

Planning Policy and Retail Property Markets: Measuring the Dimensions of Planning Intervention

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Summary. There is considerable case-study-based evidence that changes in the public policy environment have profoundly altered the structure and operation of retail property markets in England. Despite this, however, few studies of property market performance consider the influence of retail planning policies. This paper seeks to fill the gap. The empirical part of the paper uses data derived from a survey of local planning authorities to construct a range of measures of planning policy stance. The indicators demonstrate that the role of policy is complex and multidimensional. The paper then explores the relationship between planning policies and measures of property market performance. The results show that, while proactive policies do not guarantee a vibrant market, they can play an important part in stimulating occupier and investor demand, even where there are poor economic fundamentals.

1. Introduction

In the past two decades, research into the operation of retail property markets has been dominated by two distinct approaches. First, there is a voluminous body of case study evidence, developed mainly by retail geographers, which explores the contemporary retail sector dynamic (Wrigley, 1998a; Guy, 1998a) and the impact of policy change on the spatial structure of retail markets (Wrigley, 1998b; Guy, 1998b, 2002). Secondly, property researchers have sought to build quantitative economic models of retail rental values and building cycles (Key *et al.*, 1994; Tsolacos, 1995, 1998).

Much of the case-study-based work explores the impact of institutional and policy change and, in particular, the resultant decentralisation tendencies on the vitality

and vibrancy of city centres (Ravenscroft, 2000; Thomas and Bromley, 2002) and the development of new urban forms (Lowe, 1998, 2000). Typically, these studies have placed land use planning policies at the heart of explanations of the changing fortunes of retail centres. They also tell us that changing behavioural and institutional processes in the retailing industry are having a profound impact on retailers' space demands and the type and location of new property offerings (Adams *et al.*, 2002).

On the other hand, the economic models have sought to explain the relationship between property market time-series outcomes and macroeconomic variables. These models have a tendency to concentrate on the demand side as the predominant driver of property cycles. The focus on market outcomes does little to enrich the case-study-based

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insights about market processes and, more particularly, the role of public policy in shaping local markets. That is not to say, however, that there is no interest in the operation of local property markets.

The robustness and applicability of cross-sectional economic models across diverse local markets has begun to be examined following recognition of the importance of the disparate performance of local retail property markets to institutional investors (Hamelink *et al.*, 2000; Jackson, 2002). However, where econometric models have been estimated on cross-sectional data, they have also focused on demand-side factors as the dominant influence on rental determination (Jackson, 2001a; Robertson and Jones, 1999). Thus, the impact of the supply side, and in particular the influence of local planning policies on available retail floorspace, is given a perfunctory treatment. Indeed, several authors suggest that the relatively poor explanatory power of economic models can be traced to their failure to accommodate the impact of planning policies (Henneberry *et al.*, 2005; Jackson, 2001b; McNamara and Morrell, 1993). Disappointingly, the important behavioural and institutional processes underlying changes in market conditions have also been assumed away.

In this paper, we seek to combine insights from the detailed analysis of the policy environment, with data on market outcomes. The methodological rationale for the paper is outlined by Adams *et al.* (2005), who note that the analysis of the relationship between public policy and property markets can be greatly enhanced by insights derived from disparate approaches in a more pluralist research method. The primary objective of the paper is to examine the retail planning policy environment and to construct indicators of the differential policy stance adopted in a selection of English town and city retail centres. Our secondary objective is to undertake an exploratory analysis of the relationship between retail land use planning and property market performance. This preliminary investigation seeks to illustrate the

complex interrelations between planning policies and property market outcomes.

The central premise of the research is that, while a restrictive land use planning policy results in higher rents and limited available space, we know that if this general stance is applied uniformly to all centres, the analysis of changing central planning policies would fail to provide the missing explanatory power modellers assume. Clearly, it is the differential local authority implementation of policy, and the way in which this is shaped by local economic and environmental considerations, that matters. Drawing on evidence from a survey of 55 local planning authorities, augmented by a series of in-depth interviews, the paper seeks to unravel key local policy dimensions and implementation strategies and explore the extent to which they relate to the differential performance of towns and cities as retail locations and to retail property market outcomes.

