly, neoclassical and Marxian development process models over-emphasise agency and structure respectively and do approach redevelopment in a linear way.

Given that we define the problematic in terms of housebuilder adaptation to a changing policy regime, another promising route of analysis appears to be a combination of the institutionalist development process models combined with concepts of competitive strategy and competitive advantage borrowed from evolutionary approaches in the management literature. This approach takes into account the multiplicity of relations between the actors involved in the development process and can accommodate for the role of change in the norms and routines underpinning the strategic re-orientation of the firm. This element is crucial in explaining the challenges posed to the industry and to the wider system of production by the redevelopment of previously developed land and the reasons behind the response which at least some housebuilders have displayed to the recent shift in government policy.

3.2 The Neo-classical rent-based approach to redevelopment

Redevelopment issues are related to land use theories in a profound way. Land use theories try to describe urban land use distribution and change as well as the mechanisms behind them. Furthermore, as seen in chapter 1, at least one version of the brownfields definition is based on land use and economic criteria. Urban land use theories are the analytical tools that try to link the economy with urban space and could therefore provide useful insights on the issue of urban land redevelopment.

Mainstream land use theories share the assumption that different land uses are competing with each other and that abandonment and renewal are generated by the competition between uses for sites- sometimes described in the ecological language of land-use invasion and succession. Their common assumption is that this competition is reflected in the price, or rent, that different uses and users are willing to pay for locating in the same place. In general, the more accessible the place the higher the price, or rent, the hypothetical user is willing to pay. Accessibility is used as a shorthand for the wide group of attributes which can determine the productivity of sites and its precise specification will vary between users and uses.

These ideas, essentially building on the analysis of differential productivity and rent stemming from the work of David Ricardo¹², have been developed from the 19th century onwards by theorists like Richard Hurd, Robert Haig and many more. Their concepts have been eloquently summarised by R.U. Ratcliff in his book *Urban Land Economics* in 1949:

“The utilisation of land is ultimately determined by the relative efficiencies of various uses in various locations. Efficiency in use is measured by rent paying ability, the ability of a use to extract economic utility from a site. The process of adjustment in city structure to a most efficient land use pattern is through the competition of uses for various locations. The use that can extract the greatest return from a given site will be the successful bidder...In summary,...the structure of the city is determined through the dollar evaluation of the importance of convenience.”

The mechanism through which competition for urban land functions, was proposed by William Alonso and it provided an integrated theoretical platform for what was until then a bundle of distinct studies in land use, transportation, housing etc. The idea of an urban location theory, based on a monocentric city, has ever since dominated neoclassical thinking as far as urban structure is concerned. Only relatively recently have urban economists proposed polycentric models.

Since the model appeared, many researchers have built upon its various assumptions and have refined the model, bringing new parameters into consideration and examining different aspects of it. The assumption of the monocentric city has been expanded to accommodate polycentric urban areas (see for example the work of Mills). Instant market clearing can be modified as serial or incremental rounds of development, redevelopment and change in stock adjustment models. Muth and Evans amongst others examined density variations in combination with urban growth as well as the variations in household location preferences. Finally, various authors tried to emphasise the role of state and planning as well as the influence of infrastructure on land use patterns.

¹² According to Ricardo, rent “pays landowners the value of land’s marginal product and is precisely the amount left over after paying owners of other inputs the values of their marginal products.” (Mills E., Hamilton B.; 1994, p. 95). Classical economists considered rent as the price to be paid for the use of land as a factor of production.

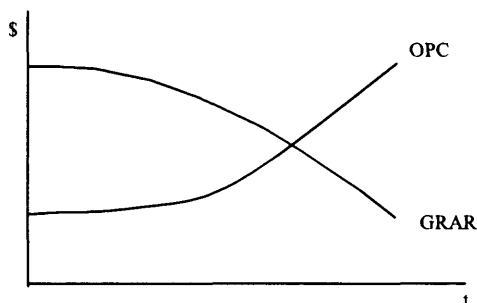
3.3 The optimal redevelopment rule

Redevelopment in neo-classical urban economics is inextricably linked with theories of urban growth. An early problem encountered by this approach was the inability to account for the ‘durability’ of the built environment within a static equilibrium framework. After the mid-70s various attempts were made to elaborate on redevelopment based on a comparative static analysis and the ‘optimal redevelopment rule’. This section will elaborate on them after explaining the basics of the ‘rule’.

The ‘rule’ appears at least as early as the 1980s, in the work of Brueckner (1980) or Wheaton (1982). It states that for redevelopment to occur, the “net residual value to land if developed “optimally” should be greater than the “gross value of land and capital that currently exists on the site plus the cost of demolishing the old capital” (DiPasquale D., Wheaton W., 1996, p. 85).

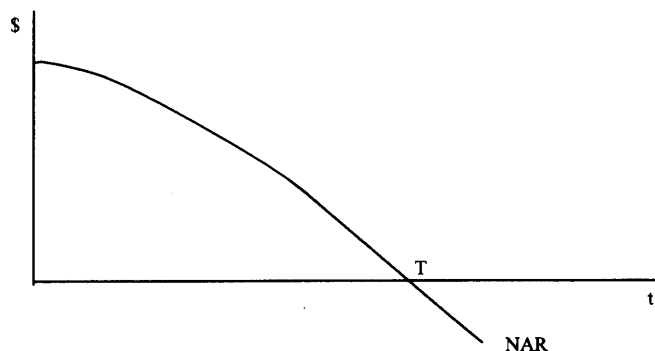
Balchin (2000, 1995) as well as Harvey (2000) and DiPasquale and Wheaton (1996) elaborate this topic in detail. Balchin as well as Harvey explain that during its lifetime the building’s OPERating Costs (OPC) will rise, in real terms. This will happen mainly because of increasing maintenance and repair costs and also because of its decreased adaptability to new needs. The opposite applies to the building’s GROSS Annual Returns (GRAR) -based on rent received- which are under constant pressure from competing developments and the change of users’ needs.

Figure 3.1: Operating cost and gross annual returns through a building’s lifetime



The Net Annual Return (NAR) of a building for a given use is dropping annually since $NAR = GRAR - OPC$. In one point in time (T) it will eventually become zero and after that it will turn negative (Figure 3.2).

Figure 3.2: Net Annual Return through a building's lifetime



The value of the site at each given point in time (i) is given by the formula $P = \sum_{i=1}^n [(R_i - O_i)/(1+r)^i]$ where P is the value of property in current use, r is the rate of discount, R_i is the GRAR from year i to year n and O_i is operating costs from year i to year n excluding depreciation.

After T years the operating cost becomes higher than the rent which can be attained from the market, hence the capital value of the site becomes negative. This in turn means that it is no longer profitable for the building/site to be used under its current use. If it is not possible to find another use that can yield higher rents then the site would be better left unused. According to Harvey (Harvey, 2000), at this point the owner of the site has three options:

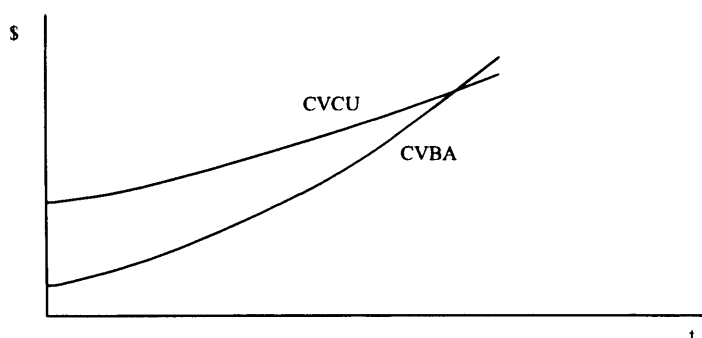
- a. To maintain the existing building and modify it in order to accommodate new uses or intensify the existing use;
- b. To demolish the existing building and construct a new one;
- c. To abandon the existing building altogether and develop on a new site (i.e. greenfield development).

Before reaching decisions b or c though, the owner will probably have to consider decision (a) at some earlier point. Rehabilitation has its own economic rationale, based on attaining higher NAR through decreasing OPC and increasing GRAR. Refurbishment is worthwhile only when its cost would be smaller than the present value of the rise in NAR expected by the refurbishment. Eventually at some point in time this will no longer be feasible and thus options b or c will be followed.

Once the site/building has been vacated from its previous use the decision to redevelop will depend upon the value of the cleared site: this value must be higher than the value of the site/building in its existing use, plus clearance costs. Assuming

now that price stability is unfeasible for a period as long as a building's lifetime, both the capital value at the current use (CVCU) and the capital value at the best alternative use (CVBA) will rise over time, in nominal terms. As shown in Figure 3.3, CVBA will eventually overtake CVCU since the latter is increasing at a lower rate than the former. CVBA will increase because of the increased NARs that a new purpose-built building can obtain and the longer lifetime of the building, which means that more NARs can be aggregated to obtain present value. However, CVBA is not the present value of the site since preparatory work (demolishing and rebuilding) has to be carried out in order to bring the site to the best alternative use. It should be noted here that Best Alternative Use may not be the same throughout the building's lifetime.

Figure 3.3: CVBA and CVCU through a building's lifetime



When construction of the building took place CVCU was greater than CVBA and this is the reason why construction started in the first place. The value of the cleared site (VCS) in each given point in time is given by the formula $VCS = \sum_{i=1}^n [(R_i - O_i)/(1+r)^i] - DC - RC$, where r is the rate of discount, R_i is the GRAR from year i to year n in best alternative use and O_i is operating costs from year i to year n in best alternative use excluding depreciation, DC is the cost of demolition, clearing and servicing and RC the cost of rebuilding. As long as $DC + RC > \sum_{i=1}^n [(R_i - O_i)/(1+r)^i]$ the value of the cleared site in its best alternative use is negative despite the CVBA being positive. Redevelopment will only occur when $VCS > CVCU$, at the moment the building has become economically inefficient. This however, will happen some time before the building becomes technically inefficient in its current use.

Within a similar theoretical framework, DiPasquale and Wheaton (1996), consider redevelopment as an "...adjustment process by which housing capital is gradually replaced." (ibid., p. 85), it "...can be economically feasible under a range of market changes" (ibid. p. 86). Based on the optimal redevelopment rule, they propose that if ' p^0 ' is the total value of the existing use per unit of land surface, ' F^0 ' the existing floor area ratio, ' a^0 ' the hedonic value of the existing housing capital and ' b ' the marginal reduction in value with increasing densities and decreasing lot sizes, then $p^0 = F^0(a^0 - bF^0)$ (i). The mathematical form of the condition of redevelopment as stated in the previous paragraph then becomes $p^* - p^0 > dF^0$ (ii), where p^* is the net land return from new optimal development and ' d ' is the cost of demolition per unit of floor surface (ibid, p.85).

If we replace p^* we get¹³, $F^*/F^0 > (a^0 - bF^0 + d)/[(a-m)-(b+t)F^*]$ (iii), where ' m ' is the basic cost of construction per unit of surface and ' t ' represents the incremental additional construction cost per unit of surface which increases in a linear fashion as density increases. We can draw certain conclusions from inequality (iii). In particular, it shows that redevelopment may occur at various new densities depending on the relation between technical and consumer preference variables before and after redevelopment. Optimal F may be lower than existing if a is sufficiently high or if ' m ' and ' t ' are sufficiently low or both.

At first glance, both Harvey's and DiPasquale's example indicate that in a perfect market and under perfect competition the only factors that would affect the pace of redevelopment would be the interest rate, and the various costs as analysed above. This is far from the truth though. However, even simple models such as the one by DiPasquale and Wheaton recognise that there is a variety of conditions that affect the pace and the form of redevelopment. Besides the factors that are considered in the models we saw, decision makers have to work with rental streams but both the future rent and the rate of return are subject to uncertainty. This makes the decision process much more complicated than it looks in the example above.

During the last few years in London, despite sometimes historically low nominal interest rates, generous grants and other financial provisions (for example gap funding) that reduce servicing costs and a robust demand in most property sub-markets, a variety of vacant sites still fails to attract redevelopment. Although, on

¹³ For a detailed treatment of the topic see DiPasquale and Wheaton, 1996, p. 76.

many occasions the blame is squarely put on planning or ownership constraints, research so far has argued or assumed that a variety of constraints must be in operation, for this phenomenon to occur.

Two basic problems with early land use/urban growth theory was durability of housing and the issue of foresight: Under what future price expectations is development and redevelopment occurring (or not)? Two strands of equilibrium modelling have evolved, one assuming perfect price foresight the other assuming 'myopic' behaviour (i.e: the expectation that future prices will be equal to current prices).

Early attempts to model urban growth with durable housing were made by Brueckner (1980) and Wheaton (1982). They elaborated on the work of Muth (1973), Fujita (1976) and Anas (1978) and Brueckner proposed a 'vintage' model of urban growth in order to explain divergence from the smooth density curve predicted by the static model. Wheaton on the other hand emphasizes the changes in density depending on distance under myopic or perfect foresight and concludes that under the latter, land speculation and landbanking may be "intertemporally pareto efficient" (ibid., p.21).

More recently, Rosenthal and Helsley (1994) assume myopic landowners in an effort to test the optimal redevelopment rule. Their assumption is that demolition and clearing costs are zero. Thus they overcome the problem of durability and estimate that "...housing is demolished when the existing stock of structural capital is economically obsolete." Munneke (1996) further confirms these findings in support of the 'redevelopment rule' and says that the probability of redevelopment does not only increase with the increase in value of the "redeveloped state" but it is also selective: certain sites will get redeveloped more often than others. Finally, Braid (2001) is more concerned with how urban growth is affected by redevelopment under perfect foresight. One of his assumptions is that the lowest income group will occupy redevelopment in the inner city whereas the highest will occupy land in the outer fringe. His models predict "perfect concentric rings" and "a perfect discontinuous population density pattern." (ibid., p. 444).

Despite the useful insights and a straightforward logic, neoclassical approaches are not without criticisms, some of which are quite relevant for issues having to do with adaptation and change. These we will discuss in detail in the following chapter.

3.4 Criticisms of the neoclassical approach and the need for an alternative

In reality, many assumptions of the neo-classical model are very difficult to apply in land markets. Since these models assume instant market clearing, they cannot accommodate for historical and ownership factors which distort the market, sometimes leading to disequilibrium (Hamnett, 1982). To many researchers the role of institutions in the land market was central in explaining them and they should not be treated as “imperfections”. Economic rationality was doubted since it was argued that different actors, or land users, do not always behave in an economically rational way, especially as far as the housing markets are concerned.

An important criticism is that commodities in the land market are not divisible or homogenous, at least not in the way that canned soup is. Even if two office blocks are exactly the same, construction-wise, they most probably are not the same as far as their locational qualities are concerned. Other critics focus on the power struggle between the actors involved in the production of the built environment and tried to clarify the dynamics of that struggle within the capital accumulation process.

In some ways the persistence of brownfield land poses the same theoretical questions as persistent unemployment: Is it an indication of an anomaly within the mainstream framework? Is there such a thing as an efficient level of land dereliction and vacancy? If so, how can this level be reached and is it morally acceptable to talk about efficient and inefficient levels of vacancy and dereliction in an era of homelessness and house price inflation? Certainly most of the work on the constraints to brownfield redevelopment assumes that such a level exists.

However, the dualist¹⁴ assumption that the mainstream economics treatment of redevelopment is either true or false disregards the epistemological tenet that no single theoretical approach can encompass reality in its totality. It is more productive to understand that the mainstream, neoclassical, approach has both strengths and weaknesses and thus some of its contributions can be appreciated and usefully contribute to an explanation of the phenomena under observation. Starting from the premise that the present research examines an open system, the socio-economic process of redevelopment, makes it easier to accept that mainstream economics can

¹⁴ Dualism is a prominent feature of the ‘Cartesian’ mode of thought is the tendency to interpret reality in terms of sets of mutually exclusive all encompassing categories: good/evil, positive/normative etc. (see Dow, 1996, p.16)

provide useful insights into the workings of that system but can never manage to describe that system in its totality, by definition.

Economics is still a social science and it is bound by the same constraints that all other social sciences face when dealing with their subject-matter¹⁵. Papageorgiou and Pines (1999, p.17) note that attacking model-based thinking on its unrealistic assumptions is “vacuous” since all models are based, by definition, on “drastic simplifications”. What matters, according to the same authors, is “whether or not unrealistic assumptions simplify the problem in a way that allows for a clear, partial and undistorted glimpse of the object we are interested in learning about”. They add that criticism is “unproductive” if it is not coupled with alternative proposals.

As Ive (1997) summarises it, neo-classical economics fails to deal with issues like “capitalism, classes, power, labour processes, time, evolution, innovation, endogenous change and the real institutions of modern capitalism, such as the business corporation and the financial system”. To that sort of criticism Krugman replies that leaving such a huge blank area is the price we have to pay for discovering or rediscovering knowledge through new methods and techniques which for the time being are incomplete and inadequate (Krugman, 1995). Krugman also makes another interesting remark. He argues that the reason why mainstream economists have not bothered with space so far is that agglomeration economies, economies of scale and imperfect competition have been impossible to model until recently (Krugman, 1995).

Nelson and Winter on the other hand launch a much more detailed criticism, highlighting the inefficiencies of ‘mainstream’ economics in explaining economic change (Nelson & Winter, 1982). A change in market conditions (i.e in demand for the industry’s products) cannot be accommodated within an equilibrium framework simply because the latter pre-supposes both instant behavioural adjustments and perfect forecast of the outcomes, both patently absent in the world of business. If however one accepts that change comes as a surprise, at least to some of the parties involved, then inevitably one has to allow for a period of adjustment during which the “prevailing policies” of some of the actors are not ‘maximising’ simply because they are better tuned to the old regime than the new one. Hence, one has to accept that markets are not in equilibrium for some time after a shock occurs. This sort of

¹⁵ See Sayer (1992)

logical contradiction runs deep into the core of the basic neo-classical assumptions has plagued mainstream economic thinking on issues like innovation or business strategy and explains why related theory remains underdeveloped and has retained an ad hoc character despite the progresses made in game theory. In the words of Baumol (1968, p.68) since "...maximization and minimization have constituted the foundation of our theory...the theory is deprived of the ability to provide an analysis of entrepreneurship."

Nelson and Winter belong to the big family of economists and social scientists who have strived to enrich and expand classical and neo-classical thought or even propose alternatives to it. Later in this chapter we will briefly present some of these alternatives, but we will pay particular attention to the way they examined urban issues, land redevelopment and industrial change. They see the economy in evolutionary terms and it is therefore useful to remember that evolutionary systems, by their very nature have unstable parameters. They are disequilibrium systems and in such systems our power of prediction, though not zero, is very limited because of the unpredictability of the parameters themselves. In the words of Boulding (1981, p.44) "Social systems have Heisenberg principles all over the place, for we cannot predict the future without changing it."

Before we examine the recent approaches that deal with institutionalist and evolutionary issues let us first deal with a family of approaches that are based in the early tradition of Marx. Interestingly, Marx was himself concerned with issues of change albeit at the level of the mode of production, i.e capitalism itself.

3.5 Marxist rent-based approaches

One of the main concerns of Marx himself and of Marxists ever after, are the power relations between the economically defined social classes. Each and every insight of Marx on issues such as rent is seen under the light of the struggle between the capitalist class and labour class during the wider process of capital accumulation. Here, value is created when natural resources are transformed into products through human labour. However, not all of this value is returned to labour. Instead, the people who own the means of production, the capitalists, take a part of it, that part being 'surplus value'. Land in itself cannot produce surplus value but is a necessary

precondition for most productive activities. Therefore, rent paid to landowners is regarded as a deduction from the surplus value.

Landowners, landed property to be precise, own the rights over land. They have the monopoly to exclude others from access to and use of those rights. By virtue of this monopoly they are able to extract payments, in the form of rent, from capitalists who wish to produce value on that land. In this way "The intervention of landed property...alters the profitability or feasibility of specific production methods or the location of production" (Ball,1985, p.72).

Marx, whilst talking about agricultural land and production, differentiated between three forms of rent: differential rent (DR), monopoly rent (MR) and absolute rent (AR). He went on to divide DR into DR I and DR II, but the empirical distinction and measurement of each category has proven to be impossible. According to Hamnett (1982) monopoly rent results from the uniqueness of a place's product and the willingness of the capitalist to pay extra for this uniqueness. A good definition of the other two categories comes from Kerr (1996, p.60):

"...differential rent arises from the difference between the individual production price of a particular capital... and the general production price of the total capital invested in the sector of production concerned...Absolute rent arises out of the excess of value over the price of production..."

Marx himself tried to transfer his categories into urban space, but did not pay much attention to the issue. He distinguished two categories of housing rent and he named them building rent and ground rent. Building rent is the interest/profit of the capital expended in a building and it equals INTEREST + REPAIR COST + CAPITAL REPLACEMENT COST (AMORTISATION). The amount above this reasonable rent goes to ground rent and it is the amount paid for the particular advantages of the situation.

Urban rent theory was not a major concern to Marxist theorists until the 1960s when the interest in urban studies was revived. The three most influential Marxist urban theories have been those of Harvey (starting in 1973), Castells (1977) and Lojkin (1976). Castells treats the built environment as the place where labour power is reproduced and embarks on a discussion of the role of the state and collective consumption in that reproduction process. Lojkin considers urban areas as the locus of consumption, production and distribution but does not pay particular attention to the agents involved in the production of the built environment except if that is the

state (probably a result of his familiarity with France). Finally, Harvey pays particular attention to the role of rent, finance capital, the production of the built environment and its role in the process of capital accumulation. In essence he tries to propose an explanatory framework for the production of the built environment¹⁶.

Ball (1977, 1985a, 1985b, 1986) criticised the suitability of classic Marxist rent categories, which stem from analysis of agricultural production, in an urban context, preferring to see rent as a market price and emphasising the role of social relations¹⁷. In the work of Harvey (1978, 1982, 1985, 1989) rent is both a barrier to capital and a stimulant. Landowners assume a coordinating role, necessary for and not parasitic on the function of capitalist accumulation. They constantly seek to put the land in the highest rent-yielding use thus promoting land use change and renewal.

How successful it is to transfer agricultural rent categories to an urban context is still an issue of debate (Haila, 1990; Kerr, 1996). The debate however, provided some useful insights into urban phenomena. As Edwards (2000a) notes, the usefulness of this strand of thought lies in revealing the struggle of social groups to secure part of the flow of social surplus; including that generated by state and private investment in urban infrastructure and by the scarcity produced by restrictive planning.

An interesting attempt to apply Marxist thinking to urban renewal issues is the 'rent gap' hypothesis. As a matter of fact, the hypothesis has been used to explain gentrification, but could be applied to redevelopment in general as well. It first appeared in 1979 in an article by Neil Smith and attracted considerable attention since. According to Smith, the rent gap is "the disparity between the potential ground rent level and the actual ground rent capitalized under the present land use". Potential ground rent is "the amount that could be capitalized under the land's highest and best use". Redevelopment only occurs when this gap is wide enough for the developer to obtain a "satisfactory return" after deducting all redevelopment expenses, although this phase is the last in a 5-stage circle of devalorisation and revalorisation.

A similar approach, based on value instead of rent, is the value gap hypothesis, put forward by Hamnett and Randolph (1984, 1986). They proposed that when the "vacant possession value" of a property is greater than its "tenanted investment value" then the landlords are tempted to sell to owner occupiers instead of renting out in order to "realise the capital gain".

¹⁶ For a detailed analysis of Harvey's approach to the development process see section 3.9

Several researchers tried to verify empirically the existence of a rent gap or a value gap in gentrified areas and Clark (1992) proposed that those two approaches are actually commensurable. Bourassa (inter alia 1993) indicated that the rent gap hypothesis is flawed. He claimed that its use of terms is inconsistent, it confuses rent with value and their interrelationship, it mistakenly determines land rent in conjunction with current land use and it is based on tax assessment data to define capitalized land rents whereas tax assessments in most jurisdictions are based on the “highest and best use”. Most importantly he claimed that the rent gap hypothesis does not provide us with explanations as to why redevelopment occurs. Bourassa concludes that, given these inadequacies and contradictions, the more coherent neoclassical treatment of redevelopment is preferable to the rent gap hypothesis.

Counterarguments to Bourassa’s critique were given both by Clarke (1995) and Smith (1996). Clarke argues that current land use can indeed affect rents, that it is valid to use tax assessment data and that most of Smith’s terminology is quite accurate and well defined. The last point is also brought up by Smith (ibid.) who adds that it is fundamentally mistaken to judge the internal coherence of a Marxist hypothesis on neoclassical grounds. Both authors trace the roots of the hypothesis back to Marx and Engels. Hammel (1999) also argued in favour of the rent gap hypothesis although he claims that it should best be used at the neighborhood or the metropolitan scale.

Finally, Yung and King (1998) tried to test the hypothesis on Melbourne data and concluded that it is a useful tool that measures “a temporary inconsistency between distinctly different submarkets (for houses and for vacant land) coexisting in the same place”. However, they add, it only describes a part of the process and just an aspect of a very complex phenomenon. Therefore to us, the quest still remains for a broader theory that would encompass more aspects of gentrification and even more so, of urban renewal.

As far as the development process is concerned, Marxist authors highlight the tendency of distinct sets of social relations of building production to become dominant and to influence the physical growth and change of cities. Beldecos (2000) and Isik (1991) are good examples of the implementation of this approach in

¹⁷ For a detailed analysis of Ball’s approach to the development process see paragraph 3.10

research. Some of these 'distinct sets' or 'models' will be presented in the next chapter.

Despite its inadequacies, the Marxist approach to the built environment and land development highlighted two issues of major importance, the role of agency and structure and the role of history. This strand of thought is convergent with an institutional approach in that the emphasis is on enduring social and economic mechanisms including state policy and law, market behaviour and social structures.

3.6 The Evolutionary and the Institutional approaches in perspective

Evolutionary and Institutional economics are schools of economic thought, which were influential during the pre-World War II period and have recently attracted renewed attention, as did most other non-mainstream approaches. Many authors would consider them as separate schools though there have been signs of growing convergence and complementarity between the two recently (Aoki, 2001; North, 1990). Their foundations lie in the writings of economists like Veblen, Commons, Mitchell, Galbraith or even Schumpeter (who disliked institutionalism). The main focus of these approaches is on 'change' and 'structure'. Indeed, they view the economy not as a static or evenly growing closed system but as a dynamic, open system where change and disequilibrium is the rule rather than the exception.

Institutionalism proposes no general theory of redevelopment (or of anything else), however much of the work that has been done on the real estate markets in the UK has institutionalist affinities. Evolutionary approaches try to deal with and eventually explain the patterns of change that economic activities demonstrate. The purpose of the following section is to make a brief historical account of evolutionary approaches and institutionalism, to demonstrate their key theoretical and methodological concepts and show their complementarity (Metcalf, 1998, p.21) in explaining 'change'.

An important characteristic of institutionalism is its inclusiveness and its eclecticism. Hence its methodology and its assumptions have much in common with other schools of economic thought, particularly with the post-Keynesian, although it also has drawn from Marxist, mainstream and neo-Austrian economics (Dow, 1996; Hodgson, 1998; Samuels, 1995). The reverse also applies; many authors well within

these traditions have begun to re-examine institutions and their role in the economy. Most notably, mainstream economists trying to explain the emergence and function of institutions have proposed a 'new' institutionalism whose main difference from the 'old' is the acceptance of 'methodological individualism' i.e the acceptance that individuals predate institutions and that their individual preference functions are identical and given.

As Hodgson (1998a) puts it, institutionalism "does not attempt to build an all-embracing paradigm", but this does not mean that it does not recognise the need for theory. Methodological and theoretical core ideas do exist under institutionalism, but serve as starting points not as a basis for a unifying general model. The lack of an all-embracing paradigm in institutional economics could be attributed to factors such as its multi-disciplinarity and its affinity with 'instinct' psychology and pragmatist philosophy (Hodgson, 1998a). Institutionalism has a rich tradition of historically and geographically specific studies, trying to explain concrete situations instead of moving into abstract generalization.

Besides the above, Samuels (1995) and Hodgson (1998a, 1988) note some more basic characteristics of institutionalism:

- Institutions are not only important but also continuously evolving.
- Institutions, such as the market, are subject to social control; they are created and structured by social action and are not independent; neither do they function according to 'natural' laws.
- Technology has a prominent role in the "transformation of economic systems"
- Power structures within the society and the market are responsible for resource allocation. Prices are social conventions.
- Individual identities both affect and are affected by institutions, the cultural and power structure of a society. However it is impossible to totally explain individuals in terms of structures and structures in terms of individuals.

Some disagreement exists on what exactly an institution is. Some theorists consider institutions to be the organizations (i.e trade unions), agencies and firms involved in whatever process they might examine or take a "common sense"

approach towards the issue (see Ball, 1998). Others, particularly transaction cost economists, move to higher levels of abstraction and consider institutions to be sets of rules, the “rules of the game” (North, 1990; Adams, 2001; Eggertsson 1990). They consider organizations to be agents, belonging therefore to the same analytical category as individuals. Others consider both to be of significance, for example Ive and Gruneberg consider both markets and firms as institutions (Ive, 1997; Gruneberg and Ive, 2000). Perhaps a more productive stance would be to separate the levels of abstraction, to recognise that the rules and practices of the game are institutions mediated and reproduced by organizations which in themselves are created by institutions as well. Then one may use those analytical categories accordingly at different levels of abstraction.

The rather static treatment of the firm from the old institutionalists has also lead to a revival of the evolutionary approach to economic change which in many ways complements the more traditional institutionalist approach. The writings of Kenneth Boulding (1981) and Nelson & Winter (1982) advanced the agenda in the Anglo-Saxon literature whereas the French regulation school (Aglietta, 1979) pursued similar issues from a marxist point of view. Similarly, Williamson (1985) and North (1990) have revisited the writings of Coase to trigger the development of what became known as the New Institutional Economics or Transaction Cost Economics.

Evolutionary approaches try to explain both the changing relationships between entities (institutions, firms) but also the changing nature of those entities themselves. Biology is the field where an evolutionary theory was first applied, although there are apparent similarities between Darwin and Malthus. This does not mean however that economic evolution is a transcript of biological evolution, there are both differences and commonalities between the two. The basic concepts and principles are similar, as they should be for the approach to be coherent enough as to be called evolutionary. There are also differences, having to do with the particularities of each discipline’s subject-matter.

As Metcalfe (1998, p.6) notes, the two main concerns of any evolutionary theory are

“...the causal mechanisms which produce different behaviour patterns in a class of entities, and a dynamic process of selection which resolves these different behaviours into emergent patterns of change.”

Whereas the outcomes of selection are easier to examine¹⁸ quantitatively, the examination of the patterns of behaviour inevitably requires an examination of the strategies and the learning process of agents (organizations or individuals). Here is how Nelson & Winter (1982) summarise the basic characteristics of the evolutionary approach:

- The behaviour of economic actors is purposeful. Actors have goals whose accomplishment they pursue. In that pursuit they build and follow rules and procedures, 'policies', which reflect adequate calculations but are not 'optimal' in the neo-classical sense.
- One major goal of economic actors is 'profit seeking', they follow "policies" whose profitability they "inexactly compare, from time to time, with individual alternatives that present themselves by processes not entirely under their control".¹⁹
- Competition is an important factor that affects the decision-making process of economic actors.

Having in mind the different strands of institutionalism within property market studies we should note that a "critical stance" towards neo-classicism does not necessarily mean rejection altogether. Surprisingly many economists agree that the property markets are generically 'imperfect', meaning that equilibrium between supply and demand is rarely, if ever reached for any price level. On the other hand the introduction of firm agency as a factor contributing to structural change can provide additional insights on the firm's reciprocal relation with its environment.

A robust neo-classical argument on how and why the property market is not efficient, based on the Efficient Market Hypothesis, is given by Evans (1995). He claims and demonstrates empirically that "there is no true market value of a property, only a range of prices" and that the property market responds to information with time lags much longer than the time lags of an exemplary efficient market, such as the stock exchange. Matysiak and Wang (1995) as well as Blundell and Ward (1997) corroborate his findings. Even more so Adams (1994) argues that besides internal

¹⁸ The examination of the 'interaction dynamics' of selection however are a much more complex issue. See Dosi (2000, p. 25)

¹⁹ This behaviour is not 'profit maximising' in the strict neoclassical sense which claims that "... there is a global, faultless, once-and-for-all optimization over a given choice set comprising all objectively available alternatives." (Nelson & Winter, 1982, p.31).

influences which lead to inefficiency, external influences (negative externalities, free rider problems etc) can lead to market failure altogether.

Institutionalists take the argument of property market inefficiency one step further by adding that judging the efficiency of the market with EMH as a starting point, based on Pareto or informational adaptation criteria, should be enriched and elaborated upon. To them, institutions could both be viewed as market facilitators as well as barriers to optimal market functions. State regulation, cartels or trade unions influence the market in profound ways. Since the market price is determined by external, non-market influences, questions arise like: 'Who influences the market? Why? Who benefits and who loses?' (Keogh and D'Arcy, 1999).

Within mainstream economics, possible answers to these questions could only come from transaction cost theory, information theory or game theory (Ball, 1998) although developments in the latter often lie outside the strict definition of neoclassical economics. Unfortunately there is not much work being done on the property markets based on those theories, indeed there is a question of how well these theories could explain an inefficient market whilst deriving from a neo-classical background. Transaction cost theory for example views institutions as rational cost minimisers.

Institutionalists on the other hand have developed methodologies that try to encompass the development process and explain the function of the property market without hesitating to borrow from other theoretical frameworks. These methodologies, Ball's structures of provision, Healey's structure/agency and more recently, Gruneberg and Ive's attempt to combine them will be presented in the following section.

3.7 Overview of the development process models

Most of the research on the re-use of urban land is linked to an examination of the development process and therefore acquires an institutional flavour. In recent years various conceptual models have been proposed as tools to analyse the development process, the major difference being the weight put on the role of institutions, the complexity of their intra- and interrelationships and the theoretical assumptions which underpin those models. Due to the complexity of the development process and the variety of the theoretical approaches, any attempt to

group the different propositions seems impossible at first. However, broad categorisations are possible, based on methodological and theoretical criteria.

Ball (1998a), Healey (1990, 1991) and Gore and Nicholson (1991) all contributed to the attempt by proposing different ways to organise the examination of development process models. Ball's (1998a) main concern was to outline the influence of institutionalism in property research and launch a critique of non-mainstream institutional approaches. He asserts that mainstream economics has failed to incorporate the role of institutions adequately in a property market theory, in spite of hopeful advances in transaction cost theory (which other authors would refer to as the new institutional economics). He then proceeds to differentiate between structure-agency institutionalism, power approaches: conflict institutionalism, behavioural institutionalism and ad hoc institutionalism and his very own "structures of building provision". What emerges from his heavy criticism is that all non-mainstream institutional approaches actually provide methodological frameworks and have only limited presumptions which are pretty much the same that 'old' institutional economics also have. He concludes that their usefulness and their superiority over a mainstream approach has to be substantiated by more research.

Healey separated the models into two broad categories, Neo-classical and Marxist according to their theoretical underpinnings. Within each category models are further subdivided according to the processes they emphasise. Table 3.1, taken from Healey's article (1991), vividly illustrates her point. The third category, which she calls 'Agency models' is the closest to what Ball described as the non-mainstream institutional approaches.

Table 3.1: Development process models (after Healey, 1991)

Theoretical assumptions	Economic process	Event sequence	Agency
<i>Neo-classical</i>	Fraser, Harvey J.	Munton & Goodchild	Kaiser&Weiss Drewett, Barrett
<i>Marxist</i>	Harvey D.	Boddy	Ambrose, Ball

Critics would be quick to argue that such a straightforward division is not self-evident and that many models would fall outside both categories. Indeed, what is

different at most times is the theoretical tradition that underpins each proposition and has inevitably affected each and every analysis which used the proposed model as a tool. In that respect, Healey disregards institutional economics and their influence in formulating many of the models she identifies including both her and Ball's approaches.

The table above is by no means exhaustive; Gore and Nicholson (1991) based on a somewhat different approach, identify different categories for the development process models, although they refer to more or less the same authors. They recognise however that the structures of building provisions approach is the most promising way forward since it does not call for an all-encompassing theory but for the creation of historically, sectorally and geographically specific models.

In the following paragraphs we will summarise the most important development process models according to their theoretical underpinnings. Although Healey (1991) and Gore and Nicholson (ibid.) identify more than 15 models, two of the most recent and more refined will be analysed in greater depth as they have managed to address many of the theoretical and practical concerns that plagued earlier models. These are the 'structures of building provision' and 'Healey's institutional model'.

3.8 Neo-classical approaches to the development process.

Development process models that are based on the neo-classical economic tradition emphasise the economic process and the role of individual actors; most importantly, if not exclusively, the role of developers. They focus on the macro level, on overall supply and demand and on market constraints that might affect both. Much of the real estate literature in the UK is based on models of this kind. They treat vacant land as an indicator of the market's conditions and they have quite obviously affected most of the literature on that issue, hence the discussion about "constraints" or "barriers" that prevent the market from clearing. Examples of such approaches can be found in J. Harvey (2000) and Fraser (1984).

According to Healey (1991) and Gore & Nicholson (1991), these models, fail to grasp important aspects of reality such as:

- i) the different types of demand (user or investor),
- ii) behaviour with non-economic rationale but with a solid environmental or social objective,

- iii) the uncertainty over future gain that is tied to the development process,
- iv) the influence of valuation and appraisal methods and
- v) the complex interactions through time and space of the various agencies involved in the development process.

It is this last deficiency that event-sequence models try to counter. A good example of the first unrefined such approaches can be found in Cadman and Austin-Crowe (1978) or Cadman and Topping (1995) where the development process is separated into evaluation, preparation, implementation and disposal and does not differ much from straightforward equilibrium models. Ratcliffe (1978, p.111) believes property development is “similar to any other industry” and proposes a flow chart diagram that further breaks down Cadman’s four stages of the development process as seen through the developer’s eyes.

In a more elaborate attempt by Barrett (et. al.) (1978, 1983), the development process is grouped into a “triangular pipeline” separated into a series of events evolving through time like a spiral. Each side of the triangle represents one stage in development: Pressures and prospects, feasibility and implementation. By the end of each cycle of the spiral a new “state of development” occurs. The choice to create a new model was made to avoid the “oversimplifying assumptions” of the flow chart models but oversimplification as far as the external variables are concerned could not be avoided (Gore and Nicholson, 1991), something that the authors themselves recognise (Barrett et.al., 1978, p. 17). A modified version of the ‘triangular pipeline’ is the ‘rectangular pipeline’ of Gore and Nicholson (1985) where one more stage has been added to accommodate the creation of public sector land uses on vacant land. Although limited in scope, this model moved one step further in taking into account external influences and it does not assume a ‘time vacuum’.

These event sequence models emphasise the existence of “barriers” that prevent the process from running smoothly and provide a quite detailed descriptive tool for the development process. Their main weakness is their failure to inquire into the reasons why each actor acts as it does. The sequential approach is also vulnerable to criticism since quite often the development process is not sequential, many different events might happen simultaneously or in a sequence that is reverse to what the models presuppose.

Agency models belonging to the neoclassical tradition, try to build upon both equilibrium and event-sequence and try to incorporate the roles of different actors in

the process, their strategies and their interests. They unravel much of the complexity of the development process. One of the first such examples is the model of Weiss (et. al., 1966) and Kaiser and Weiss (1970) on residential development whereas in a British context similar examples are the models of Craven (1969) and Drewett (1973).

