



# Mapping out the regulatory environment and its interaction with land and property markets<sup>☆</sup>

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## ABSTRACT

The purpose of this paper is to explain how the regulatory environment created by planning and building regulations interacts with land and property markets. Since this regulatory environment operates as a form of intervention within property markets in general and the development process in particular, it is essential first to understand the nature, structure and operation of land and property markets. These are covered in the first section. The second section identifies the aims and components of the planning system and building regulations. From this basis, four broad types of policy intervention are reviewed in the third section. These cover policies that seek to shape, regulate or stimulate market activity, and those that aim to build state or market capacity to produce desired outcomes. The final section uses the private residential development process as a case study to explore the extent to which state intervention can influence producer–consumer relationships in one important market sector. The paper argues that effective intervention in land and property markets requires the creation of a broad range of policy tools and their appropriate deployment to suit particular market circumstances.

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## 1. Land and property markets

A market exists when buyers and sellers involved in the production and consumption of some commodity come together to undertake transactions. Some markets have a clearly identifiable location. In contrast, property rights are exchanged through informal and decentralised networks. Land and property markets are thus socially constructed through relationships, organisations, rules, cultures and ways of thinking. What is more, there is no single market, but rather a series of linked submarkets. Each may have its own routines and procedures alongside its distinctive relations with other institutions. There are three main ways in which such submarkets can be defined: geographically, sectorally and by motive of acquisition.

Geographically, submarkets exist both within and between particular locations. Although exactly the same three-bedroom house, for example, may be produced by the same builder in London and Newcastle, it is likely to sell at a different price in each city and thereafter to experience a different annual change in its value. Sectorally, the five traditional market sectors—agricultural, residential, retail, office and industrial—have more recently been joined by two newcomers: business space and leisure. However,

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despite the importance of geographical and sectoral submarkets in other policy arenas, subdivision by motive of acquisition is more relevant to this paper.

This is because the distinction between use, development and investment as motives for property acquisition is crucial to understanding the likely property response to policy initiatives. The user rents or buys space in the user market. This means that they are interested in use value, and especially in matters affecting business productivity and operating costs, such as appearance, comfort, convenience and efficiency. The investor buys and sells existing or recently completed property in the investment market and is interested in the income flow from user rents, capitalised into the exchange or investment value of the property. The developer aims to exploit development value created by opportunities such as building sites or redundant premises suitable for renovation, available in the development market. The developer seeks to minimise development costs and maximise development revenues, in order to maximise profits.

Any single market actor, whether an individual or an organisation, may adopt more than one of these roles. A mature developer may diversify into investment while an adventurous investor may initiate development. In contrast, where the role of developer is quite separate from that of user or investor, the nature of the development may be more influenced by short-term than long-term thinking. The final section of the paper argues that this point is particularly relevant in understanding the UK speculative house building industry.

## 2. The regulatory environment

According to the UK Government, “Planning shapes the places where people live and work and the country we live in. Good planning ensures that we get the right development, in the right place and at the right time” (ODPM, 2005, para 1). Although markets are concerned with all the attributes of property, such as use, value, management, development and ownership, and operate throughout a building’s lifetime, planning must achieve what it can at the point of development. It is essentially a form of intervention within the land and property development process that affects the development market directly, but the user and investment markets only indirectly.

We can think of the planning system as a durable container with changing contents (Healey et al., 1988). The container is constructed of formal instruments such as the requirement for statutory development plans, and organisational arrangements such as local planning authorities for the management of land use and environmental change. These have remained remarkably stable since comprehensive planning was introduced in 1947. While the essential construction of the planning container is still based on the 1947 model, the policies with which it is filled and the uses to which it is put have changed markedly over time.

Some commentators take a narrow view of planning when considering its impact on land and property markets, and think only of the statutory system of land use regulation, or simply of the development control process. But markets operate more holistically than this. So a broader view of planning, which sees it as encompassing all those policies on land, land use, housing, transport and regeneration that are likely to have clear impacts on the use, investment and development of land and property, is more appropriate.

Building regulations are a far more specific form of intervention in the development process. They set construction standards to ensure the health and safety of those living, working in or visiting new buildings, and to promote energy conservation and accessibility. The building regulations in England and Wales have 14 parts, which include Part L dealing specifically with the conservation of fuel and power.