The paper is organised into five further sections. The next section examines the structure and operation of the retail property market. Section 3 then briefly examines recent changes in the retail policy environment. This section also seeks to make an explicit link between these changes and property market performance. Section 4 provides details of the research method. In particular, it provides information on the survey instrument used to capture details of local policies and the secondary data sources used to shed light on property market performance. The section also outlines the statistical methods used to construct measures of planning policy stance. In section 5, the focus is on the empirical results, while section 6 sets out the conclusions and examines the implications for planners and property professionals.

2. The Structure of the Retail Property Market

Retailing is one of key economic sectors in the UK, employing over 2 million people and with a turnover of more than £157 billion (DTI, 1998). In recent years, the growth of the retail sector has been accompanied by

growing demand for retail space. Rising levels of consumer expenditure have triggered high, and rising, levels of occupier demand. This has led to relatively strong growth in rental values, rising at more than 8.5 per cent per annum, since the mid 1990s (authors' calculations). In addition, the retail property sector currently dominates institutional investment in direct property, accounting for 51.6 per cent of the capital value of direct property assets, compared with 47.8 per cent in 2003 (IPD, 2003, 2004). In recent years, returns from retail property have outperformed other sectors of the market (IPD, 2004; also, see Tables 1 and 2 for details). Although much of the rise in the fortunes of retailing relates to the development of out-of-town centres and retail warehouse parks, city-centre shopping centres have also experienced major increases in capital values, bringing their total value to more than £19 billion (Dixon and Marston, 2003; also, see Table 2).

However, while it is clear that vibrancy within the retail sector can help underpin local economic competitiveness, there is strong evidence that recent trends are partly a function of the inability of property supply to adjust to market conditions. Thus, although short-term property market returns might be positive, longer-term urban economic growth can be inhibited by the functioning of land and property markets. As D'Arcy and Keogh (1997) note, the role of land and property markets as mediators of urban change needs to be better understood.

This requires that some consideration is given to the complex workings of the market. Property economists recognise that there are important interrelationships between the markets for occupier space and the activities

Table 2. The performance of the UK retail market, 2003 (percentages)

Sector	Total returns
All retail	15.5
Standard shops	14.2
Central London shops	10.6
Rest of UK shops	14.9
Shopping centres	15.5
Retail warehouses	16.6
All offices	3.2
All industrial	11.3
All property	10.9

Source: IPD (2004).

of investors and developers (Keogh, 1994; DiPasquale and Wheaton, 1996). The standard textbook model of the property market explores the relationship between rents, capital values and yield levels. The conceptual model is based on a system of linked sub-markets (the occupier market, asset/investor market and development market) through which market adjustment takes place (Ball *et al.*, 1998).

Usefully, unlike more general discussions of the retail sector which often conflate the influences of these sub-markets, and where much of the discussion revolves around the needs of the user (the retailer), this framework explicitly acknowledges that changes in the occupier (or user) market interact with the behaviour of property investors and developers (and that investors' and developers' decisions feed back into the user/rental market). In the short run, rental values are shaped by changes in user demand which tends to respond to changes in the business economy. This change in the user/rental market will also lead to a change in the investment value of property (where price is influenced by rental income as well as future capital growth). In the long run, developers respond to user and investor demand conditions and the supply response feeds back into the determination of rental and capital values. Within this framework, it is implicit that the planning system influences the ability of the development industry to respond to the signals from the user and

Table 1. The performance of UK property markets (percentages)

Sector	Annualised rental growth 1983–2003	Annualised capital growth 1983–2003
Retail	4.0	4.6
Office	0.9	1.3
Industrial	2.9	2.6

investor markets. It is the sluggish supply response that makes rental values highly sensitive to changes in demand conditions.