A more advanced approach has been made by Bryant (et.al) (1982) on rural land conversion to urban uses. It manages to bring together an event-sequence model with a quite inclusive agency approach. However, as the authors themselves accept that the “sequence of events...is in reality only one possible chain” (Bryant et. al., 1982, p.57) and they also fail to examine the model’s relation with external factors. Finally, Goodchild and Munton (1985) also build upon the same tradition in examining greenfield development. They identify 6 separate routes to development, passing through 2 key stages: identification and initiation. As with every model in the same tradition, it suffers from its linear perception of events, its limited scope and its inability to grasp important aspects of the process such as finance or the interrelationship between actors.

All the reviewed models, and others belonging to the same tradition, try to map decisions and/or the various stages of the development process. What they lack is the link to “structure”. These models cannot easily generalize from whatever processes they manage to unravel into wider forces that operate in the economy and the society. In that respect they fall victims to what a sociologist would call “the agency-structure debate” and the inherent inability, or unwillingness, of mainstream economics to recognise wider societal forces and interests.

3.9 Marxist approaches to the development process

One should not be surprised that Marxist analysts are involved in the same sort of issues as their neo-classical counterparts. It is the same set of phenomena that they try to address although they are starting from different theoretical assumptions. Marxist models are more preoccupied with structural forces and the wider historical and social context within which development takes place.

David Harvey emphasized the role of property development in the economic processes of the capitalist economy (Harvey 1978, 1982, 1985). Following a more relaxed interpretation of Marx, he identifies three circuits of capital: the flows of

capital into production which he calls the primary circuit, the flows into fixed assets and consumption fund which he calls the secondary circuit and the flows of capital into science, technology and social expenditures which he calls the tertiary circuit.

These three circuits operate as the framework upon which an explanation of the production of the built environment is constructed. The form of the built environment is a product of an extremely complicated spatial and temporal switch of the flows of capital between those three circuits and between geographical areas. However, Harvey's powerful structural analysis of the role of the development process in the capitalist mode of production finds little space for an analysis of the development process *per se* and the role of human agency.

Structural determinism is characteristic of Boddy's model (Boddy, 1981). He also distinguishes between three circuits, much closer to Marx's original ideas: industrial, commercial and interest bearing capital. The developer is in command of an industrial capital circuit which borrows money from the interest bearing circuit and sells the final product to a property company which manages the commercial circuit but also draws capital from the interest bearing circuit. Although it highlights the different aspects of the process and their interrelations this model fails to address the issue of human agency and is notoriously difficult to implement in real life situations because of its abstraction level (much the same criticism as with Harvey's).

A Marxist 'agency' model is proposed by Ambrose (1986) and provides a powerful analytical tool that tries to address the problems of structuralism without losing much of the analytical rigour at the macro level. Ambrose's work focuses on the relations between the three major groups of actors: finance industry, the state and the construction industry as well as in the relations of actors within this group. Room is also given to 'external' factors, such as the 'general public' but not much to 'planning'. The final goal is to show the ways through which their interaction formulates the end product: the built environment in the UK. The great strength of this model is the ability to describe the components of the system, their roles and functions and the processes under way. However it also fails to identify functions at a more detailed level whereas it seems best suited to describing development coming from large companies or investors which can easily switch between property sectors (Gore and Nicholson, 1991).

What is therefore still missing is what Healey (1991) proposed:

“ to analyse the ‘driving forces’ of the development process in different sectors, locations and time periods in a particular urban region, and thus to explain the processes of the production and reproduction of the built environment in specific places, empirical analysis must enter into the details of agency relations in the events of the development process” .

This is what models based on the institutional approach try to do.

3.10 The institutional approach to the development process

The institutional models, as one would expect from the relevant discussion in section 3.6, do not have strong theoretical underpinnings. This means they do not necessarily follow or embody the doctrines of long-established theoretical traditions. They do however make a case for the evolutionary nature of systems and for the interplay between agency and structure. The following two models of the development process cannot therefore be categorised as Marxist nor as neoclassical, although they might be able to accommodate inputs from those bodies of theory. This has been more evident in the work of Ball, whose proposal (SoP) was firstly applied within a Marxist context but gradually moved into the context of a less radical approach.

Ball’s model of “structures of building provision” as it developed through time, (Ball, 1983, 1985, 1986a, 1986b, 1992, 1998a), is not one all-encompassing proposal. He notes that a separate model should be developed for each type of development, in accordance with his methodological propositions but should also be accompanied by “wider social theories, methodologies of empirical investigation and where necessary statistical analysis.” (Ball, 1992). In his work he only analysed two sectors, the owner occupied housing sector and the council housing sector. As far as those two sectors are concerned:

“a structure of housing provision describes a historically given process of providing and reproducing the physical entity housing, focusing on the social agents essential to that process and the relations between them” (Ball, 1986a).

So, for each development sector there exists a specific historical and geographical set of relationships between agents involved in the development process: production, exchange, distribution and use of the built environment. The character of these structures is dynamic since they are under constant pressure for change and adaptation from the different actors. In the words of Ball (1998a): “Those relationships are embodied within the organisations associated with that type of building provision, and they may take a market or a non- market form.”

Overall it is a very promising approach which succeeds in grasping many crucial aspects of the development process. As it was initially applied adopting a Marxist perspective it was open to the same structuralist deficiency: the over-emphasis on the way action is structured around the fundamental relations between land, capital and labour which many Marxists are accused of treating in too mechanical a way. Since then Ball has systematically tried to refine it and in his article on institutionalism (Ball, 1998a) he re-iterates the key elements of his concept:

- The ‘structure’ of a building provision is the network of organisations and markets involved in it.
- There exists a two-way influence between organisations and markets, leading to their mutual constant evolution.
- Structures of provision are geographically and historically distinct.
- Structures of provision are not a complete theory, they are rather a way of exploring through the use of other theories.
- What should be included in a structure of provision and how is a structure distinguished from another is a matter of contingency. It has to be established according to the prevailing circumstances.

The last characteristic is probably the weakest point in the approach, leaving much room for debate. In his latest works, Ball himself asserts that the usefulness of this approach could eventually be judged only if more research is undertaken.

The other major institutional model of the development process has been proposed by Healey in 1992. It is encompassing a different perspective from the “structures of provision” approach by searching for an all-encompassing model that will be versatile enough to be adopted under different political regimes, in different

geographical and historical contexts. This approach is based on the ideas of Giddens and Jessop on the interplay between structure and agency, ideas however, that have long existed within the tradition of institutional economics. It also benefits from the political economy inheritance in understanding the structural forces that shape people's actions while on the other hand it remains sensitive to the "details of the social relations" that constitute the development process (Healey, 1992).

The development process is defined by Healey (1992) as:

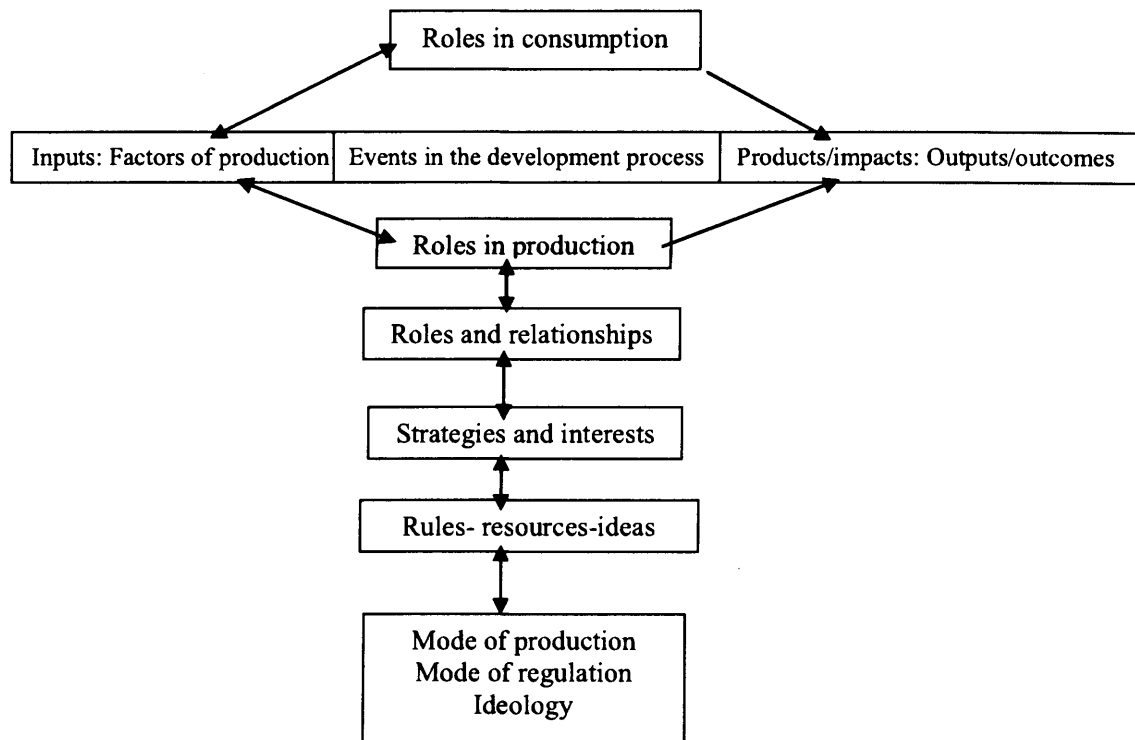
"the transformation of the physical form, bundle of rights, and material and symbolic value of land and buildings from one state to another, through the effort of agents with interests and purposes in acquiring and using resources, operating rules and applying and developing ideas and values."

To analyse this process we need to (Healey, 1992):

- i) Describe the process, the events and the agencies involved,
- ii) Describe the roles and relations of those agencies in production and consumption,
- iii) Assess the strategies and interests of those agencies as well as the resources, rules and ideas that formulate the context of the development process and finally
- iv) Theorise on how "actors reproduce, reinforce and transform the social relations".

The figure that follows has been used by Healey to summarise the proposed model and it serves that purpose quite well.

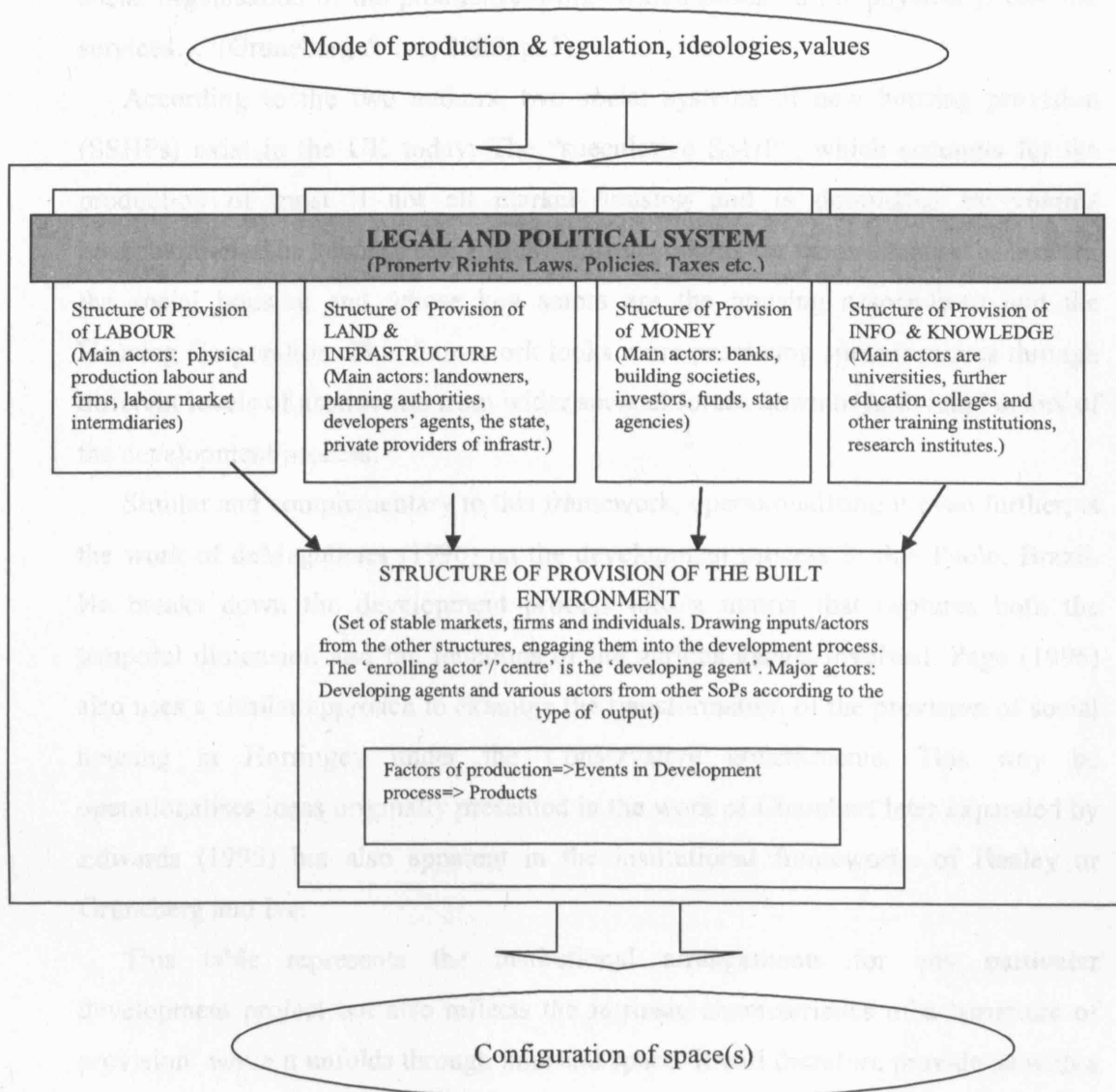
Figure 3.4: An institutional model of the development process (Healey, 1992)



In principle this model is not all that different from Ball's approach in its assumptions although it has a more explicit dialectic relationship between structure and agency. According to this approach structures are "material resources, institutional rules and organising ideas" (Gruneberg and Ive, 2000a). These structures influence the behaviour of agents so that they are not behaving with perfect economic rationality. It has been employed in actual research even less than the structures of provision and what has emerged so far is a difficulty in attributing causality because of the structure-agency dichotomy. The other difficulty ofcourse is the lack of details as far as the role for the housebuilding industry or the property industry in general are concerned.

The model that tries to bring the models of Ball and Healey together and address issues of the property sector is the model of 'Social systems of Provision' and 'Social Systems of Production', conceptualised by Gruneberg and Ive (2000a). They introduce the notion of the Social Structures of Provision, as "...a set of stable market and firm institutions..." which "...permits individuals to form both stable habits and stable expectations of the future." (ibid., p.24).

Figure 3.5: A proposed development process model.



At first, Gruneberg and Ive distinguish “four overarching sets of economic institutions” called systems of provision (SoP) upon which “production also draws” (Gruneberg & Ive, 2000, p.4). They are the SoP of labour, the SoP of land and infrastructure, SoP of money and the SoP of information or knowledge. They are complemented by non-economic institutions such as the legal system, the political system and the forms of property rights. These systems directly influence the “Social Structures of Provision” of the Built Environment which they define as “...a particular sub-set of stable markets, firms and individuals, concerned with producing

and transacting one product...” and the “Social Structures of Production”, the “...-social organisation of the productive work- which produces the physical goods and services...”(Gruneberg & Ive, 2000, p. 5).

According to the two authors, two social systems of new housing provision (SSHPs) exist in the UK today: The “speculative SSHP”, which accounts for the production of most if not all market housing and is dominated by volume housebuilders. The “contracting SSHP” which accounts for the production of most of the social housing and whose key actors are the housing associations and the Housing Corporation. This framework looks more promising since it moves through different levels of abstraction from wider societal forces down to individual actors of the development process.

Similar and complementary to this framework, operationalising it even further, is the work of deMagalhaes (1996) on the development process in Sao Paolo, Brazil. He breaks down the development process into a matrix that captures both the temporal dimension and the functions of the various agents involved. Page (1996) also uses a similar approach to examine the transformation of the provision of social housing in Harringey under the Conservative governments. This way he operationalises ideas originally presented in the work of Chambert later expanded by Edwards (1995) but also apparent in the institutional frameworks of Healey or Gruneberg and Ive.

This table represents the institutional arrangements for any particular development project but also reflects the intrinsic characteristics of a ‘structure of provision’ while it unfolds through time and space. It will therefore provide us with a useful tool in our effort to explore the particular characteristics of the brownfield development process.

Figure 3.6: Table of ‘Functions, phases and interactions’ in development

	Previous Use (pre-development)	Mediation (inception, lift-off)	Development	Consumption
Ownership				
Finance/ Credit				
Promotion				
Production				
Use				
Regulation				

Source: de Magalhaes, 1996, p.74

As de Magalhaes explains (1996, p.74) development, and redevelopment as one can add, can be broken down to the following functions:

- Ownership: Rights over land and buildings
- Finance: Provision of capital for activities like land acquisition, site preparation, construction, purchase of property, maintenance
- Promotion: Site assembly, application for legal licences and permissions, commissioning and supervision of projects/works, marketing to buyers and users.
- Production: construction activity
- Use: Use of land and buildings under owner occupancy, or lease or any other arrangement
- Regulation: development control through rules and regulations²⁰

According to this strand of thought, development is essentially a transformation of space in phases by the actors involved in each of these functions, leading from a pre-development stage to mediation, development and finally the consumption of the newly created space. During this process of spatial transformation the structural configuration of actors may be reproduced or may be challenged and transformed, giving rise to a new configuration. Since the 'brownfield issue' has already been identified in previous chapters as an issue related to the housing production process one can assume that there are significant benefits to be drawn from an examination of the brownfield re-development process along those lines.

This paragraph concludes the review of the approaches that have dealt with issues of redevelopment and the production of the built environment more generally, it is now worth having a closer look at how some of these have been utilised in researching the topics at hand.

3.11 Related research on urban land re-use.

Most research in the development process line of thinking follows the neo-classical approach described in sections 3.2, 3.3, 3.8. Researchers pretty much adopt the assumptions of the equilibrium model thus assuming that vacant land is an

²⁰ de Magalhaes introduces this as a separate function and does not examine it within other functions.

indication of how well the market is allowed to operate. An extensive literature on the constraints that do not allow the market to operate has accumulated through time, mostly re-iterating similar results.

An early piece of research came from Burrows (1977) who asserted that cessation of a land use may occur when this use is impossible, unsuitable or undesirable. His analysis was taken up by Gore and Nicholson (1985) who incorporated it into their own development process model for the public sector. After implementing their model, they come to challenge the notion that land vacancy is a persistent problem, they see it as a temporary transient phase, at least as far as public sector land is concerned. Earlier in the same volume however, Moor (1985, p.62) claims that there is "little evidence" that public landowning bodies were "actively taking steps to bring such land into development".

According to Bruton and Gore (1980), vacant land is the spatial effect of shifts in economic activity. Therefore the notion that it is a problem is not completely justified, given the fact that most of it was in the 'pipeline' for redevelopment. However, constraints might occur that will prevent redevelopment: the availability and cost of finance, poor physical conditions and accessibility, lack of demand or ownership and planning difficulties. Nicholson (1980) makes a very similar point.

Adams (et. al 1988) summarized the development constraints on inner city vacant land into 4 major categories (see also Goss, 1998 and Fulford, 1998); ownership constraints, physical constraints, planning constraints and price constraints. Ownership constraints have to do with multiple ownership and passive owners that are unwilling to release the land. Planning constraints have to do with all the procedures that extend the time that is needed to get the necessary permissions and legal agreements. Physical constraints are ground conditions/contamination, existing buildings, internal access, adjacent uses, external access, size/shape and services available. Finally, price constraints have to do with the vendor's expectations of the site's price. Even this point of view, mainly concerned with the supply side of the issue, does not fail to recognise the explicit role of the landowners. It is claimed that their attempt to preserve and enhance the value of their assets can pose serious barriers to redevelopment.

Cameron (1988) and Couch & Foules (1992) have been major contributors to the issue of land vacancy and the understanding of the processes that lead to it. They were the first to note the analogy between the land and labour markets and use the

methodology and the terminology of unemployment studies as a useful guide to lead them into the exploration of the causes of continuing land vacancy. According to Ball (et. al. 1998b, p.68), who draws his categorisation directly from the work of Cameron and Couch & Foules, there are a number of reasons for vacant land to have arisen and remained unused:

- Frictional reasons have to do with the intermediate situations that are part of land-use change.
- Structural reasons have to do with technical changes, site unfitness or new locational preferences.
- Finally, demand deficiency has to do with the temporal cyclical characteristics of the market.

Adams (1996) mentions that frictional vacancy may be overcome by supply-side policies and demand deficiency may be overcome by demand stimulating policies, but one should not forget that supply-side policies require a buoyant market if they are to have any success. There is little use in making land available for which there is no demand. According to Ball (et. al. 1998b), state intervention aiming at re-using vacant land should focus on the structural reasons. Even focusing on that field may well lead into significant unsuccessful public expenditure.

As Budd (1992) argues 'speeding up the turnover time of production and the circulation of capital and revenues gives competitive advantage to capitalist enterprises'. The developers aim at increasing their profit by picking the right circumstances in time and space. He further argues that although this might give certain characteristics of fictitious capital to the land, the latter still retains characteristics of fixed capital. In property development, what's bought and sold are rights over rent. These rents are realised through land redevelopment. In these circumstances, sites which pose structural barriers to speedy development will be even less attractive and profitable to developers than otherwise.

The constraints that we mentioned previously are blamed for blocking the development potential of PDL sites. On the one hand, they increase the risk of investment, therefore requiring a higher yield whereas simultaneously they increase the initial/fixed costs of the land and they extend the time of circulation of capital. Therefore, from a developer's point of view it is all too probable that investing in brownfields may result as an unproductive investment that will undermine their

competitive position in the market. However, risk and uncertainty are relative concepts, depending enormously on the amount of knowledge accumulated in the actors involved and the information available to them. Economic activities and production practices are by definition less uncertain if those performing them have developed the skills and the knowledge 'how to do it'. Therefore, qualitative change in the strategies and practices of housebuilding firms is a very important parameter in examining attitudes towards the new policy-imposed requirements for the redevelopment of previously developed land. The following section elaborates a bit further on the theory supporting this argument.

3.12 Firm organisation, business strategy and competitive advantage.

As Piore and Sabel (1984, p. 268) note "We live in a world where uncertainty, ambiguity and rapid change favour flexibility and adaptability over sheer scale", nowhere is this more true than in present day housebuilding in the UK. According to Leonard-Barton (1998) technological, political, or social changes are the key factors affecting the business environment any firm is operating in, a point also made by Porter (1980,1985). When faced with this type of changes and the uncertainty they entail, many companies are reluctant to exit markets that still appear profitable or to abandon well-established practices and technologies that may however be unsuitable for the new business reality. Barlow and Duncan (1994) as well as Barlow and King (1992) agree that the high degree of uncertainty inherent in British speculative housebuilding forces companies to stick to norms, strategies and positions that are suboptimal.

Leonard-Barton (ibid.) argues that companies that eagerly develop new capabilities, methods and skills which allow them to break into new markets will gain ground against their more conservative competitors. This insight connects well with the work of Hamel and Prahalad (1994) who define core competencies as "...bundles of skills and technologies that enables a company to provide a particular benefit to customers" (ibid., p. 199) and argue that competition for the future, strategic competition, is about 'opportunity share' in contrast to competition for the present, which is concerned with market share and operational efficiency. New market niches are even more unclear in their operation compared to existing markets.

Therefore strategies to capture future opportunity share are not driven by the anticipation of immediate financial returns but by the prospect of having a leading position in future industry structure. According to Hamel and Prahalad (ibid.) the companies most likely to succeed in this and thus to protect the long-term future of their business, are those that emphasise the creation of 'core competencies'.

Core competencies are "embodied in employee knowledge and skills", "embedded in technical systems" their creation and control are guided by managerial systems and institutionalized in values and norms associated with the various types of embodied and embedded knowledge creation and control (Leonard-Barton, 1992, p. 113).

Hamel and Prahalad (1994) describe the process of building up these competencies as an endeavour which is inherently speculative as some of these capacities will never be exploited. Firms with strategic foresight preemptively build what they consider will be the future core competencies, in full awareness that if their foresight proves to be accurate these core competencies will make up the core of future value delivered to customers.

Competence building however is a process that rarely progresses in abrupt advances fuelled by inventiveness but is rather more like a cumulative learning experience. In some cases, existing competencies need to be enhanced but in other cases it requires the creation of new intellectual capital. Because of the nature of this process, companies that fail to begin at an early stage will be faced with extreme difficulty to catch up later on with those who have. They will find themselves in a present that someone else dreamt up and prepared for and they will have to resort to extreme and/or costly measures in order to catch up.

Impinging on this type of analysis are ideas borrowed from evolutionary and institutional thinking as well as management literature on strategy. When Ronald Coase, back in 1937, posed the simple question 'Why do firms exist in a market economy?' he was puzzled by the fact that firms in many cases appear to be superseding the price mechanism altogether. Within a firm, Coase continued, "some authority", the entrepreneur or the managers, is allowed to "direct the resources" and to have control of the production process. Decisions in a market environment are taken on the basis of information about prices whereas within firms decisions are taken on the basis of a power structure where what matters is the level of authority to

command the resources available. At least this was the case in the firms Coase was talking about.

Coase's own answer to the question he put was that transactions within the price mechanism do have costs and that organisation into firms is a way to minimise/overcome those costs. The firm then is in essence an answer to problems of information or the lack of it. This ofcourse is a radical departure from the standard neoclassical assumption of 'perfect knowledge' and 'frictionless' transactions.

What underlies Coase's ideas is the belief that people indeed try to act rationally, however they are rarely aware of all the relevant facts nor can they always predict the full consequences of their actions. Their behaviour is therefore rational but bounded, in obvious resemblance to 'bounded rationality', first coined by Herbert Simon. According to Simon (1957), human beings are rational in the sense that they attempt to achieve certain objectives. This attempt is fraught with problems arising out of the particular nature of information, knowledge and humans themselves.

As far as human rationality is concerned, Simon claims that "...the capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required..." (Simon, 1957a, p.198). That capacity is not only physiological but also determined by "social or even organisational forces" whereas "...the possibilities of modifying and relaxing these limits may themselves become objects of rational calculation..." (ibid. p.199). Incidentally, it is along that line of thought that Williamson based his influential work on 'transaction cost economics' (Williamson, 1979, 1985) on which Healey also refers in her attempt to bring the 'new institutionalist' agenda closer to development and property studies.

We have previously hinted at the emergence of "a new way of doing things" in the production of housing, affected by changes in policy and in the nature of demand. Dosi (1982) was referring to the world of science and technology when he called these new ways that signify a break with the past 'new technological paradigms'²¹. In the case of PDL redevelopment the change in the way the built environment is produced is very significant albeit not strictly technological and not necessarily as grand as a 'paradigm shift'.

²¹ He refers to a 'technological paradigm' as being a '...solution of *selected* technological problems, based on *selected* principles derived from natural sciences and on *selected* material technologies.' (Dosi, 1982, p. 152, emphasis in the original)

The question is how these new 'ways' emerge, how they are linked to the organisation of the firm and its environment and what the relationship between the two as expressed through business strategy is. The inquest into the relationship between firm organisation, strategy, markets, institutions and industrial structure is not recent but has hugely benefited from the renewed interest in institutional and evolutionary economics²².

With regards to the emergence of a new paradigm, Dosi (1982) argues that 'economic forces' and 'institutional and social factors' work as filters, 'selective devices', that allow only certain 'paths' to be followed. However, the set of scientifically feasible futures constitutes a much larger pool from which the selection is made. Once a paradigm is established, exactly because of the 'bounded' nature of human rationality, it has a powerful 'exclusionary' effect in the sense that it becomes the 'normal' way of doing things and therefore focuses the efforts of relevant agents in 'refining' it rather than substituting it altogether. This refinement process is the 'normal' technological progress.

In great resemblance to the management literature mentioned in previous paragraphs Dosi and Marengo (1993) argue that the capacity of the firm to adapt within each 'path' or, even more, to contribute to the 'paradigm shift' is determined by its 'competencies', the "problem-solving features of particular sets of organisational interactions, norms and -to some extent- explicit strategies" in other words 'competencies' comprise the set of organisational routines of the firm whereas strategies are seen as the higher-level link between competencies and the external environment.

Thus the firm can be viewed as a 'repository of knowledge' whose memory resides in the selective exercising of various appropriate organisational routines from its members (Nelson and Winter, 1982, pp. 99-101). What ensures the 'appropriateness' of the routine that is selected each time is the communication between the members of the organisation (firm) and the wider environment, the interpretation of that communication from each member and the subsequent coordination of actions. The existence and enforcement of routines through

²² Evolutionary approaches are "... concerned with explaining how the relative importance of specified entities changes over time" (Metcalfe, 1998, p. 22). based on the principles of variation, heredity and selection / adaptation. Innovations constantly "introduce new varieties of behaviour into the nexus of existing competitive relations" (ibid., p. 7).

“enforcement rules” or other “motivating considerations” assures “...a comprehensive truce in intraorganisational conflict.” (ibid., pp. 104-110).

These ideas echo in literature on competitive strategies and competitive advantage of industries (i.e. Porter, 1980, 1985, 1998). New ‘ways of doing things’ may become commonplace if companies view them as a good basis on which to establish difference, a cornerstone of their competitive strategy. Then, if they are indeed offering a competitive advantage to the firms that adopt them, the ‘new ways’ will spread through imitation or selection. Industry composition and possibly the size of total output as well as the relative presence of different types of business will be affected as a consequence of that adaptation process.

Institutional structures, such as ‘ways of doing things’ or ‘paradigms’ arise through habitual behaviour (Gruneberg & Ive, 2000a, p.22), through repetition of routines starting from the individual but extending up to the level of the firm. Indeed one of the firm’s main functions is to ensure that individuals do behave according to certain routines in order to achieve specific aims of that organisation. (Nelson and Winter, 1982).

Routines are the “regular and predictable behavioural patterns” (Nelson and Winter, 1982, p.14) that include “production techniques” and “decision rules” at all levels of management and production, they include:

- well-specified technical routines for producing things,
- procedures for hiring and firing,
- ordering new inventory,
- increase or decrease in production according to demand

as well as:

- policies regarding investment,
- policies regarding R&D
- business strategy regarding diversification and oversees investment.

In evolutionary theory of organisation, routines are to the firm what genes are to living organisms, the most important idea being that the survival of firms may well be attributed to the routines they follow and the configuration of those routines and their ‘appropriateness’ in relation to the external environment. Therefore, the firms of today have inherited many of their characteristics from the past. In the words of

Hamel & Prahalad (1994) each firm is characterised by the "... biases, assumptions and presuppositions..." of managers, as well as "...beliefs, values and norms..." about markets, clients, stakeholder interests, competitors etc. They interchangeably call these established sets of norms and routines 'managerial frames' or 'genes'/'genetic coding'.

The greatest danger with these frames is that managers usually forget why they hold those beliefs and even worse consider everything that lies outside them as not worth knowing. It seems that 'frames', 'genes' and 'paradigms' have the same meaning: an established social structure with its own rules and routines and self-replication dynamics, its just the scale that differs. This 'code' is a result of a particular set of environmental conditions, when the environment changes this 'genetic inheritance' may actually become a major threat to the firm's survival and the firm will need to shed it.

However, as we have commented already in previous paragraphs, it is not always possible to change that inheritance that easily. At a fundamental level, information (and knowledge) is bound to what Arrow (1962) called the 'information paradox': the costs and benefits of obtaining information (or at least certain types of information) cannot be known in advance. In a similar way "The worth of knowledge cannot begin to be asserted until we have it." (Shackle, 1972). Furthermore, as Kasper and Streit (1998) and Fransman (1998) point out, the costs of obtaining information (closed set of data) and knowledge (open-ended beliefs) should be treated as 'sunk costs'. But 'sunk costs' are the worst thing that can happen to the managers of a company with a short term view of the world and a lot of anxious shareholders.

Most research also assumes that because change causes "stress, anxiety and arousal" (Hosking and Anderson, 1992) it causes a first response of resistance by managers. The effort of managers will be to try and incorporate the new information into a known and manageable mental framework. They will therefore resort to their standard rules, norms and routines in an effort to process the new information and convert it into something more familiar (Staw et. al 1981, p.507). When it proves impossible to handle the new situation in the traditional way, managers will tend to deny or avoid/seal off the new reality.

However, other research (Crouch, 2000) reveals that the above reactions are not always the norm. In many cases, change triggers positive feelings of empowerment

through the opportunities for action that it offers. The actual reaction depends therefore on the possibilities that are open for managers to act and get involved with the course of change. The need for involvement is related to the fact that routines are crystallised through norms permeated by and held together through power relations, change therefore is a threat to these relations unless it allows for an inclusive restructuring.

Interaction between actors may be formalised, resulting in written contracts, or more casual. Intra-firm institutional structures follow a similar pattern albeit contractual arrangements are much more important here. Seen under that light a structure of provision of housing will comprise of actors (firms or individuals), interacting whilst performing their functions in order to fulfil their contractual obligations, formalised or even informal. The behaviour of these actors, the way they respond to and shape their business environment will be considered within the theoretical framework of competitive strategy.

The notion of competitive strategy came to the fore during the 60s when Andrews and Christensen highlighted the need for a holistic treatment of a firm's functions. They saw business strategy as a way to optimise a firm's response to its environment by exploiting its strengths and its weaknesses in the face of constantly changing opportunities and threats. (Montgomery and Porter, 1991)

In the case of housebuilding, it will be discussed in the next section that at least one of the strategically important factors -government policy- is radically changing. This does not mean that other factors of strategic importance are not co-evolving as well, but the argument explored in this thesis is that government policy changes in land provision have a profound effect on the housebuilding firms in terms of production and marketing. Eventually, accumulation of experience, knowledge diffusion and buyers' learning will lead to changes in the buyers' segments that are served thus making housing in PDL redevelopment available and appealing to wider market segments.

3.13 Managing change, the role of strategy and concluding comments

Simon's ideas echo in the work of business strategy theorists, who examined how strategy links to the firm's organisational qualities. Given the complexity and inherent unpredictability of the world around them, firms (or economic actors in

general) cannot have perfect knowledge of all relevant information about their environment nor can they know all the alternative actions open to them (Nelson & Winter, 1982). They have to draw their course based on strategies which in turn are a response to the subjective and partial view that actors have of their environment.

Strategies not only reflect the perceptions that actors have about their environment, they also reflect the knowledge actors have about themselves, in the case of firms this would mean their organisational capabilities. Essentially, strategies provide a bridge between the internal and the external environment of economic actors. Evolutionists view them as “heuristics”, as high level decisions on “principles and devices” that “...are believed to shorten the average search to solution of the problems of survival and profitability.” (Nelson & Winter, 1982, p. 133)

This is essentially the concept behind much of the management literature on strategy as well. Henry Mintzberg’s differentiation between deliberate, or formulated, strategy and emergent strategy relates to heuristics that are developed ‘on the job’ as opposed to heuristics developed ‘from above’ (Mintzberg, 2003). Both concepts however are compatible with an evolutionary perspective about how a firm works whereas traditional approaches (for example in game theory) focus on strategy as a ‘complete plan’.

After positioning deliberate and emergent strategies in the two extreme poles of a spectrum of possibilities, Mintzberg moves on to explore the relationships between different types of strategy and varying degrees of spontaneity (ibid., p.6). He came up with the following 8 clusters.

- *Planned strategies* are centrally derived, are implemented through formal control mechanisms and probably deal with stable, predictable environments.
- *Entrepreneurial strategies* focus around the vision of a leader who has absolute control of a firm exploiting a protected niche. The flexibility of the strategy depends on how clearly articulated the vision is. Usually these strategies are deliberate but can be emergent as well.
- *Ideological strategies* reflect a shared vision of all the members of an organisation, forged through their sharing of common norms. Usually deliberate.

- *Umbrella strategies* try to combine deliberate strategic target setting from a leader with emergent pattern shaping within the set boundaries.
- *Process strategies* try to keep the procedural characteristics (key people, methods etc) under control whilst allowing the actual formulation to be emergent.
- *Disconnected strategies* rise from individual members' responses in the absence of centrally derived targets or even contrary to them.
- *Consensus strategies* emerge through members' behavioural convergence in the absence of centrally determined patterns.
- *Imposed strategies* are 'imposed' on the organisation by external environmental forces beyond its control. Though they are emergent in that sense they can be made deliberate if the force of change is internalised.

Consequently, Mintzberg sees strategy from 5 different angles, his famous five Ps (ibid., pp. 4-8) , the constituent characteristics of strategies

- *As Plan*: A "consciously intended course of action. A guideline (or set of guidelines) to deal with a situation."
- *As Ploy*: " ...specific "maneuver" (sic) intended to outwit an opponent or competitor."
- *As Pattern*: "...consistency in behaviour, whether or not intended.", "a pattern in a stream of actions."
- *As Position*: placing an organisation in relation to its competitive environment.
- *As Perspective*: sharing "...an ingrained way of perceiving the world."

These 5 different views are not necessarily incompatible with one another, in a way they are the 'tools' of a conceptual toolbox that will help us in our efforts to 'crack' the strategy nut. 'Perspectives' are emergent qualities of organisations, formulated in the long run through an organisational learning process. Positions, patterns, plans and ploys may derive from perspectives but may also give rise to perspectives. However, "...once they are established, perspectives become difficult to change." (Mintzberg, 2003, p. 8).

From an evolutionary point of view, position is a most interesting notion since it incorporates competitive behaviour in relating the organisation to its environment.

Seeing strategy as 'positioning' however does not preclude the implementation of plans or ploys nor does it mean that certain behavioural patterns (routines) do not emerge. The process of positioning and the organisation's perspective are also inextricably linked: ones position in the world is very much determined from what one can perceive of it.

The complex interrelationships we have just mentioned serve both as clarifications and as caveats. With these considerations in mind we will base most of the following discussion of strategic positioning on Porter's ideas (Porter, 1996). He sees strategy as the process of combining activities in order to gain an advantageous position out of the many possible and 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, p.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., p.45).

Strategic positioning (doing something different or doing the same thing differently) thus contrasts with operational effectiveness (OE) (doing the same thing better than others doing exactly the same). Lacking strategic vision but competing in terms of operational efficiency alone usually leads to industry consolidation through mergers and causes immense pressures on profitability because operational effectiveness is much easier to imitate and therefore it does not offer a sustainable competitive advantage. The fewer companies that are left through OE competition are these who were more efficient but nevertheless may still lack a strategy.

These ideas are very relevant for housebuilding, an industry that is witnessing significant consolidation during the last decades. Housebuilding firms, grow and get bigger but in most cases this growth comes through mergers and acquisitions (M&A) (see Chapter 7). UK housebuilders' emphasis on OE competition to the detriment of strategic positioning may well be amplified by the imperatives of the financial services industry and institutional investors in two ways: Firstly, OE has positive effects on share prices because it usually increases short-term profitability, M&As have a similar positive effect on share prices sometimes for no reason other than speculation. Secondly, a big part of the financial services industry survives by providing the services required for M&As. Therefore strategic positioning may appear as a less attractive short-term answer to the problem of firm survival and growth. The effort of one of the firms chosen as case studies to disengage from the

grip of institutional shareholders and the issues surrounding that effort are indicative of the differences in scope between housebuilding and finance firms.

Hamel & Prahalad (1994) take this argument one step further when they criticise what they call 'denominator managers'. Managers who cannot sustain growth through imaginative new market creation often take "...the accountant's shortcut to asset productivity." and attempt to increase Return On Investment (ROI) by "making the assets sweat", a process that usually involves substantial social costs (layoffs etc.) but rarely ensures long-term corporate survival by itself. Restructuring and reengineering are useful when a firm aims at getting to the future first. If it 'gets there for less' then so much the better. On their own however, exercises at 'denominator management' are defensive responses against those opponents who set the rules of the game.