## 3. Types of policy intervention

In broad terms, this regulatory environment can be seen as an attempt by the state to enhance the efficiency, equity and sustainability of market products. More specifically, since economists of different persuasions have different concepts of how land and property markets work, we can identify at least four questions that might be asked about the effectiveness of policy intervention. These are:

- From a neo-classical economics perspective, how far does policy directly affect the overall quantity of market supply and demand?
- From a welfare economics perspective, how far is policy able to overcome market failure?
- From a new institutional economics perspective, how far does policy reduce, or indeed increase, market transaction costs?
- From a ‘political economy of institutionalism’ perspective, how far can policy transform market cultures and practices?

Most recent research into the impact of the planning system on land and property markets has taken a neo-classical perspective, concentrating on how planning policy has transformed market conditions through its constraints on overall land supply. This

issue has been addressed by a variety of researchers since at least the late 1980s, albeit in slightly different ways (see, for example, Bramley, 1993, 1998, 1999; Bramley and Watkins, 1995, 1996; Cheshire and Sheppard, 1989, 1996; Evans, 1991, 1996, 2004; Evans and Hartwich, 2005, 2006; Gerald Eve, 1992; Henneberry et al., 2005; Jackson et al., 1994; Leishman and Bramley, 2001, 2005; Meen, 1998, 2005; Meen and Andrew, 1998; Meen et al., 2001; Monk et al., 1996; Monk and Whitehead, 1996, 1999; Pryce, 1999).

This body of research provides a partial analysis of the distributional effects of planning intervention in the housing market (Adams and Watkins, 2002). Although estimates of the magnitude and distribution of the effects differ, it is clear from the above references that planning constraints lead to higher prices and densities, restrictions in the quantity of homes supplied, and convergence in the type and design of new homes. Although these results are perceived in generally negative terms, there are winners and losers. Higher purchase prices force new buyers to pay more, but existing landowners gain from higher returns through the inflated selling prices in land and housing markets. Developers’ profits are dented by higher land prices and lower levels of development, but are inflated by higher selling prices. Residents derive unmeasured utility from the better urban environment associated with protected green belts, but lose out through higher densities and smaller plot sizes within urban areas and at the urban fringe. Crucially, however, none of these studies are able to measure the less tangible social costs and benefits. Neither are they able to gather systematic data, which might allow the accurate assessment of the aggregate effects of the more measurable impacts. As Breheny (1999) notes, however, the clear losers when supply is restricted are the poor, who are disproportionately affected by rising property prices.

In contrast, there has been a recent lack of serious empirical evaluation from a welfare economics perspective of the extent to which spatial planning can successfully tackle the market failures of negative externalities, lost opportunities and scant provision of public goods. More innovative work has tended to come from a new institutional economics approach. Here, important contributions have been made by Pennington (2000), who has applied public choice theory to interest groups and collective action in the political marketplace, and notably through Webster’s substantial body of work exploring the relationship between planning and property rights (see, for example, Webster, 2002, 2005; Webster and Lai, 2003).

Again, while much research over the years has looked at planning from a political economy perspective (see, for example, Healey et al., 1988), and there is increasing interest in bringing an evolutionary economics approach to the analysis of land and property markets (see, for example, McMaster and Watkins, 2006), few researchers have systematically employed a political economy approach to investigate the interaction between planning policy and property markets. The current state of science is thus heavily reliant on neo-classical approaches to understanding this interaction, with some interesting recent contributions from within new institutional economics.

At this stage it is important to classify policy approaches in broad types, rather than treat each new policy individually. By thinking broadly about the market impact of the planning system, Tiesdell and Allmendinger (2005) have identified four main types of policy intervention. Specifically, planning policies may seek to shape, regulate or stimulate market activity, or to build state or market capacity, or both, to produce desired outcomes. Table 1 illustrates these four types.

Successful policy interventions are likely to require an appropriate mixture of policy types, rather than placing undue reliance on a single type of policy. Market regulation through

**Table 1**  
Broad types of policy intervention in land and property markets

Policy type	Purpose	Examples
Market 'shaping'	To shape the context within which market actions and transactions occur	Statutory development plans Transport investment plans Code for sustainable homes
Market 'regulation'	To regulate or control market actions and transactions, ensuring some consideration of externalities and the public interest	Development control/ management Building regulations Restrictive covenants attached to sales of public sector land
Market 'stimulation'	To make the market work better, by having a direct impact on financial appraisals	Land assembly and release Grants or tax breaks to encourage more desirable activity or taxes to discourage undesirable activity
'Capacity building'	To build capacity of state and/or market operators	Encouraging public–private development partnerships Promoting skills for sustainable communities

Source: Adapted from Tiesdell and Allmendinger (2005).

development control and management and building regulations certainly has a role to play in influencing market behaviour, but it would be mistaken to rely on regulation to change market cultures. Only close examination of each market sector will reveal the most appropriate mix of policy intervention. The final section of this paper therefore seeks to interpret the framework developed so far, specifically in relation to the speculative house building industry.