Some of these relationships are captured in macroeconomic models of the property market (Nanthakumaran *et al.*, 2000; Tsolacos *et al.*, 1998). In accordance with the stylised facts, such models demonstrate that consumer expenditure drives the demand side of the rental market and that the supply side adjusts sluggishly, even in comparison with other property sectors. These models, however, tell us little about the underlying reasons for the lack of supply-side responsiveness.

Rather, for insights into the operation of the supply side of the market, we need to turn to detailed analyses of property developer behaviour and the development process (see, for instance, Guy and Henneberry, 2002; Adams, 1994; Healey, 1991). This literature highlights the roles, behaviour and decision-making approaches of different actors and the practices and networks that influence the way organisations operate and engage with each other. The planning system is afforded a central role in theoretical and empirical analyses and is shown to be critical in determining the responsiveness of market actors.

The failure of formal models to capture these interrelations has given rise to periodic calls for renewed attempts to incorporate the role of planning in quantitative analyses (McNamara and Morrell, 1993; Ellison, 1998; Jackson, 2001a). There have been few responses. In one rare study, Blake *et al.* (2000) use a measure of planning permissions as a proxy for planning constraints in the supply equation of their model of the London office market.

Elsewhere, Henneberry *et al.* (2005) develop models of rental values and development output based on a system of equations covering the industrial, retail and office sectors of the property market over the 1998–2000 period. The retail model covers 49 centres and shows that rents respond to variations in both supply and demand conditions. The price elasticity of supply in the retail rental equation is near zero. The authors suggest that this relates to the distinctiveness

of the retail sector, where area representation is sought regardless of the cost or availability of space. In their model, a proxy variable is constructed to represent the planning regime. The variable measures the proportion of planning decisions that are approvals. The behaviour of the variable implies that, as planning regimes become tighter, the percentage of approvals decreases and so does the local property supply. These lower levels of supply are, in turn, associated with higher rents and lower levels of local economic activity. However, the authors note that the model performs least well when applied to the retail sector and, in general, the planning variable performs less well than other elements of the model. As we highlight later, this is likely to be at least partly related to the narrowness of the measure of planning adopted.

Henneberry *et al.* (2005) also highlight the importance of understanding spatial adjustment in developing an appreciation of the impact of planning policies on local markets. The authors explain that locational adjustment by retailers, in response to restrictive planning regimes in a particular locale, might mitigate against the aggregate impact of planning policies but will also complicate the emerging spatial patterns.

This reintroduces the more general problem that few real estate analysts have sought to explore the factors that shape differential market performance across space. In a rare cross-sectional study, Jackson (2001a) examines the determinants of rental values in a selection of 55 local retail markets in the UK. She produces a reduced-form model that shows that retail rental levels are dependent on demand drivers such as the income levels and socioeconomic profile of the local population. Market size, as measured by retailer representation, is also shown to be important. In a similar study of 29 local markets in Scotland, Robertson and Jones (1999) show that demand-side variables, in this case retail turnover which is used as a proxy for the derived demand for retail space, dominate rental determination. In both studies, the treatment of supply-side

issues is limited, although stock constraints are acknowledged as being important.

Jones and Orr (1999) also provide insights into spatial variations in market performance. They develop a time-series model of retail rents that explores the relationship between local and national economic factors and property market conditions. The model decomposes rental trends into local and national components. All 51 retail centres in their sample exhibit evidence of significant local-level influences on rental values. Unusually, Jones and Orr's explanation of their findings focuses on the supply side of the market. They suggest that the (price) inelastic supply of retail units in town centres leads to long-term rental premiums in growing centres.