They further argue that the companies that shape the future in many cases are 'contrarians', firms that will challenge the 'orthodoxy' i.e the established way of doing things, the managerial and wider social 'mental frames: "To discover the future it is not necessary to be a seer, but it is absolutely vital to be unorthodox" (ibid., p. 99). Companies have to dream of products not yet created and by definition do not reflect 'customer surveys' since it is extremely difficult for customers to imagine what is feasible. Not only has the firm to dream about the future (strategic intent), it also has to devise the way to get there. "Strategic architecture" is "...a blueprint for how to turn the dream into reality." (ibid, p. 107). In order to do so, the firm has to 'unlearn' and replace the part of its past that does not usefully serve its 'blueprint'.

Porter's explanation of cost and price differences between firms echoes those notions (Porter, 1996). He argues that "Ultimately, all differences between companies in cost or price derive from the hundreds of activities required to create, produce, sell and deliver their products or services..." whereas "...differentiation arises from both the choice of activities and how they are performed". In other words, superior organisational performance depends on what activities/routines/norms the organisation executes and how well it executes them. Each position requires its own "tailored activities", "product configurations", "equipment", "employee behaviour", "skills" and "management systems" underlying product development, production, delivery and support.

Similarly, positioning necessitates decisions on trade-offs between activities: The firm has to choose which activities are incompatible and thus cannot be performed simultaneously without compromising overall performance. Without trade-offs any firm could quickly place itself to any position, even occupy multiple positions simultaneously. It is very difficult to do so (Porter, 1996) because:

- A firm that occupies more than one positions might confuse the consumer as to the “type of value” it is delivering. As a consequence its image and reputation will suffer.
- Activities sustaining one position require different resources or different configuration of the same resources compared to activities sustaining another position.
- There is limited capacity to manage sets of activities within the same organisation that support different strategic positions.

Besides involving crucial decisions on trade-offs, strategic positioning is about creating an advantage based on a system of activities that fit one another. ‘Fit’ is yet another feature that makes imitation from competitors difficult since it depends on systemic qualities like:

- a) how consistent activities are between them and with the strategy
- b) how activities interlock and reinforce each other
- c) how interlocking activities lead to “effort optimisation”

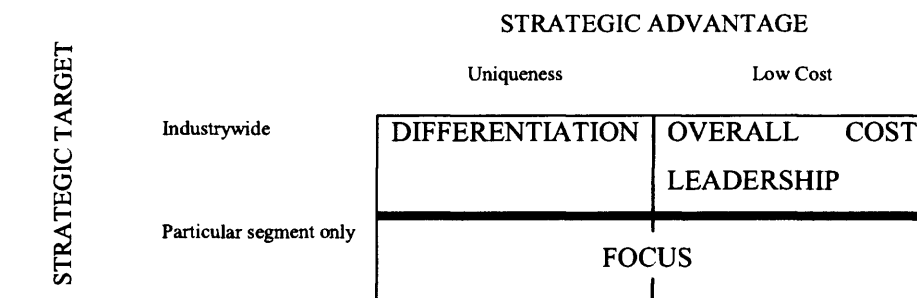
A firm that wants to create and defend a position that allows it to cope with the competitive forces of the industry²³ can follow 3 archetypical “generic strategies”:

- Minimise costs and achieve “overall cost leadership”
- Create a product that is, or everyone perceives is, unique and thus achieve “differentiation”
- “Focus” on a particular geographical area, market segment, type of product or some other related but very specific target.

²³ According to Porter (1980, p.4) the forces that determine “the state of competition” and the “ultimate profit potential in the industry” are: rivalry among firms, threat of entry, threat of substitutes, bargaining power of buyers and bargaining power of suppliers.

The following figure summarises the particular characteristics of the three ‘generic’ strategies and the relationships between them.

Figure 3.7: The three generic strategies



Source: Adapted from Porter (1980, p. 39)

So important is industry evolution to competitive strategy that Porter (1980) devotes a whole chapter to a discussion of structural change and its implications. The essence of his argument is that change is strategically important only if it affects any of the five competitive forces, otherwise it is only of tactical significance and has no fundamental structural implications. However, he readily recognises that industrial evolution does not go along predetermined paths but, on the contrary, ‘agency’ in the form of firm investment decisions plays a prominent role. The evolutionary path depends on “...luck, skills, resources and orientation of firms in the industry...” (ibid.).

The factors that Porter recognises as having potentially strategic importance are “long run changes in growth; changes in buyer segments served; buyers’ learning; reduction of uncertainty; diffusion of proprietary knowledge; accumulation of experience; expansion (or contraction) in scale; changes in input and currency costs; product innovation; marketing innovation; process innovation; structural change in adjacent industries; government policy change; entries and exits.” (ibid, p.164)

How do firms cope with change in their wider environment? Hamel and Prahalad (1994) make an argument that is heavily influenced by evolutionary thinking. Each firm has its own “genetic coding”: the “... biases, assumptions and presuppositions...” of managers, as well as “...beliefs, values and norms...” about markets, clients, stakeholder interests, competitors etc. This ‘code’ is a result of a particular set of environmental conditions, and allow the firm to cope with the demand of a particular

‘technological paradigm’. When the environment changes radically, in the fashion that Porter described, this ‘genetic inheritance’ may actually become a major threat to the firm’s survival.

In any type of land development, as Byrne (1996) has noted, there are certain tasks involved: Future demand has to be estimated in terms of quantity and quality/type, sites have to be identified and secured to satisfy this demand, the same sites have to be designed and planned to meet this demand, finance has to be found in order to fund acquisitions and construction, the whole process of design and construction has to be coordinated and managed and the end product has to be sold or let and managed/maintained after that. He thereafter separates development in 4 stages: Appraisal, Acquisition, Production/Construction and Disposal. Although this list is very close to de Magalhaes’ table of agents and functions, Byrne’s substantial contribution has to do with identifying the uncertainties inherent in these processes.

The sources of uncertainty in the appraisal stage have to do with changes or lack of clarity in the project’s specifications or other parameters, not realistic assumptions about aspects of the project as well as the market and not clearly specified objectives and design characteristics. In acquisition the biggest source of uncertainty is the response of the planning authority to the demands of the developer therefore usually the final purchase of the land is done after planning permission is granted. This means that profits are squeezed because a high price is paid for the land. During production, uncertainty arises around the project’s characteristics therefore traditionally a project whose details are finalised is less uncertain, it is also easier to standardise its production hence costs drop. Finally, in disposal the final product hits the market and the original assumptions are tested, rent and investment yields are the biggest source of uncertainty in that process.

Housebuilding in particular can be viewed as an activity combining two ‘Functions’; the development/wholesaling function and the construction function (Wellings, 2006). It is through the development/wholesale function that the higher margins are achieved in the industry, as it carries the biggest uncertainties. Construction on the other hand is a lower margin activity than can be disassociated from housebuilding as such, housebuilders are not primarily construction companies and indeed as Wellings shows (*ibid.*) mergers between construction companies and housebuilders are rarely successful.

On the same subject, Childs et. al. (1996) have examined the potential of mixed use schemes and concluded that they can be used to reduce risks when markets for different uses are not highly correlated and to add economic value when increases in supply for a particular use lead to declines in marginal revenues. Similarly, when Lai et. al. (2004) examine ways of reducing the uncertainties arising from future demand predictions they argue that:

“...the presale method not only helps developers deal with the uncertainty of future demand...but can also substantially reduce developer’s inventory costs....This method is particularly useful for large development projects...”

Based on the above rationale and assuming that there is actually a difference between non PDL and PDL housebuilding, we could argue that the ‘greenfield/expansionist’ and ‘brownfield/consolidation’ ways of urban growth comprise many different structures of provision and production stemming out of the different types of uncertainties involved. The actors involved in these structures will have developed their own norms, routines, skills and practices, their individual ‘genetic coding’ to cope with the risks and the uncertainties of the PDL redevelopment process. It is the successful adoption of norms, routines, skills and practices that are more suitable for PDL housebuilding that determines the survival of housebuilding firms in an environment of that is dramatically changing.

CHAPTER 4

Research Operationalisation.

4.1 Epistemological background

There exists a particular mode of thought, an approach in “constructing arguments and appraising theories”, in which the current research belongs. Within this mode of thought, as analysed in Dow (1996) each theory is corroborated by different sets of arguments that intermesh whilst starting from different starting points.

The philosophical basis underlying this research is realism. Realism claims that there exists a real world out there, independent of human ability to conceive it and indifferent to our changing ways of conceiving it. Most importantly though the realist concept of causality is adopted, whereby entities possess causal powers which may or may not be activated. It all depends on the existence of the suitable mechanisms which will enable these powers to produce outcomes.

Establishing causality would mean to discover how these mechanisms function in order for the causal powers to produce outcomes. Lawson (1997, p. 57) would argue that “The task, then, is to demonstrate that, but for...various social structures certain physical conditions, including actions, would not be performed”. The present thesis however will try to demonstrate how certain social structures, such as the structures of provision of the built environment, are shaped through the agency of actors like the government or the housebuilding firms and how this agency is indeed shaped by structural forces and limitations such as the planning system, .

4.2 Scientific approach

The research strategy pursued is the case study, “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (Stake, 1995, p. xi). This particular characteristic of the case study blends well with an institutionalist theoretical framework. Through a case study an institutional framework of the development process can be operationalised because

case studies are ideally suitable for looking into how actors function and why they function in that way, their interests and strategies.

Case studies have been used in the past to examine this type of topic and answer similar types of questions to the ones that this piece of work seeks to answer. Questions like “How does the development process differ in urban land re-use?”, “Which agents participate in the re-development process?”, “What are their interests and their strategies?” etc. are of an exploratory and explanatory type that can be very well explored through a case study.

Those questions refer to a contemporary event over which the researcher has no control and are definitely qualitative in character, looking for sets of relationships and actors’ strategies, thus rendering an experiment or a survey unsuitable (see Stake, 1995; Yin, 1994). A commonly held view in the natural sciences is that case studies are only suitable as an exploratory tool, whereas surveys are suitable for the descriptive phase of a project and experiments are actually the only method that can establish causality (Platt, 1992). This view, greatly influenced by positivism, is rather misleading in a social science context. Indeed as Yin argues (1994) the descriptive and explanatory parts of many significant research programmes have been based on case studies. It is therefore completely acceptable to use a case study approach for all three phases of a research project: the exploratory, the descriptive and the explanatory.

According to Yin (1994, p. 20), case study research design has five major components:

- the study’s questions,
- its propositions (if any),
- its units of analysis,
- the logic linking the data to the propositions,
- the criteria for interpreting the findings.

For the purposes of this research an inclusive and flexible strategy was adopted, data from multiple sources will be used to try and answer the research hypothesis and questions. Quantitative data may very well provide additional evidence and corroborate findings with regards to answering the type of questions we are trying to answer. This research therefore will include an analysis of existing aggregate

industry data in an examination of the 'macro' picture, of wider changes in the industry as a whole and in the business environment, a major part of the argument presented here. Other than the interviews themselves an effort will be made to gather information from relative newspaper and journal articles were necessary in order to get a different angle on the views of the interviewees and to assist with the interpretation of the dataset used.

4.3 Research Hypotheses

The present research project will explore a key aspect of the Urban Task Force proposition and the Sustainable Communities Plan that urban land recycling is a major pillar on which the attempt to revive the cities should be based. That ambitious strategy pretty much depends on the attraction of private housebuilding into regeneration. The fact that private capital is reluctantly involved with such schemes is treated by most researchers as an indication that certain constraints are in operation or, even more, that there are inherent structural deficiencies that do not allow for this to happen on a sufficient scale. Some of these constraints and their effects have already been analysed in previous research and have been discussed in Chapters 2 and 3, others will be examined during the course of the project.

For the purposes of our research we assume that specific set(s) of relations between the agents involved in the development process exist, and that these are configured in particular ways for a previously developed site to be transformed into new housing development. There are three key questions providing the stimulus for this research, the answer to which we are setting out to explore. The first of those questions is: Is the production of the built environment on brownfield sites structured in a particular and distinct way? The tentative answer to this question is the first hypothesis.

Hypothesis 1: *'Housebuilding on PDL is characterized by specific institutional structures in the form of strategies, skills, norms, routines and actor configurations'*

The institutional arrangements are reproduced and altered through the actions of the various actors involved in them. Of prominent importance to the modification and reproduction of such structures are the housebuilding companies. The

housebuilders/developers act as ‘organisers’, ‘coordinators’ of the complex web of relations a structure of provision of the built environment comprises. An evolutionary approach would argue that through selection or imitation, suitable ‘PDL structures’ will become widespread. How, why and to what effect do housebuilders affect a structure of provision? We are looking here for a description of the ‘structuration’ process with corporate strategy as the bridge between structure and agency. Consequently, the following hypothesis is our tentative answer to that question.

Hypothesis 2: *“Housebuilding companies (re)organize the housebuilding process as part of their competitive strategies in order to gain competitive advantage. As an increasing proportion of competitors will reposition themselves the changes will reflect on the industry output.”*

The next and final question is: Where can the occurring changes be attributed? Well, one could list many factors, all having an equally good chance of being relevant (see Porter 1980, p. 164). Quite often it’s the case-specific implicit or explicit involvement of the state that assists the ‘fit’ of the complex set of relations created by the various actors involved. In our view, the state is also a major actor in ‘setting the scene’ where others will perform. Despite the relative downscaling of the past couple of decades, the state’s role as the ultimate guarantor of the market’s orderly function gives it unique power over the determination of the rules of the game. As far as the housebuilding industry is concerned, very relevant government policies are those affecting the provision of land (as described in Chapter 2).

Hypothesis 3: *“The recent changes in government policy regarding land provision are contributing to the change that is now occurring in the way housing is produced”*

Based on the hypotheses we have just developed we could distinguish the following aims for this research project:

- To explore and analyse the complex set of relations that the urban land redevelopment process comprises.

- To discover how housebuilders specialising in brownfield regeneration have adapted their competitive strategies.
- To determine the role of particular government policy in the structural changes taking place in the housebuilding industry.
- To analyse how the changes described above are reflected in industry's outputs.

Research will be further operationalised through the following objectives:

- Examination of the macroscopic changes in the output of the housebuilding industry.
- Exploration of prominent cases of urban land re-use for housing.
- Identification of patterns in the institutional structures of the schemes under examination.
- Review of government policy and the ways it has changed as far as the provision of land is concerned.
- Examination of selected housebuilders' competitive strategies for elements that have taken the new environment into account.
- Explanation of the findings in terms of the main theoretical approaches.
- Using the research results as feedback to policy measures.

A new set of operational questions derives from those objectives:

- i) What are the current dwelling production characteristics in terms of land used, quantity and quality?
- ii) What is (are) the brownfield redevelopment institutional structure(s)?
- iii) What has recently changed in relevant government policy?
- iv) What is the perceived effect of government policy changes in land supply on the housebuilding process?
- v) How have the housebuilder strategies changed to accommodate for those changes (if at all...)?
- vi) Have housebuilders changed their strategies to accommodate for brownfield redevelopment ?
- vii) If yes then what are those changes?

viii) What is the rationale behind those changes? (What is anticipated and hoped?)

4.4 Levels and units of analysis

Following a realist rationale we could claim that what happens at the level of the development site (configuration of space) as well as the industry as a whole (configuration of firms) are a reflection of the workings of an SSHP (mechanism) which in turn is affected by a wider set of societal ideas and values (see Figure 3.4). Given the nature of the observable outcomes we will have to examine the development process by using a combination of methods both quantitative and qualitative.

On the one hand, quantitative analysis will examine changes at the industry level. On the other hand, qualitative examination of the case studies will untangle the way the development process works both at the level of the firm but also at the development site level. The main unit of analysis however, is the set institutional arrangements that characterise brownfield redevelopment, it is this set that we are trying to discover, the analysis of the embedded units just provides pieces of the puzzle. The following figure illustrates how different levels will require different types of analysis.

Figure 4.1: Articulation of analysis levels.

Method	Level	Embedded Units
Quantitative	Macro	The industry
Qualitative	Meso	The firm
Qualitative	Micro	Site-specific institutional arrangements

Various subunits can be identified, such as the different organisations/agencies that participate in the development process or the various individuals managing the firm. It is expected that there exist certain aspects that characterise development

“models” of housebuilding in redeveloped urban land, although they might have variations from site to site and firm to firm. These variations constitute the specific institutional arrangements which are under exploration for each site.

The previous remark also clarifies the issue of linking the data to the propositions and the criteria for interpretation. The information that is collected helps create a “description” of the development process for each site, and the set of relations that underlie it. These ‘descriptions’ are then compared to a set of theoretical propositions as well as with each other in order to distinguish common patterns and decipher the causal mechanisms that lead to the observed results.

4.5 Data collection and analysis

This research is based on a choice of cases made with replication rather than sampling in mind. This means that each selected site and firm serves the specific purpose of being useful in producing similar results or “contrasting results but for predictable reasons.” (Yin, 1992, p. 46).

The case study research strategy that is followed here has both a historical as well as a direct observation/interviewing character. In order to establish what happened in the past we have to rely on archival material and other documentation, such as old newspaper or journal articles, that give us an adequate picture of the history to date. This helps in various ways as, for example, in exploring the roles and the strategies of each agency that is involved in the development process. We also have to rely heavily on semi-structured interviews with key figures and detailed review of material (printed or other) on each individual case. On-site observations help a lot in getting “the feeling” of the place and formulating a personal opinion about the validity of the interviewee information.

The use of multiple sources of evidence allows for corroboration of the information thus increasing the validity and the accuracy of the research findings. The multiplicity of data that has been obtained is organized in a coherent case study file. For each different case a separate set of hard copy records is kept, including notes and audio tapes from interviews, photographs, photocopies of documents or references to documents copies of which could not be obtained by the researcher but could be inspected.

Data collection has not encountered extraordinary problems. Amongst other things, this research required the collection of qualitative data through a series of semi-structured interviews. During the interviews areas of interest were highlighted but the interviewee was allowed to elaborate into each area of interest. 'Question Set 1' (see Appendix B) was used during the interviews in the examination of the strategies of the housebuilding firms involved in our case studies and the effects of the changes in the land provision regime. It draws heavily on Porter's writings and suggestions. Not all questions from 'Question Set 1' were asked to all interviewees, each interviewee was asked about specific areas of interest that were within his/her professional remit or in which he/she was involved.

Two more question sets, 'Question Set 2' and 'Question Set 3' (see Appendix B) are for internal (researcher) use i.e they were used as a guide for the researcher in order to gather information related to the case studies, where gaps were identified following our research of the documentation, a relevant question was asked to the appropriate interviewee. As it is often the case we could only get broad estimates when we asked about financial details of specific development projects; this information was treated as confidential by our interviewees.

Our case study sites and firms were chosen in collaboration with the sponsors of this research who have mobilized their contacts to make sure that co-operation from all parties was forthcoming. Following the first round of interviews, a second round was carried out based either on recommendations of the interviewees of the first round or on names that have been encountered in the corporate or other literature and documentation. Refusal of potential interviewees to participate occurred in the case of one community organisation and was due to lack of knowledge about the cases under examination.

To analyse the data we relied on our theoretical propositions which suggested that housebuilders are adapting to their changing business environment. The special type of pattern matching called "iterative explanation-building" is being used. What is sought is to build an explanation whilst starting from a theoretical proposition which is being revised as many times as necessary through the examination of consecutive cases.

The next step in making our research operational was to refine the basic concepts of our hypotheses: Institutional Structures, Competitive Strategies and Competitive Advantage. After refining those concepts we readily focused our research questions

and created the broad questionnaire framework to guide us through the interviews. The question sets covered the competitive strategies of housebuilders, the relationships and actors comprising the institutional structures under examination and site-specific information.

4.6 Research issues

This research is not primarily an analysis of public policy. However, the set of public policies operating at any time, constitutes part of the institutional arrangements to be analysed in each case, for example; planning policies and practices, tax and credit policies, systems of governance, grants and subsidies. We consider it as a given fact that policy so far has not been completely successful in solving the problems associated with urban land re-use and it is not the main aim of the research to evaluate the degree of that success or failure. We will however refer to other authors who have already done this kind of research and it is also expected that this research will help to inform the evaluation of past and current policy.

All cases selected are geographically located within the boundaries of Greater London. This is due to the limited resources available, indeed choosing cases from all over the UK would require substantially greater amounts of time, effort and money. The second reason for choosing Greater London only is methodological. Choosing from only one geographical area makes the comparisons easier between the two housebuilders since the same business environment applies to both. The third reason is that at the outset, when the project was at its preliminary stages, it was considered that if a problem with urban land re-use really existed this would be of a quite distinctive form in London where demand for buildings of all types was continuously high during most of the last decade.

The impediments to land re-use in demand-deficient regions are bound to be very different indeed. One can reasonably assume that the problems will be accentuated during a slump but in any case London is probably the area where one could reasonably argue that demand for most types of property on PDL was strong for a prolonged period of time.

Tied to this issue is the problem of generalisation. It should be made clear from the outset that “statistical generalisation” was not an aim of this research, as it should not be in any research that is based on a case study approach. What is sought is

“analytic generalisation”. It is not possible nor desirable to claim that what the research uncovers can be extrapolated to the industry as a whole. The research design and scope does not allow it, however the research uncovers two rather important responses from two firms and shows how they could have an effect at a wider scale as they serve as plausible explanations of what other firms might be doing. It is both through statistical or other quantitative methods as well as case studies that our inferences will be made. This approach is suggested amongst others in the recent work of Guy and Hennebery (2002) as the way critical science should approach its object of examination. However, more research into other firms’ attitudes and strategies could shed more light into industry-wide trends.

Finally, it should be noted that ‘successful in attracting redevelopment’ should not mislead the reader into thinking that a judgement is made on the final outcome of redevelopment. Sites have been selected based on the simple fact that something was, or was not, finally built on them. The quite serious issues of evaluating development quality are important enough and complex enough to justify a separate piece of extensive research work. This does not mean however, that the research will avoid pointing out the effects which development forms may have had on qualitative features – simply that the comprehensive evaluation of policy is not the thrust of this research.

CHAPTER 5

The changing face of housebuilding

5.1 Introduction

This chapter will elaborate on some important macro-level changes currently occurring in housebuilding in Britain. Firstly, it will expand on the argument made earlier in this thesis but also elsewhere (Ball, 1983) that housebuilding in the UK is mainly a matter for private housebuilders who build on non PDL sites at low densities, selling the product, usually houses, to owner-occupiers in the open market. It has already been argued (Chapter 1) that non-speculative (social) housing was a major contributor to total housing supply until the early 1980s when the government essentially abandoned it and drastically cut down on related funding. In a climate of tension, fuelled by the affordability crisis mentioned in Chapter 1, the housebuilding industry is blamed for not responding to the challenge of providing good quality housing at affordable prices. This claim has been repeated in the past (i.e Ball, 1983). The chapter however will focus on the changes currently happening in UK housebuilding with regard both to the type of land used, the type of dwellings produced and the generic housebuilding skills required

The analysis in this chapter indicates that in response to the qualitative and quantitative change to the land input into the production process the industry is changing the types of dwellings and developments produced. This is not to say that demand factors like global investment flows as mentioned in earlier chapters did not play a role in this shift. What this chapter shows is that there was a response to the policy changes and that a link between the two exists.

Housebuilding in the UK was mainly based on expansion into the 'greenfields', therefore housebuilders have developed certain skills, norms and routines permeating the "structure of organisation of agency relationships" (de Magalhaes, 1996) that underlies housebuilding production processes. Landbanking and land management, planning and marketing have been the foci of recent literature as the 'generic' skills required for housebuilders to be successful (Adams, 2002) we could expand on this conceptualisation by viewing housebuilding as an activity dependent on 'development risk management' skills. The configuration of spaces, the

developments, produced by this structure of agency relationships are low density housing developments, marketed on the basis of their environmental amenity and aiming at customers seeking family-friendly built environments.

Furthermore, policy-induced changes in the amount and the type of the land released from the planning system for housing is increasing the proportion of PDL used for housebuilding. This change is linked at least to two types of changes in the qualitative aspects of output: a greater proportion of flats instead of houses are built and densities at new developments are increasing. Consequently, two tendencies are developing in dwelling production, one based on low density land-intensive development and another based on high density capital-intensive development.

The change in output however also reflects changes at the nature of the generic skills required for housebuilding to be successful. The traditional strategic planning and landbanking capabilities are now complemented by flexibility in design and construction and the capacity to 'negotiate' through the development process, which are gaining in importance. Marketing has also changed its focus, the rural idyll is giving its place to approaches based on the vibrancy of urban living. This enhanced flexibility and marketing focus are underlying the trend towards specialisation that previous research has already identified (Barlow, 2000), furthermore the ability to provide higher levels of customisation through a more flexible approach also taps into significant latent demand for more customer input in dwelling production (*ibid.*).

There are also indications that from the 90s onwards the well established trend of housebuilding industry consolidation has accelerated (Nicol and Hooper, 1999; Wellings, 2003) and several leading firms have strived to gain market share and achieve output growth through M&As. The relevant literature reviewed in Chapter 3 however claimed that competition through operational efficiency and M&As is indicative of a lack of strategic vision. In terms of strategic responses affecting the production process the current chapter hints that housebuilders may have:

- opted to build high density developments with apartment blocks on PDL or
- opted for low density greenfield-type development configurations using PDL instead of non PDL land.

- retained the capacity to build on greenfield land in the 'traditional' way and still use non PDL land for low density development in parallel to high density PDL development activity..
- opted to build high density non PDL. This option exists theoretically but it is not considered a realistic choice given the constraints of the planning system, and the bad experiences of the 1960s
- Medium density PDL (30-80 dw/ha) is an option but not a rapidly growing trend probably of its lower profitability compared to high density PDL
- Medium density non PDL has the same disadvantages with high density non PDL in terms of planning system constraints and marketing difficulties. Its share is dropping as a percentage of dwellings built.

Whereas this chapter will elaborate on the industry's response at the aggregate level Chapter 6 where the two case studies will explore the strategic responses of George Wimpey and the Berkeley Group towards the new policy regime. It will also elaborate on the consequences their response had for the way they organise and execute the production of housing developments and the type of spaces they are producing. First however we will examine the changes occurring at the macro level, at the whole industry and in total dwelling output as indicated in Chapter 5.

5.2 First evidence for the decline in low density non PDL development and the move into the development of PDL

During the first half of the 20th century, explosive urban sprawl resulted in rapid increases in the geographical size of Britain's cities and consequently during the post-war period the state attempted to regulate the supply of greenfield land for housing around London and the metropolitan areas. Due to the discretionary nature of the UK planning system, containment policies were a generically flexible policy measure.

The 'overspill' associated with the implementation of the Greenbelts can be seen as an adaptive response of housebuilders and the housing development process more generally, to the changed policy realities of the time. If new housebuilding in its 'spatially expansionary' form could not take place around metropolitan areas then

less 'protected' towns and villages beyond the greenbelt were the next reasonable alternative for dwelling development. Thus, although containment was an attempt to block expansionist housebuilding, this adapted to the new conditions causing 'unintended consequences' that changed the face of Britain's cities. The geographical distribution of new development changed but to a large extent the type of development did not.

Slowly but steadily, the important diseconomies inherent in the expansionist model of urban growth, which will be examined in the following chapters, have made their presence strongly felt and for the first time it seems as though they outweigh the benefits. To many interested parties, from environmental lobbyists to property industry leaders and from leading architects to government agencies²⁴ it seems that the current mode of combined greenfield expansion and urban containment using the greenbelt is environmentally, socially and economically unsustainable.

Detailed descriptions and analyses of housing provision and production in the UK can be found amongst others in the work of Ball (1983), Gruneberg and Ive (2000), Adams and Watkins (2002), Barlow and Duncan (1994). Between them, they argue that the main structure is 'speculative', providing for the private owner-occupier market, complemented by a residualised 'contract' structure providing for the social housing sector. As Ball (1983, p. 41) notes: "Owner occupation became synonymous with Building Societies and speculative housebuilding and with expansion on Greenfield sites and urban decentralisation". Since then mortgage lending has been deregulated but the main characteristics of it, as described by Ball, remain the same.

In the 'speculative' structure the most important actors are the housebuilders, the labour-only subcontractors, the owner-occupiers, the banks and building societies and the state in its various guises. That particular set of markets, firms, individuals, regulations and technical relationships (Gruneberg & Ive, 2000) now singularly dominates housebuilding activity in the UK and will be the focus of this research.

²⁴ Indicatively one can mention the FoE, the TCPA, CABE, SEEDA, Lord Rogers and many more.

The diagram illustrates the housing market system as a circular flow of capital, land, and labor. At the center is 'The housing market', which includes 'Exchange' and 'Professionals'. To the left, 'Owner occupiers' engage in 'Sales' and 'Purchases' with the market. Below them, 'Mortgage credit institutions, building socs, etc.' provide financing. To the right, 'Speculative housebuilders' handle 'Sales, Production, Land assembly and development'. They are influenced by 'Circulation of capital' (nature of economic ownership, sources of credit) and 'Land and land-ownership'. 'Building workers' and 'Building materials producers' supply the production process. At the bottom, 'The State' influences the system through four key areas: housing policy, individual and corporate taxation, employment legislation, and planning system and state infrastructure expenditure.

```

graph TD
    OC[Owner occupiers] -- Sales --> HM((The housing market  
Exchange  
Professionals))
    HM -- Purchases --> OC
    MCI[Mortgage credit institutions  
building socs etc.] --> HM
    HM --> SHB[Speculative housebuilders  
Sales Production Land assembly  
and development]
    CC[Circulation of capital  
Nature of economic ownership  
sources of credit] --> SHB
    LLO[Land and land-ownership] --> SHB
    BW[Building workers] --> SHB
    BMP[Building materials producers] --> SHB
    SHB --> HM
    TS[The State  
influences via] --> SHB
    TS --> HM
    TS --> OC
    TS --> MCI
    TS --> BW
    TS --> BMP
    TS --> LLO
    TS --> CC
    
```

1. Housing policy
2. Individual and corporate taxation
3. Employment legislation
4. Planning system and state infrastructure expenditure

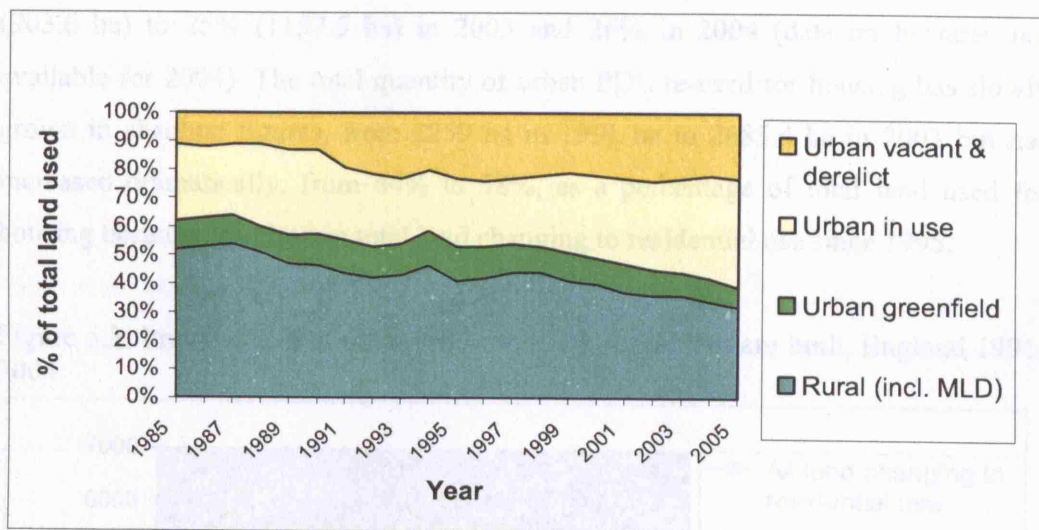
The other, residual, structure is called “contracting” by Gruneberg and Ive (2000, p.33) which is responsible for the production of social housing. In that structure, the major actors are the social housing associations, the Housing Corporation which regulates and provides funding and a host of contractors (builders, architects etc.) who have specialised in providing their services to the housing associations under that particular set of institutional arrangements. It is interesting to note here that this “contracting” structure is the outcome of a series of radical transformations during the last 25 years. Page (1996) has examined in great depth the changing roles and relationships of the actors involved in Municipal housing and the depletion of the Council’s capacity to carry out residential development schemes. Following the marginalisation of social housing production since the early 1980s, speculative housebuilding amounts to more than 90% of total annual completions in England (see Figure 1.5).

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recognised in the framework proposed by Gruneberg and Ive which is used in this thesis as one of the guiding frameworks. With this in mind, the switch to a new land supply regime following changes in government regulation is a unique opportunity to examine this particular aspect of the links between theory, policy and practice.

The following figure (5.2) shows that until 2000 more than half of the land used for housing each year was not previously developed or in rural use (which here includes Minerals, Landfill and Defence-MLD) or was an 'urban greenfield'. This is a strong indication that housebuilding in the UK was predominantly an expansionary process, geared towards building on new, undeveloped land either inside the urban fabric or, much more often, outside it.

Figure 5.2: Previous use of land on which new residences are built, England 1985-2005



Source: Adapted from ODPM, 2002a and ODPM, 2004; ODPM, 2005; ODPM, 2006

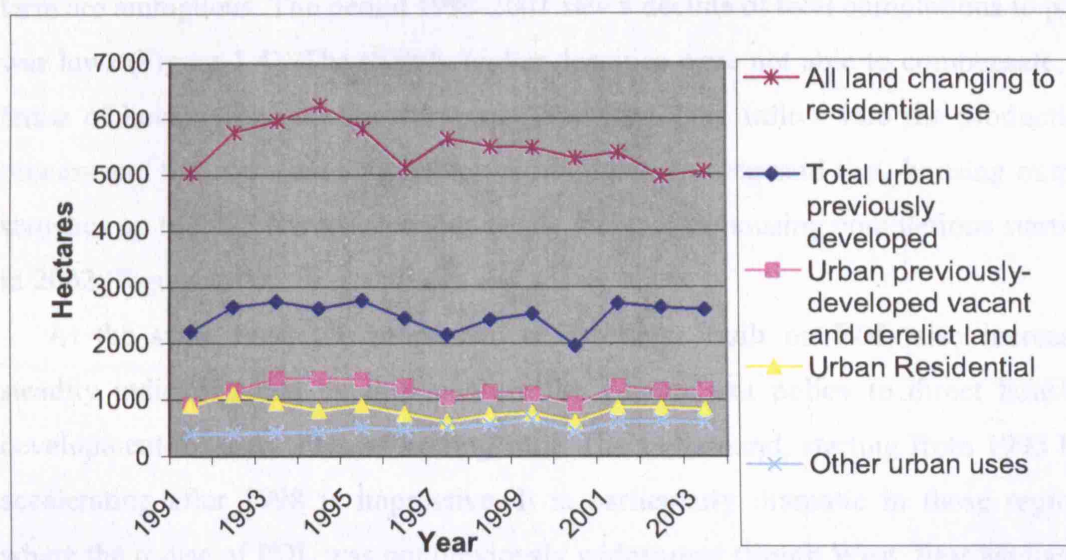
Although non PDL development comprises a very important segment of production, the trend towards proportionately more land re-use (Figure 5.2) and a concurrent increase in average densities (Figure 5.5) indicates a slow but steady shift of this well established 'expansionary' paradigm towards more compact developments on PDL.

Breheny (1998) was one of the first to notice that throughout the 1990s the quantity of previously developed land re-used for housing was actually declining in absolute figures although it was increasing as a percentage because of an overall drop in land used for housing generally. His analysis showed that for the period 1985-

1995 more than half of the land that changed into residential use each year was previously in rural use or was an 'urban greenfield'. Furthermore, the percentage of previously developed land used for new housing in urban areas was almost one third of all the land used for that purpose. Breheny therefore showed that housebuilding in the UK was still an expansionary process, geared towards building in new, undeveloped land. His point is repeated in Adams (2004) who also was one of the first to indicate the link between planning policy and corporate strategy.

Both authors are only partially right on their assessment of land use statistics however: recently revised data from the ODPM (ODPM, 2005a, 2006) show (Figure 5.3) that the area of urban land 'in use' that is re-used for housing has increased from 26% (1305.2 ha) of all the land used for housing in 1991²⁵ to 31% (1435.3 ha) in 2003 and 32% in 2004 (data on hectares not available for 2004). Similarly, 'vacant and derelict' land used for new housing in urban areas has increased from 18% (903.6 ha) to 25% (1157.5 ha) in 2003 and 26% in 2004 (data on hectares not available for 2004). The total quantity of urban PDL re-used for housing has slowly grown in absolute figures, from 2259 ha in 1991 ha to 2685.4 ha in 2003 but has increased dramatically, from 44% to 58%, as a percentage of total land used for housing because of a drop in total land changing to residential use since 1995.

Figure 5.3: Previous use of urban land on which residences are built, England 1991-2004



Source: Adapted from ODPM, 2002a; 2004, 2005a, 2006

²⁵ These numbers should be treated with caution because they have been derived from 'rounded' figures published in ODPM, 2005a, 2006

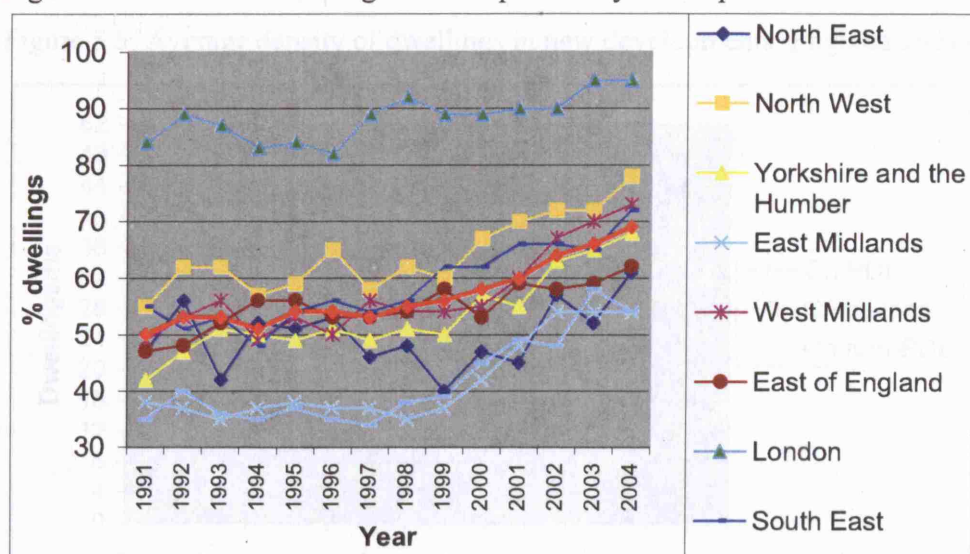
Between 1991 and 2003, the total amount of land changing into residential use increased from 5020 ha to 5050 ha, after peaking at 6230 ha in 1994, a year before the new policy was introduced. This trend mainly reflects a drop in 'rural' and 'urban' non PDL use and is combined with an increase in dwelling construction in metropolitan areas, therefore there are grounds to reasonably argue that the change in policy is having an effect. Starting from 1995, the restrictions on the use of non PDL land initiated a decline in the total amount of land used for housing but also coincided with a drop in housing production (Figure 1.2) which reversed a few years later.

This is the first indication of a link between type of land input and type of output, a link that will be explored further in the following sections. For the time being it would be useful to point out another interesting conclusion drawn from the above discussion: Simply satisfying the target of 60% of new housing to be built on PDL is not a sufficient sign of success. Achieving this target (or not) has to be measured against a series of interrelated objectives such as the quantity and quality of land used as well as the overall housebuilding output.