#### 4. Residential development as an example

Traditionally, development companies in the UK have concentrated either on commercial or industrial development, or on house building. Although this division has begun to break down, with the increasing popularity of mixed-use schemes, residential development remains a distinctively different market sector. Three particular aspects of residential development are worth highlighting.

First, the production of new homes is increasingly dominated by a small number of very large companies. In 1990, 32 companies each started more than 500 units and together claimed 41% market share. A decade later, there were 43 companies of this size whose combined market share was 71% (Wellings, 2001). Mergers and takeovers continue apace in the industry. The year 2007 saw the takeover of one top-ten builder, Wilson Bowden, by another, Barratt, and the merger of two more, Wimpey and Taylor Woodrow. Although most such companies now have an explicit 'corporate social responsibility' agenda, research has suggested that they have paid more attention to improving the sustainability of the production process than to that of the product itself (Adams et al., 2008).

Secondly, the role of developer is clearly separated in residential development from that of user and investor. The latter two roles are combined if the product is bought for owner occupation, but split if a home is bought as a buy-to-let. This has resulted in what one critical developer (Black, 1997, p. 81) described as the industry's build-and-walk-away 'trading' ethos. One consequence has been poor level of customer satisfaction, now under examination by the Office of Fair Trading (2007).

Another serious consequence of this role split is that developers must focus on short-term costs and returns, while owner occupiers who consume and invest in housing are concerned with the long term.

The structure and organisation of the UK house building are also of vital importance to the chances of achieving more energy-efficient construction. Since 1990, building regulations have been revised several times to ensure that new homes are more energy efficient. Revisions introduced in 2002, for instance, were intended to reduce the average annual CO<sub>2</sub> emissions of a new house from 4.5 to 1.5 tonnes. However, as one commentator (Smit, 2002, p. 17) pointed out at the time: "Most of the house building industry sees the requirements of Part L purely in terms of the £600 to £1200 it will add to the cost of a house. Few are able to exploit insulation, or other advanced green technology such as photovoltaic panels or water-saving devices, as a marketing opportunity that could attract buyers." This might be because few speculative house builders see marketing advantages in developing energy-efficient homes, since they consider the pay-back time too long for their additional costs (Barlow and Bhatti, 1997). Subsequently, Hertin et al. (2003, p. 285) made the similar point that "Although the benefits (of energy efficiency) should, in principle, be reflected in the price of the property, house builders cannot be sure whether the market will allow them to recover increased costs."

Thirdly, it is arguable that the UK's failure to devise an effective system for the supply of housing land is central to understanding why British house building has become so concentrated and why many house builders are not as responsive as they should be to their customers or to the communities within which they develop. Post-war planning was originally conceived as a visionary force intent on the creation of towns and cities of the highest possible quality. But over the past 30–40 years in particular, the planning system has increasingly been captured by anti-development interests seeking to ensure ever tighter restrictions on the ability of the house builders to meet demand, especially at greenfield locations.

As a direct result, it is arguable that the system has concentrated too much on restricting the quantity and location of new development and not enough on improving the quality of what is actually built. In the minds of the public, press and too many politicians, planning is now regarded as the means to stop development rather than to help create places where people really want to live. The consequent shortages of available building land, particularly at pressured times and locations, have an insidious effect on the house building industry, making it inherently 'land-focused' rather than 'customer-focused' or 'community-focused'. As Kate Barker (2004, p. 106) commented: "When land is in relatively scarce supply, fewer permissioned sites mean that there will be fewer competing house builders in any one area. This can reduce consumer choice. In such situations, competition focuses on land. Once land is secured, competitive pressures are reduced: to a large extent house builders can 'sell anything'".

#### 5. Conclusions

The case of residential development highlights the need for a broad and holistic understanding of how the regulatory environment created by planning and building regulations interacts with land and property markets. It would be mistaken to concentrate too narrowly on immediate market regulation and neglect the ways in which policies which seek to shape or stimulate the market have important and sometimes unexpected consequences on markets structures and cultures. In this context, policies that seek to build the capacity of state and market operators to create better ways of producing new homes in the UK may well be

equally important. This means that effective intervention in land and property markets requires the creation of a broad range of policy tools and their appropriate deployment to suit particular market circumstances, rather than reliance on a single policy tool (Adams et al., 2005).