Overall, it seems clear that economic analyses of the structure and operation of retail property markets have two main limitations. First, there is little consideration of the role of planning policy and processes in shaping market outcomes. Secondly, there is little consideration of the differential performance of local retail markets. In this context, the next section of the paper is concerned with the changing nature of the local policy environment and its impact on retailing and retail property markets.

3. The Changing Retailing and Public Policy Environment

As we highlight above, the retail sector is highly competitive and dynamic. It is also subject to considerable regulatory controls. The combination of regulatory objectives and the need to promote retailing opportunities, as part of place promotion strategies, means that the sector has long been influenced by an array of diverse, and often conflicting, policy initiatives.

Since the mid 1960s, the sector has undergone a period of almost continuous change. Many of these changes have had profound spatial economic and property market consequences. Notably, Schiller (1986) describes three waves of retail decentralisation. In the first wave, convenience retailing began to

decentralise from towns and cities. In the second, retail warehouses, providing outlets for garden centres and DIY retailers, began to spring up in industrial estates. In the mid 1980s, the third wave saw the emergence of large out-of-town retail developments such as the Metro Centre, Merryhill, Meadowhall and the Trafford Centre. It is argued that this last wave has, in effect, provided the basis for new urban forms, with these centres being incrementally transformed into new towns (Lowe, 2000).

It is clear that this third phase has had the most pronounced impact on towns and cities. Earlier forms of decentralisation, with a focus on bulky goods, had arguably little impact on city centres (Guy, 1998b). The creation of out-of-town centres provided a significant challenge to the social and economic hegemony of city centres (Lambert *et al.*, 1999). The relative attractiveness of alternative shopping locations was reinforced by growth in car ownership, by changing retail practices, including longer opening hours, and by the growth in shopping as a leisure experience (Bromley and Thomas, 1993). The poor competitive position of city centres was also influenced by the rise in congestion, poor parking facilities, increasing safety concerns and a deteriorating shopping environment.

These changes occurred in, and have been influenced by, a rapidly changing policy context. The late 1980s saw abandonment of the 1977 guidance which dictated that planning policies should protect existing retail hierarchies and guard against overprovision of retail space. The subsequent guidance facilitated out-of-town developments, resulting in 46 separate proposals for regional shopping centres between 1988 and 1992 (DoE, 1993). This lax policy stance, however, was reversed in the 1990s, as environmental concerns rose up the political agenda and heralded the beginning of the end for the third wave of decentralisation. In the 1996 guidance, the location of development was to be plan-led rather than market-led (DoE, 1996). This guidance required that a sequential test should be undertaken in relation to site selection, in which

off-centre locations would only be considered if other town-centre or edge-of-city locations had been ruled out.

Although recent government publications indicate that this system has been broadly successful, there is a suggestion that the guidance has been subject to varied interpretation in different areas (ODPM, 2003, 2004; Jackson, forthcoming). It is also clear that the condition of city centres has not improved uniformly. Thomas and Bromley (2002), for instance, highlight the continued decline of potentially strong middle-order shopping centres. From this, they infer that additional policy initiatives might have a role to play. In this context, town-centre management schemes have become important. The Lockwood Reports, for instance, undertake a review of 260 key urban centres and demonstrate that TCM has played an important role in enhancing the health and vitality of Britain's towns and cities (Lockwood, 2001, 2003).

In general, we have seen that, in addition to the changes in direction and emphasis in policy content, the regulatory environment has also become extremely complex. As Guy (2002) explains, as well as adapting to the evolution of central government policy, local authorities need to accommodate the provisions of the local development plan, developer requirements, environmental and physical site considerations, employment and local economic development objectives and traffic and transport issues. In addition, they need to consider the implications of urban regeneration strategies and related housing and social policy objectives.