The analysis of available data as presented in Figures 5.2 and 5.3 provides strong indications that the recent policy measures have put pressure on the supply of non PDL land. The effects of that pressure on total housing output at least in the short term are ambiguous. The period 1995-2001 saw a decline of total completions to post war lows (Figure 1.4). The slightly higher densities were not able to compensate, in terms of housing output, for the loss of non PDL land inflow into the production process and the corresponding reduction in output. Having said that, housing output statistics up to 2005 show a slow but steady increase in housing completions starting in 2002 (Figure 1.4).

At the same time, the proportion of dwellings built on PDL also increases steadily indicating that by this measure the government policy to direct housing development towards PDL is bearing fruit. The turnaround, starting from 1995 but accelerating after 1998 is impressive. It is particularly dramatic in those regions where the re-use of PDL was not previously widespread (South West, East Midlands and North East). There, the percentage of new dwellings built on PDL has jumped from below 40% to around 60% in three years' time (Figure 5.4).

Figure 5.4: % of new dwellings built on previously developed land 1991-2004



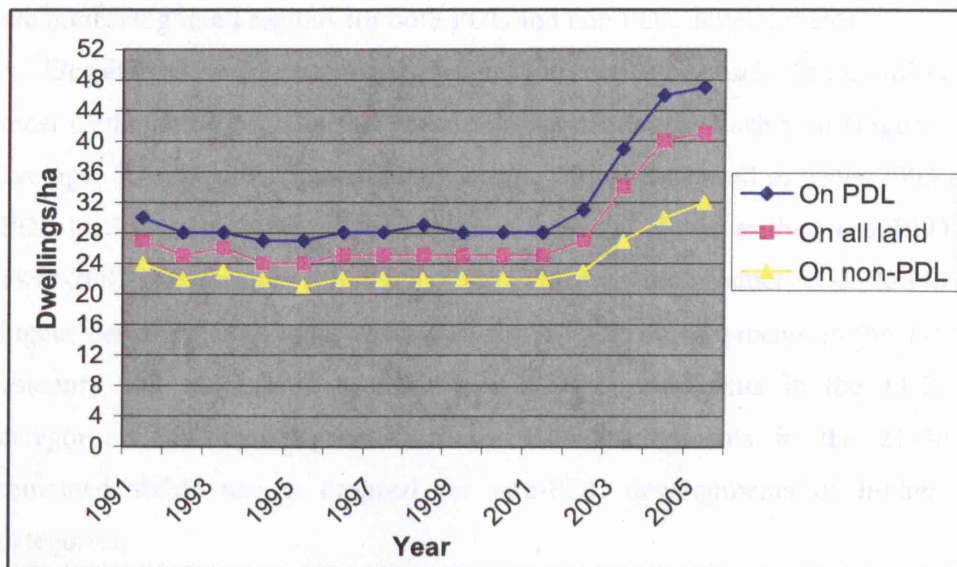
Source: Adapted from ODPM 2002a; 2004b; 2005a, 2006

This upward turn in housing output accompanied by a higher percentage of dwellings built on PDL is combined with a marked increase in densities of newly built developments which have also begun to pick up considerably since 2002 (Figure 5.5). Given the time lag between the decision to purchase a site and the completion of construction of the development²⁶, it is reasonable to assume that the increase in densities appearing in 2002 is rooted in decisions taken four, five or more years prior to the date the completed dwellings were counted in the statistics. This in turn, means that on average housebuilders begun to turn towards higher density housebuilding at a date reasonably close to 1995, when the government first imposed the 50% target.

This in turn indicates that planning policy affects the configuration of spaces (type of developments) which the housebuilding industry produces but would also mean that on average the industry is hesitant in pre-empting planning policy. If that was the case then the rise in densities in response to the requirements of PPG3 should have come much earlier than 2002 and there should have been no lag or dip in housing output. On the other hand, to request such foresight from any industry is rather utopian, if policy makers had given enough notice of the oncoming change then a smoother transition could have been expected.

²⁶ One could estimate on average 1-2 years to locate and buy a site, 1-2 years for the design and planning permission process, and 2-3 years to build and sell.

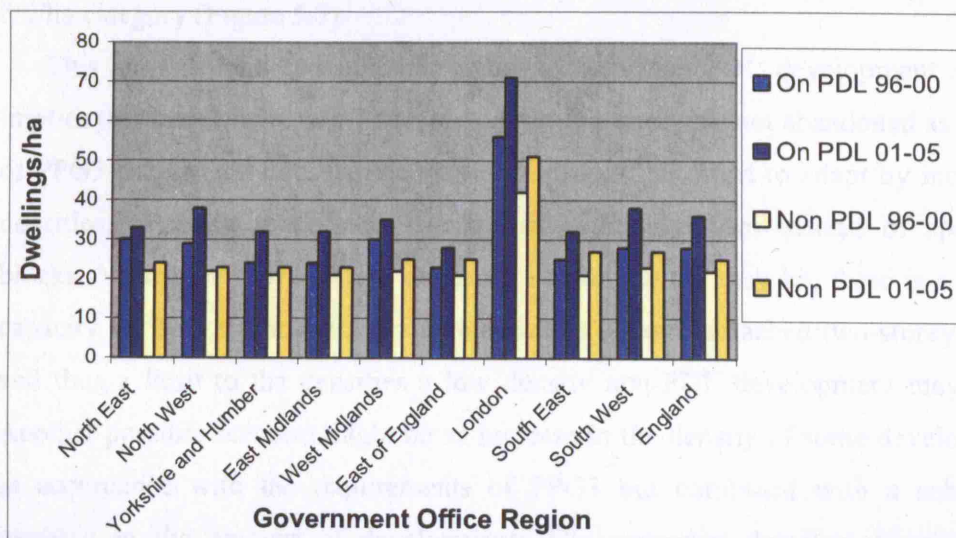
Figure 5.5: Average density of dwellings in new developments, England 1991-2005



Source: Adapted from ODPM 2002a; 2004; 2005a; 2006

The argument made here is that this increase in densities is associated with the type of land used, and that on average, developments on PDL are built at higher densities. Figure 5.6 provides a strong indication of that.

Figure 5.6: Average density of dwellings built by land type; 1996-00, 2001-05



Source: ODPM, 2003, 2006

It shows that for each and every English region, developments on PDL have more dwellings per hectare on average. Furthermore, it shows that average densities are increasing in all regions for both PDL and non PDL developments.

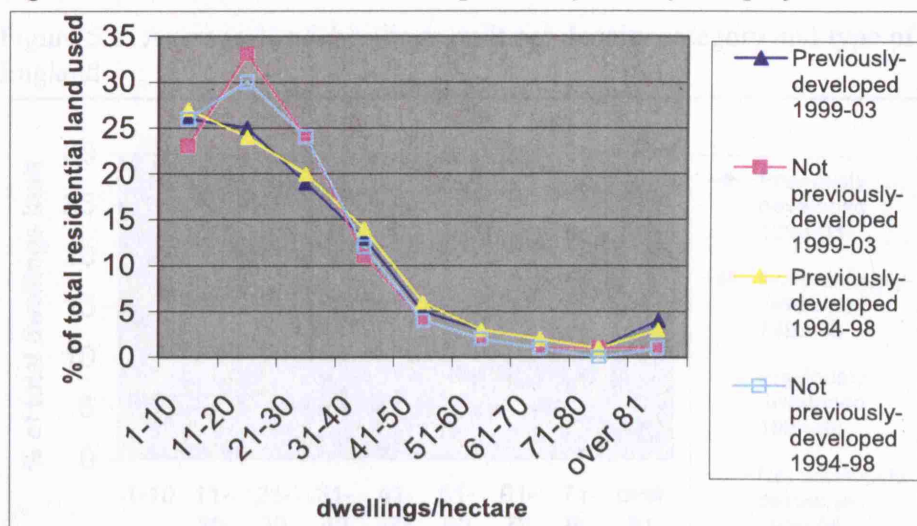
Despite the slowly occurring change, low density housebuilding still consumes most of the non-PDL land that is put into residential use each year (Figure 5.7). On average, 80% of developments built during 1994-98 as well as 1999-2003 on non-PDL land were built on densities below 30 dw/ha. However, between 1994-98 and 1999-2003 low density (1-30 dw/ha) non PDL dwelling production shifted to slightly higher densities. Less land was used for non-PDL developments in the 1-10 dw/ha category and more land used for non-PDL developments in the 11-20 dw/ha category. Land consumption for non-PDL developments in the 21-30 dw/ha remained stable and it dropped for non-PDL developments of higher density categories.

This response from the housebuilding industry is not without significance. PPG3 has directed the planning system towards the promotion of densities above 30 dw/ha and therefore pressures housebuilders to build such schemes, therefore the following trends could be anticipated: an increase of land used in density categories of 30 dw/ha or higher and a decrease of land used below that threshold. This is indeed happening with PDL land albeit to a small extent. However, in non PDL land there is an increase of land consumption at the 11-20 dw/ha category and a drop above the 30 dw/ha category (Figure 5.7).

This shift in land consumption in low density non PDL development actually implies that low density non-PDL types of development are not abandoned as a result of PPG3 but instead housebuilders are still making an effort to adapt by increasing densities, as much as possible, while still building houses instead of apartment blocks. No matter how cleverly designed a development may be, there is a limited capacity for each site to accommodate detached or semi-detached two-storey houses and thus a limit to the densities a low density non-PDL development may reach. Another possible scenario might be an increase in the density of some developments in accordance with the requirements of PPG3 but combined with a substantial increase in the amount of developments like upmarket detached housing, thus lowering the overall average. However, this scenario would have increased total non PDL land consumption, which is not the case. There might be more plausible explanations for the transformations of low density non-PDL housebuilding which

would be useful grounds for future investigation but fall outside the remit of the current research.

Figure 5.7: Land used for new developments by density category



Source: Adapted from ODPM, 2002a and ODPM, 2004

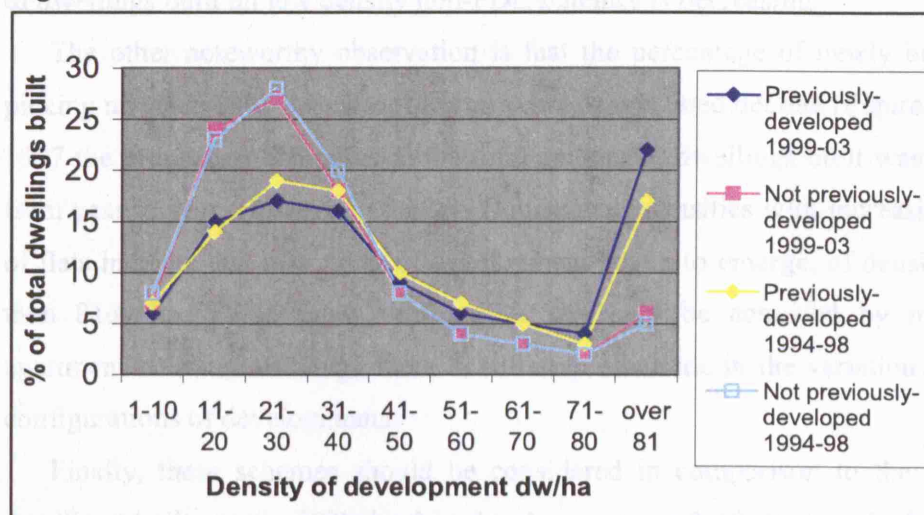
In any case, whatever the cause, it appears that low density non-PDL developments do not exceed on average a certain density limit, lower than 30 dw/ha. Therefore we could argue that the policy pressure via PPG3 for new developments to exceed that density essentially facilitates if not promotes product change, namely for developments comprising apartment blocks not houses.

More evidence pointing at a difference in the type of developments produced depending on the type of land used, comes from further analysis of the distribution of housing output per density category (Figure 5.8). Of all dwellings built on non-PDL during the period 1999-2003, 58% were built in developments with densities below 30 dw/ha, rising to 76% if the threshold is put at 40 dw/ha. Only 6% of the dwellings built on non-PDL were built in developments of densities higher than >81 dw/ha. More importantly, this distribution has not changed significantly since 1994-1998, at least in terms of percentages.

On the other hand, a significant 22% of total dwelling output on PDL was built in developments of 81 dw/ha or more during the period 1999-2003, up from 17% in 1994-1998. In contrast to that, 38% of dwellings built on PDL during the period 1999-2003 were below the 30 dw/ha mark rising to a cumulative 54% below the 40

dw/ha mark, down 4% compared to 1994-1998. This shows that non-PDL land is linked to low density development and PDL land is linked to higher density developments.

Figure 5.8: Average % of dwellings built per density category and type of land used, England



Source: Adapted from ODPM, 2004

This trend in turn reflects a “jump” of the housing output from one extreme to the other. Whereas a big part of total dwelling output is on low density developments, dwelling output in high density developments is also increasing significantly. Output in medium density developments between 30-80 dw/ha is steady in non-PDL land and dropping in PDL land. This analysis strengthens the argument that, in terms of the types of developments produced, private housebuilding in the UK is polarized, Table 5.1 below indicates how this polarization is evolving with time.

Table 5.1: Percentages of total dwellings built by density and land type in 1999-03 and 1994-98

	High Density 1999-03	High Density 1994-98	Trend	Medium Density 1999-03	Medium Density 1994-98	Trend	Low Density 1999-03	Low Density 1994-98	Trend
Non-PDL	6%	5%	UP	18%	16%	UP	76%	79%	DOWN
PDL	22%	17%	UP	24%	25%	DOWN	54%	58%	DOWN

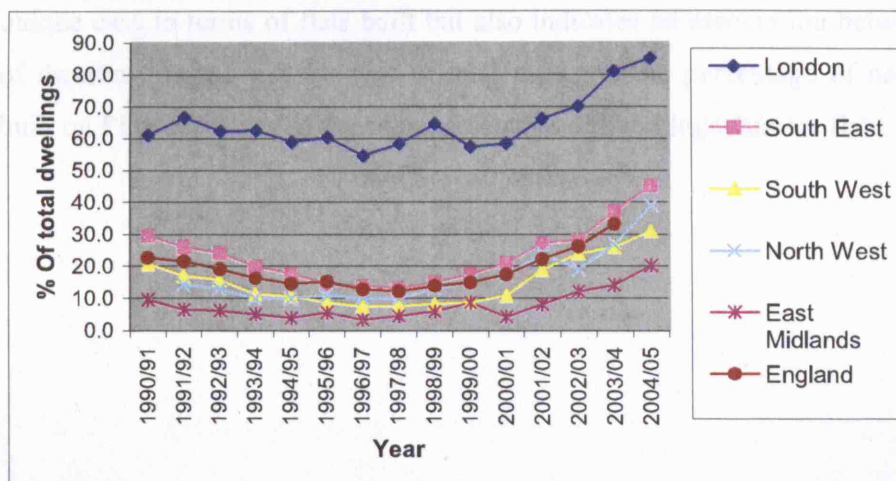
Source: Adapted from ODPM, 2004

On the one hand non PDL schemes are mostly land-intensive built at densities below 30 dw/ha. The distribution of dwellings per density category for this type of land has remained relatively static through time. Slightly larger numbers of dwellings are built in higher density developments for this land category. On the other hand PDL schemes are increasingly built on densities above 81 dw/ha whereas the number of dwellings built on low density non-PDL schemes is decreasing.

The other noteworthy observation is that the percentage of newly built flats is picking up since 1997 following several years of sustained decline (Figure 5.9). Until 1997 the proportion of houses in the total amount of dwellings built was increasing from year to year. However, after 1997, increasing densities with increasing number of flats indicate that new types of development begun to emerge, of densities higher than 81dw/ha. These types of densities can only be achieved by multi-storey apartment buildings although there is still ample latitude in the variation of feasible configurations of developments.

Finally, these schemes should be considered in comparison to the 7% of the dwellings built on non-PDL land in developments of 1-10 dw/ha which consumed 23% of that land used for housebuilding. This poses a pressing question about the social equitability of the non PDL low density housebuilding, at least in terms of land consumption and provides support to the argument that low density non-PDL housebuilding does not adhere to the requirements of sustainable development.

Figure 5.9: Flats as % of total private dwellings built in selected GORs



Source: www.odpm.gov.uk

As far as London is concerned, not only are significantly more dwellings built on previously used land (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. However, the trend towards more flat production in relative terms is obvious in all cases²⁷. That data is indicative of a difference between London and the rest of England as far as the composition of developments and dwelling production are concerned. The two variables, 'percentage of flats built' and 'percentage of new dwellings built on previously developed land' are strongly correlated as shown in the following table (Table 5.2).

Table 5.2: Pearson Correlation between type of land and type of output

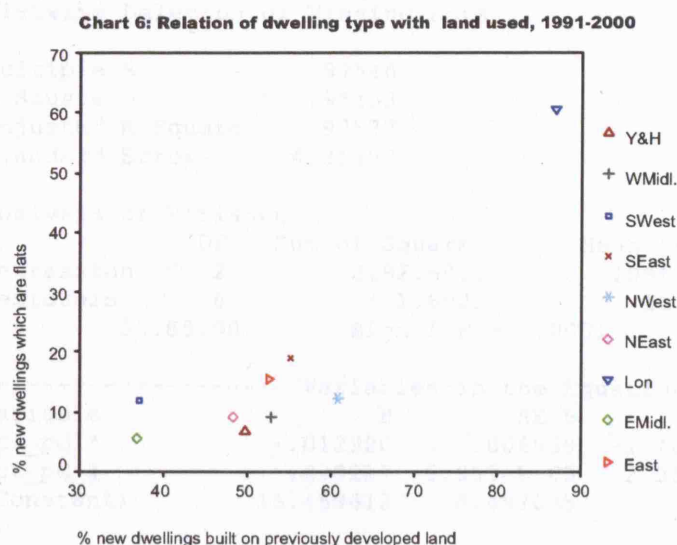
		% new dwellings which are flats
% new dwellings built on previously developed land	Pearson Correlation	.884(**)
	Sig. (2-tailed)	.002
	Sum of Squares and Cross-products	1781.465
	Covariance	222.683
	N	9

** Correlation is significant at the 0.01 level (2-tailed).

The Pearson correlation indicates a strong positive linear relationship between the two variables that is statistically significant at the 0.01 level, as a matter of fact it is significant at the 0.002 level. This correlation not only shows that London is a unique case in terms of flats built but also indicates an association between the type of dwelling output and the type of land used. As the percentage of new dwellings built on PDL increases so does the percentage of dwellings that are flats.

²⁷ Some of this difference however may be attributed to the metropolitan character of London as opposed to the other regions which contain rural areas.

Figure 5.10: Scattergram of type of dwellings produced in relation to percentage of dwellings built on PDL, average 1991-2000



Source: Own calculations using data from ODPM 2001, 2002, 2004b

This scattergram also hints at a correlation and maybe a non-linear relationship between the percentage of flats built and the percentage of new dwellings built on PDL land. This suspicion of a non linear relationship is confirmed when we try a linear regression, a cubic regression and a quadratic regression method to analyse the data in SPSS. The results from the application of these three methods showed the best fit for the quadratic²⁸. In detail the results are shown in the following tables:

Table 5.3: Results for the Linear Regression method

Dependent variable.. pct_flat Method.. LINEAR
Listwise Deletion of Missing Data

Multiple R .88375
R Square .78101
Adjusted R Square .74972
Standard Error 8.49052

Analysis of Variance:

	DF	Sum of Squares	Mean Square
Regression	1	1799.6715	1799.6715
Residuals	7	504.6229	72.0890
F =	24.96458	Signif F =	.0016

----- Variables in the Equation -----

Variable	B	SE B	Beta	T	Sig T
pct_pdl	1.010220	.202187	.883746	4.996	.0016
(Constant)	-37.271602	11.152885		-3.342	.0124

²⁸ The results should be viewed bearing in mind the small sample size

Table 5.4: Results for the Cubic Regression method

```

Dependent variable.. pct_flat          Method.. CUBIC
Listwise Deletion of Missing Data

Multiple R          .97546
R Square            .95153
Adjusted R Square   .93537
Standard Error      4.31457

Analysis of Variance:
      DF      Sum of Squares      Mean Square
Regression      2          2192.6015          1096.3008
Residuals       6          111.6929           18.6155
F =          58.89190      Signif F = .0001

----- Variables in the Equation -----
Variable          B          SE B          Beta          T      Sig T
pct_pdl*          -.012920      .006939      -1.408268      -1.862   .1119
pct_pdl           .000217      6.9576E-05      2.359290       3.119   .0206
(Constant)        15.468612      8.497035              1.820   .1185

----- Variables not in the Equation -----
Variable          Beta In      Partial      Min Toler          T      Sig T
pct_pdl           2.765726      .156641      3.180E-05          .355   .7373

Notes:
9 Tolerance limits reached; some dependent variables were not
entered.