As this paper has argued, particular development products are the consequence of specific market conditions and development processes. In the UK, the extensive past development of greenfield housing estates, which many commentators have labelled as unsustainable, has been the result of a specific process of development created as much by financial and construction systems as by the regulatory environment. If the state wishes to promote radically different forms of urban development in future, it may be necessary to shift the policy balance from policies that aim to regulate or shape the market to those that seek to stimulate it or build market capacity. This may require more direct public intervention in the land market, by assembling and releasing land to achieve desired forms of development in desired locations. It may also involve encouraging the reform of financial and development systems to create the capacity for more people to commission their own homes, so combining the short-term role of the developer with the longer-term roles of user and investor. This would help ensure that the long-term financial benefits of more sustainable forms of construction are accorded greater influence during the development process.

What scope then exists for the state successfully to challenge 'market fundamentals' in future, for example, by requiring all new development to be carbon-neutral? The framework developed in this paper provides a useful insight into such questions. From a neo-classical perspective, it has been suggested that policy restrictions on land supply have had unintended market consequences, creating both winners and losers. One set of winners over the past 60 years have clearly been greenfield landowners, especially since the value of land with planning permission for residential development in England ranged from 163 times that of agricultural land in the North East to 303 times in the South East (Barker, 2004). In an efficient market, one might expect the cost of more demanding regulatory requirements ultimately to be passed on to landowners, who would receive less for their land from developers owing to the higher cost of construction. This might have only a marginal impact on the multiplier between agricultural and residential land value, and might not dampen the enthusiasm of landowners to sell for development.

However, the concept of an efficient market with perfect information is a theoretical rather than a practical one. Much would depend on the clarity and certainty of any policy shift and the extent to which market operators received and transmitted unambiguous signals about it. In the short term, policies that impose extra costs on developers, especially at a time of relatively static prices, may lead to reduced development output. A clear policy environment that enables developers to pass extra costs on to landowners in the form of reduced land values is essential to avoid this in the long term.

In summary, this short paper suggests that the state and the market do not exist in isolation from one another, but are engaged in a continual attempt at mutual transformation. Despite the market's many advantages in this engagement, it remains informal and decentralised. Yet the state's potential strength in explicitly setting a policy agenda is realisable only if it takes a more rounded view of both the market and the policy tools that might be needed to achieve effective intervention.