The myriad of changing influences in the policy and business environment have had complex and, at times, conflicting spatial and property market implications. On the one hand, it is argued that, in response to the highly competitive nature of the retail industry, British retailers are searching for new locations, away from traditional centres, from which to exploit newly emerging commercial opportunities (Guy, 1994). On the other hand, the prioritisation of city-centre vitality and viability in land use planning policies has generated increased reinvestment

in city-centre retail development and has led to 80 per cent of the floorspace under construction, in late 2002, being located in town-centre schemes (CB Hillier Parker, 2002). Furthermore, investment in retail property has dominated the property offer in urban regeneration schemes (Adair *et al.*, 2004).

The preceding review has identified some important trends. First, it is clear that, to date, studies of retail property markets have generally failed to explore the role of policy in shaping market performance. Secondly, the retail sector is extremely dynamic and has operated, and will continue to operate, within a complex and changing policy context. It seems clear that this policy environment is having important effects on the location decisions of retailers. Indeed, several authors have made strong, although admittedly untested, claims about the important interaction between the outcome of policy initiatives and market performance. For instance, Dixon and Marston (2003) suggest that there is a relationship between the vitality of retail centres and rental growth. The next part of the paper explores the range of policy initiatives impacting on retailing and retail property and considers the role these policies might have played in shaping market performance.

4. Data and Research Methods

4.1 *The Research Approach*

The empirical part of this paper is concerned with two interrelated issues. First, and most importantly, our study tries to capture different aspects of the policy environment influencing the retail property market. In this context, there is a need to construct a number of indicators to measure the local policy stance. Secondly, we are also concerned with the complex relationship between the policy measures and property market performance.

The research is developed in several stages. Stage one is based on in-depth interviews with retail planners operating in different market contexts. The interviews explore the main levers of planning policy, existing approaches

to monitoring markets and the concerns and priorities currently dominating policy development and the delivery of planning objectives.

Stage two involves the design and administration of the survey instrument. The design of the survey is informed by the in-depth interviews. The postal survey is used to collate information on the characteristics of the property market, the local retail strategy and approaches to issues such as town-centre management and the monitoring and promotion of vitality and vibrancy, social and economic change and the implementation of discretionary planning policy levers. Thirty-five (64 per cent) out of 55 selected local planning authorities in England responded. The authorities selected coincided with those for which property market data are routinely available from IPD. The questionnaire design sought to avoid sensitive information and to be relatively easy to complete for mid-ranking planning officers. Many of the questions ask the respondent to identify relevant points on a Likert scale.

The third stage of the research focuses on the production of indicators of local planning policy based on survey responses. Principal factor analysis (PFA) is used to search for communality in dimensions underlying individual answers, with subsequent collation of responses across subsets of questions. Despite the atheoretical nature of this statistical approach, in this context it allows us to examine a diverse array of policies that impact on retail markets and can help to reveal similarities in underlying objectives. Further details of the PFA approach are set out in section 4.2.

The final stage of the research process combines our measures of policy stance with retail rental data for each of the centres. Average rental growth rates over the 1996–2000 period are calculated from IPD's retail rental data. The data comprise retail rental growth rates calculated as the annual change in the estimated rental value (ERV) per square foot as at December of each year, where the ERV is derived in accordance with the RICS' Appraisal and Valuation Manual (now

'Appraisal and Valuations Standards'). The data are not, therefore, distorted by any unusual lease terms or other unique factor relating to the occupier or lease. The data reflect the average rates for each market using properties held by those investors represented in the IPD dataset. The data, therefore, reflect the characteristics of those investors, their property preferences and their movements into and out of markets. To retain confidentiality and allow easy visual assessment of comparative positions, this is presented on a scale of 0 to 100, with 100 indicating the greatest rate of (positive) rental change. Standard statistical procedures, including correlation, are then used to test for systematic relationships between the property market performance data and the planning policy measures.