```

Table 5.5: Results for the Quadratic Regression method

```

Dependent variable.. pct_flat          Method.. QUADRATIC

Listwise Deletion of Missing Data
Multiple R          .97433
R Square            .94933
Adjusted R Square   .93244
Standard Error      4.41145

Analysis of Variance:
      DF      Sum of Squares      Mean Square
Regression      2          2187.5289          1093.7644
Residuals       6          116.7655           19.4609
F =          56.20312      Signif F = .0001

----- Variables in the Equation -----
Variable          B          SE B          Beta          T      Sig T
pct_pdl           -2.157283      .717252      -1.887204      -3.008   .0238
pct_pdl*          .025700      .005757       2.801157       4.464   .0043
(Constant)        53.534080      21.149689              2.531   .0446

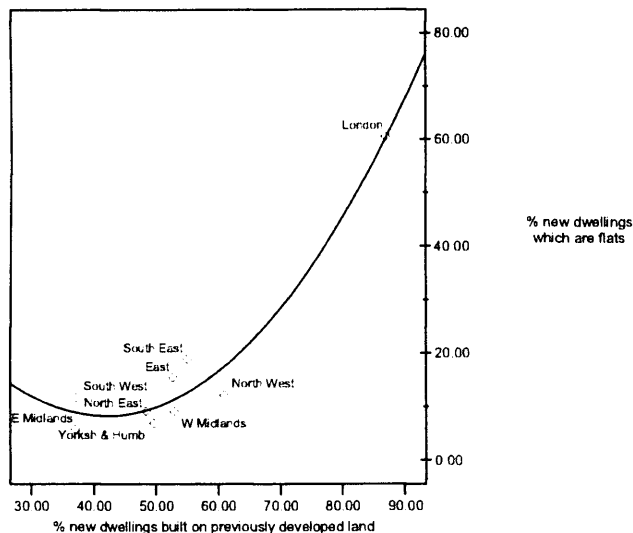
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The complete expression of the best fitting quadratic function is $Y = -2.157283 X^2 + 0.025700 X + 53.534080$ where Y is percentage of new dwellings which are flats

and X is percentage of new dwellings built on PDL. Both the R square and the adjusted R square show extremely high values of approximately 0.95 and 0.93 respectively which means that the model has very high predictive value. As far as the analysis of variance is concerned, the F value is also substantially high (56.2) and statistically significant at the 0.0001 level. This means that the null hypothesis can be rejected and therefore we can claim that the two variables compared are indeed different and that this difference is not a chance outcome.

Plotting the curve for this quadratic function (Figure 5.11) also shows that as the percentage of new dwellings built on PDL increases, the percentage of new dwellings that are flats drops slightly at first. Then, when the percentage of new dwellings built on PDL exceeds 40%-45% approximately²⁹ the percentage of new dwellings that are flats begins to increase as a percentage of total dwellings built. Interestingly, the fact that the function is quadratic means that this increase occurs at an increasing rate

Figure 5.11: Plot with the best fitting curve for the quadratic function



²⁹ Finding the first derivative $dF(x)$ of the regression function $F(x)$ and the solutions for $dF(x)=0$ could give the exact inflection point. A simple visual observation locates this point between 40 and 45%.

This link between percentage of dwellings built on PDL and dwelling type output, poses interesting questions as to what the effects of the changing land input are on the various “structures of organisation of agency relationships” underlying private housebuilding (de Magalhaes, 1996) and on the organisation of housebuilding production. The present research is assuming that these changes are indeed fundamental: as the use of PDL has increased and will be increasing so the percentage of new dwellings built on PDL has and will be increasing throughout the country and therefore so will the percentage of these new dwellings that are flats increase as well. This however also means that the newly produced built environment will have significant differences in its configuration from the environments previously produced. Based on the theoretical framework presented in chapter 3, one can reasonably expect that in order to be able to produce these new configurations of spaces the actors involved will have to reconfigure the way they interact with each other and the way they organise their production processes.

Indicatively, 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 UK. Persimmon, which 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, p. 2). Both firms claimed they did not expect any growth in volumes for the first six months of 2003 but they expect improvements in their profit margins.

George Wimpey, claimed that their output of flats had 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, p. 17). The chapter that follows (Chapter 6) will examine in detail the strategies and practices of George Wimpey and one of its competitors that focuses in London, the Berkeley Group.

5.3 The influence of the switch into PDL re use on generic housebuilding skills

According to Wellings (2006) housebuilders function at two levels: that of developer and that of construction company. Adams and Watkins (2002, p.129),

therefore claim that they have become exceptionally good at deploying special skills in 3 generic functions: Landbanking/land management, planning and marketing in order to make greenfield speculative housebuilding feasible. These skills, institutionalized through norms and routines, also reflect areas where the firm integrates the inputs from each of the SoPs (labour, land, money, knowledge) shown in figure 3.5. This was confirmed by several interviewees who referred to the crucial elements of a housebuilding business. One of them, a person involved in depth into the strategic planning and landbanking aspects of housebuilding, said that these basic elements are:

“Ability in securing sites, transforming acquisition into planning permission as quickly as possible, market and sell houses and buy a new site”.

Essentially many interviewees confirmed that what matters in housebuilding is the speed of transformation from site purchase, to building, to next site purchase. It has already been argued in the current thesis that dwelling production in the UK is characterized by a move between two extremes in the types of developments produced (Figure 5.8) with the percentage of dwellings built on low density developments in decline and the percentage of dwellings built on high density developments rising fast. The percentage of dwellings built on medium density developments remains stable. An interesting question to answer, providing a first insight into the workings of the housebuilding process, is why would this move between extremes take place?

As it has been already indicated earlier in this chapter when discussing Figure 5.8, the crosstabulation of the type of land used and the density of development produced housebuilders are faced 6 alternative ideal-type combinations as strategic options to choose from, shown in table 5.6 below.

Table 5.6: The six land-density options open to housebuilders

		High density (>80 dw/ha)	Medium Density (30-80 dw/ha)	Low density (<30 dw/ha)
Type of Land	Non PDL	Slowly growing as percentage of non PDL output. Similar to high rise layouts tried in the 1950s and 60s. Goes against ideology of 'rural idyll'. The planning system and local NIMBYism make it unlikely that such developments could go ahead easily.	Slowly growing as percentage of non PDL output. More likely than high density non PDL to be accepted by LPAs and local communities. Traditional housebuilding construction methods can still be used.	Dropping as percentage of non PDL output. Traditional suburban housing developments, promoted by planning policy till 1995 and still more acceptable by local communities.
	PDL	Growing fast as percentage of PDL output. Financially profitable at high enough densities. Construction methods different to traditional housebuilding (concrete, curtain walling etc.). Policy discourse promotes it, the planning system accepts it, changing social norms are more accommodating. 'Urban chic' marketing approach is emerging and seems to be finding a welcoming audience.	Slowly growing as percentage of PDL output. From a construction point of view it is at the limits of traditional construction methods. May be more efficient and profitable for housebuilders to switch to different methods and higher densities.	Dropping fast as percentage of PDL output. An attempt to create the same configuration of space as above using a locationally and economically disadvantageous type of land. Difficult to capitalise on the 'rural idyll' since PDL is rarely rural and has been associated with contamination and dereliction.

The professionals involved in the non-PDL low density housebuilding process, from architects and planners to quantity surveyors and land managers have become accustomed in working with this type of land. Their expertise in the 3 generic areas has developed in particular ways, institutions, norms and routines have developed in their behaviour in order to standardize the process and increase efficiency. This specialization has developed to such an extent that when asked if non-PDL housebuilding and building on PDL are similar a senior manager of a major housebuilder said: *"No, they're not, it's a different industry"*. This response however was coming from a person whose company specializes in high density PDL, the opposite extreme of low density non PDL.

The same interviewee defined the company he works as a manager for as a *"regenerator"* and when asked how would he call the types of development they are

building he stressed the differences in the element of risk involved in PDL high density housebuilding compared to non-PDL low density housebuilding:

"It is regeneration. We are also building private homes and affordable homes in fairly close proximity and that has risk attached to it...to actually build a new community and sell expensive flats to people to create a cross subsidy to build poor flats and bring poor people next door, is a risk that the rich people might say 'not for me thank you' ...It is a risk having to build commercial shell space and wait perhaps years until anybody wants it because they are waiting for a critical mass of population to use their shops, their restaurants, their gymnasium or whatever."

Therefore, although the broad areas of landbanking/land management, planning and marketing where generic skills are required remain the same, the way a firm goes about in deploying them is different between non PDL and PDL housebuilding at least in terms of how risks are managed. With regard to land ownership and landbanking of non PDL sites, it is crucial for housebuilders who want to secure a steady 'pipeline' of sites coming into the production phase to get options or acquire land at the right place at the right price and time, often buying counter-cyclically. Housebuilders identify suitable non PDL sites through a network of local estate agents, local contacts and specialised landbuying teams. Compared to a PDL site, a non PDL site requires less servicing and preparation and its pre-development appraisal is less uncertain given that low density development, 'in keeping' with its surrounding environment, is the standard that the planning system is used to deal with. This mentality is so ingrained that the change to high density PDL development poses new challenges for the industry with regards to the response of the planning system. In the words of a senior manager familiar with the planning aspects of housebuilding:

"... the industry as a whole, suffer from the same setback. They may achieve all of the objectives (design, parking, density, etc...) but local authorities do not follow government policy and stop the implementation of the new standards. This is reflected in the high number of appeals, council members decide opposite of government advice."

For historical reasons that have to do with the attachment of British elites to land ownership and because of its singular use agricultural or other non-urban land is relatively consolidated in terms of ownership, compared to the more fragmented urban land which may be consolidated at the freehold level but may be bound by various leasehold arrangements of differing timescales at various levels of ownership rights. Furthermore, the planning system tends to release large sites (Adams and Watkins, 2002, p.135) which in turn favours the bigger companies who can acquire and manage a landbank of large non PDL sites. In that sense the expansionist non PDL way of housebuilding did not favour the development of land consolidation skills in both the public and private sector. It is noteworthy that Compulsory Purchase Order (CPO) has only very recently become a topic of great interest amongst the professionals of the built environment, at the same time when urban regeneration is dominating the agenda.

Furthermore, according to senior managers interviewed for this research, the cost of purchasing non PDL land is a major element of the total cost of development, reaching 40% in many cases thus making gains or losses from land speculation extremely important. This should be compared to around 10% in high density PDL developments. As one of them eloquently said when asked how profits are made in high density PDL housebuilding:

"We know how to work the density. Land value is a fairly low percentage of development value and if you are buying a green field you might pay 35% or even 40% of the value,... (in a brownfield)... it is between 5-10%, so yes, the land might be £30 million and that is a lot of money to pay the interest on every week. It goes through a cycle where the borrowings might go up to £100 million but when it comes down, if you are a long term player running a public company and if at the same time you have another project that started back here and has peaked and come down here, so if you look at the bigger picture it evens out so land values are not that significant."

This difference in percentages also reflects the relatively low cost per square meter of non PDL housing construction and land servicing. However, it highlights the importance of landbanking/land management as a cost control mechanism and hints at the comparatively higher margins that housebuilders enjoy when building

upmarket non-PDL developments, especially highly priced detached houses. Indeed, when 40% of costs are land costs then margins will be accordingly affected by changes in this cost element.

It is important to note that according to Barker (2003) three housebuilders that specialise in brownfield development, Berkeley, Bellway and Barratt have 0 (zero) years' worth of strategic³⁰ land holdings. On the contrary Wimpey has 16.7 years worth of strategic land and Persimmon has 19.7 years. These figures, albeit extreme and most likely unrepresentative of the industry, indicate that there is an important difference between specialised brownfield developers' and conventional developers' approach to land acquisition and land banking. Information gathered as part of the current research indicates that the Berkeley Group has a landbank of around 25000 plots (Perrins, 2003), only enough for around 5 years worth of output assuming current output levels. The number of plots has dramatically increased during the last decade, but this reflects to an extent the fact that sites are now built at much higher densities therefore pushing the number of plots disproportionately higher compared to the number of sites in the Group's possession.

However, there appears to be a significantly different attitude towards landbanking, viewed by more traditional housebuilders as problematic. A comment from an interviewee knowledgeable of the strategic landbanking practices of traditional non PDL major housebuilders demonstrates the difference in approach. When asked about the landbanking practices of the Berkeley Group this interviewee said: *"Berkeley are in a specialist field. They have a huge site turnover, they sell on many sites because they cannot develop."*

Asked to comment about this, a manager with deep knowledge of the practices of the Berkeley Group suggested that what matters for the group is not how long a site stays in its possession but how much value it is added by the company during the time that the site stays in its possession. In general, he added, the Berkeley Group is *"not intimidated"* by holding sites for a long period and to take the time *"to get most out of the site"* on the contrary little attention is paid to profiting from land appreciation. One could comment that conventional housebuilders seem to be much more comfortable with the idea of having capital tied into their landbanks, giving

³⁰ The source of these figures according to the Barker review is the Credit Lyonnais' "Private Housebuilding Annual". They do not include land without planning permission and where a decision to grant planning permission is imminent.

credence to the argument that their profits heavily depend on the appreciation of land.

By the same token, 'traditional' housebuilders still feel that PDL in their landbanks is creating problems. In response to a question regarding the recent acquisition of Laing (a company with 90% brownfield sites in their portfolio) by George Wimpey an interviewee with good knowledge of the landbanking process said: '*Their landbank is not entirely hopeless*'. In contrast, another interviewee knowledgeable of the Berkeley Group's 'Strategic Land' division commented that the role of this division is not that important because "*they do some work in the suburbs*". Incidentally, a few months after this interview the Berkeley Group announced its withdrawal from all non-PDL housebuilding (see Chapter 7) maintaining some of the know-how about suburban development within Berkeley Community Villages Ltd.

The Barker review (Barker 2003, 2004) also points out the importance that landbanking has for traditional housebuilders and the difference that PPG3 has made. Options to buy non PDL sites now involve a bigger total cost for the developer because the number of such sites that can potentially gain planning permission is severely limited therefore more sites need to be found and bought. Anecdotal evidence in Barker's Interim Report (2003) reveals that since March 2000 planning permission was obtained for only $\frac{1}{4}$ of non PDL sites on which a certain unnamed housebuilder was holding options.

If this is true for the industry as a whole, and there is no reason why it should not be, then housebuilders who want to build on non PDL need to restructure their landbanks to increase the number of sites and therefore increase the chances of getting a planning permission. At the same time they will have to face the extra costs of letting their options expire fruitlessly, tying their capital on assets that are essentially useless and be exposed in a radical reduction of the profits they would otherwise have made from land appreciation at least in relative terms given the difference in the cost structure between the PDL low density and non PDL high density housebuilding.

The second generic skill, gaining planning permission for a site, should be better seen as a process of transferring the development rights from the state/social sphere to the private. As such, it is a process which in the case of non PDL housebuilding

starts with housebuilders' attempts to influence the planning system to designate land in accordance with their strategic landbank holdings during the development plan formulation process. This in turn requires substantial strategic land and strategic planning capabilities which is usually area specific and force housebuilders to be geographically fragmented, a trait well explored by Ball (1983). This is quite different from the negotiation skills required to see a planning application through the planning system and to constantly revise it thereafter. The change in government policy makes the out of town non PDL strategic land and strategic planning knowledge redundant at least in geographical terms and for as long as PDL land is the way to go whereas by the same token it makes the planning negotiation and land consolidation skills more important.

The new types of output and the different approach to landbanking require a different approach from the developers and the planning system alike. Partially because of the powerful sustainability discourse and partially because of practical, locational, reasons, many brownfield sites have already been allocated as potential development sites from the Local Planning Authorities (LPAs). PPG3 and the sequential approach put extra pressure on both the developers and the planning system to promote PDL site redevelopment, whereas PPG4 and PPG13 also try to influence commercial development and transport infrastructure in the same way.

With regard to planning skills, there is therefore limited scope for developers of PDL in pressuring the planning system during the plan-making process in order to allocate developable PDL land according to their landbank especially during a transitional period when their landbank has to be qualitatively transformed from non PDL to PDL. This 'tweaking' of the system however is a crucial element in non-PDL development because at the discursive level the LPAs were rather negatively predisposed in releasing 'greenfield' land. What is more important in PDL housebuilding is the land-use designation for each site, usually aiming at higher density mixed-use schemes and therefore allowing for substantial negotiation during the planning application approval process. This in turn makes stakeholder engagement skills and planning gain negotiation skills on behalf of the developer³¹ much more important.

³¹ These 'negotiation' skills, which accommodate for the constant change of the development's design and mix of uses are also essential for other actors, like the LPA and the local community.

An interviewee involved in both PDL and non PDL regeneration said that although all developers are “*reasonably constructive*” the Berkeley Group follows an impressive cooperative attitude towards the development of sites, quite different from the industry standard. Their approach will be explored further in the specific case study of Chelsea Bridge Wharf. The interviews conducted for the case studies indicate that the planning system is treated by conventional housebuilders, like George Wimpey, more as a process that needs speeding up in order to speed up the production cycle.

In the case of Falcon Wharf, the developer negotiated a few changes in the design and layout of the development but as soon as these changes were approved they went ahead with construction while the s. 106 agreement was still under negotiation. In essence, they went ahead with construction without planning permission. This did not happen in the other case study where, on the contrary, the developer engaged the local planning authority at every stage of the process with a long term relationship in mind.

This ‘need for speed’ is reflected in much of the discourse surrounding the reform of the planning system. It has been adopted by the government which is benchmarking planning authorities accordingly: Planning authority funding has been tied to performance and this in turn is measured mainly by the percentage of planning applications processed within 8 weeks.

Furthermore, PDL site developers face different uncertainties with regards to development. Granting development rights on PDL should in principle face less policy-generated difficulties given the current pro-urban policy discourse, the lack of established local communities in and around most PDL and the eagerness of local authorities to promote consolidated urban growth. For example Wandsworth, where both our case studies are situated, prides itself as being an authority with a can-do mentality which welcomes development and whose approach according to a person knowledgeable of its planning approach is “*to maximize the benefits of the use of land*”.

Indeed, it would be a logical paradox for any LPA to divert development into urban PDL following the government policy imperatives like the PPG3 sequential approach and then deny granting planning permission when applications arrive. This does not mean that permissions cannot be denied but rather that there is now a change of ideologies and social values (as they were called in Figures 3.4 and 3.5)

towards a more 'pro- urban development' stance. As it has emerged from the interviews what is now more important for PDL housebuilders is the s.106 agreement. In the case of high density housebuilding this is reflecting concerns about wider issues like the social mix and the development and its effect on the marketability of the development. This in turn makes long-term stakeholder engagement even more important. In low density housebuilding on PDL the concerns about s.106 have more to do with the actual profitability of the development.

Other than that, an important argument regarding PDL redevelopment emphasizes the uncertainty over development coming from the material conditions on the site itself (contamination, existing structures requiring demolition etc.). However, as the interviews have revealed, these issues are of a technical nature and are therefore a manageable risk rather than an uncertainty in themselves. This view has recently been confirmed by more extensive surveys (Shephard and Dixon, 2004) showing that technical issues like contamination are not deterring adequately resourced developers.

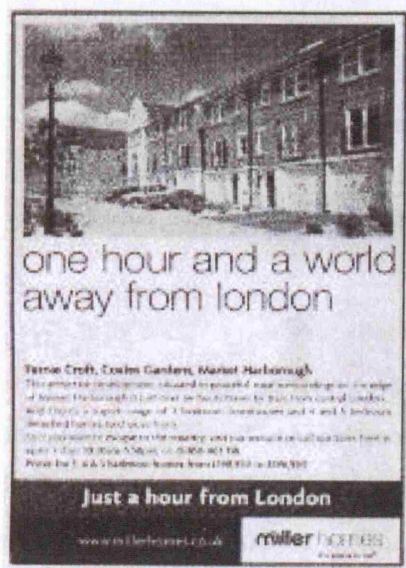
Finally in terms of marketing the development the importance of attracting customers by selling a lifestyle more than a product should not be underestimated. Neither should one underestimate the role of marketing in ensuring a constant flow of sales that in turn will ensure stable income streams. More interestingly, the marketing of the types of the low density developments and dwellings usually built on non PDL very much rotates around the 'idyllic countryside living'/'escape the city evils' theme, the origins and evolution of which has already been discussed in Chapter 1. Even a cursory look at the publication material of major 'greenfield' developments reveals that the theme of 'Escape from the City' is still in use, together with images of happy family life and an attractive natural environment (Figures 5.12; 5.13)

Figure 5.12: Typical pictures advertising low density developments



Source: Persimmon 2002

Figure 5.13: The 'Escape the City Evils' theme is still featuring strongly

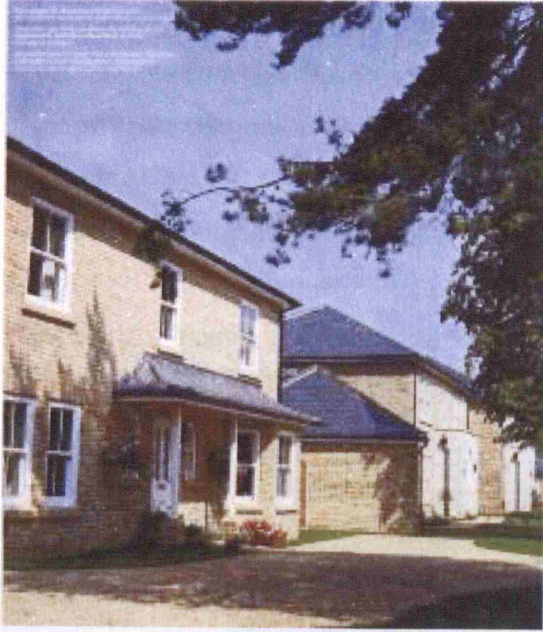


Source: 'Metro', 28 Jan 2005

So strong are these images and so ingrained this culture of marketing that it is very difficult for the industry to abandon them altogether if only because it takes time to build a new 'marketing paradigm' that could substitute the existing tried and tested recipe. The way the urban renaissance/ sustainable community discourse found an expression in the greenfields vs brownfields dichotomy increased the difficulty of successfully marketing developments on PDL based on the 'rural idyll' marketing model. Even a cursory examination of marketing material reveals that housebuilders

did actually try to promote low density developments on PDL land, an example can be seen in of Persimmon's Annual Report for 2002, which features the following photograph (Figure 5.14), depicting an "Excellent example of brownfield regeneration".

Figure 5.14: An "Excellent example of brownfield regeneration"



Source: Persimmon 2002

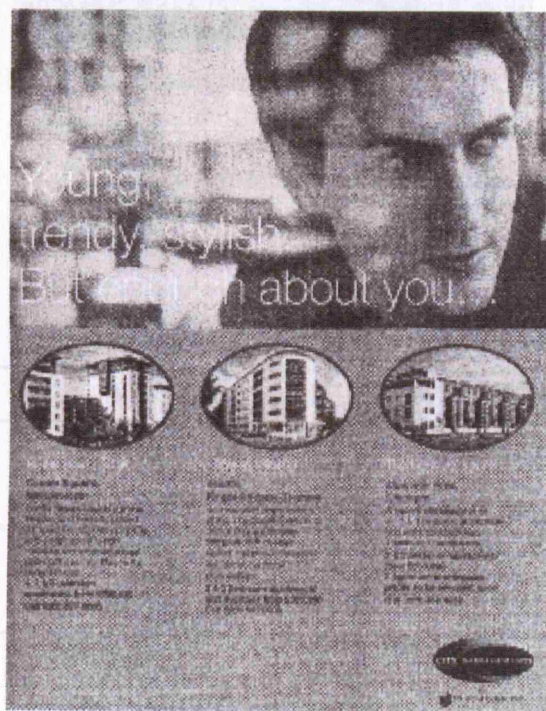
There is little difference between the development shown in Figure 5.14 and the configuration of spaces created in typical non PDL developments: low density, high environmental amenity, traditionalist architecture. This example is therefore indicative of some of the realities housebuilders are faced with and the choices they have to make. On the one hand they strive to cater for consumers who require, or are used to live in, suburban low density environments. Housebuilders know how to build and put these developments to the market for sale, but they no longer are able to do so on non PDL land and therefore have to transfer this configuration of spaces into PDL sites.

On the other hand, some generic qualities of PDL, other than the adverse marketing consequences of the greenfields vs brownfields debate, make traditional 'rural idyll' marketing for low density PDL developments very difficult. Their usually urban location does not lend itself to evoking images of suburbia, it also provides developers with opportunities to attract uses more lucrative than housing.

Contamination and dereliction further deteriorate the capacity to market the development based on the 'rural idyll' whereas the attached higher servicing and other costs (like affordable housing) make profitability much more dependent on density (see section 5.2).

It should not come as a surprise then that a new marketing model is deployed to promote PDL high density developments. The lifestyle sold with an urban PDL high density development is sharply in contrast to the lifestyle sold with a low density development, either PDL or more often non-PDL. In urban development priority is given in promoting the image of the 'trendy', 'urban chic' and 'vibrant' character of city living. Images of young, dynamic (usually single) and trendy individuals are evoked to promote the 'aspirational status' of the clientele.

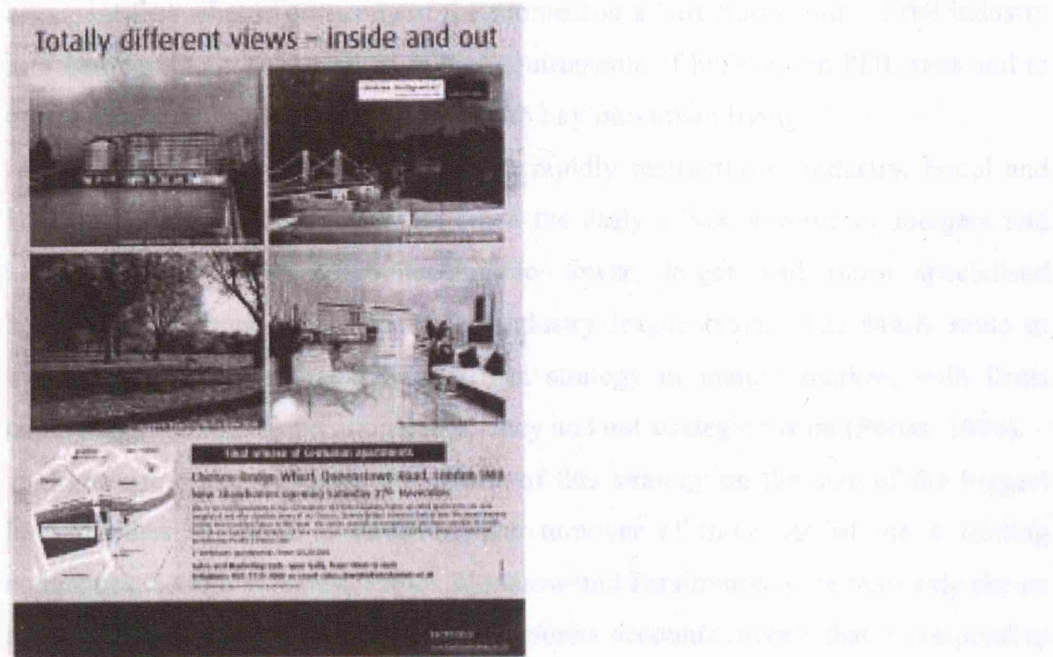
Figure 5.15: 'Young, trendy, stylish. But enough about you...'



Source: Advertisement by Persimmon City Developments, Metro 28 Jan 2005, p.49

The architectural and design features of the buildings are contemporary as opposed to the traditionalist 'rural idyll' cottage features of low density non PDL housing. This target group however usually has enough disposable income to pay for the higher prices that this strategy of product differentiation entails.

Figure 5.16: Focusing on the merits of being 'different'



Source: Metro, 28 January 2005

The following table summarises the basic characteristics of the two marketing approaches:

Table 5.7: Marketing elements of the two main types of residential developments

	Low density non PDL	High density PDL
Occupants	Nuclear families	Singles or Couples, no kids
Environment	Rural, safe, predictable	Vibrant, adventurous, urban
Age group	Middle aged	Young
Architecture/Design/Style	Traditionalist	Contemporary

5.4 Strategic level responses and the restructuring housebuilding industry

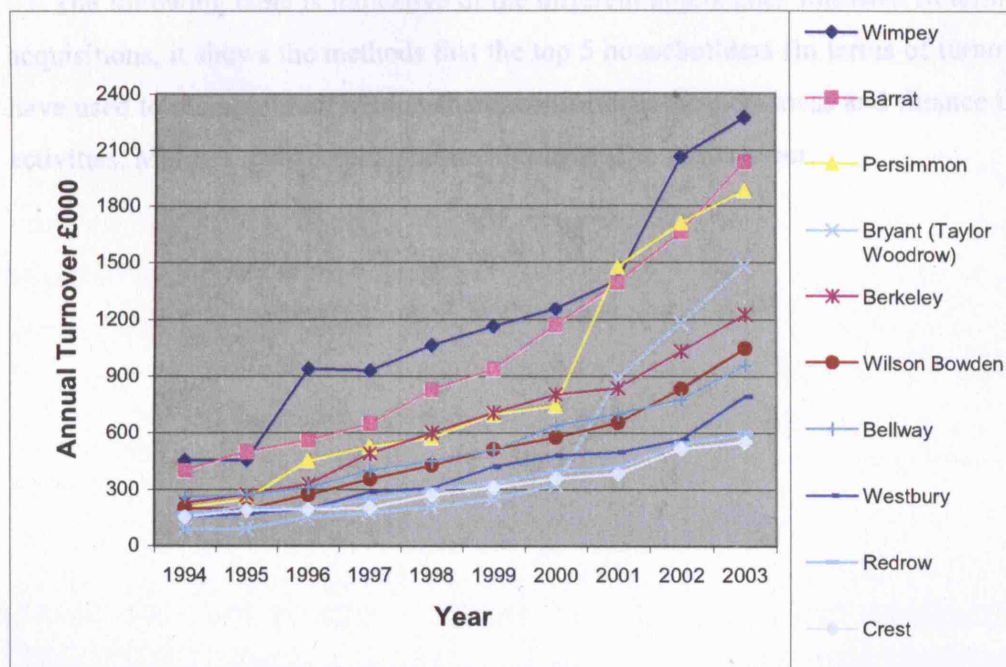
In the previous sections we saw how the product and the 'configuration of spaces' that housebuilders are producing is changing, affected by changes in land input. It is interesting to note that this change is affecting England as a whole, not

only major metropolitan areas like London (Figure 5.4). This strengthens the argument that what is occurring at the moment is a 'structural shift' of the industry into new product types, adapted to the requirements of building on PDL sites and to the needs and aspirations of customers who buy into urban living.

Other indications are also there of a rapidly restructuring industry. Nicol and Hooper (1999) have observed that since the early 1990s a wave of mergers and acquisitions is taking place leading to fewer, larger and more specialised housebuilding firms at the top of the industry league table. The M&A route to increased market share is a typical firm strategy in mature markets with firms competing in terms of operational efficiency and not strategic vision (Porter, 1996).

Figure 5.17 demonstrates the effects of this strategy on the size of the biggest housebuilders in terms of turnover. The turnover of three out of the 4 leading companies George Wimpey, Taylor Woodrow and Persimmon quite markedly shows sudden 'hikes' which a review of their corporate accounts reveals that correspond to M&As. In the case of George Wimpey, there is a marked trend (which may be coincidental) to proceed to an acquisition whenever Barratt threaten their leadership.

Figure 5.17: Top 10 Housebuilders by annual turnover, 1994-2003



Source: Adapted from Wellings 2003; 2004

It seems that leadership, in terms of turnover at least, is a primary goal of George Wimpey, who try to maintain it by acquiring new business whenever the competition threatens to overtake them. Barratt on the other hand is a housebuilder that does prioritise organic growth and has a land bank of 93% previously developed land (Meadows, 2005).

As it has been argued elsewhere too (see Chapter 3), this struggle for leadership is representative of at least two major trends underlying the industry's evolution at the present moment: Companies that have embraced the 'regenerator' paradigm are competing with companies that chose an alternative response to the changes affecting the industry. This in turn has an effect on their competitive position and therefore is reflected on their strategies for achieving growth. Companies with a realisable strategic vision will be able to grow 'organically' by expanding their business through exploiting the growing demand for their products that cover future needs as they are created. On the other hand, firms that follow more cautious strategies towards these new growth areas will be more likely to resort to M&A in order to achieve growth and maintain their market share. The long term success of either approach is however unknown as each approach addresses different uncertainties and therefore has its own advantages and disadvantages.

The following table is indicative of the different approaches followed in terms of acquisitions, it shows the methods that the top 5 housebuilders (in terms of turnover) have used to increase their market share, consolidate their business and finance their activities. Mergers and acquisitions are highlighted in grey colour.

Table 5.8: Corporate activity of the top-5 housebuilders, 1996-2004

Year	Wimpey	Barratt	Persimmon	TW/Bryant	Berkeley
1996	Asset swap with TARMAC	'1 for 4' rights issue (£90m)	Acquisition of Ideal Homes (£178m) and '1 for 2' rights issue		'2 for 9' rights issue (£73m)
1997			Acquisition of Mightover (£6.3 m)		Placing of 4.75 million new shares (£33m) and '2 for 9' rights issue (£125 m)
1998			Acquisition of assets Laing Homes Scotland (£18 m)		Acquisition Thirlstone Group (£25.1 m)
1999			Issue \$150 m US Senior notes		
2000			Acquisition of Tilbury Douglas Homes Scotland (£19 m)	Acquisition of minority in Canadian Monarch Investments (£94 m). Sale of Greenham Construction and Greenham Trading (£97 m)	
2001	Integration of Wimpey Homes and McLean Homes. Acquisition of Alfred McAlpine Homes (£463 m)		Acquisition of Beazer (£612 m). Sale of Torwood timber frame business and Beazer Partnerships (£4.7 m)	Acquisition of Bryant Group (£218 m cash and £ 196.2 m shares)	
2002	Sale of McAlpine Homes Cumbria (£16m). Acquisition of Laing Homes (£295 m)				£47m placing of new shares
2003			Acquisition of Merewood Group (£23 m)	Acquisition of Wilson Connoly (£480 m)	Phased MBO of Crosby Homes
2004		Sale of US housing division (165m)		Sale of St. Katherine's Dock (£283 m)	Share repayment programme

Source: Adapted from Wellings, 2004

According to this table Wimpey and Persimmon, as well as Taylor Woodrow demonstrate very intense M&A activity during the last decade, in sharp contrast to Berkeley and Barrat. This evidence suggests that some of the biggest companies in the business are staying big by buying out other companies, acquiring skills and landbanks in the process, an approach well described in Michael Ball's work too. Indeed this is confirmed by evidence from the case study of George Wimpey as will be developed in the following chapter.

5.5 Conclusions

From the analysis in this chapter it emerged that housing provision in the UK is going through an 'adaptation' phase. Non PDL land used for housebuilding is following a downwards trend, the target of the Government for 60% of new homes to be built on previously developed land has been achieved, it stood at 72% in 2006.

This chapter showed however, that this requirement is also a proxy for the type of land used by the housebuilding industry and that it has an important effect on the types of dwellings produced. The higher the percentage of newly built dwellings on PDL the higher the percentage of these new dwellings that are flats. This correlation is very important since it shows that this quantitative target-setting from the government on an issue that on the surface appears unrelated to qualitative changes in dwelling production is actually having a profound effect on the types of built environment produced. More flats means more apartment blocks which in turn implies denser developments and the abandonment of the standard low density suburban development with single occupancy family housing.

This trend towards more compact developments is also demonstrated by the increase in land re-use (Figure 5.2) and the increase in densities (Figure 5.5). At the same time total land consumption is dropping, as a result of the turn away from land-intensive non PDL development (Figure 5.3). This shift from the production one type of built environment to another coincides with a drop in total housing production that was only recently reversed, as more and more high density developments are produced.

As a result of the changes in government policy related to the supply of land, housebuilding firms are now faced with a requirement to significantly change their strategies and to develop new know-how in order to respond to the changing circumstances of their business environment. Not all firms will interpret that change in the same way, nor will they respond to it similarly. Indeed, our analysis shows that one of the most significant changes occurring in housebuilding is the leapfrogging from low density non PDL developments of below 30 dw/ha to high density PDL developments of above 80 dw/ha. This is however an outcome of the decline of low density PDL and non PDL with a slight increase in medium and high density non PDL types of development and a boom in the development of high density PDL sites.

This reflects the strategic choices facing housebuilders, which were here theorised in 6 categories as a cross section between density and type of land (Table 5.6). This categorization makes clearer that housebuilders are essentially faced with limited options when dealing with the constraints imposed by the planning system in terms of land inputs into the production process.

This move from low density PDL and non PDL development to high density PDL should also be expected to have an effect on the three generic skills required for success in housebuilding. The process of accumulating a huge landbank then tweak the planning system in a favourable way, starting from the plan-making process, used to be an effective method of accruing speculative profits from land trading and land development. Restructuring these landbanks to better suit the locational and qualitative requirements of PDL housebuilding is incurring a huge opportunity cost and actual financial commitment.

Effective partnership-building and negotiation skills should become crucial due to the long term involvement that non PDL requires from housebuilders and the renewed importance of s.106 agreements. Marketing is also dramatically changing. Selling low density non PDL developments was based on the 'rural idyll' ideal whereas high density PDL developments, or at least their urban variant, are sold on the merits of the 'urban lifestyle'.

Finally, these changes are also reflected in intra-firm competition. There are signs that businesses that have adapted by embracing the new paradigm are now experiencing strong 'organic' growth whereas firms that have followed a more cautious approach based on the traditional business model are competing in terms of operational efficiency and depend on M&As in order to maintain leadership in terms of size. In the following section we will examine two of the leading firms in the London market, one that is at the forefront of 'regenerating' the other being a more cautious 'follower'.

CHAPTER 6

The diverging courses of two housebuilders

6.1 Introduction

Following the statistical analysis at what we called the 'macro' level in the previous chapter, which illuminated some of the changes shaping the industry at the aggregate output level, this chapter will focus on the 'meso' (firm) and the next chapter will focus on the 'micro' (site) level. In the previous chapter it was argued that there is a link between the changes in planning policy and the significant changes occurring in the types and quantity of industry output. This chapter will explore how this change in the final product is linked to a process of strategic adaptation of two major housebuilders to the new business environment.

Depending on the timescale and the type of response of each firm, this reorientation affects their competitive position which in turn affects their present and future profitability and hence their chances of future growth or even survival. Residential development is a business activity involving high degrees of uncertainty. There are uncertainties about the future market, consumer preferences, economic and fiscal policy, product construction and specification to name just a few. Firms can be short-sighted in the sense that they cannot fully anticipate the consequences of their actions let alone the shape and form of their future business environment. This chapter will look at some of the ways that have been used by the two firms to tackle the uncertainties in their business in order to protect their profitability (diversification into different markets, risk management of the development process).

The strongest feedback firms have about how well their 'behaviour' fits the environment is sales and profitability. We will examine two major housebuilding companies: George Wimpey and the Berkeley Group in an attempt to see how each company has adapted to the changes in its business environment. In accordance to the discussion in paragraphs 3.12 and 3.13, we will particularly focus on how each company's competitive strategy is formulated and the interrelationships between these strategic reorientations and each company's financial circumstances as they are reflected in corporate accounts. We will utilise profitability, turnover, sales and output as the most important indications about the company's course as they are

closely linked to strategic choices at the corporate level. As we argued in chapter 3, a company whose strategic positioning creates a sustainable competitive advantage will not only increase its chances of survival but its financial performance will also be positively affected as it will have a head start in exploiting new high margin markets.

The Berkeley Group had prepared for the policy change by engaging in high density PDL projects before the Government in 1995 announced their target for 50% new dwellings to be built on PDL. Thereafter they have indeed witnessed rapid 'organic' growth and starting as a small housebuilder of executive suburban housing they have become a major player in the London market and one of the biggest in the UK through a process of strategic adaptation emphasising the creation of new competencies. In the process they have radically changed the type of products they are offering and moved from a marketing strategy emphasising 'Focus' to one emphasising 'Differentiation' (see Figure 3.7).

George Wimpey took a different, more cautious approach similar to the typical housebuilder approach of expanding into new markets by creating subsidiary business units to deal with what they perceive as a geographically specific market segment. They responded rather belatedly to the new policy environment, in the late 90s-early 2000 and their effort to build new competencies was embedded in a more general strategy of risk management through geographical diversification and dispersal to different market niches. They were also keen to acquire businesses that had already developed a skills set more attuned to PDL redevelopment. At the same time they have gone through several reorganisation programmes, emphasising efficiency, which saw the company changing from a global construction conglomerate into a UK oriented housebuilder with a subsidiary in the US market.

In a market with rapidly increasing prices, the effect of 'strategic' adaptation (as described above) on competitive position is dulled because the firm's income may grow regardless of the firm's performance in other respects. During most of the last decade, turnover for George Wimpey has grown quite quickly as a result of rising housing prices and efficiency gains although actual unit production has remained stable. During lengthy periods of more stable price conditions (or during a slump) strategic advantages can make a big difference in profitability because they are then the only source of superior performance. The analysis of the accounts of the two

companies highlights how their strategies have influenced their profitability in an era of house price inflation.

It would be very difficult for any housebuilding company to survive without the capacity to manage the uncertainty inherent at all levels and phases of development (see for example Ball, 1999). Seen from this perspective, an overview of the history, organisation and strategy-making practices will help us ascertain what the main factors are behind the strategic positioning of each company. We intend to find out what it is that makes a company special with regards to the way the scale of operations, complexity and diversity are managed. The main elements under examination are the interactions with the planning system and the management of the development process including design and construction. As we shall see, these three, sometimes interrelated, aspects are treated in a distinct way which constitutes a very interesting dimension of each company's approach to PDL redevelopment.

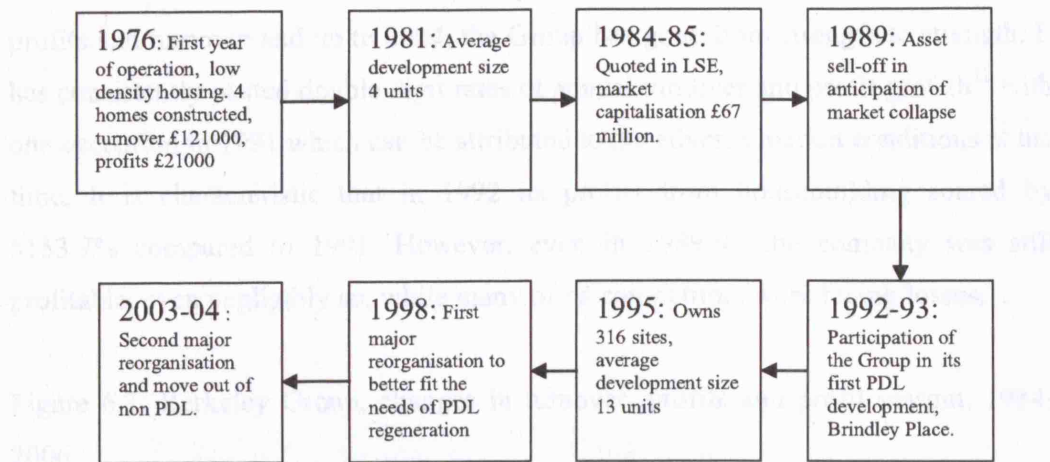
Based on the analysis of the current chapter, Chapter 7 will then examine how these particularities that underlie the companies' organisation and operation have been translated into development practices at the site level. The examination of the concrete practices followed at Chelsea Bridge Wharf and Falcon Wharf will further illuminate the details of the 'Berkeley approach' and the 'Wimpey approach'.

6.2 The history and the performance of Berkeley Group and Berkeley Homes

This section will examine the Berkeley Group and Berkeley Homes in particular, a London top-3 volume housebuilder at the forefront of previously used land regeneration whose practices are often cited as a leading example for other housebuilders to follow (GLA, 2002).

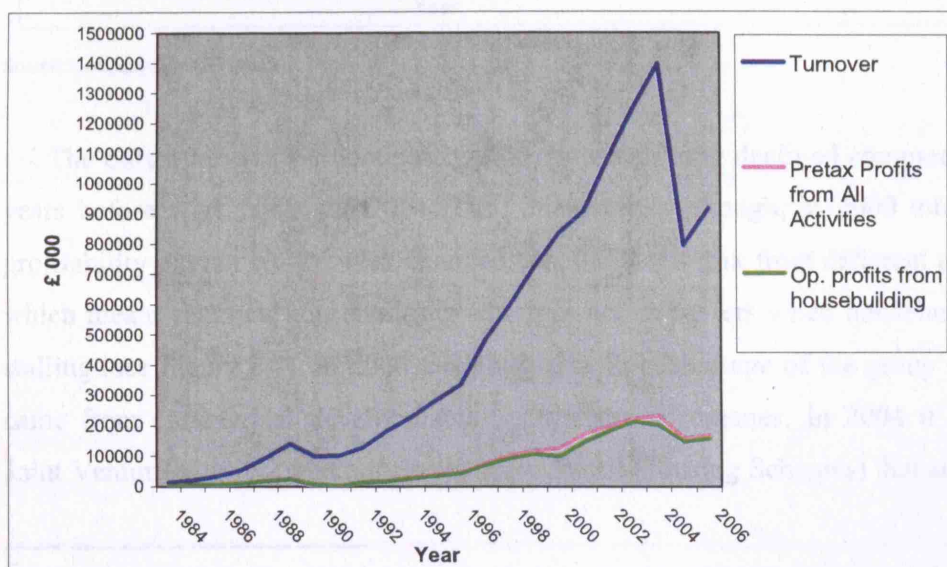
The Berkeley Group was founded in 1976 by Jim Farrer and Tony Pidgley, aiming at the niche market of executive housing developments or similar single houses. Its main geographical areas of activity were London and the South East. The Group expanded its activities to the Midlands and the North East after that but recently refocused on the markets of London and the South East. It is now one of the major housebuilders in London, targeting the middle-upper and luxury market segments with more than 3500 units sold annually (see diagram 6.3) and referred to by the Greater London Authority as one of the 'UTF Leaders' (GLA, 2002).

Figure 6.1: A timeline of the history of the Berkeley Group.



The industry 'league tables' from EmapGlenigan/Housebuilder Magazine (Menary, 2003) show that in London, the Berkeley Group is the top housebuilder company, based on applications to build, followed by Wimpey. In comparison, for the UK where the competition can build on non PDL, Berkeley comes fifth behind Wimpey, Barratt, Persimmon and Taylor Woodrow (Wellings, 2002). Its annual report vows to "...remain committed to undertaking today's most exciting and challenging urban regeneration and renaissance projects." (Berkeley Group, 2003).

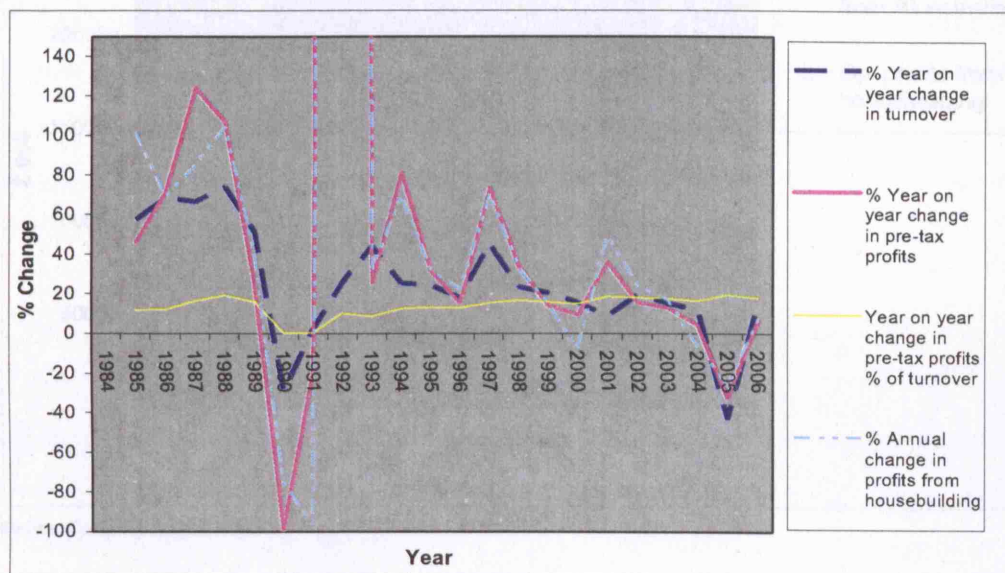
Figure 6.2: Berkeley Group, annual turnover and profits 1984-2006



Source: Company Annual Reports

Since the 1989-1991 market downturn, which caused a temporary slump in profits and turnover and up to 2004, the Group has gone from strength to strength. It has consistently posted double digit rates of annual turnover and profit growth³² with one exception in 1991 which can be attributed to the adverse market conditions at the time. It is characteristic that in 1992 its profits from housebuilding soared by 5153.7% compared to 1991. However, even in 1989-91 the company was still profitable, even negligibly so, while many of its competitors were facing losses.