## References

- Adams, D., Watkins, C., 2002. *Greenfields, Brownfields and Housing Development*. Blackwell, Oxford.
- Adams, D., Watkins, C., White, M. (Eds.), 2005. *Planning, Public Policy and Property Markets*. Blackwell, Oxford.
- Adams, D., Payne, S., Watkins, C., 2008. Corporate social responsibility and the UK housebuilding industry. In: Murray, M., Dainty, A. (Eds.), *Corporate Social Responsibility in the Construction Industry*. Taylor & Francis, London, pp. 235–258 (Chapter 11).
- Barker, K., 2004. *Review of Housing Supply—Delivering Stability: Securing our Future Housing Needs*. HMSO, London.
- Barlow, J., Bhatti, M., 1997. Environmental performance as a competitive strategy? British speculative housebuilders in the 1990s. *Planning Practice and Research* 12, 33–44.
- Black, J.S., 1997. Quality in development, by design or process? In: *Proceedings of the Town and Country Planning Summer School*, pp. 80–82.
- Bramley, G., 1993. Land use planning and the housing market in Britain: the impact on housebuilding and house prices. *Environment and Planning A* 25, 1021–1051.
- Bramley, G., 1998. Measuring indicators of planning restraint and its impact on housing land supply. *Environment and Planning B: Planning and Design* 25, 31–57.
- Bramley, G., 1999. Housing market adjustment and land supply constraints. *Environment and Planning A* 37, 1169–1188.
- Bramley, G., Watkins, C., 1995. *Circular Projections*. Council for the Protection of Rural England, London.
- Bramley, G., Watkins, C., 1996. *Steering the Housing Market: New Housing Supply and the Changing Planning System*. Policy Press, Bristol.
- Breheny, M., 1999. People, households and houses: the basis to the 'great housing debate' in England. *Town Planning Review* 70, 275–293.
- Cheshire, P., Sheppard, S., 1989. British planning policy and access to housing: some empirical estimates. *Urban Studies* 26, 469–485.
- Cheshire, P., Sheppard, S., 1996. On the price of land and the value of amenities. *Economica* 62, 247–267.
- Evans, A., 1991. 'Rabbit hutches on postage stamps': planning, development and political economy. *Urban Studies* 28, 853–870.
- Evans, A., 1996. The impact of land use planning and tax subsidies on the supply and price of housing in Britain: a comment. *Urban Studies* 33, 581–585.
- Evans, A., 2004. *Economics and Land Use Planning*. Blackwell, Oxford.
- Evans, A., Hartwich, O.M., 2005. *Unaffordable Housing: Fables and Myths*. Policy Exchange, London.
- Evans, A., Hartwich, O.M., 2006. *Better Homes, Greener Cities*. Policy Exchange, London.
- Gerald Eve, 1992. *The Relationship Between House Prices and Land Supply*. HMSO, London.
- Healey, P., McNamara, P., Elson, M., Doak, J., 1988. *Land Use Planning and the Mediation of Urban Change*. Cambridge University Press, Cambridge.
- Henneberry, J., McGough, T., Mouzakis, F., 2005. Estimating the impact of planning on commercial property markets. In: Adams, D., Watkins, C., White, M. (Eds.), *Planning, Public Policy and Property Markets*. Blackwell, Oxford, pp. 105–127.
- Hertin, J., Berkhout, F., Gann, D.M., Barlow, J., 2003. Climate change and the UK house building sector: perceptions, impacts and adaptive capacity. *Building Research and Information* 31, 278–290.
- Jackson, A., Morrison, N., Royce, C., 1994. *The Supply of Land for Housing*. Discussion Paper No. 42. Department of Land Economy, University of Cambridge.
- Leishman, C., Bramley, G., 2001. *A Local Housing Market Model with Spatial Interactions and Land-Use Planning Controls*. Heriot-Watt University, Edinburgh Unpublished paper.
- Leishman, C., Bramley, G., 2005. Modelling local housing adjustment in England. In: Adams, D., Watkins, C., White, M. (Eds.), *Planning, Public Policy and Property Markets*. Blackwell, Oxford, pp. 79–104.
- McMaster, R., Watkins, C., 2006. Economics and underdetermination: a case study of urban land and housing economics. *Cambridge Journal of Economics* 30, 901–922.
- Meen, G., 1998. Modelling sustainable home ownership: demographics and economics. *Urban Studies* 35, 1919–1934.
- Meen, G., 2005. On the economics of the Barker Review of Housing Supply. *Housing Supply* 20, 949–971.
- Meen, G., Andrew, M., 1998. *Modelling Regional House Prices: A Review of the Literature*. Department of the Environment, Transport and the Regions, London.
- Meen, G., Gibb, K., Mackay, D., White, M., 2001. *The Economic Role of New Housing*. National House Building Council, Amersham.
- Monk, S., Whitehead, C., 1996. Land supply and housing: a case study. *Housing Studies* 11, 407–423.
- Monk, S., Whitehead, C., 1999. Evaluating the impact of planning controls in the UK—some implications for housing. *Land Economics* 75, 74–93.
- Monk, S., Pearce, B., Whitehead, C., 1996. Planning, land supply and house prices. *Environment and Planning A* 28, 495–511.
- ODPM, 2005. *Planning Policy Statement 1: Delivering Sustainable Development*. Office of the Deputy Prime Minister, London.
- Office of Fair Trading, 2007. *Housebuilding: Reasons for a Market Study*. OFT, London.
- Pennington, M., 2000. *Planning and the Political Market: Public Choice and the Politics of Government Failure*. Athlone, London.
- Pryce, G., 1999. Construction elasticities and land availability: a two stage least squares model of housing supply using the variable elasticity approach. *Urban Studies* 36, 2283–2304.

- Smit, J., 2002. The colour of money. *Building Supplement on homes*, 17–18.
- Tiesdell, S., Allmendinger, P., 2005. Planning tools and markets: towards an extended conceptualization. In: Adams, D., Watkins, C., White, M. (Eds.), *Planning, Public Policy and Property Markets*. Blackwell, Oxford Chapter 4.
- Webster, C.J., 2002. Property rights and the public realm: gates, green belts and gemeinschaft. *Environment and Planning B* 29, 397–412.
- Webster, C.J., 2005. The new institutional economics and the evolution of modern urban planning: insights, issues and lessons. *Town Planning Review* 76, 455–484.
- Webster, C.J., Lai, L.W.C., 2003. *Property Rights, Planning and Market: Managing Spontaneous Cities*. Edward Elgar, Cheltenham.
- Wellings, F., 2001. *Private Housebuilding Annual 2001*. Credit Lyonnais Securities Europe, London.