4.2 *Constructing the Planning Indicators*

As we note above, the main analytical technique used in this paper is PFA. The use of PFA (and the related principal components analysis) is well established within property studies (see, for example, Dale-Johnson, 1982; Watkins, 1999; Hamelink *et al.*, 2000; Jackson, 2001a). The approach has also been used to produce measures of planning policy constraint and policy stance (Bramley and Watkins, 1996; Bramley, 1998; Malpezzi, 1996). Despite the growth in usage, however, there are several common variants to the approach. Here, we provide details of the method used to construct our planning measures.

The use of PFA provides for the reduction of multiple variables into a smaller dataset, by identifying structure, or communality, within the data. This communality is captured using a 'regression line' through a linear combination of the original variables, with rotation of the axes revealing different dimensions of communality (Kim and Mueller, 1978). As each new factor, or variable, is identified, it captures progressively less of the residual variation in the original data. Thus, extraction of the initial factors will retain the majority of information, while

reducing the volume of data. Each new factor, or variable, is orthogonal to previous factors, providing the advantage of removing correlation among variables (Greene, 1993).

Identification of an appropriate factor solution is based on the use of the Kaiser (1960) criterion to assess the proportion of the original variation captured within each new variable, discarding those with an eigenvalue of less than 1. Factor loadings are examined to identify and understand structure within the factors. A residual correlation matrix is used to identify the degree of variance not picked up by the retained components. Given our aim of producing useful tools to enable market operators to assess the planning context, attention is also given to the interpretability of the results (Goddard and Kirby, 1976).

Prior to analysis, frequency tables are examined to indicate distributions and the suitability of each variable for analysis. A correlation matrix is also examined to reveal where a sufficient degree of correlation exists (that is a coefficient of ± 0.3) for PFA to be appropriate (Child, 1970). Subsequently, Kaiser–Meyer–Olkin and Cronbach’s Alpha statistics are examined to determine the robustness of the results.

To produce composite variables, the original data are revisited and observations for each variable within each factor summed and converted to a scale from 0 to 100. This method of reverting to the original variables to construct the new composite variables carries a number of advantages. First, it produces composite variables that are regarded as displaying ‘purity’, given that the alternative of calculating and extracting factor scores incorporates some element of all variables, even those with statistically insignificant communality. By comparison, those factor scores will be comparatively ‘muddled’ with this additional information. Secondly, the production of each composite variable is not reliant on complete data across all variables, just complete data for each original variable within each composite variable. This provides a greater amount of information as at least one composite variable

is produced for each market. Thirdly, using the scale of 0 to 100 provides easy assessment of comparative positions of each market/authority—both in terms of how they score relative to each other and also their ranking within the composite variable (or scale) as a whole. Finally, for the next stage(s) of the analysis, reverting to the original data enables examination of a correlation matrix, which would have been meaningless with orthogonalised variables.

5. Results and Implications

5.1 *Measuring Planning*

The survey of local authorities generated information on the nature and type of policies influencing the retail sector, local economic and social conditions, the state of the property market and the importance afforded to various aspects of policy. Respondents ranked the relative weight given to a range of policy measures and local priorities. This included detailed consideration of diverse but important issues such as the range of users within towns, constraints to development, town-centre strategy and retailer, consumer and investor requirements. In total, the survey generated more than 50 variables. Clearly, even after removing pervasive responses and closely related variables, this volume of data makes it difficult to identify readily the relative significance of local phenomena, such as policy stance and environmental or economic context. Hence, we seek to use systematic statistical procedures to construct composite indicators from the data. As noted in section 4.2, the standard technique available for this purpose is factor analysis.

Table 3 reports the results of this analysis (variable definitions are provided in Table A1 in the Appendix). It shows the factor loadings linking each of 14 key variables to new composite indicators. The analysis identifies five distinct factors, each of which can be interpreted as measuring a separate feature of the local retail market area and its policy environment.

The first composite variable loads most heavily onto retail market policy variables.