Figure 6.3: Berkeley Group, changes in turnover, profits and profit margin, 1984-2006



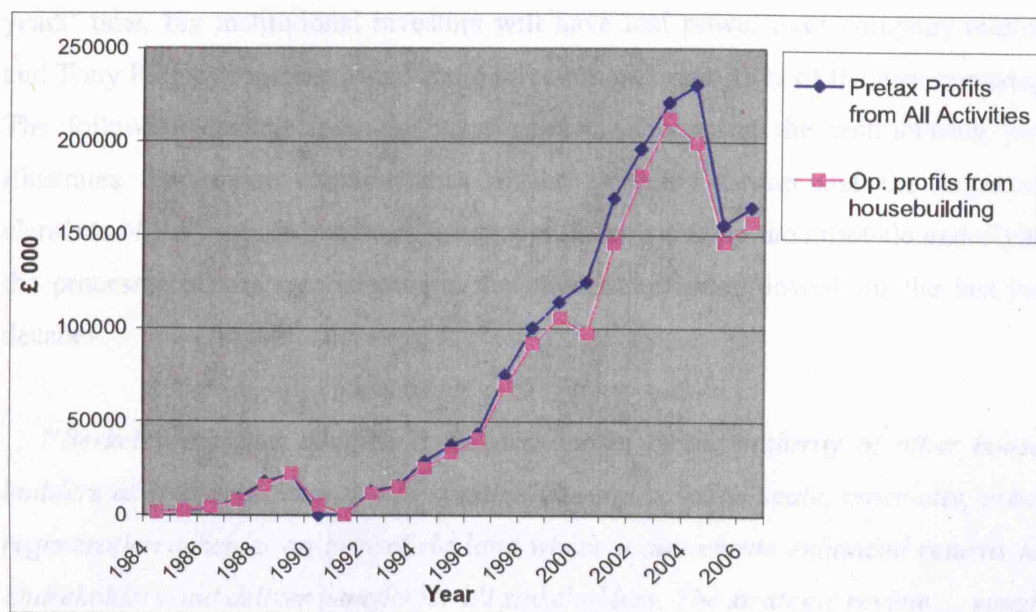
Source: Company Annual Reports

The only other years where profits from housebuilding declined compared to the years before were 2000 and 2004-2005. Interestingly enough, in 2000 total group profitability did not suffer, what changed was the profit mix from different activities which means that non housebuilding activities act as buffers when housebuilding is stalling (see Figure 6.4). In 2000 a slightly greater percentage of the group's profits came from commercial developments, in mixed-use schemes. In 2004 it was the Joint Venture activity (which includes some Social Housing Schemes) that acted as a

³² In the case of the Berkeley Group these profits include profits from activities outside the UK which are minimal as well as non housebuilding activities.

buffer, although the group's performance in 2005 was affected to a large extent by the decision to totally withdraw from non-PDL housebuilding by selling Crosby Homes to Lend Lease and at the same time to adopt new accounting standards. In comparison, when no such mix of activities existed as a serious alternative, as in 1990-92, the drop in profitability from housebuilding signified an equally important drop in total profitability.

Figure 6.4: Berkeley Group, comparison of profits from housebuilding and profits from all activities, 1984-2006



Source: Company Annual Reports

The Group's transformation was not sudden or immediate and required consistent effort and steady reorganisation. The 1998-2001 period was a period of reorganisation for the group, as the 1999 annual report (Berkeley Group, 2000, p. 3) recognises:

"The year has been a challenging one in terms of production. A growing number of the Group's projects are on brownfield urban sites which are more technically demanding thus requiring the right management teams in place with the right procedures and controls to deliver the finished units to the right timescale and costs. During the year Tony K. Pidgley has undertaken a review of the structure necessary to successfully manage the wide range and volume of developments undertaken by

the Berkeley Homes companies. Accordingly, those companies have now been reorganised to ensure that our management teams, skills and expertise align more closely to the types of developments undertaken.”

Similarly, 2004 witnessed a similar major strategic re-orientation, the proposal from the Board was to phase out non PDL housebuilding, scale down the business and gradually buy out existing institutional investor stakes to turn a group with a market capitalisation of £1.4 billion into a specialized housebuilder with a market capitalisation of about £500 million. After the restructuring will be completed, in 6 years’ time, big institutional investors will have lost power over company matters and Tony Pidgley together with 3 more directors will own 15% of the new company. The following excerpt from the press release announcing the restructuring plan illustrates the unique characteristics of the Berkeley Group and the important elements of the business model of the group. It also sums up the rationale underlying the processes of strategic adaptation that the Group has followed for the last two decades.

“Berkeley operates a different business model to the majority of other house-builders as it concentrates mainly on highly complex, large-scale, inner-city, urban regeneration schemes on brownfield land where it can create enhanced returns for Shareholders and deliver benefits for all stakeholders. The strategic review ... sought to assess the best route for delivering shareholder value. This took place in the context of the Board’s views about the outlook for achieving sustainable growth in the markets in which it operates – where there appears to be a natural size for a residential urban regenerator – and takes into account the normalisation of the housing market following a decade of boom and a number of other external factors.

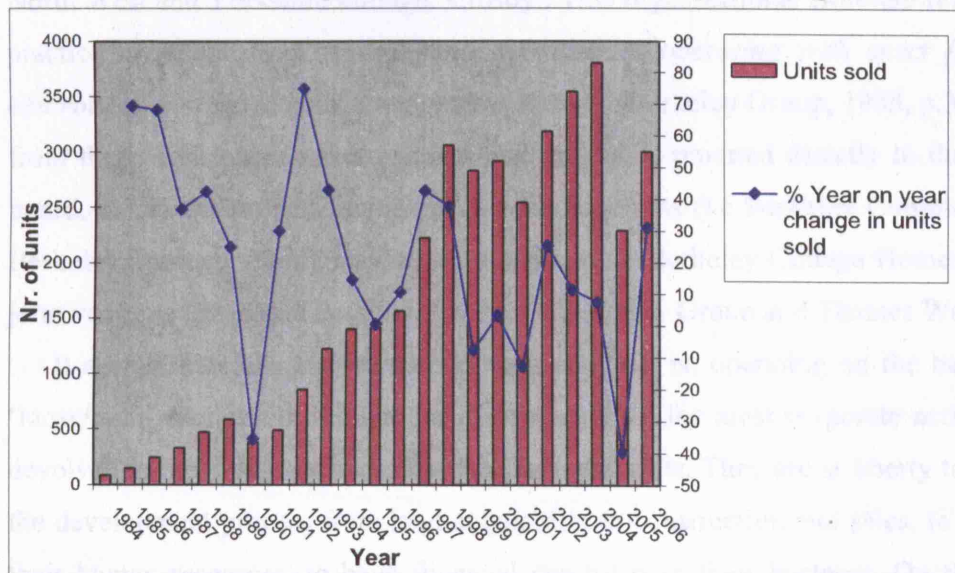
The Board considered a number of strategic options including continuing to grow the business, which required further investment and additional management teams, disposing of the business or selling-off or demerging individual divisions....After careful consideration the Board has decided to leave behind Berkeley’s traditional housebuilding heritage and focus primarily on larger scale complex regeneration. This strategy allows the return of substantial capital to Shareholders while enabling Berkeley to continue to buy land selectively when attractive opportunities arise in the urban regeneration market. Critically, it is a

path that will retain staff to ensure the sustainability and future of the business with the main challenge now being to realise the value contained within Berkeley's strong land bank."

Indeed, since 1991 and throughout most of the 90s the company's margins are steady or growing although no major efficiency gain plans have been executed. In a mature business sector like housebuilding a growth in margins without the implementation of major reorganisation plans is a strong indication that the company's growth is not just an outcome of the buoyant property market but has to do with inherently efficient operations and good corporate capacity to tap into in high-margin markets. A review of the corporate accounts, an example is shown in the quotes above, reveals that what is driving strategy is not a preoccupation with operational efficiency, which however is a consideration.

It has to be noted here that this financial performance is accompanied by a housing sales record with some 'bad' years, coinciding with adverse market conditions and/or periods of corporate restructuring.

Figure 6.5: Berkeley Group, nr of units sold and year on year change, 1984-2006



Source: Company Annual Reports

This performance from a company facing long-established competitors operating in conditions which sometimes are close to local monopolies points to the fact that the Berkeley Group is not a conventional housebuilding company. In the next section

it will be argued that the Group, through its strategic orientation and its organisation of the production process has differentiated its product enough to carve its own niche market and exploit it accordingly.

6.3 The organisation and the development approach of the Berkeley Group

Before its reorganisation of 2004-05 the Berkeley Group Plc was divided into 3 main divisions. Crosby Homes, St. George and Berkeley Homes, subdivided into the London and the Home Counties subdivisions. These divisions which essentially were the Group's 'brand names' each comprised more than one company (or business unit), each with a particular emphasis on specific markets, usually geographically defined. This structure was implemented in 1998-99 when it was reviewed to align it better with more PDL development (see section 6.2).

Berkeley Homes was split into two companies responsible for the London market (West London and East London & City) the others covering Surrey, Kent, Sussex and Hampshire. One more subsidiary, St. George concentrated on specialized developments (high density on prime sites). The Group moved into the Midlands, North West and Yorkshire through 'Crosby'. This organizational structure reflected a practice of establishing "*autonomous subsidiaries operating with strict financial control and motivated local management teams.*" (Berkeley Group, 1988, p.3). Apart from these divisions a series of other business units reported directly to the Group board, most of them performing group-wide functions (i.e Berkeley Commercial or Berkeley Strategic Land), specialised activities (i.e Berkeley College Homes) or are joint ventures (St. James is a JV between the Berkeley Group and Thames Water).

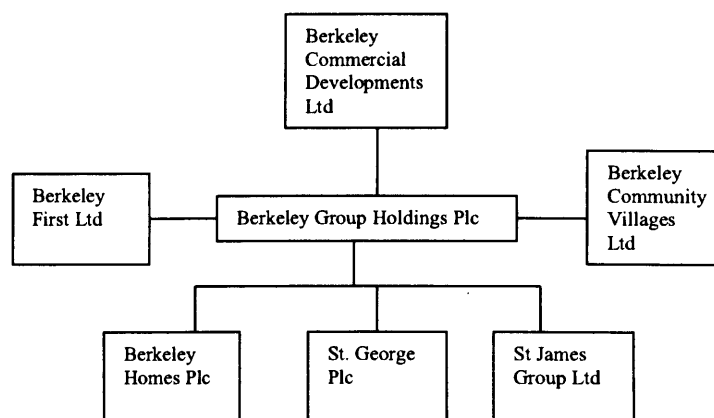
It seems therefore that the Group was, and still is, operating on the basis of a 'loose/tight' model: On the one hand responsibility for most corporate activities is devolved to the divisions and individual business units. They are at liberty to handle the development process from land acquisition to construction and sales, to manage their human resources, to have financial control over their business. On the other hand few crucial 'regulators', functions like strategic land, corporate strategy, corporate finance are kept under tight central control.

During the interviews it emerged that as a matter of corporate philosophy each Division operates with a high degree of autonomy, has its own Board of Directors and profit accountability. The Group's role is usually limited to strategic and

financial coordination and oversight. One of the reasons behind this unusually high devolution of powers is the high motivation it provides to local management teams without depriving them of access to the Group's resources.

A new major corporate restructuring took place following the Strategic Review of June 2003. Following this review the Berkeley Group Holdings Plc was formed to replace Berkeley Group Plc. The new organisational structure essentially reflects the 'loose/tight' approach: It is 'flat', with the holding company being one level removed from the various divisions who maintain a high degree of autonomy.

Figure 6.6: The structure of Berkeley Group following the 2003-2004 reorganisation



It is noteworthy that this organisational structure closely reflects a specific approach to the future course of residential development: Berkeley Homes and St. George are the 'regenerators' mainly producing high density schemes on PDL. St. James is a joint venture with Thames Water, a secure source of strategically located sites and a 'regenerator' as well. Berkeley First is specialising in key worker and student accommodation in mixed use or standalone schemes, a market that has been identified in the interviews conducted in this research as a future growth area and a hedge against the cyclicity of the private housing market. Berkeley Commercial Developments specialises in commercial developments in mixed use schemes but also standalone. Finally, Berkeley Community Villages is actually the strategic land division which identifies and gets planning permission for strategic land opportunities that will provide the 'sustainable communities' of the future. The three divisions, the three 'regenerators' are based in their own individual headquarters whereas the three more specialised units whose function is more 'horizontal' are

actually based in the Berkeley Group Holdings headquarters in an unassuming detached house in Cobham.

According to T.P the Group is in the business of “...adding value to land, through the application of our development skills.” (Berkeley, 1992, p. 4). The process of land development and thus of adding value to land is split by T.P. into 5 ‘functions’:

- land acquisition and use optimisation,
- planning permission,
- design of product,
- construction,
- marketing & sales.

Our research has revealed that as far as the firm is concerned these functions are treated as a constantly evolving process and therefore they are only separated here for analytical reasons. Site selection and acquisition is market-driven in the sense that local land acquisition teams try to verify whether a site has the potential to suit the needs of potential customers. Depending on the area these may be good schools, amenities, shopping etc. Therefore, decentralised land acquisition by teams with excellent local knowledge is essential.

The teams involved in land acquisition are also skilled in development. Their skill ranges from surveying, to planning, to design, to marketing and they work together on a site from beginning to end. When external specialists are brought in they are integrally tied to the Group’s teams. This means that a specialist in any field is involved with all aspects of the development from start to finish. Incidentally this approach is very similar to the multiskilled teams that are now more common in construction. Multiskilled teams in development take away part of the coordination task, reduce rework and therefore uncertainty in the construction process.

Finally, we were struck by the emphasis put on keeping product design flexible. Customer input is allowed from the very beginning in combination with ‘forward selling’ practices. Similarly, the layout of the flats or houses can be revised even at a late stage during the development process, to accommodate for changing market conditions and customer requirements.

The skills of the Group are applied throughout those functions with the aims of reducing risk, protecting and enhancing the margin, speeding up turnover and to “meet the needs and aspirations of the purchaser” (ibid., p. 4). Profit making through

land trading is not within the strategic priorities of the Group. Emphasis is put on adding value to land through development based on what one interviewee called “a construction management approach” into the whole of the development process. The following paragraphs will examine the elements of this approach, which we could call “development management”.

Ideally, in traditional housebuilding, once the decision is taken to develop a site then construction on the sites should begin and finish as soon as possible (hence the dissatisfaction with the planning application process) and sales should finish as soon as possible after that so that the uncertainty from changing market conditions is reduced to a minimum and the cycle can start again. Given the capacity of the Group in the early 1990s to built bespoke luxury low density developments, small sites were an ideal fit and an advantage because they allowed for product individualisation, marketing flexibility and quick turnover.

However, volume production of large capital intensive developments on PDL which are more complex in terms of design, planning and construction would in theory require certain compromises with regards to turnover time. These developments, by nature of their density and thus their increased unit volume can form a substantial part of any housebuilder’s annual output. Flats in apartment blocks are difficult to occupy if the block is still under construction. So, developments with apartment block schemes should be more vulnerable to swift changes in market conditions compared to traditional low density housing development whose construction can be stopped quickly but can be occupied albeit partially finished.

Phasing development and mixing of uses have allowed for a flexible response and a risk management approach to the new circumstances. Phasing allows for the development to be constructed in smaller batches instead of one big batch. The development is therefore treated as a series of modules or smaller development cycles, each one of a size big enough to finish within a period of time that minimises market exposure. Depending on the efficiency of the construction process and the prevailing market conditions this size can therefore vary from a few dozen units (one block of flats) to a couple of hundred units (a small neighbourhood).

Flexibility on the other hand has two aspects to it: one refers to the flexibility within each module or batch and has to do with the type, size and style of the apartments produced and eventually with the market segment that this batch will be sold to. Even during the process of construction the size and configuration of some

flats can change to suit market demand and the style of the apartments can be modified to fit the buyer's tastes and requirements (this is a benefit of 'shell and core' methods). The other aspect of flexibility refers to the mix of uses of the development as a whole. Planning permission is granted to a specific mix of uses but this may change during the project's lifetime by submitting new applications. Indeed, in developments like King's Cross, the discussions on the outline planning permission revolve around the potential of defining the mix of uses in terms of a possible range of coverage that each use could occupy in the future depending on market conditions.

Therefore, what was envisaged as a hotel in the original planning application may become an office block or an apartment block during the course of development. In much the same way, leisure uses may be converted to retail and vice versa, the square footage of each use may also change. Site planning and design becomes a unique process: sites are constantly re-planned with the aim of increasing densities "*...whenever appropriate in line with best planning practice.*" (Berkeley Group, 2003, p.9) This allows the company to increase output per site and gross margin without extra land costs.

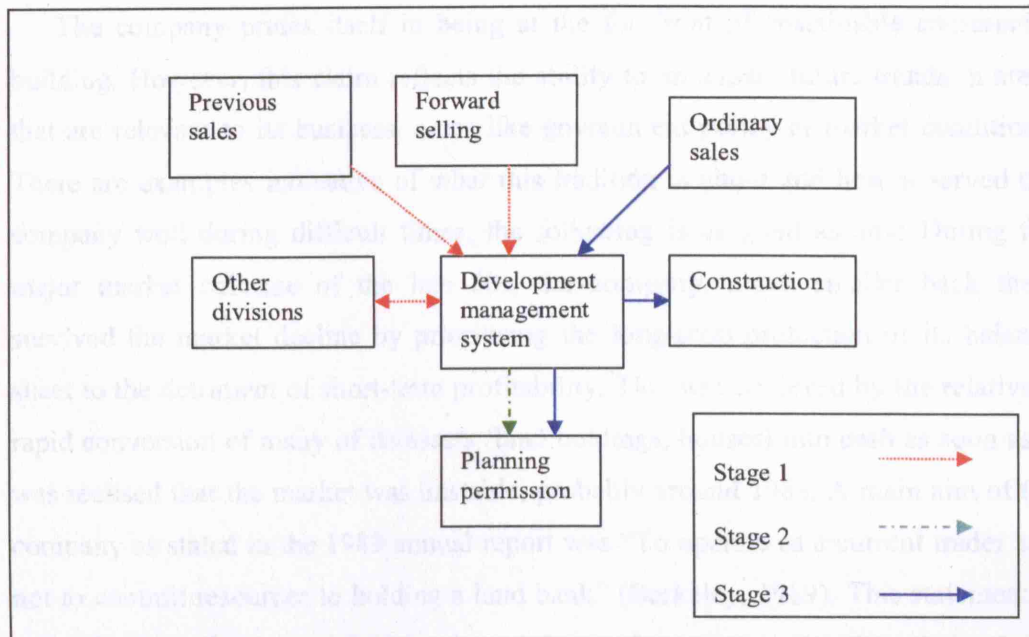
We saw previously that from the very early days the company aimed at reducing risk and construction time as much as possible thus increasing turnover and maximising return on capital employed. The ability to change the mix of uses combined with the appropriate phasing is an equally effective risk management strategy as the 'stop-go' strategy of traditional housebuilders and has the added advantage that it potentially smoothens the cyclical variations in the housing markets or the core activities more generally, that could otherwise affect profitability (see diagram 6.3).

This constant process of use mix variation is made possible through a highly developed construction management approach which will be elaborated further in chapter 7. The other important element that makes this approach work is market feedback. The development manager needs to know what the demand and supply conditions are in different markets (retail, housing, office, leisure etc) but also what the characteristics of that demand are, which types of products are more sought after.

In that respect information from other divisions (i.e Berkeley Commercial) is crucial as well as information from forward selling. Forward selling, another tried and tested practice of traditional housebuilders was used as a way to decrease the

variance in the cash flow³³ that characterises speculative housebuilding: Forward selling not only allows for a more balanced cash flow but also acts as an insight into market demand. This information, combined with the rest of the sales feedback can be then translated into quantitative and qualitative alterations in supply and thus make it more responsive to fluctuations in demand.

Figure 6.7: The demand-supply information flow of the Berkeley model



In 2003 'cash due on forward sales' was £920.9 million compared with total sales per year of £1130.1 million (Perrins, 2003). Although today forward sales are more widespread throughout the industry the extent that this practice is used at Berkeley is rather exceptional. Finally, another big advantage of forward selling is that it allows the company to start work on the site "as soon as possible" but at the same time to be responsive to the demands of the clients by incorporating their preferences into the product (flat) thus living up to the marketing strategy by selling a highly personalised product for which it can attract higher premiums.

Despite the changes that have occurred, the approach of the Group to development today bears similarity to the approach it had 15 years ago, which was much closer to traditional housebuilding. Some of the competencies of the company

³³ As is well explained in any development finance textbook, most speculative projects are faced with negative cash flows at the first years of their construction followed by surpluses thereafter.

have remained intact, enhanced and transferred to a completely new market and under a completely different external environment but new ones have developed to cope with the present and the future market.

6.4 The Berkeley Group and its involvement with high density PDL development

The company prides itself in being at the forefront of sustainable community building. However, this claim reflects the ability to anticipate future trends in areas that are relevant to its business, areas like government policy or market conditions. There are examples indicative of what this tradition is about and how it served the company well during difficult times, the following is as good as any: During the major market collapse of the late 80s, the company, much smaller back then, survived the market decline by prioritising the long-term protection of its balance sheet to the detriment of short-term profitability. This was achieved by the relatively rapid conversion of many of its assets (land holdings, houses) into cash as soon as it was realised that the market was unstable, probably around 1988. A main aim of the company as stated in the 1989 annual report was “To operate as a current trader and not to commit resources to holding a land bank” (Berkeley, 1989). This statement is not only an indication of the severity of the market crisis at the time, it is also a manifestation of the group’s adaptiveness deriving from strategic flexibility.

Berkeley started off as a developer of upmarket ‘bespoke’ suburban houses. Characteristically, sales on sites no larger than 4 units were 52% of total sales in 1988 whereas in the same year the Group closed down Berkeley Homes London because the London market was deemed to be extremely volatile. Despite the London closure, the Group continued to operate in Wimbledon and Kingston building executive detached houses.

After the market bust of ’89-’91 the Group expanded in new markets like Housing Association and Student housing and in new geographical areas. It also expanded its product and price range. It did so by adapting its competencies and developing new ones as we have elaborated in the previous section. The Group also began to move towards PDL redevelopment in the early 1990s. Despite actively expanding its market coverage during the same period, senior management was

considering possible company responses to the changes that the Rio summit and the sustainability discourse would bring to the industry.

They decided to make an experiment by getting involved in Brindley Place in Birmingham, developed by Argent, in 1992-93. The commercially successful outcome showed that the approach could work, the final product sold at a huge premium despite a very depressed local market and serious concerns about local social deprivation and crime. Still, in 1995 the annual report reiterated the Group's commitment to holding a small landbank and to deriving profits from high turnover but not from land appreciation. Of the 316 sites under its ownership at the time, 180 were suitable for 5 units or less and the average development size was 13 units.

Although the transition towards more PDL development was gradual it seems that 1999 was a critical year. That year's company report (Berkeley, 1999, p. 3) recognises that and also identifies a crucial element of the Group's approach towards redevelopment, the strict control over the development process.

"A growing number of the Group's projects are on brownfield urban sites which are more technically demanding thus requiring the right management teams in place with the right procedures and controls to deliver the finished units to the right timescale and costs."

During that year the Group was restructured to "...align more closely to the types of developments undertaken." (ibid., p. 3) In the same report reference is made to the production of "small, high quality executive developments in primarily suburban locations..." (Berkeley Group, 1999). This may seem somehow puzzling at first since it seems that it was realized early enough that the competency and the future of the firm lay in urban PDL redevelopment, mostly in the inner city rather than the leafy suburbs. The following quote from the 1999 annual report is a good example of what the firm does but also how its is positioned in a broader business environment which the change in government policy is reshaping.

"Our strategy was based on the fact that our development skills and expertise lent themselves most readily to expanding into city and town centres where we could concentrate on urban and brownfield schemes. This has proved very successful. Land

supply is a key element of our business and obtaining the right planning permission within the right timescales is essential.

The Government has made it clear that it wants to see 60% of the new housing supply built on recycled or brownfield sites. These are precisely the sites on which the Berkeley Group is now concentrating and where it has acquired particular expertise. At the same time, the implosion back into city and town centres where people now enjoy living and want to buy their homes has generated an active and ready market for our products. Over the last few years, the Group has become skilled at developing complicated inner-city and town centre sites. Although these sites are not without their complications and frustrations, we believe that this expertise and understanding of the issues will contribute markedly to our future growth.” (Berkeley Homes, 1999, p. 5)

The company gradually moved from its original identity as a builder for a niche, quality suburban market to another niche, that of quality urban PDL developments at a much larger scale. Essentially this is a transition from a strategy emphasising ‘Focus’ to one based on ‘Differentiation’, to quote the terms examined in Chapter 3 (Figure 3.7). It was definitely not an easy transformation, the official strategy statement in the 1999 Annual Report gives us some clues as to what the shift entailed. It states that:

“The Berkeley Group strategy for the future is to be the most profitable group in its sector whilst maintaining a prudent financial policy which places constant emphasis on the protection of shareholder’s funds”

This should be interpreted according to the market conditions at the time, just exiting a rather stagnant market with the memories of the 1989 crash still relatively recent. The gradual character of the transition is a sound business practice when a firm is developing new competencies, it is an inherent characteristic of this learning process. The redevelopment of big brownfield sites is seen as a move that will allow the group to exploit the opportunities opening in future growth areas like the Thames Gateway. However, until very recently, the group still persisted on building executive suburban developments even as a residual activity.

Although the expectations for the immediate future point towards more inner city development, the company's management foresees that at some point in the future, inner city PDL land will become scarcer and redevelopment activity will move towards PDL land in the 'inner suburbs'. These would again require a transformation of the company towards production that is better suited to those areas. Maintaining suburban 'know-how' and presence was therefore a practice that may appear inefficient in the short run but may potentially have provided the Group with the basis of its profitability in the future. The strategic review of 2003 led to the abandonment of non-PDL housebuilding and regional activities thus leading to the divestment of Crosby Homes.

Therefore the skills required for the particular strategic option of the return to the suburbs were maintained at a very limited scale within the remit of 'Berkeley Community Villages Ltd.'. That review also led to a renewed emphasis on other sectors (affordable housing, commercial property) that blend better with the business model. This reorganization apparently sacrificed non PDL housebuilding and wider geographical coverage in favour of a more specialized company with reduced influence from the City which could instead focus on the activities that the management believes it does best.

The external changes to the broader environment, affected by government policy, were linked with the core firm competencies via a forward looking strategy that anticipated the future rather than sticking to what the industry mainstream was doing. The group landbank and related practices is also reflecting the group's strategic orientation. A site comes forward for development either because it has been located by a land buyer/development manager or because an agent or owner has approached the company. It is then appraised by a team of sales people, land managers, planners, architects, engineers and surveyors and if the appraisal shows that it is feasible then BH either buys and option, enters a joint venture or buys the site outright depending on the circumstances. This process is aimed at minimising uncertainty at this stage by using as much expert input as possible from people who will be involved at all aspects of the development. Thus issues such as unrealistic expectations and unclear specifications are tackled (see Chapter 2).

In 2003 more than 95% of the sites in BG's land holdings were PDL, a figure similar to that of other PDL housebuilders like Barrat or Laing. In 2005 all development (100%) was carried out on PDL land. When asked who the major

competitors of the Group are, both senior and middle managers replied that the other top-5 housebuilders are fiercely competing for pretty much the same sites, however the product these other companies are producing is perceived as quite different.

In conclusion, the group tries to strike a delicate balance and does not fit any of the 'ideal type' organizational models. It has devolved most control outside the 'group core' together with knowledge and expertise and is held together by a few key functions like a common strategy which is decided upon and implemented at a central level. It has a set of common practices and processes and a mechanism to transfer this knowledge base throughout the organization.

The company adopted the new policy jargon very early on but the changes in its skills came gradually and took over a decade and two major reorganizations to complete. In that sense, the strategic vision that guided the company throughout the 1990s was not reached with a 'leap' but came about through a process of learning and gradual adaptation. To get a good idea of what the company's approach to development is, it is worth looking at Chelsea Bridge Wharf Ltd., the company responsible for developing Chelsea Bridge Wharf. This will be done in chapter 6.

6.5 The history and the performance of George Wimpey

George Wimpey Plc, a major housebuilder founded in 1876 by stonemasons, was purchased in 1922 by Godfrey Mitchell and it remained under the Mitchell family control until 1985. The history of the group is an interesting one, especially during the last 20 years when it transformed from a conglomerate with global reach to a housebuilder covering most of UK's housing markets both geographically and in terms of prices and products offered.

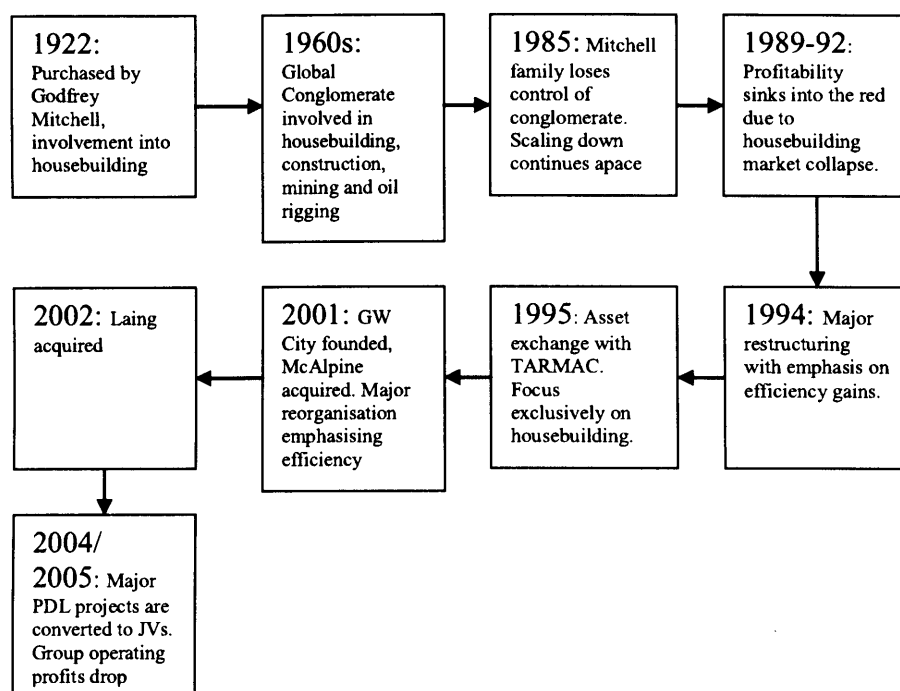
It got involved in private housebuilding in the 1920s and reached the peak of its activity as a construction conglomerate in the 1960s when it was actively involved in activities as diverse as oil rig construction and mining/quarrying. During the 1980s the company began to scale down its activities and started to focus more on housebuilding, however it remained globally active in engineering, construction and mining till the mid 90s.

The process of re-focusing the company on few core activities reached a turning point in 1995-96 when the Group exchanged assets with TARMAC in a deal that merged Mc Lain Homes (the housebuilding arm of TARMAC) with the Wimpey

Group. The Group's 1995 rationalisation came at a cost, a net outflow of £40 million, because essentially the Group was offloading all its marginally profitable activities in construction.

Mc Lean Homes were mostly selling upmarket 4 bedroom houses; their turnover in 1994 was £485 million and they had completed 6036 units. In that sense they were a business almost as big as Wimpey Homes. However, their average house selling price was around £80,000 in 1994, around £20,000 more than the average selling price of Wimpey Homes' properties, which mainly were 2-3 bedroom houses. Following this acquisition George Wimpey almost doubled its turnover and housing output and became one of the biggest housebuilders in the UK (Figure 5.17, Figure 6.10)

Figure 6.8: A timeline of the history of George Wimpey



In keeping with this practice of using mergers and acquisitions as a way to increase market share, increase its assets and expand its skills base, George Wimpey paid £461 million to acquire Mc Alpine Homes in 2001 from Alfred Mc Alpine Plc that was then in a process of transforming from a construction group to a facilities management and utility services business (Mc Alpine, 2005).

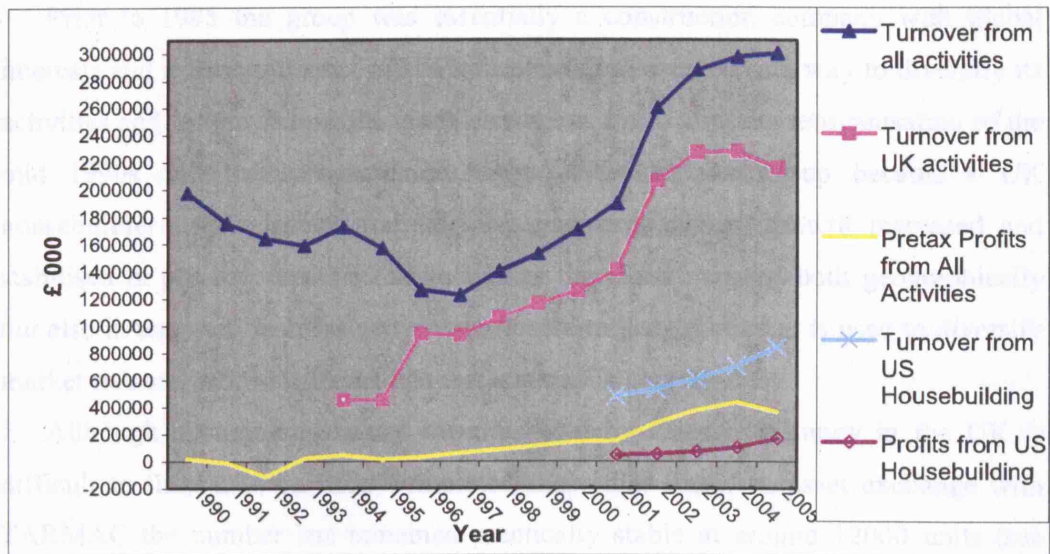
Consecutively, in 2002, Laing Homes was also acquired. This is a housebuilder without a portfolio of standard housing types who instead had developed a highly innovative design and construction skills base that allowed construction of housing “tailored to suit” each individual site (Laing Homes, 2005). It also had a very strong track record of building Housing Association housing. As a result Laing was and still is specialising in upmarket PDL developments in London and the Home Counties and has become the second brand name under which the George Wimpey Group operates in the UK.

These Mergers & Acquisitions (M&A) activity allowed George Wimpey Plc to extend its geographical coverage and product and price range to cover most of the UK and almost all types of housing. It is also a sign that the group is also using diversification into various market segments and in various geographical areas as a risk management strategy.

This latter approach to housebuilding is in striking contrast to the Berkeley group’s latest strategic re-orientation and it hints at a different attitude towards risk and uncertainty, much closer to the traditional housebuilding strategies of diversification into many market segments, wide geographical coverage and reliance on M&As to acquire skills and increase market share. Despite this approach to market uncertainty, or maybe because of it, George Wimpey Plc made a loss of £120 million during 1991 and 1992, reflecting the adverse market conditions that prevailed at the time. Thereafter turnover was in steady decline and profitability was marginal until the major restructuring of the company in 1994 affected profitability in a positive way (Figure 5.9).

The pattern of decline in the UK market resumed after 2000 and speeded up after 2003 however the US business picked up substantially during the same period acting as a buffer to what otherwise would have been a significant drop in turnover and profitability. Indicatively, the average sales price in the UK dropped to £178000 in 2005 from 185000 in 2004 and profit margins declined to 12.9%. However, in the US the average sales price rose by 7.6% to \$313000 and the profit margin rose to 20%.

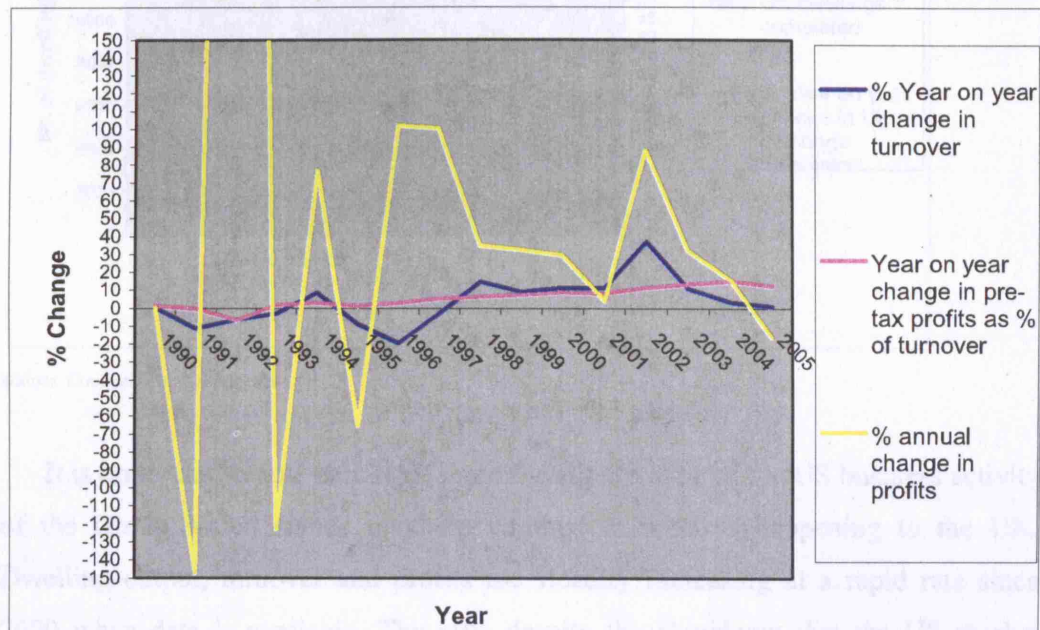
Figure 6.9: George Wimpey, annual turnover and profits 1990-2005



Source: Company Annual Reports

Although in 1995 the company disengaged from sectors outside housebuilding, it took another 2 years of effort and a sustained market upturn for turnover to begin an upwards course. The company's senior management also made serious efforts in increasing efficiency, which reflected positively on profit margins. Since 1995-96 therefore, the company's sole business is housebuilding and the role of its non-UK activities has changed.

Figure 6.10: George Wimpey, changes in turnover, profits and profit margin 1991-03

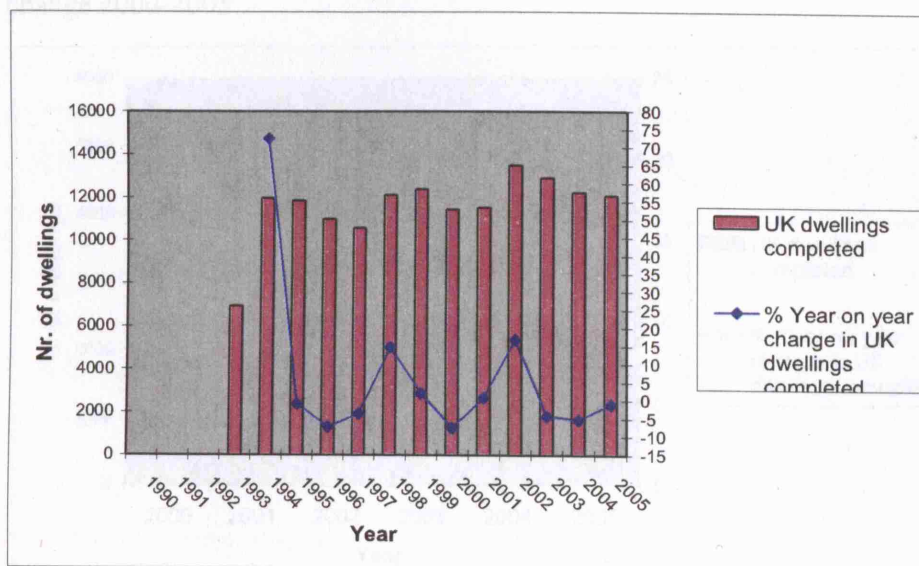


Source: Company Annual Reports

Prior to 1995 the group was essentially a construction company with global interests and a strong interest in UK housebuilding, using it as a way to diversify its activities and to reinvest profits made elsewhere. Following the reorganisation of the mid 1990s and the set exchange with TARMAC, the group became a UK housebuilder with a substantial US presence, profitability growth increased and stabilised in positive territory. Its focus has therefore changed both geographically but also in terms of business activity. Exposure to the US market is used to diversify market risk and indeed it seems that this strategy is bearing fruit.

Although a complete dataset on units sold by George Wimpey in the UK is difficult to find, data on units completed show that since the asset exchange with TARMAC the number has remained practically stable at around 12000 units (see Figure 5.11). This is despite the acquisition of two significant housebuilders, McAlpine and Laing Homes which in theory should have boosted the Groups output.

Figure 6.11: George Wimpey, nr. of units completed and year on year change 1993-2005



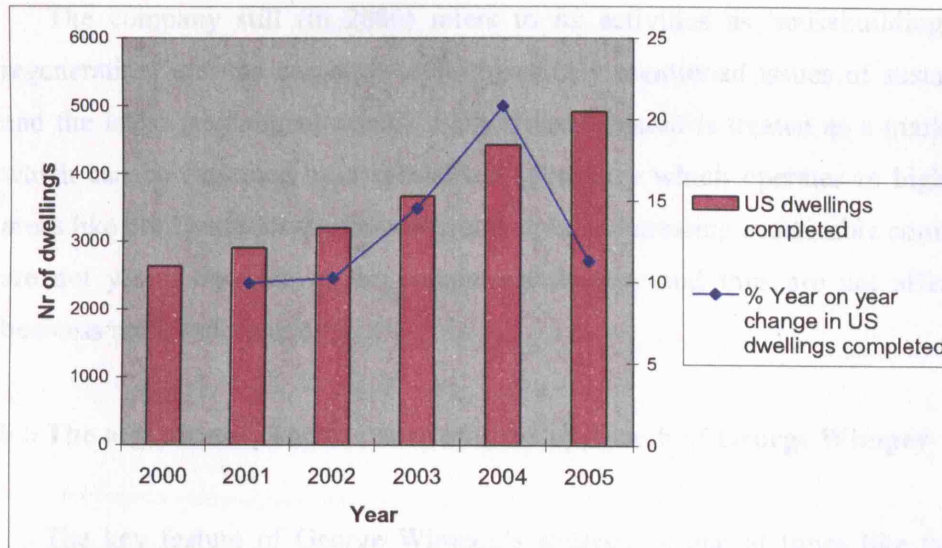
Source: Company Annual Reports

It is important to note here once more the significance of the US business activity of the Group which stands in sharp contrast to what is happening to the UK. Dwelling output, turnover and profits are steadily increasing at a rapid rate since 2000 when data is available. This was despite the slowdown that the US market

witnessed in 2005 following the significant increases in the Federal Reserve interest rates which continue apace to the present day. The company's chairman summarised the situation as follows (George Wimpey, 2006, p.6):

"The housing market in the UK remained difficult throughout the year, with the total number of housing transactions for 2005 17% below the previous year. Against this background, our businesses did well to deliver total UK volumes similar to last year as well as significantly increasing our forward order position entering 2006. The increased use of incentives needed to achieve this, along with the impact of a shorter landbank, resulted in reduced operating profits and margins. By contrast the US housing markets in which we operate remained very strong, with national housing starts reaching record levels. We continued to push forward strongly with our growth plans and delivered higher volumes, margins and operating profits. In the US too, we have come into the new year with a far stronger order book."

Figure 5.12: George Wimpey, nr. of US dwellings completed and year on year change 2000-2005



Source: Company Annual Reports

The course of the profits of this more traditional housebuilder is strikingly different to that of Bekeley Homes and follows the trends for the whole housebuilding industry much more closely. Since output is steady and the firm product mix moves towards flats (i.e lower average selling price per unit than

detached houses) one can assume that the primary source of turnover increases in the case of George Wimpey is the general uplift in housing prices whereas company profitability benefits from a sustained effort to increase efficiency, geographical diversification into the US market, as well as some major reorganisation efforts combined with M&As. Increased operational efficiency and streamlining is an expressed goal in the corporate strategy documentation. Market share mainly benefits from mergers and acquisitions and not from expansion to emerging market niches which however implies a less successful strategic vision, as discussed in Chapter 2. It cannot be determined from the current research what the outcomes of this approach will be, whether this approach will reap long terms benefits or whether it will lead to a drop in profitability and market share.

George Wimpey's senior management appears to be very reluctant to radically reorient the company in response to the new policy regime and the business environment it creates. Instead it seems to be following the model it to which Ball also refers to in his work of 1983. This model is based on spreading market risk by covering all the UK and all market segments then hedging that risk by operating in the US market.

The company still (in 2006) refers to its activities as housebuilding, not as regeneration, and the corporate website scarcely mentioned issues of sustainability and the latest government agenda. PDL redevelopment is treated as a market niche which can be exploited by a specialised subsidiary which operates in high margin areas like the Thames waterfront. Regeneration and creating sustainable communities are not yet at the core of the company's strategy and thus are not affecting its business model substantially.

6.6 The organisation and the development approach of George Wimpey

The key feature of George Wimpey's strategy is that at times like this when housebuilding undergoes transformations that will shape it for years to come, their efforts to adapt are focusing on the used and tested recipes that have characterised their way of doing business for decades.

At the time when the interviews were conducted George Wimpey Plc was operating with 6 business units: George Wimpey, McLain Homes, McAlpine, Laing, GW City and Morrison (in the United States). In the UK these 6 units are not

associated to separate 'brand names' and all sales are done under the 'George Wimpey' umbrella except for Laing Homes that maintained its separate identity. Each business unit has control over development issues but strategic and financial issues are dealt with centrally.

"The Group finances its operations through a combination of retained profits, bank loans, and long term loans in the form of US\$ private placements with a group of US insurance companies. All loans are raised centrally by the Group's Treasury Department." (George Wimpey, 2001, p.19)

The company has gone through several reorganisations in the last 15 years, the latest major one in 2001 aimed at reducing costs (staff, building/procurement) and to increase long term performance. It led to the decision to rebrand all the products of the different divisions to 'George Wimpey'. Other aims were:

- to improve the landbank, partially achieved through the acquisition of Laing
- to reduce regional businesses from 29 to 21
- to devolve responsibilities from the Group to the divisions
- to establish new business for the specialised market of central London (2 companies focussing on inner city developments one for inner London and one for other major UK cities, based in Manchester).
- To expand to the US market.

These aims were essentially consolidating the direction that the company had taken in previous years in an attempt to tackle the main challenges facing big non PDL housebuilders in an era of transition to new development types. The 2001 Annual Report illustrates the point that we have established through the interviews and the analysis of the company accounts. The Group is trying to adjust to PDL redevelopment and this is affecting the types of dwellings produced. At the same time this lateness in changing the product mix when compared with the Berkeley Group is telling of the difficulties George Wimpey is faced with as the following quote indicates (George Wimpey, 2001, p. 15).

“The product range now available to customers is well spread both in geographic and demographic terms and is well positioned to cater for a broad spectrum of the market. Inner-city and bespoke developments have continued to expand as dedicated management focus on this area of the product portfolio. The level of activity on brownfield sites has grown to 45%. Apartments now represent 11% of completions and 58.0% of homes completed in the year were detached. With a growing shortage of skilled labour, reassessing how homes are constructed whilst maintaining a high level of customer satisfaction is becoming a greater priority. A Research and Development Manager has been appointed who will concentrate on the research aspect of the challenge during 2002. This will entail assessing already proven building techniques around the world to ensure the Company is well prepared for changes over the next generation of housebuilding.”

It is worth noting how the company is moving towards more flat production but still produces a great amount of detached houses albeit at the same time it reverts production onto PDL. Before the purchase of McAlpine only 34% of George Wimpey sales were in southern England compared to 50% for McAlpine, following the acquisition (completed Oct 2001, £ 463 m.) the GW Group not only increased its presence in the booming south but also acquired a big landbank of high quality that would cover the groups needs in the south for 2 years after the acquisition (George Wimpey, 2001; p.5, p.14). Following the acquisition, the long term landbank stood at 15,903 acres whereas the short term landbank stood at 40,567 plots. The landbank was further enhanced in terms of brownfields following the acquisition of Laing since Laing Laing has a 90% brownfield landbank and a product range that is close to that of Wimpey.

6.7 George Wimpey and its involvement with the re-use of PDL

Faced with the changes in government policy and in the wider business environment, the company followed a rather traditional housebuilder strategy: On the one hand they tried to make the most out of existing know-how by slightly adapting it to the new circumstances and on the other hand they tentatively and rather belatedly explored ‘new ways’, based however on the tried and tested recipes with regard to

development and market risks. The latest Annual Report (George Wimpey, 2006, p.2) summarises this approach:

“Our 26 regional businesses and three satellites in the UK give our operations significant scale and truly national geographic coverage. Each business unit provides a range of products, from one bedroom apartments and starter homes to large detached family homes.”

Instead of building capacities early on that would lead to the transformation into a ‘regenerator’ the Group treated PDL development as an activity similar to non-PDL housebuilding and secondly as a new market niche in to which one should expand by establishing a new business unit, as a result in 2005 the group produced 66% of its output on PDL and maintained 34% non-PDL production. This strategy however, regardless of its advantages or disadvantages, attracted a ‘UTF follower’ characterisation from the GLA since the UTF calls for a series of radical transformations in the way the built environment is produced. Regardless of any characterisations it remains to be seen whether this more conservative approach will be justified in terms of its long term benefits.

The group follows a rather standard approach to development, trying to minimise turnover time. Profitability is based on the ability to secure suitable sites then get planning permission as quickly as possible, market and sell the houses and finally transform the income into new land purchase to start the cycle all over again. At the same time, strategic landbanking offers the company an edge over its competitors not only in securing a steady flow of land but also in profiting from land appreciation. Strategic land and strategic planning capabilities are given prime importance and are very well developed.

The company has its own network of land managers who are looking for sites and the group only partially depends on agents and land owners coming to them. Therefore, business units are able to analyse local circumstances quickly (planning conditions, UDP allocations etc.) and rapidly locate and acquire or secure sites that satisfy a stringent set of conditions (well-located etc). The exception to this approach is George Wimpey City that solely relies on offers because it is a new and small business unit and has not yet managed to establish this type of know how and networks.

As it happens, housebuilders like George Wimpey face (or believe they face) the biggest bottlenecks in the planning application phase. A usual complaint of housebuilders and in this case of George Wimpey's management teams is that local planning authorities are unresponsive to government policy in the sense that local councillors and planners do not easily approve of developments that adhere to the new higher density requirements and that they have 'excessive' demands from the s. 106 agreement. The 'excessiveness' however is affected by the persistence of George Wimpey to build low density non PDL 'standard' type housing on PDL sites, either at low or at medium densities.

The technological barrier for traditional construction methods stands at 6-7 storeys which means that densities above a certain limit cannot be achieved unless site coverage increases and/or unit size decreases dramatically. This has added an extra cost to the development and it is believed that this extra cost element will have to affect affordable housing provisions or other elements of the s.106 agreement.

The company realised rather belatedly that there existed an emerging market niche for upmarket apartments on prime locations in London (mainly riverside) and that the skills required to build high rise PDL developments are very specialised and new to housebuilders. Indeed, more standard housebuilding methods (like timber frame) are economically and technically feasible for buildings up to 6-7 storeys. Above that height new materials and construction methods have to be deployed (for example structural concrete, curtain walling) which are unusual for the traditional housebuilding industry but are widely used in commercial property construction. George Wimpey however attempts to develop PDL sites with 'standard' housing types and construction methods.

Parallel to the effort to increase market share and skills base through M&As and as part of the strategy to expand into new markets by establishing new business units, George Wimpey decided to move into what it perceived as the growing niche market for inner city apartments in high density developments, like multi storey blocks. Two business units were established in 2001, George Wimpey City to cover the metropolitan areas outside London (mainly covering Manchester and the North) and George Wimpey Central London for the London market. The two units merged during the first months of 2004 but the merged unit still maintains offices in Manchester. George Wimpey City is the only unit that has the capacity and skills to build high rise apartment blocks. It is deploying these skills to tap into the luxury end

of the market, thus directly competing with the Berkeley Group. Although the Group established Inner London special teams in 2001, product composition has been changing towards more flats since 1999, indicating a product shift even before the new specialised business units begun to have an influence but four years after the government announced its PDL redevelopment targets.

The business unit has a very narrow remit: to build high rise apartment building in inner city PDL sites and it is not involved with complex long term projects. Many of the sites have a social housing element and most of them are mixed use. Although they are not the only unit of the George Wimpey group that works with brownfield sites they are the ones who specialise in multi-storey apartment buildings or high rise as they call them. The other units in the group build standard type housing with traditional methods thus tapping into lower margin markets of low density PDL and medium density PDL or the lucrative but restricted low density non PDL.

George Wimpey Central London follows a different approach to that of Berkeley. In the words of one of their senior managers they do "*what a true developer does*", they bring all the necessary elements together and they manage the process. They work with contractors under JCT 'design and build' contracts which consequently means that there is limited flexibility to alter the scheme once construction begins. This flexibility is further limited by the size of the developments which George Wimpey City is capable of undertaking, up to 150 units or double the size of a few years ago.

This size of development is the equivalent of one big apartment block similar to Falcon Wharf, the flagship development of George Wimpey City. Although this size is 1/6-1/8 the size of developments like Imperial Wharf or Chelsea Bridge Wharf it is still a significant endeavour, bearing in mind that the vast majority of UK housebuilders will produce around or less than 150 units a year.

6.8 Conclusions

The two companies examined in this chapter treat housebuilding in completely different ways, although they are faced with the same business conditions. The housing market is notoriously volatile and therefore notoriously difficult to predict. This uncertainty about the future course of supply and demand and the brave assumptions that housebuilders have to make about the future course of

the market has been the main source of corporate closures in times of sudden market decline.

A traditional housebuilder response to the peculiar nature of this market has been to diversify in terms of geography and market segments. George Wimpey entered the 80s as a construction conglomerate, active in most construction activities. The company treated housebuilding as a way to diversify its investments but the erosion of its competitive edge in construction led to a radical restructuring effort that eventually led to an asset exchange with TARMAC in the mid 90s.

Since then, George Wimpey Plc has made sustained efforts to increase its profit margins by focusing on increasing operational efficiency. To complement this efficiency drive, the company is expanding its geographical coverage and the market segments it is covering mainly through M&As. Today, it covers most areas of the UK and most market segments. It is also expanding its activity in the US market as a further way of diversifying its business and its market exposure. Indeed the US market is boosting the profitability and the margins of the group (20% operating margin in the US for 2005 compared to 12.9% for the UK). In the UK market these margins are close to the industry average and growth in terms of output is static, indicating that turnover and profit growth depend on housing price inflation, M&As and efficiency gains.

The involvement of the group into the redevelopment of high density PDL follows the same logic. A specialized subsidiary was established to exploit a specific market niche: the inner city high margin markets of London and Manchester. Its activities have grown significantly in the few years following its establishment. At the same time the other subsidiaries of the group are also beginning to develop PDL sites but part of their effort is focused on low density PDL whereas higher density developments are also limited by the traditional housebuilding construction methods.

The Berkeley Group on the other hand has transformed from a small housebuilder of exclusive suburban detached housing to a 'regenerator' at the forefront of mixed use PDL redevelopment. It has achieved this through a learning process, by testing the market early on and by strategically preempting the policies of the government. Market uncertainty is managed through a flexible approach towards development which is based on flexibility towards the planning and design of the product and relying on the incorporation of market feedback into the development process.

The company does not tackle market volatility by 'global' coverage of the UK market in terms of geography and market segments. Instead it specializes in upmarket, high margin, mixed use developments in relatively few selected markets and prominent locations. During periods of housing market downturns the commercial or non-market housing activities are compensating for the decline in profits from speculative housebuilding. The three housebuilding divisions operate as separate brand names and their areas of activity overlap, there are no geographical or other boundaries between them but in any case the Group recently shed off their activities outside the South East of England and stopped their involvement in non PDL development.

The outcome of this strategic approach to development is that the company has grown at a dramatic pace. Its output and turnover are increasing steadily, its profit margins are steadily on the industry average or higher. The growth of the group is 'organic', based on tapping early on into hitherto unexploited market niches. The recent reorganization exemplifies this, the Group's structure includes a division specializing in contemporary forms of non-market housing and a division keeping an eye on strategic land opportunities with some knowledge of lower density suburban housebuilding.

After elaborating in this chapter on the strategy-making process, the creation of core competencies and the effects that each firm's approach had on its financial position and its output we can confidently say that there are indeed significant differences between the way the two companies are handling the development process and associated risks. In the short run the Berkeley Group benefits from organic growth but is more exposed to one market in terms of geography and market segment. Wimpey on the other hand remains at the top of the league and is much more diversified geographically. It remains to be seen which approach will advantageous in the next downturn.

We will move on to focus on the 'micro' scale in the next chapter. We will examine what the practical implications of each approach were on the way development was carried out from site identification to sales, in two cases, one for each firm.

Chapter 7

Two ways of producing the built environment

7.1 Introduction

Bearing in mind Barlow's recent comments that housing "...remains an essentially mass produced product, manufactured by using craft skills" (Barlow, 1999, p. 25) we can see how the shift towards high density PDL developments creates the preconditions for radically changing the way the built environment is produced. Although because of the nature of its methodology this research cannot comment on the industry-wide trend, it has uncovered substantial evidence that both the Berkeley Group and George Wimpey are changing the types of dwellings they are producing as well as the way they are producing them. The way they are bringing this change forward differs in each case as we shall see. In this chapter the emphasis will be on the development-specific institutional and managerial arrangements characterising each approach.

The first case study project is Falcon Wharf, a high density, mixed use scheme of a relatively small size (124 units) but at the limit of the productive and managerial capacity of George Wimpey City (GWC). It was chosen following the recommendation of key interviewees that this is the best example of what George Wimpey City does in PDL regeneration. It emerged that although GWC use construction techniques borrowed from office development, they follow a relatively standard approach to development. The development process is broken down into stages and these stages are reflected in the way the development of the site was organised from start to finish.

The site was bought with planning permission from a previous developer but modifications were made to increase profitability then the construction work was procured through a 'Design and Build' contract. The building will be constructed in one single phase. Emphasis throughout this process is on speed, this preoccupation with speedy delivery at each stage (very usual in the industry as explained previously) has caused major frictions with the Local Planning Authority because construction essentially started without a finalised s.106 agreement. The developer could not wait for the final agreement. This development therefore is not only typical

of the particular housebuilder's approach but at the same time it is also indicative of the limitations of this more traditional approach to development.

The second case is a typical example of a Berkeley Homes approach. It is a large (800+ units), multi-phased, high density, mixed use development which will take several years to complete. Berkeley Homes treats development as a process in constant flux and it turns the standard procurement method on its head by embracing change and finding ways to adapt the development process to market demand. It manages this process through a set of norms, routines and skills that bear great resemblance to the 'Fasttrack' method and a construction management approach. The main features of this approach include:

- Engaging in discussions with the planning authority before the planning application is submitted when the ideas about the project are still developing
- Using multiskilled teams to tackle each site and keeping the same team involved throughout the process, responsibility for the development is not passed on to other departments at various stages
- Allowing planning, design and construction to overlap or run simultaneously instead of treating them in sequence to each other
- Separating the development in autonomous phases, it is entirely possible that each phase is built by a different contractor, always under the supervision of the developer and its construction management consultant who coordinates the process
- Varying the product mix for each phase based on the feedback from other corporate divisions and sales as well as forward selling

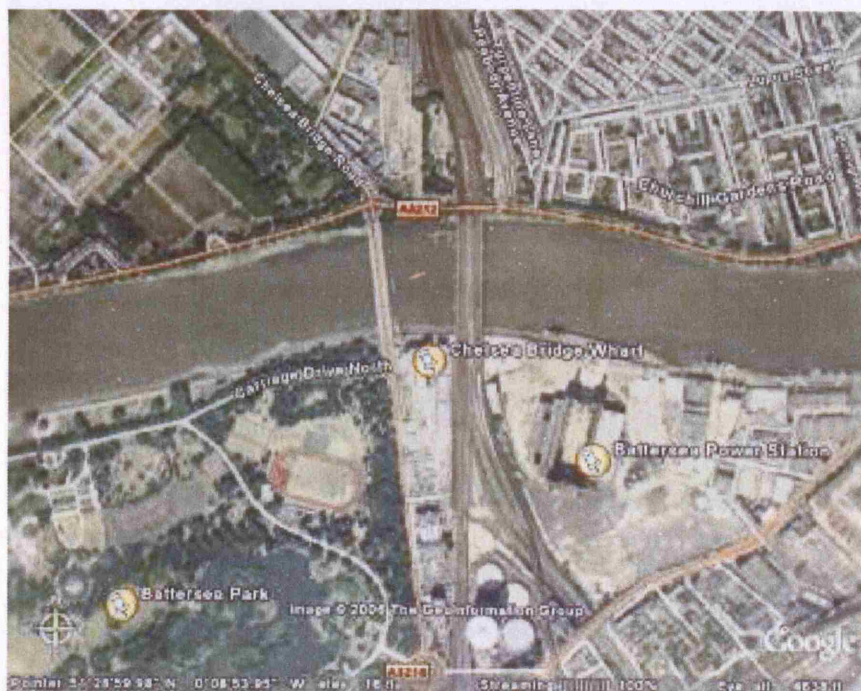
In many ways, Chelsea Bridge Wharf Ltd uses elements of the 'fast-track' construction method appropriately adapted to the UK context and the particular circumstances of PDL redevelopment. Therefore, the inherent flexibility of the overlap between planning, design and construction is combined with customer input and sales figures to appropriately modify each project phase even during its construction. This method is radically different to the stage by stage development and 'Design & Build' procurement that GWC implements but requires a much greater coordination effort, a skill and a know how which is only acquired through

practice and learning. The outcome of this learning process however is an increased capacity to manage effectively the uncertainties surrounding big, long term and complex projects. This is in contrast to the standard approach which has inherent limitations in the size and complexity of the projects that can be developed.

7.2 Berkeley Homes' Chelsea Bridge Wharf

The 3.5 ha site is bounded to the north by the river, to the west by Queenstown Rd., leading to Chelsea Bridge and it extends 65 m east of the railway lines leading to Grosvenor railway bridge. Three sites were joined to create the site under development (see Figure 6.1). The biggest one, the site of Battersea Wharf had a 300 m. river frontage and it was joined with the site of Spicer Cowan warehouse and the space underneath the railway arch that lies between the two. Battersea Wharf is inside the Battersea Park Conservation Area and it was a site with contamination hotspots dating back to the days when it was used by the railways and as a wharf.

Figure 7.1: Aerial photograph of Chelsea Bridge Wharf and the surrounding area



Source: [Google Earth](https://www.google.com/maps/@51.4815, -0.145, 15z)

The first proposals by the Berkeley Group's architectural advisors envisaged a 'Corbusian' layout for the site, as one interviewee called it. The Local Planning Authority (London Borough of Wandsworth) were very willing to consider the redevelopment of the site, although it was in a conservation area, but were adamant to maintain the urban character and form of it. The borough planners however wanted to create a continuous urban frontage along the sides of Battersea Park and were not very keen on allowing the originally proposed scheme, mainly because of fears that it would destroy the 'feel' of the area. The developers also went to CABE with their original ideas and CABE recommended a project with a façade on the park. The plans therefore had to be revised again in consultation with the Local Planning Authority and in turn this process resulted in a much less iconic scheme but of equally high density, with a plot ratio of 2.3:1. Contamination was not viewed as an insurmountable obstacle in spite of the important hotspots that existed on the site, it was seen as a manageable risk.

Figure 7.2: Western view of Chelsea Bridge Wharf (CGI)



Source: Berkeley Homes brochure

Following this preliminary negotiation process, the developers applied for planning permission using 'double tracking'³⁴. Although this procedure is usually confrontational, in this case it was not seen as such by the Local Planning Authority

³⁴ 'Double tracking' means that the developer submitted the same application twice. In that case, if one application does not get planning permission and an appeal is launched there is still one application to be determined by the LPA which means that negotiations can continue while the appeal is pending.

who ‘understood’ the rationale behind it, evidence of a good rapport between them and the developers.

There was very limited community consultation since, as an interviewee said, *“there was no local community to upset and have them object or make petitions”*. There was a limited number of objection letters (only 4) during this stage. However, as some interviewees have pointed out, the particularities of the riverside location are generally not taken into account in any of these schemes. Therefore the proposed development does not accommodate river transport and is practically inaccessible from the river Thames. This, however, distorts the continuity between the riverwalk, the site’s hinterland and the river itself: it creates a spatial barrier. The risk therefore is that the spatial continuity and the relationship between land and water is disturbed and amenity value as well as the opportunity to use an increasingly important alternative to road transport is lost.

There had been various proposals for the site during the past 4 decades ever since the railway activities were scaled down during the 60s. The following table’s chronology summarises various proposals for the site as well as some of the uses it has accommodated during the last 4 decades. As far as information could be gathered the presumably derelict ‘brownfield’ site was simultaneously used for coach parking, storage, as police car compound yard, bungee jumping and was hosting squatters as well.

Not unexpectedly for such a prime location, developer’s interest on the site was increasing during market booms. One such occasion was in 1987-1989 when the British Rail Property Board sold the site to Parc Securities. At that time Parc came forward with a series of proposals which were all granted planning permission subject to legal approval that was, crucially, never agreed upon. The market bust of 1989-90 put these proposals on the shelf but interest revived in 1997 in the form of a collaboration with Autodome. This proposal however, for a major motor car related exhibition and leisure centre failed to materialise because Parc went into receivership and the site was put up for sale.

Table 7.1: Brief historical overview of Chelsea Bridge Wharf site

Year	Use	Owner	Application for	Decision
1960s	Railway Sidings, Coach parking, storage	British Rail		
1971		British Rail	Hotel	Outline p.p.
1988		Parc Securities from British Rail Property Board	Business, flats, retail, hotel, restaurants, 1700 parking	Grant p.p subject to legal agreement.
1989		Parc Securities	Business, flats, retail, hotel, restaurants, 1478 parking places	Grant p.p subject to legal agreement.
1990			Mainly business, hotel, restaurant, retail, flats, public open space	Grant p.p subject to legal agreement.
1997	Bunjee jumping, police car compound, squatting, coach parking, storage	Autodome (with Parc)	Leisure and Exhibition Centre related to the motor car. Hotel and Residential	
1999	Bunjee jumping, police car compound, squatting, coach parking, storage	Berkeley Group (from PWC)	Mixed use scheme including residential, retail, hotel, leisure.	Granted planning permission. Under construction.

Source: LB Wandsworth planning application archives

The site, which until then was called Battersea Wharf, was bought outright by Berkeley Homes in 1999. They also bought two smaller neighbouring sites (Spicer Cowan and the space underneath the railway arches). The owner was in receivership and this was the only route left open by the receivers Price Waterhouse Coopers. This again meant that the developer was faced with the uncertainty of the LPA refusing permission. However the early engagement with the LPA and the substantial know-how in negotiation (including double-tracking) turned this uncertainty into a low probability risk. They applied for planning permission in September 2000, with a proposal for a mixed use development of 608 dwellings, a health club of 3500 square meters, 8500 square meters of office space, 370 square meters of retail space and a 235 bed 4* hotel. The density of the proposed development stood at 714 habitable rooms per hectare, the buildings would reach 11 storeys and would have several basement levels. The proposal was accepted and granted planning permission.

Table 7.2: The change in the use mix following planning permission

	Flats (aff/ble)	Density h.r.p.h.	1- bed	2- bed	3- bed	Hotel	Restaurant and bar m2	Health Club m2	Retail m2	Office m2
Original Applic. 2000-01	608 (152)	714	197	382	29	235 beds	2800	3500	370	8490
Situation 2004 after 38 planning applic.	723 but will rise to 842	936	n.av.	n.av.	n.av.	438 beds	Smaller but m2 n.av.	3500	370	Smaller but m2 n. av.

Because of its complexity a special business unit was set up in the form of Chelsea Bridge Wharf Ltd. The company has an overdraft facility with Berkeley Homes and essentially with the Group. The project is self-financed; the money provided by the Group upfront are repaid throughout the development of the site when the sales begin. This can take several years, which implies commitment on behalf of the Group and potentially limits its expansion potential but at the same time depends crucially on central fiscal control in order to balance out the cash flows from various projects and create an overall positive return on the capital invested. The benefits of this system of financing are reflected in the Group's low leverage (13.5% in 2003) which makes it less vulnerable to interest rate fluctuations.

Two of the hypotheses underpinning this research refer to institutional structures and configurations of actors that characterise PDL redevelopment. We have already examined some of those skills, norms and routines in the previous chapter. In terms of actor relationships and configurations, the 'Phases, functions and interactions' model that was reviewed in chapter 3 (Table 3.6) provides a useful mapping of the specific arrangements for this development project. This mapping reveals that the development process is kept under the tight control of the Group in its various guises with the more 'strategic' activities carried out by the Group (see Table 7.3). During the mediation phase the group has direct control over ownership and finance but uses external consultants for the promotion function. It maintains that control via Chelsea Bridge Wharf Ltd during the development stage as well and expands it in all functions except regulation.

External consultants are used in the production function only in conjunction with Chelsea Bridge Wharf Ltd. After the whole development is completed, the Berkeley Group completely disengages but passes on the ownership to a single owner, a long term investor who will be collecting the ground rent. This is done on purpose in order to maintain a unified ownership for the site and therefore allow for easy day-to-day management and maintenance of the property. Table 7.3 however does not capture one very interesting aspect of the method Berkeley is using, the overlap between phases (see Figure 7.4).

Table 7.3: Functions, phases and interactions in the development process

	Previous Use (pre-development)	Mediation (inception, lift-off)	Development	Consumption
Ownership	Price Waterhouse Coopers, receivers to Parc Securities	Berkeley Group Plc 2 3	Chelsea Bridge Wharf Ltd 3 8	Unknown investor 2 investors occupiers 7
Finance/ Credit		Berkeley Group Plc 3	Berkeley Group 3	Banks, Inv. Trusts (no big inst. invest.)
Promotion	1	CBW Ltd 5 Halcrow, Scott Brownrigg, CMS, STATS, Whitby Bird	CBW Ltd 5 Marketing Agency	9
Production			CBW Ltd 6 Bovis, Harris, SBT A+P, Whitby Bird	
Use	Various uses (squatters, bungee jumping, police car compound, coach parking, light industrial)	4	4	Individuals, small and bigger private investors, commercial occupiers, hotel operator
Regulation		LBWandsworth, TfL, PoLA, Crown Estate, NetworkRail,	LBWandsworth, Building Regulations, NHBC	S.106 agreement: freeholder/contractual arrangements, management

The functions phases and interactions shown in the figure above are as follows: (1) Land sold or otherwise transferred, (2) Standard freehold sale (3) Internal capital financing, (4) Standard planning or other permissions, (5) Standard consultancy arrangements (6) CM contract tendered for during each phase of the development (7) Standard bank financing or other sources suitable for small investors or owner occupiers (8) Standard long leasehold contracts (9) Standard rental agreements.

Chelsea Bridge Wharf Ltd operates autonomously and has full control over the development as it plays a central role in coordinating the process whereas the Group plays a key role in financing the development. The interviews revealed that their teams start working on a site by formulating a general idea of what the development should be like (how big etc.). Each team member argues on what will work and what will not from their point of view. This way responsibility is shared between team members but also the various aspects of the development that could generate uncertainties at later stages are tackled.

This inter-departmental approach covers all aspects of the project, an example is apartment layout which is constantly changed in this early stage until, in the words of an interviewee involved in the process, "*it felt right*". We have grounds to believe that this a practice very much blended with the competitive strategy of the Group which emphasises flexibility. Our investigation showed that the team that designed Chelsea Bridge Wharf realised that part of what they do would be tentative, in fact the notion of '*getting it right from the start*' is doubted altogether. Everyone involved in a development team is encouraged to constantly look into and review projects instead of trying to fix something from the start (as the JCT Design & Build would require).

Our interviewees were fully aware that what is sold is not property but a lifestyle. High quality construction is therefore a priority but more importantly, emphasis is put on fulfilling buyers' aspirations for a unique lifestyle that is reminiscent of the 'luxury inner city apartment' ideal. Individuality and character are the most important features in that respect, satisfying substantial customer demand that was so far remaining latent (Barlow, 2000). The way to achieve this in CBW is to have the company experts involved with all aspects of the development from start to finish. This means that they contribute in aspects of development from valuation to design.

Figure 7.3: Advertisement for Chelsea Bridge Wharf emphasising the lifestyle aspects of the development and the location.



Source: Berkeley Homes brochure

The capacity to customise the product is the outcome of a flexible design and construction process. The approach is very similar to the 'Fasttrack' construction method based on concurrent time scheduling and overlapping production elements. The big risk with this method comes from the effort required to coordinate the process, maintain quality and avoid or resolve conflicts. To mitigate this risk, the teams within CBW bring together company experts and occasionally consultants and try to find how they can make the most of the site, the apartment etc. This means that the site design is an iterative process that follows a learning curve. Indeed, the site now accommodates 20% more units without any significant changes in the mix of uses.

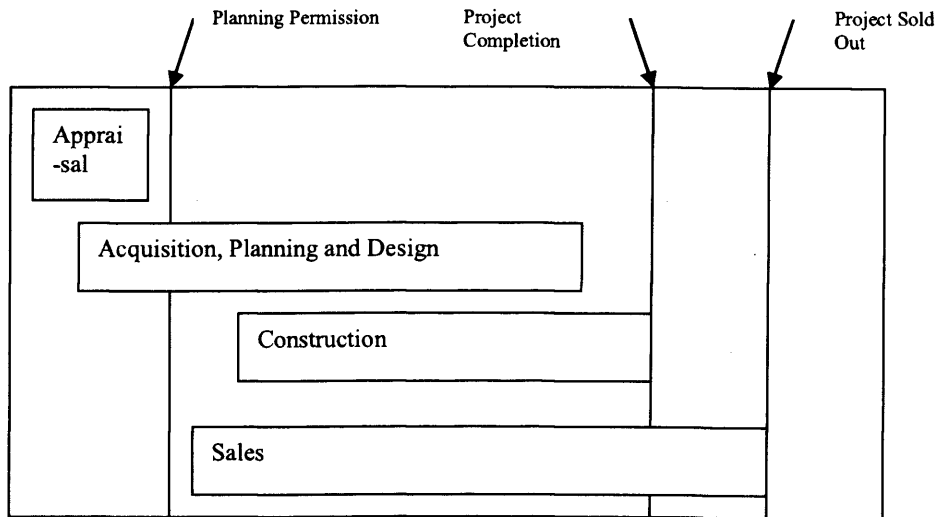
Following purchase, the same multidisciplinary team which also includes people familiar with the commercial aspects and sales, works in close collaboration with planning and architecture consultants to apply for planning permission. BH/CBW was directly involved in the negotiations for permission and planning gain.

After permission was granted CBW constantly sought to change it to fit market conditions better. For example CBW started with 608 units but this number now has risen to 723 and will reach 842 if the latest application receives permission. At least 40 applications for alterations to the original submission, some of them quite substantial, were submitted since then.

This constant re-think of the scheme is a key aspect of the Berkeley Group approach to development. Because of the scale and the nature of the project at Chelsea Bridge Wharf the developer will have to stay involved in it for at least 6 years although this is a project that is average in size, for the Group's standards at least. The strength and the nature of future demand is probably the most important uncertainty factor in development. Usually developers try to create developments that will suit the nature of demand at the time the project is conceived. The original scheme therefore is a reflection of the developer's perception of 'what will sell quickly'. This perception might be accurate to various degrees. But it is almost impossible to successfully forecast demand at every stage for a project that takes 6 to 7 years from inception to completion.

In schemes that require a medium term involvement, responsiveness to the changing nature and strength of demand is imperative. The development and consumption phases (see Table 7.3 and Figure 7.4) have to be articulated in a way that would ensure profitability or at least survival, if all else fails. These elements can ensure this flexibility: appropriate phasing between and within elements, ability to quickly change the type of products offered and ability to manage this change profitably.

Figure 7.4: The interlocking stages of development in Chelsea Bridge Wharf



This flexibility at the site level is a result of the flexible product development. As we have already discussed previously, the layout and design of the apartments is discussed in multidisciplinary design teams and is continuously re-worked “until it feels right” which implies a process that only ends when the last batch of apartments is constructed. As a result the whole development’s internal layout is treated flexibly. This flexibility is one of BG’s core competencies. It allows BH to

- adjust the development’s mix of uses during the development phase
- ‘personalise’ the product (apartments)

Thus it is able to sell a product bundle emphasising high quality, trendy, personalised, fashionable, stylish, ‘urban’ lifestyle to people who can spend from 200k to 8000k. The brand is not ‘diluted’ because:

- it keeps the same standards throughout, it is never ‘cheap’
- it occupies the upper price range of a particular geographical market
- products are not so ‘brand sensitive’ you do not buy your BH to show off that it is a BH but you do buy the ‘lifestyle’ to show off.
- Price differences may be attributed to other factors (like location) thus preventing brand dilution.

Production is limited (the local market is not flooded with BH products).

The leasehold on a long lease ownership arrangements are another factor adding value to the development and a characteristic of the Berkeley Group way of thinking

about their project. The freehold for the whole development is sold to one investor who then becomes responsible for the maintenance of the whole development through a specialist agency. This in turn deals with a potential problem with the management aspects of apartment block schemes where fragmented freehold ownership makes the maintenance of the building more complicated and in some cases impossible. This arrangement not only lifts that uncertainty, thus increasing the saleability of the properties, it is also an important factor in gaining planning permission and successfully negotiating the s.106 agreement.

The other interesting aspect of this approach is that it can be applied to development projects whose scale goes far beyond the industry average. Although the 800+ units of CBW make it a big project by any standards, the Berkeley Group is involved in similar projects of 1200+ units, thus although CBW is typical and its location is uniquely marketable it is by no means the biggest or most complex project that the Group currently undertakes. It is therefore reasonable to argue that Berkeley has created a know-how that allows it to develop major projects on PDL sites that are not necessarily straightforward to develop (in this case a major difficulty in all previous projects was the planning gain agreement). Its core competencies can be transferred from site to site to create products that will appeal to different 'market segments' (by price).

Chelsea Bridge Wharf is a particularly complex development, a big site with various uses and some contamination hotspots. Because of the flexible organisational approach of BG it was easy to create a new company to tackle development issues when the task proved too difficult for Berkeley Homes. This practice, to set up an autonomous business unit, which is a standard in commercial development, has proven to be so successful that it is now transferred across the group and indeed was imitated in our other case study as we shall see.

7.3 George Wimpey City 'Falcon Wharf'

The 0.496 ha site is bounded to the west by the river, to the east by Lombard Rd., to the south by the Heliport and a timber merchant's warehouse and to the north by another residential development (Oyster Wharf). The site was under Council ownership and was used as a vehicle repair depot, building works depot, highways depot and laundry. Around 1998 Frogmore Estates, a property investor/trader bought

it through their subsidiary, Harbour Land Ltd, with the intent of getting planning permission and either sell on or find a partner for a joint venture. This is in line with their standard business practice, especially for housebuilding where development activity is usually undertaken by a development partner. In the case of Falcon Wharf the site was sold with detailed planning permission to the developer George Wimpey who implemented it with slight alterations as it will be discussed below. Recently, George Wimpey set up a Joint Venture called Falcon Wharf Ltd with the Royal Bank of Scotland and sold to it (essentially to the RBS) for £31.7 million the land and associated development works for Falcon Wharf.

Figure 7.5: Aerial photograph of Falcon Wharf and the surrounding area



Source: Google Earth

The following chronology summarises the different phases the site has gone through during the last 2 decades. In similar fashion to Chelsea Bridge Wharf this site was also partially in use prior to its acquisition by Frogmore and various applications for planning permission had been accepted but always faced difficulties with planning conditions or the s.106 agreement. This site is also on a prime location, situated within a fabric of active warehousing and light industrial uses that are now enmeshed with new luxury residential developments. In this particular case a heliport is also present and as any visitor to the area can say, it is also very intensively used.

Table 7.4: Brief historical overview of Falcon Wharf site

Year	Use	Owner	Application for	Decision
1986	Storage	Wandsworth Borough Council	Public Riverside Walkway	Deemed p.p.
1996	Storage	Unknown	Alteration to B1 uses (offices).	Conditional P.P.
1998			Extensions and alterations	Grant p.p subject to legal agreement.
2000	Vehicle maintenance, disused dock	Harbour Land/ Frogmore Estates Plc	Mixed use multi-storey scheme including residential, hotel/offices, restaurant.	Granted planning permission.
2002		George Wimpey	Modified mixed use multi-storey scheme including residential, hotel/offices, restaurant.	

The original proposals from 'Harbour Land Ltd' envisaged a slightly smaller development with 119 dwellings, 14 (12%) of which would be affordable, a swimming pool for the hotel, no alternative office use, a smaller restaurant and 207 parking spaces and extended the riverwalk over the water whilst making the dock unusable. Following consultation the scheme increased in height and size but alterations occurred in its relationship to the river as well. The riverwalk was redesigned and will be built over land, the dock remained usable and became better integrated into the site. George Wimpey bought the site from Harbour Land with Planning Permission in 2002 and applied for alterations to the permission in order to make the development more profitable by tuning it better to market conditions at the time.

The LPA was not engaged at an early stage and this new application was faced with significant difficulties and delays. This was because the affordable housing requirement had changed between the date planning permission was granted

to Frogmore and the date George Wimpey applied for the alterations. Finally, the developer and the LPA agreed that affordable housing would be provided off site but this only happened after the application attracted the attention of the Mayor of London.

Table 7.5: The change in the use mix following planning permission in Falcon Wharf

	Flats (aff/ble)	Live- work units	Density h.r.p.h.	Restaurant m2	1- bed	2- bed	3- bed	Other	Hotel	Office m2
Consultation	119 (14)		240							-
Orig. Appl. 2000										
Approved P.P. 2000	149 (35)	8	300	668	65	44	10	30	87 beds	4171 (altern.)
Situation 2001	145 (21+14off site)	8	292	668	65	44	10	26	87 beds	4171 (altern.)
Situation 2003	145 (21+14off site)	-	292	746	87	47	10	1	-	3048

There was some community consultation since there may not be a significant local residential community in the area but a significant number of small business interests, from the 33 neighbours only 3 objections were received originally, 2 more after the final revisions. The Heliport was the most vociferous opposer to this development mainly because of concerns about the effects that a high rise tower would have on air navigation and landing procedures because of the changes in wind circulation, Falcon Wharf is a substantial building, the plot ratio is 4:1 and the building will be 55 meters high (see Figure 7.6 and 7.7).

Figure 7.6: Artist's impression of the development and its surroundings



Source: George Wimpey City brochure

The site was originally owned by the London Borough of Wandsworth but is located on a strip that witnessed a lot of speculative activity during the last 10 years. Most of the waterfront to the north and south of the site has been or is currently being developed for residential/ mixed use schemes. It was however hardly a commonsense 'brownfield' site as it was actively used by more than one users for more than one uses, so it was closer to our definition, provided in Chapter 2.

Figure 7.7: The development under construction



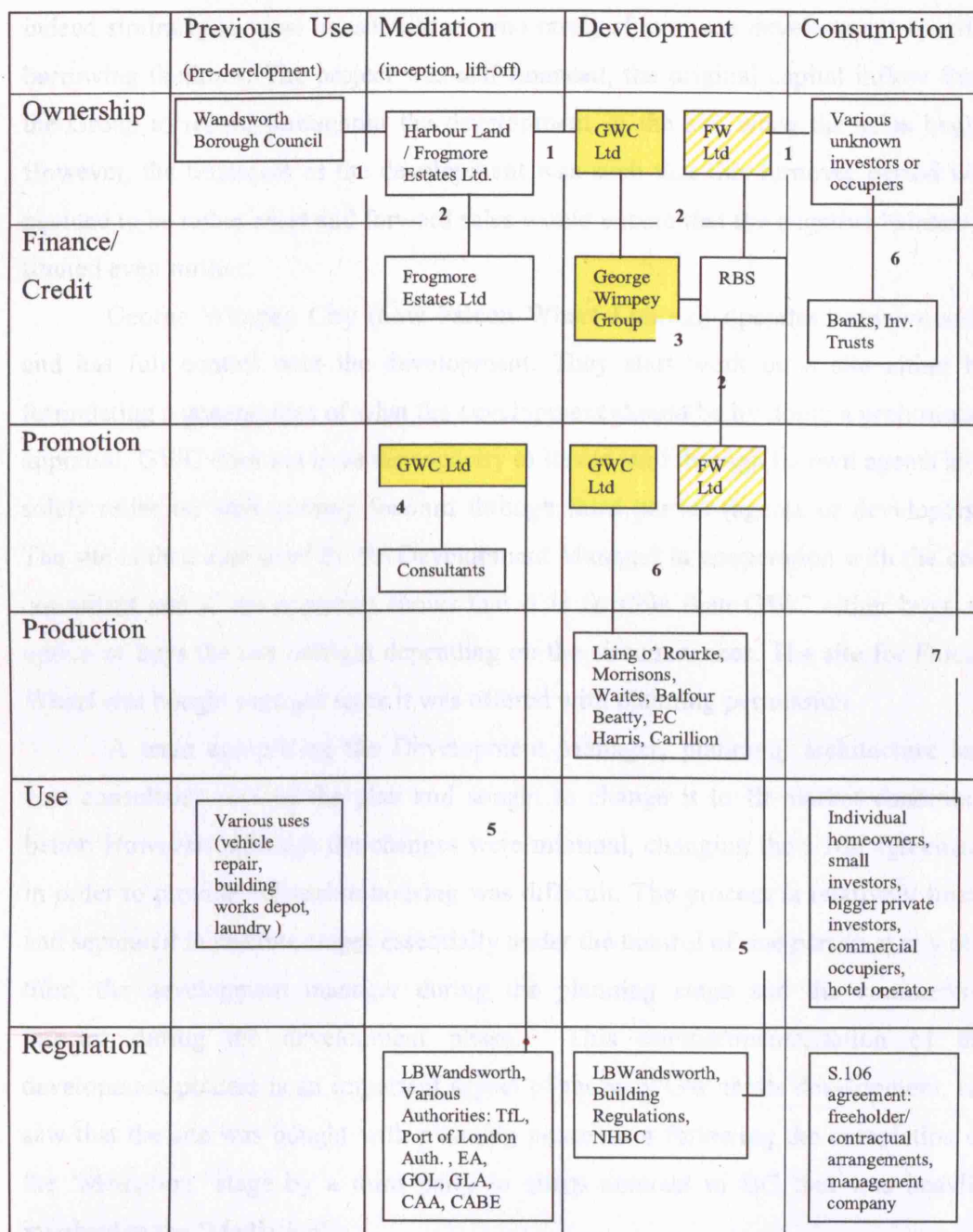
Source: Author

When we apply the 'Functions and phases' matrix in the case of this development we find that the most interesting feature in terms of the way the different functions and phases are articulated is the separation between the phases of Mediation and Development. Indeed Harbour Land handled the mediation phase and profited from it but this separation into discrete stages allowed George Wimpey City to be involved in the Development phase in terms of ownership and finance provision with the architects, Burland TM, bridging the gap between mediation and development. All other aspects of the development process are handled by agents that lie outside George Wimpey City.

This indicates that in essence George Wimpey City acts as an investor that allocates a certain amount of capital on their investment and outsources most other functions in an effort to make a return as quickly as possible based on a relatively fixed development proposal. This is in contrast to the direct involvement of Berkeley in most phases and functions, constantly striving to add value to the development by

a series of modifications and alterations. In our view this is the crucial difference between a 'Regenerator' and a housebuilder.

Table 7.6: Functions, phases and interactions in the development process



The functions phases and interactions shown in the figure above are as follows: (1) Standard freehold sale (2) Internal capital financing, (3) Asset purchase from RBS (4) Standard consultancy arrangements (5) Standard planning or other

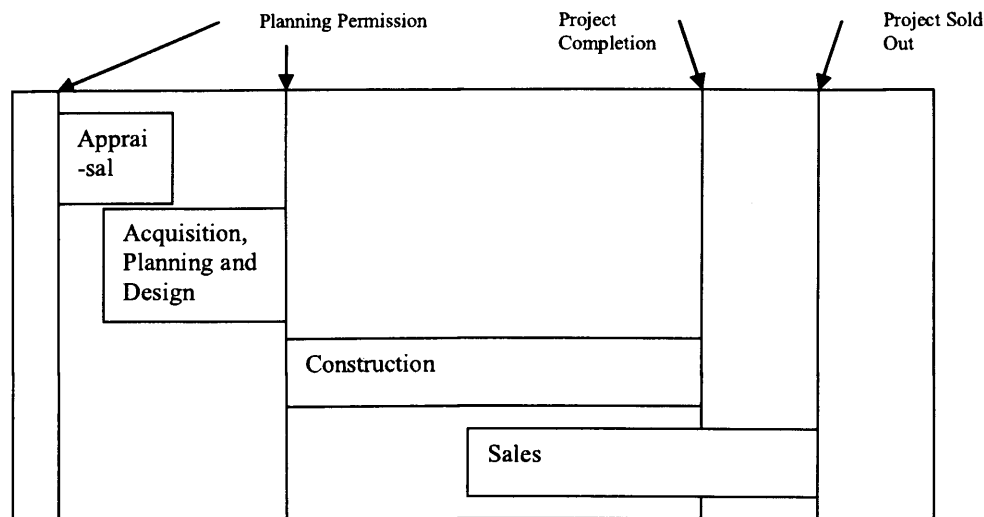
permissions, (6) Standard JCT contracts (6) Standard bank financing or other sources suitable for small investors or owner occupiers (7) Standard rental agreements.

Prior to the recent formation of the Joint Venture, GWC had an overdraft facility with the Group similarly to Berkeley Homes/Chelsea Bridge Wharf and indeed similarly to most housebuilders who rarely if ever use development specific borrowing facilities. The project was self-financed, the original capital inflow from the Group to repaid throughout the development of the site when the sales begin. However, the timescale of the development was such that this turnover period was planned to be rather short and forward sales would ensure that the negative balance is limited even further.

George Wimpey City (now Falcon Wharf Limited) operates autonomously and has full control over the development. They start work on a site either by formulating a general idea of what the development should be by doing a preliminary appraisal. GWC does not have the capacity to locate land through its own agents so it solely relies on sites coming forward through third parties (agents or developers). The site is then appraised by the Development Manager in cooperation with the cost consultant and if the appraisal shows that it is feasible then GWC either buys an option or buys the site outright depending on the circumstances. The site for Falcon Wharf was bought outright since it was offered with planning permission.

A team comprising the Development Manager, planning, architecture and cost consultants revised the plan and sought to change it to fit market conditions better. However, although the changes were minimal, changing the s.106 agreement in order to provide affordable housing was difficult. The process is relatively linear and separated in discrete stages essentially under the control of one person at any one time, the development manager during the planning stage and the commercial director during the development phase. This compartmentalisation of the development process is an important aspect of the way GW treats development, we saw that the site was bought with planning permission following the completion of the 'Mediation' stage by a third party in sharp contrast to BG that was heavily involved in the 'Mediation'.

Figure 7.8: The distinct stages of development in Falcon Wharf



The development manager organises the process and makes key decisions about the site, sometimes in cooperation with other departments up to the point where development begins. Thereafter the Development Manager hands over to the Commercial Director who has responsibility over sales and the Project Director who has responsibility over construction.

This particular site was 'brought' to GWC with planning permission through personal contacts which are related to the existing links between Carillion, Frogmore/Harbour Land and GWC. This meant that the profit potential was lower because the added value of gaining planning permission was now included in the price of land. The design for the site was re-worked with the original Architect's help in order to maximise development potential, this again is the usual GWC approach for sites which are bought with planning permission. This particular site however was given special attention since it is a prime waterfront site and therefore GWC identified its potential to be a flagship project. To achieve those characteristics the product had to undergo some modifications that would make it more attractive to the potential GWC clients that would aspire to the lifestyle the development represents. The uses originally envisaged also had to be changed, the content of the commercial element in particular. Therefore the Hotel gave its place to a bigger restaurant and a bigger office element (see table 7.5)

Within GWC the Development Manager acted as the coordinator of the process, bringing together the company experts and occasionally the consultants in

order to find how they can make the most of the site. Due to the restrictions imposed by the existing design, the short timeframe, the nature of the D&B contractual arrangement and the compartmentalisation of the development process this attempt did not result in radical transformations other than the change in the commercial element.

The marketing strategy for this development also depends on selling a 'lifestyle', capitalising on the vibrancy and vitality of nearby Battersea. The development even has its own website (www.falconwharf.co.uk) which amongst other things includes a list of fancy restaurants in the vicinity of the development.

Still, changes of the same magnitude and of the same nature as these that took place in Chelsea Bridge Wharf are impossible because of the procurement method (D&B) which is less flexible in terms of permissible quantitative and qualitative changes in the development once construction has begun. There is also very limited possibility for customisation based on customer feedback and forward sales. This flexibility however is not necessary in this approach to development since long-term involvement is seen negatively as the development has to finish as soon as possible after starting.

This approach, emphasising compartmentalisation and speed of delivery of the whole development in one phase has another interesting implication. If this approach is followed in big mixed use development schemes have to be developed in discrete stages but in one phase from start to finish. As the size of the development gets bigger the uncertainties and risks surrounding all aspects of the development increase. Thus, although it might be technically possible to produce a development of 800 units provided that enough capital is available, the market risk inherent in successfully developing and selling so many units in a short period of time makes it an endeavour difficult to undertake. As our interviews confirmed, GWC started off with developments sized between 50-70 units and gradually moved to developments up to 150 units. This size seems to be a 'natural' barrier fitting the 'risk profile' that the developer sees as manageable under current market conditions.

The recent Joint Venture with RBS not only boosted the profits of the Group but also allowed it to spread the financial risk of the development. However, since this is a very recent event and took place after our interviews were completed it was not possible to explore further the implications that this move has for the

development process model that the Group applies in PDL projects. A similar JV with Barclays Bank was set up for another similar development, GN Tower.

7.4 Conclusions

The comparison of the way these two projects were developed revealed quite a few similarities but also uncovered some key differences between the two companies. Berkeley, in the form of Chelsea Bridge Wharf Ltd has developed a development method that capitalises on change by implementing an approach to development that emphasises flexibility. The result is that the project at Chelsea Bridge Wharf has undergone significant alterations throughout its lifetime and each phase of its development is much better tuned to the needs of the market, thus it can sell quicker and at a premium. Even when the dwellings are sold on and therefore the developer disengages, provisions are made that the scheme remains under a united Freehold therefore putting in place the conditions for a high standard property maintenance and management service.

This flexible approach does not mean that the Group relinquishes control, the process of mediation and development remain under the strict control of the company in its various guises. The scale of the whole development is also much larger than Falcon Wharf since the project is not treated as a 'one-off' but as a constantly evolving process which yields different outcomes at each phase. CBW is a characteristic mixed use high density development project like many others that the Group undertakes, as a matter of fact its size is significantly smaller compared to other projects which can be twice as big. Our findings give us ground to believe that because of the way this model handles the risks and uncertainties associated with scale in development projects, the overall size of a long-term development project managed this way can be far bigger than the average for the industry.

Berkeley's approach is dealing with the uncertainties of development by increasing the quantity and flow of information both internally but also between the organisation and the external environment at all stages of development. Furthermore, it undertakes a huge coordination effort in order to allow these phases to overlap and thus benefit from the increased synergies that these overlaps allow.

If successful, this approach, maximises the ability of the company to respond to market fluctuations by modifying the mix of uses, the style, type and size of the

apartments or the specifications of whatever space it is creating. At the same time, phasing allows parts of the development to be occupied whilst other parts are still under construction. The success of the development project if this approach is followed depends more on the successful management and coordination of the project and much less on market conditions or fluctuations in the business environment. However, the practice of modifying a project from phase to phase in order to suit market conditions better might actually create an issue of community participation for the surrounding residents and users who were consulted at the early days of the project. The same applies for the tenants who move in at later stages and for the LPA who may discover that the end project will not be what they expected or wanted it to be.

On the other hand George Wimpey City with Falcon Wharf is tapping into exactly the same market of high-end dwellings in mixed use developments attuned to a luxurious lifestyle. Its marketing pitch is very similar to that of Berkeley. However, it is not capable or willing to insert similar levels of flexibility into the process. Therefore the process of development is treated in discrete stages with minimal overlap and limited information feedback loops. George Wimpy only engaged with the development stage in this instance, with limited involvement in the Mediation and Consumption stages. Emphasis is put on minimising exposure to uncertainty and risk within each stage by pursuing the fast delivery of the outputs of each stage so that the next stage can proceed. This latter attitude was the cause of conflict with the LPA and still puts the development at risk since it essentially went ahead without a finalised s.106 agreement.

This approach also has certain inherent limitations that do not allow George Wimpey City to undertake schemes of bigger scale and complexity. A project of around 150 units, although quite significant in size by industry standards, is however much smaller than the projects undertaken by the Berkeley Group. This is because if a bigger project is carried out under a D&B contract then the company will be faced with a series of uncertainties and risks which may even threaten its existence if the project is not completed and sold out fast enough.

CHAPTER 8

Conclusions

8.1 Introduction

Housebuilding in the UK is undergoing an era of change in many respects. What are more important for this research are the transformations occurring in housebuilding affected by policy changes generating new risks and uncertainties. These changes promote urban living and new types of urban environments, in the form of denser mixed use developments of higher environmental standards and a greater social mix.

Although these changes have their roots in globalised discourses (i.e sustainability) and international flows of capital, a specific UK planning policy used to promote the new agenda was the change in the type of land 'released' by the planning system for housebuilding. This goal was made operational by the 'sequential approach' and the target of 60% new dwellings to be built on PDL. It is widely recognised in management and business literature that the regulatory environment in which a firm operates is of great importance. In the case of housebuilding, government regulation as expressed through the planning system's control over the release of developable land is of the utmost importance. As the theoretical approaches we examined in sections 3.12 and 3.13 indicated, the changes in the regulatory environment can be linked to strategic responses at the firm level. These strategic responses have meant that the way housebuilders conduct their business transformed, but not necessarily in the same direction or at the same speed throughout the sector.

In chapter 4 it was argued that the observable is an effect, a manifestation of deeper causal mechanisms. The analysis of aggregate data on industry output and type of land used showed that changes are occurring in the types of built environments produced. The strategic level decisions that directed housebuilding firms were also analysed and it was shown that the way firms are managing development functions has to change in order to accommodate for the changes in its business environment. Two major housebuilding firms and two of their more representative developments were used as an example of the way housebuilders have

responded to their new environment. These two case studies demonstrate the mechanisms producing specific effects at the firm level and therefore potentially at the industry output and as a result on Britain's newly built urban environments.

8.2 Revisiting our problematic

Much of the current debate about the UK housing market neglects factors like the changes in planning policy we described in this research. It focuses, quite rightly, on rapid household growth, the government's subsidies to buyers which have an inflationary effect, the housebuilder's cautious approach to building more dwellings (i.e a relatively price inelastic supply) and on the restrictions on non-PDL land supply which allegedly strangle the industry.

One has to understand however that many of those factors were in place and were affecting the market exactly in the same way during the last 50 years. The Barker review of housing supply is the latest research document to assess all those factors and indeed to stress the complexity of a phenomenon that requires an explanation deeper than putting the blame on a seemingly stubborn refusal by housebuilders to respond to price signals by increasing supply. As will be elaborated in the discussion in the following paragraphs, this research showed that housebuilders are indeed responsive to changes in their business environment and especially to qualitative changes in land supply. Therefore, although this research does not answer the wider questions that instigated the Barker review, it leads towards a better understanding of how the housebuilding sector operates and how the built environment in the UK is produced.

The global discourse framing the significant policy effects at the UK level is the sustainability discourse. Although it emerged as a concept in the early 70s, sustainability has an increasing effect on British urban policy from the mid 1990s onwards. Thereafter, UK governments ardently favour city revitalisation and the return to urban living as opposed to suburban or rural lifestyles. These new ideals for urban living have been consolidated through a series of documents the most important of which arguably 'Sustainable Communities: Building for the Future'. This document epitomises the new approach and makes steps towards its implementation, either by establishing a set of principles that should guide future growth or by addressing the funding issues that accompany this effort.

As Murdoch (2004) has argued in this sustainability discourse 'greenfields' and 'brownfields' have been counterposed in a dialectical way, as polar extremes, examples of what is good and what is not. The 'clean' and 'natural' greenfields became sacred. Their well-entrenched sanctity was reaffirmed through their juxtaposition against the equally ill-defined category of 'contaminated' and 'derelict' brownfields, positioned at the opposite extreme.

In a society where the 'rural idyll' epitomises the ideal way of living since the Victorian times it should not come as a surprise that any attempt to divert the course of urban development from an expansionary paradigm towards an 'urban renaissance' would be accompanied by strong symbolical references to the greenfields and the brownfields. By the same token however, brownfields have become the only morally acceptable option for future development to be directed into. If greenfields are 'good' and therefore worthy of preservation then brownfields are 'bad' and need to be fixed. Both Conservatives and Labour, have subscribed to this agenda and pursued it consistently.

The planning system, through the control of the release of land for development, was used as a mechanism to promote this agenda, admittedly within a favourable market context which might have facilitated that switch. The Conservatives first set the target for 50% of new dwellings to be built on PDL and Labour increased it to 60% and introduced the sequential approach and higher density requirements. Documents like the Urban Task Force report and 'Sustainable Communities' set the wider aspirational goals for mixed use, socially equitable and environmentally friendly urban environments. At the same time, global capital flows created an environment conducive to the internationalisation of investment into property. The effects of this 'push' although significant in accommodating or even facilitating policy shifts cannot be disentangled from the effects of policy or the effects they had on policy formulation.

The combination of strategic policy documents and more instrumental policy measures within a conducive market environment radically changed the landscape as to the type of development Local Planning Authorities should grant permission to as well as its location. This in turn affected the types of built environments the development industry, and therefore housebuilders, were called upon to produce. In the current UK context this intervention through the planning system is probably the

only ideologically acceptable way through which government can actually intervene in order to direct private business interests.

Since the late 19th century, with the encouragement of the state, housing development took the form of suburban expansion into land of the urban periphery that was previously used for other purposes, usually agriculture, or not at all. It seems that since then various attempts have been made to achieve a better balance and especially after the war a lot of effort has been put on inner city revitalisation and controlled urban growth.

However, almost a century after the first LCC suburban housing estate was built, this turn towards the suburbs still structures the way cities are built and consequently the way a large, proportion of the population lives and experiences the built environment. To radically challenge these well-entrenched notions of how and where one should live is a task that requires deep cultural changes in favour of denser forms of urban living. The government has to pursue it relentlessly, the people have to internalise it in their consumer preferences and provision and production of the built environment have to be restructured in order to create such environments. Apparently then, at some point the 'greenfields vs brownfields' debate became counterproductive in terms of serving these policy goals and the term Previously Developed Land entered the practitioners' vocabulary. PDL is a much more accurate reflection of the reality of urban sites but at the same time it is a broad category and can cover all types of land where some sort of human activity involving development has taken place.

8.3 Housebuilder practices and the different ways of approaching development

Whereas 'Sustainable Communities' set a broad framework of directions and ideals for society to strive for, the brownfields vs greenfields debate has a much more practical significance given the generic characteristics of the housebuilding industry. In abstract terms the housebuilding industry comprises organisations that are striving to make a profit through the transformation of space from one configuration of uses and users to another, dwellings in this case. From a 'production process' point of view this is an industry whose 'raw material' is land (previously used or unused) and its output is dwellings. Assuming that the demand is there, if one

wants to affect change at the level of industry therefore, one very effective way to do it is to affect the input of land.

The type of industry output, ie the type of dwellings produced, is linked to the type of input i.e the type of land used. We have shown that such a link exists. As more and more PDL is used for housebuilding so is the proportion of flats increasing as a percentage of the total number of dwellings produced. Areas like the South West, where still relatively low amounts of PDL are used, demonstrate the lowest proportion of flats built as a percentage of total new dwelling construction. In London on the other hand new housebuilding is almost exclusively on PDL and housebuilders are mainly producing flats.

A major element of any housebuilder's strategy is the preoccupation with market volatility and the housebuilder's inability to predict which way the market will turn next. As Ball (1983) has eloquently discussed, this volatility forces housebuilding firms to adopt production methods that would allow them to stop production and exit the market very quickly if the market takes a downwards trend and at the same time would allow them to speed up the production cycle if the market is booming.

In a business environment where the final product is a mono-functional housing development, a sensible housebuilding firm would subcontract their labour force, maintain minimal investment on capital assets, keep a landbank but regulate the flow of land in the development pipeline. The emphasis is on speed and on the ability to stop everything and get out of the market during a market crash, then get back in when things get better. This is what Berkeley did so successfully in 1988/89 and indeed this is what George Wimpey follows today.

This preoccupation with market volatility has not changed today but the requirements for the final product now call for a mixed-use multifunctional urban environment on PDL. This is both a blessing and a curse, an opportunity and a threat. It is a threat because mixed use PDL schemes are more complicated to plan, design, build and manage than a single use scheme on non PDL. This means that a prolonged and thorough engagement of the developer with the development is necessary. At the same time it is an opportunity because mixed use schemes allow for diversification to more than one property markets. In that sense a mixed use scheme can be seen as a portfolio diversification opportunity, where mix of the basket of uses is adjusted in order to mitigate risks inherent in each market where the individual asset held is traded.

The two case studies indicate two different strategic approaches to managing market risk and the uncertainties inherent to property development more generally. George Wimpey treats non PDL development as a niche market that calls for a special subsidiary able to exploit it. The same risk management model applies here that applies in non PDL development: emphasis is on speed in getting planning permission, building the development as fast as possible, selling and moving on to the next project. The process is broken down temporally in discrete phases starting almost in sequence of one another.

The site at Falcon Wharf was located by a developer specialising in profiting from getting planning permission then selling on, GWC bought it with planning permission, modified it in order to increase the profit margins and began construction without a s.106 agreement based on a 'Design and Build' contract which treats the development as one project, to be built in one phase from start to finish. If the market begins to turn down the exit strategy of the developer would require either to stop construction half way or finish and sell at a loss. In the extreme case this niche market collapses, the specialised business unit would have to be closed down but this in theory would leave the rest of the business unaffected, ready to do whatever they are doing in other market niches and other places. It turned out however, that this niche market is doing well and is attracting big investors, like the RBS, thus generating substantial amounts of capital that help improve the Group's cash flow. Wider market risks are mitigated through geographical differentiation.

Berkeley on the other hand manages the same uncertainties by approaching development flexibly and engages long term with a development site. Market volatility is therefore managed or even exploited through diversification and phasing within the development project. The type of uses and the composition of the development (types of apartments built, square meters of each use) is under almost constant adjustment. This adjustment is based on what the multiskilled teams managing the project (and the development manager leading them) believe that the market wants at the time when construction in each phase of the development begins. Crucial to this approach is the information gathered through forward sales on the specific development project and through various departments of the company. This flexibility requires an equally continuous renegotiation of the planning permission which in turn requires a very good working relation with the Local Planning Authority.

In case of a market downturn, the first response could be to change the mix of uses or products in favour of another type of product (studio flats instead of 2 bedroom flats) or another market (leisure instead of housing). More radically, in case the company would be facing a simultaneous downturn in all markets the development of any further phase could be frozen without significant effects in the cash flow because of the widespread forward selling practices which generate significant secure cash flows.

As far as the production element is concerned, housebuilding as ‘transformation of space’ is more than a mere production of a batch of dwellings. It involves a significant construction element but it is a structured process, enshrined in institutions. This link between type of land used and type of output accords to our basic theoretical model which distinguished between the intertwined elements comprising a structure of provision: land, money, labour and knowledge. Changes in land provision are fundamentally changing the configuration of that structure and inevitably to the production element ‘nested’ in it, the ‘production configuration’.

With regard to the provision element, this and other research showed that the switch from non PDL to PDL causes housebuilders to:

- Restructure a key element of their competitive strategy and their profitability, their landbank, towards smaller sizes, with less years’ worth of land and higher turnover of plots. ‘Strategic landbanking’ of non PDL sites awaiting their turn to enter the development pipeline has to be abandoned. Restructuring their huge non PDL landbanks also carries a big opportunity cost since the existing landbanks have to be treated as ‘sunk costs’, investments with uncertain returns to say the least.
- Re-organise the land purchase departments inside the firm that link housebuilders with the new urban PDL land markets and develop new networks of contacts and agents to cover new areas of interest away from the urban periphery. This reorganisation might be a very difficult thing to achieve in the short term and it incurs substantial costs to housebuilders. In the case study covered in this research, Berkeley has done it but George Wimpey City does not have the capacity to actively seek suitable land.
- Rethink the way they manage the development process. The traditional sequential approach is challenged by approaches stressing flexibility, mixed

uses, phasing and contemporality, in what could be called the 'development management' approach.

Focusing on the construction element of housing development is only part of the picture. Planning policy promotes higher densities albeit for all sorts of reasons like liveability and public transport viability. This means that for traditionally built housing developments on urban PDL to be profitable 'affordable housing' quotas have to be and/or quality and building standards have to be compromised. The problem is that higher densities mean higher construction costs as well although the traditional housebuilding methods and technologies that most housebuilders use (TF, bricks, load bearing walls etc.) allow for buildings of up to 6 storeys to be built. In fact the costs of high density are so much higher that whereas in non PDL housing the cost of land comprises up to 50% of the total cost, in PDL housing this is closer to 10%.

Interestingly, for buildings above 6 storeys there needs to be a 'transition' into different technologies and materials (structural concrete, curtain walling etc.) whose use makes much more economic sense in high-rise blocks, a fact that has not escaped commercial property developers building skyscrapers. This technological transition requires a big investment in know-how and a significant restructuring of the supply chain of the producers. Faced with this reality, the housebuilders we examined have given at least two apparently diverse responses:

- i) they have developed new competencies, new ways of managing the risks associated with the development process, incorporating forward selling info about the market (i.e Berkeley Group)
- ii) they have created specialist business units that are focusing on the market for upmarket high rise apartment blocks on prime locations. Development is treated in stages, same as in non PDL. The rest of the organisation continues to work within the established paradigm and tries to make the most of it even by building low density PDL and non PDL developments.

These responses however are the outcome of strategic choices on behalf of the housebuilders. Choice (i) reflects an assumption that government policy is going to remain unchanged as a general direction in the long run, i.e for a time period that justifies a structural re-orientation of the whole organisation. In the case examined this transition has been gradual but steady and took about a decade to complete. Non

PDL housebuilding, and the capacity to perform it have been almost totally abandoned. Emphasis is put on future PDL growth areas and sectors like affordable housing where the latent demand is huge. Choice (ii) reflects a more cautious approach. The organisation believes that more traditional approaches can cope with the new environment while at the same time cautious steps are taken towards a new direction. Therefore, the main energies of the senior management are focused on efficiency gains and restructuring which aims at rationalisation of the existing business.

At the same time they diversify in the US and strive to cover all types of markets in all of the UK. They recognise that the changing environment requires a change of attitudes but the approach they take is measured although they are indeed researching and exploring potential responses. This approach however has also kept them at the top and only time can tell whether and how the long term future of the company will be affected.

8.4 Re examining the original hypotheses

It is worth remembering here what the three hypotheses we set out to examine were and to see to what extent have they been proved or disproved as well as which new areas of interest have emerged and which directions future research could fruitfully pursue.

The first hypothesis that *'Housebuilding on PDL is characterized by specific institutional structures in the form of strategies, skills, norms, routines and actor configurations'* has been shown to be accurate but it is difficult to generalize this solely based on the findings of this research. However, we have identified two distinct institutional structures between Berkeley and George Wimpey with the first company maintaining much more direct control over the process in the form of a function of coordination between overlapping phases, what we called the 'development management' approach. The second company is following the more traditional separation of the development process into distinct stages that follow each other in close succession or with minimal overlap.

This takes us to the second hypothesis that *"Housebuilding companies (re)organize the housebuilding process as part of their competitive strategies in order to gain competitive advantage. As an increasing proportion of competitors will*

reposition themselves the changes will reflect on the industry output.". Indeed we have seen how the industry output has been changing, slowly at first but much faster thereafter as housebuilders begin to develop know-how in PDL high density redevelopment. Berkeley is witnessing organic growth as a result of their adaptation whereas George Wimpey is static in terms of output but their efficiency gains allow them to remain on the top in terms of market share via M&As. These also allow them to acquire land/assets and know-how which they can use to serve particular market niches in specific geographical regions.

In the case of Berkeley it is quite clear that the company underwent massive but gradual reorganization as a part of a strategy that aimed at transforming it from a high-end suburban housebuilder to a luxury 'inner city regenerator'. The main preoccupation behind this reorganization of the development process has to do with tackling uncertainty and managing the risks involved. George Wimpey on the other hand approached the changes in government policy with caution and responded with caution. Their approach to uncertainty is based on the more tried and tested recipes of geographical and market segment diversification and business unit specialization.

As far as the causes of those changes are concerned, statistical and other quantitative analysis, complemented by qualitative observation has shown that indeed *"The recent changes in government policy regarding land provision are contributing to the change that is now occurring in the way housing is produced"*. This conclusion reaffirms management literature arguing that an important factor affecting business behaviour is government policy and the emanating regulation. It is interesting however to note how planning policy has become a way of affecting housing provision in the UK thus serving social goals that the planning system was not set up to serve.

A most significant finding of this thesis was the discovery that a new practice is emerging in the housebuilding sector. This approach manages the risks associated with development in a new way. Information from forward selling and sales in other departments are used as guides for future demand. This information is then translated into dwelling production through a flexible construction management process based on flexible construction methods and permitted by the good rapport developed with the Local Planning Authority.

8.5 Theoretical implications and future research directions

This research was initially preoccupied with a perceived lack of understanding about the current problematics surrounding PDL housebuilding. In particular we were puzzled by the apparent dead end that existing research had reached in the effort to explain a series of interrelated phenomena culminating in an apparent inability of new dwelling supply to respond to the combined 'push' of very strong price signals and a combination of policy incentives and disincentives.

Although various answers were offered in order to explain this, none seemed satisfactory. Indeed, the main theme underlying all these explanations, elaborated upon in Chapters 1 and 2, is a comparison between an abstract theoretical conception of what should be happening and what is happening in reality. Crucially, this approach assumes that there is something wrong with reality if reality does not adhere to a specific theoretical preconception about how things should be. Hence a long list of barriers and obstacles emerges apportioning blame either to individual actors like the housebuilders and the policy makers or even to institutions like the planning system.

Instead of trying to fit the observable into the theory this research followed a different approach. We accepted that the actors involved in housing development are responsive and reflexive and therefore a change in their business environment would have an effect on their behaviour, even more so if it was of strategic importance, as a change in the provision of land is for housebuilding. Therefore, this research did not ask why housebuilders are not responding to the forceful signals of their environment but instead tried to untangle the ways they have responded and the implications of that response.

In order to do this we used insights from institutionalism and evolutionary approaches. Both these lines of thinking maintain that the interaction of a firm with the other actors forming or affecting its environment is essentially guided by the need for survival and is expressed through a strategic realignment that is institutionalized in the norms, rules and routines forming the core competencies of the firm.

As we have shown, both firms under examination responded to the changes in the policy regime affecting their business. The substance of what they did is very different but they went about it through processes of institutionalization, following their realization of the change and its consequences. They both modified their

internal organization, the range of products offered and their marketing strategies but at a scale and scope that differs between them.

This result accords with the expectations of the evolutionary approaches and is a remarkable conclusion since the Berkeley group took a much more radical and thus 'risky' approach if seen under the lens of conventional housebuilding. It radically transformed itself from a small suburban high end developer to a major housebuilder engaging in long term, mixed use schemes of high managerial complexity. This is opposed to the approach of GW that emphasizes geographical and market segment diversification as a way to deal with the uncertainties of housebuilding.

However, the BG approach is not as risky as it seems, instead it is a well calculated and orchestrated exercise in capacity building that preempted the changes in the business environment. GW is much more reactive and therefore follows change instead of initiating it. We can only make assumptions whether what is happening with these two firms is characteristic of a wider industry trend. An examination of the extent to which these transformations have affected the whole sector would be an interesting route to explore in the future as a definite question can not be given from this research.

Another implication in terms of theory is the realisation that an approach purely based on economic arguments can only highlight certain aspects of the complex interrelationships between planning policy and the housebuilding industry. Research of this type was feeding extreme comments relating to the capacity of housebuilders to be in business and led to uncritical calls to abolish the planning system³⁵. The combination of quantitative and qualitative research used here, which emphasised the institutional aspects of housing development and used an evolutionary rationale has managed to untangle causal links between policy change on the one hand and the reaction of the housebuilding industry on the other.

This does not mean that an examination of planning and housebuilding based on a mainstream economic approach should not be pursued. Findings such as the inelastic housing supply or the trend towards densification do not run counter to our approach. What was missing from those approaches was a qualitative aspect that would try to identify the causal mechanisms behind these findings. For example we can now argue that the supply of housing during the period 1995-2001 was indeed

³⁵ These calls however, rarely take central stage. The latest Barker review of the planning system is recognising the inherent complexity of planning issues and the minimal effect it can have on many issues adversely affecting the UK economy.

inelastic but this was due to housebuilder adaptation to the new policy requirements and the time it took for new developments that accorded to those requirements to reach completion. It would be interesting therefore to explore whether the latest increase in housing production marks a more permanent shift in dwelling supply and how the elasticity of supply has been affected.

Another example is the sharp differentiation of the response of housing supply between metropolitan areas and the rest of the country. In metropolitan areas where restrictions are stringent and the lack of Greenfield land is more pronounced the housebuilding industry has doubled or trebled production. Our research shows that this may be due to the emergence of actors whose practices are adapted to the new policy regime compared to those housebuilders who cannot or do not wish to make the transition from greenfields to brownfields.

Therefore, in terms of future research, this thesis has opened up a very fruitful chapter. It poses the question whether the practices of the Berkeley Group are indeed an industry-wide trend and if that is the case, how successful are these other companies. The suspicion is that Barratts probably follows a similar practice but other smaller developers might also have things to offer in that respect. Also interesting is the examination of what the more traditional housebuilders are doing, especially those specialising in Greenfield development in rural or non-metropolitan areas.

In terms of major housebuilders it would also be worth pursuing research that would aim at determining what their responses are and whether George Wimpey is alone in their adaptive response. Since we argued above that the slump in dwelling production was affected by a transition to a new regime it would be interesting to examine whether other evidence in the form of a historical review of the practices and output of the industry would confirm that. This type of research would also allow us to determine who the new industry leaders are.

What is also interesting is ofcourse the issue of community participation. In the 'development management' approach there is no clear idea from the start about what the development will comprise at the end. Such certainty does not exist throughout the process. This however means that the LPA and local communities are facing difficulties in negotiation any sort of planning gain whereas tenants who move in at the early stages may find themselves in front of unexpected surprises, for better or for worse. The urban environments that are built today on urban PDL sites will

reflect what the market wants at each phase of their development but might have a problem in actually reflecting what the wider needs and aspirations of present and future residents might be, the 'holistic' aspect is lost.

Finally, at a rather more grand scale, it is the belief of the author that it is about time we begun to examine whether the current and much talked about housing crisis, that has been with us for decades now, can solely be attributed to the inadequacies of housebuilders to deliver their product. We showed that they will adapt to their environment in the best way they can and profitability is the best indication they have got about whether they're doing a good job or not. Maybe it is worth examining if the crisis is demand driven as well as affected by the lack of adequate provision of non-market housing.

We do not claim that this research can show what is happening to the industry as a whole. This is a claim difficult to prove in any case and it would require a very different methodology in order to tackle it. Our macro level research shows things are changing in an industry wide scale, indicates how they have changed at the meso level for two important and sizeable firms and shows how dwelling production processes have been affected by those changes. It is quite possible that other firms may have come up with yet another set of responses but this would not invalidate the findings of this research, rather it would strengthen the call for a deeper exploration of the issues that this research highlights.

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APPENDIX A: List of interviewees

Lady Dido Berkeley, Vice Chairman (Tidal), River Thames Society

Tony Carey, Managing Director, St. George

Greame Dodds, Managing Director, George Wimpey City

Paul Garber, Planning Director, George Wimpey UK Ltd

Bob Leuty, Borough Planner, London Borough of Wandsworth

Phil Lyons, ex Land Director, George Wimpey City

Peter Makower, River Thames Society

Rod Martin, Development Manager (for the South of England), George Wimpey City

Bryan Salmon, Planning Executive, Berkeley Group

Kevin Scott, Senior Development Manager, Berkeley Homes/CBW Ltd

Mike Southcombe, Projects Director, George Wimpey City

Not available for comment:

Peter Deakins, Battersea Society

David Lewis, Battersea Society

APPENDIX B: Questionnaires

QUESTION SET 1

Basic Info

- 1) Basic facts about the company (size, turnover, employees, production size).
- 2) In which businesses does the company compete?
- 3) History of Company
- 4) History of product range

Current Strategy

- 1) What does the company identify as its mission?
- 2) What business strategy does the unit follow: What do you set out to do? What is the current strategy? (Porter, 1980:49)(Cost, differentiation, focus).
- 3) History of strategy: When did you first start pursuing that?
- 4) When did they see that something had to change?
- 5) Which processes did lead to the current strategy? How did they come up with it?
- 6) Market surveys beforehand (How do you try to understand market and customer)?
- 7) How will the future of your industry look like? How will it be different from today?
- 8) What are the basic future goals of the firm? Market share, profit etc.
- 9) What are the “major assumptions held about the firm itself and the industry”? (how does it see itself and others: cost cutter, best sales force etc, characterisations/ beliefs)
- 10) How would you define your company? What are the core competencies of the firm? (what it does best/better than any competitor?)
- 11) Which markets do you aim to serve?
- 12) In what product markets do you participate today?
- 13) In what product markets will you participate in the future?
- 14) Which customers are you serving today?
- 15) Which customers will you be serving in the future?
- 16) Through what channels do you reach customers today?
- 17) Through what channels will you reach customers in the future?
- 18) Who are your competitors today?

- 19) Who will be your competitors in the future?
- 20) What is the basis of your competitive advantage today?
- 21) What will the basis of your competitive advantage be in the future?
- 22) Where do your margins come from today?
- 23) Where will your margins come from in the future?
- 24) What are the company's "major strengths and weaknesses"?
- 25) From the following list of skills, resources and requirements which do you believe best reflect your firm?

Sustained capital investment and access to capital,
 intense labour supervision,
 products designed with ease of construction in mind,
 low-cost sales/distribution system,
 tight cost control,
 frequent detailed control reports,
 formalised and structured organisation and responsibilities,
 incentives based on meeting quantitative targets,
 strong marketing abilities,
 new product development,
 creative flair,
 focus/capability on product development,
 reputation for quality and technological leadership,
 long tradition in the industry,
 unique combination of skills drawn from other industries,
 strong cooperation,
 strong coordination of functions between product development and marketing,
 subjective measurement and incentives instead of quantitative measures,
 amenities/workforce policy to attract highly skilled labour,
 highly trained or creative people

- 26) Which of those skills makes you unique today?
- 27) Which of those skills will make you unique in the future?
- 28) Description of leadership style!!

Future Goals-Assumptions

Business unit level :

- 1) Long run profit or Short term profit? Profit or revenue growth? Growth or ability to pay dividends?

- 2) Attitudes towards risk: How does the firm balance profitability, market share, rate of growth and risk level?
- 3) Values/Beliefs: Does it want to be market leader, industry statesman, maverick, technological leader?
- 4) History of following particular strategy that institutionalised into a goal?
- 5) Strongly Held views about product design and quality
- 6) Locational preferences?

Corporate level:

- 1) Current results (sales growth, rate of return etc...)
- 2) Overall goals.
- 3) How does the parent view the b.u.? Is it 'core' or 'periphery'? Is the b.u. considered a growth area or a mature unit?
- 4) Why did the parent enter this business?
- 5) What is the economic relationship between b.u. and parent ? (complementary, share R+D etc.)
- 6) What are the core beliefs of management? (tech leadership etc?)
- 7) Is there a strategy the parent has applied elsewhere and thinks of applying in this b.u.?
- 8) Given the b.u. performance, needs of other units and overall strategy what sorts of targets are there for the b.u.? How important is it in the distribution of corporate resources?
- 9) What are the parent company's diversification plans? Will they create synergies with the b.u.?
- 10) What clues does the organisational structure of the parent company provide about the relative status of the b.u.?
- 11) Rewards and compensations of divisional management.
- 12) Where are the execs recruited from? (inside b.u, parent comp, outside?)
- 13) Do any of the execs of the parent have emotional attachment to b.u.?(coming from there, early inception, bought it etc?)

Assumptions-Beliefs

- 1) Beliefs about relative position (costs, product quality, technological sophistication, profitability etc)

- 2) Are the top managers of parent satisfied with current position?
- 3) Self evaluated strenghts and weaknesses
- 4) What are the key factors for success in the current business climate?(opportunities and threats)
- 5) Strong identification with particular products, policies/approaches (design, quality, location, selling etc).
- 6) Cultural, regional and national differences that affect the way senior managers interpret the world? (i.e where are they from, CV etc)
- 7) Organisational values that are strongly institutionalised (i.e founder beliefs)
- 8) Beliefs about future trends for the product, trends for industry and the effect of industry trends on the products.
- 9) Who do the senior managers view as the stronger competitors? Their strengths, weaknesses and future moves.
- 10) What are the company's biggest failures in the past?
- 11) What are its biggest successes?
- 12) What are its most significant recent moves?(i.e ought divested certain b.u etc)

Govt Policy: Effects on landbanking, strategies etc.

- 1) Quite recently the government begun to pursue a more rigorous BF policy (PPG3, Sust Cities etc.). How did that affect your decisions (if at all)?
- 2) What do you and/or other senior managers view as the major opportunities and threats presented by changes in government policy, social and political change?
- 3) How do changes in government policy affect the industry and your competitors?
- 4) Did these changes make it easier or more difficult for companies to enter or exit the industry?
- 5) Were they beneficial or harmful to your business and why?
- 6) Are these changes affecting the landbanking/land acquisition programmes?
- 7) Have they affected your recruitment practices?(new specialised staff, new skills etc?)
- 8) Did you anticipate the new policy or did it surprise the company?
- 9)What is your opinion about those policy changes?
- 10) What would you change in them?
- 11) Do you believe they will remain in place in the long run?

QUESTION SET 2

Analysing institutional structures for cases. Broad areas of interest (after de Maghalaes, 1996)

- 1) Labour: Main actors. What are the main types of labour occupied? How are they hired? Where from? Salaries above or below average?
- 2) Land: History of ownership with owner's details. How was the land acquired? How much did it cost? What were the planning provisions for the site? What were the main difficulties the development faced?
- 3) Money: Who provides the finance? What are the financing arrangements? Is the development making a loss or a profit? How does profitability and sales compare to other schemes? Where can be any differences between the investment plan and reality attributed?
- 4) Info&Knowledge: Any special skills required from the workforce? Any shortages in specialised technicians? Special construction techniques applied/materials/organisation of construction site? Specialised marketing, finance knowledge?
- 5) Actors and relationships(horizontal): Who were the main actors involved in ownership, finance, promotion, production, use and regulation throughout the different phases (previous use, mediation, development, consumption)? What are the main relationships between them? What is the nature of their involvement? What are the interactions between them? What are the mechanisms through which agents act? What was the role of each agent as perceived by itself and by others? What were the objectives and interests of each agent (for each site)?

QUESTION SET 3

Site specific data (after de Maghalaes, 1996)

- 1) Plot size and total surface of developed areas, nr and type of apartments, mix of uses, type of tenancies per apartment type.
- 2) Allocation of tenancies and types in the building(s).
- 3) History of development with key points and chronology.
- 4) Technological characteristics (similar to 4 in QS2): Construction methods, providers of materials and ready-made parts.
- 5) Budgets and timetables.

Table: Functions, phases and interactions in the development process

	Previous Use (pre-development)	Mediation (inception, lift-off)	Development	Consumption
Ownership	Previous Landowner	Mediating Landowner	Mediating Landowner	
Finance/ Credit		Financier		
Promotion		Promotor		
Production				
Use	Previous User			
Regulation		Local State		

Explanations:

Ownership: Rights over land and buildings

Finance: Provision of capital for activities like land acquisition, site preparation, construction, purchase of property, maintenance

Promotion: Site assembly, application for legal licences and permissions, commissioning and supervision of projects/works, marketing to buyers and users.

Production: construction activity

Use: Use of land and buildings under owner occupancy, or lease or any other arrangement

Regulation: development control through rules and regulations