Table 3. Factor analysis results

	Factor				
	1	2	3	4	5
<i>ESTSHOP</i>	0.909				
<i>ESTSERV</i>	0.853				
<i>ESINVDEV</i>	0.770				
<i>ESTLEIS</i>	0.768				
<i>DLPHYS</i>		0.822			
<i>ECPHYS</i>		0.811			
<i>DLLAND</i>		0.807			
<i>ECLAND</i>		0.699			
<i>TCMSIG</i>			0.892		
<i>DOCTCP</i>			0.846		
<i>TCPHYS</i>				0.958	
<i>TCLAND</i>				0.818	
<i>ESTPVAC</i>					0.866
<i>ESTPDEM</i>					0.808
Eigenvalue	4.233	3.099	1.643	1.372	1.169
Cumulative variance	30.233	52.368	64.102	73.904	82.252

The data measure the relative importance the planning authority accords to encouraging and maintaining a range of users—shop (*ESTSHOP*), leisure (*ESTLEIS*) and service providers (*ESTSERV*)—within the town centre, as well as the significance of accommodating investor and developer requirements (*ESINVDEV*). A *high* score on this variable implies a relatively *pro-property market policy stance*.

The second composite variable loads most heavily on measures of the extent of built environment constraints to new development on the edge of the city and in peripheral district and local centres. The dominant variables include the rank score awarded to difficulties associated with land constraints (*DLLAND*, *ECLAND*) and other physical constraints (*DLPHYS*, *ECPHYS*). Thus, a *high* score on this variable implies the absence of significant *built environment constraints on the periphery* of the market area.

The third variable relates to the importance of specific promotional and management strategies within local retail planning policy. The dominant variables here measure the importance of promotion of the town centre within local retail planning policies (*DOCTCP*) and

the importance of town centre management to the success of the town centre (*TCMSIG*). A *high* score on this measure indicates these strategic co-ordination and promotional policies are extremely important within *local planning policy*.

The fourth composite variable is similar in interpretation to the second, except that it focuses on land and physical constraints in the town centre (*TCLAND*, *TCPHYS*). Again, in this instance, a *high* score suggests there are no significant difficulties for new development due to *built environment constraints in the town centre*.

The fifth composite variable loads most heavily on property market and economic measures. There are high loadings on variables recording the presence of relatively high retailer demand for property and low vacancies in the retail market (*ESTPDEM*, *ESTPVAC*). A *high* score on this variable can be interpreted as representing *healthy market and economic indicators*.

The total amount of variation in the original variables captured by the analysis is over 82 per cent. Each of the 5 factors explains a diminishing proportion of the variation, falling from just over 30 per cent to 8 per cent. To assess

the appropriateness of the solution, the Kaiser–Meyer–Olkin measure of sampling adequacy is used. The value of 0.531 is acceptable given the comparatively small sample size. However, for prudence, Cronbach’s Alpha coefficient is examined in additional reliability analyses and indicates a highly acceptable factor solution, with values generally between 0.8 and 0.9.

Thus, our analysis of a survey of local planning authority retail policy strategies, informed by a series of in-depth interviews, has led to the production of a range of composite measures of planning stance and local economic and built environment context. These measures relate to 35 of the most significant local retail property markets in England, encompassing a geographically and functionally diverse distribution of markets, each characterised by high levels of consumer spending and interest from institutional investors. The measures offer a broader view of the dimensions of planning policies than alternative published sources such as PS2 data.

These measures also allow us to undertake an exploratory analysis of the relationship between policy stance and market performance. In general, we might expect an area that produces high scores on all factors to be free from land market, economic and regulatory constraints.

5.2 *Planning Policy and Market Performance*

This section explores the relationship between the composite measures of planning policy stance and context and property market performance indicators. Table 4 provides

details of the mean value for each of the composite indicators and the ranked average rental change over the 1996–2000 period. For each of the variables, the minimum value achievable is 0, while the maximum is 100. Given this, it is interesting to note that, for the second and fourth variables, where a low score indicates severe difficulties with land availability and physical constraints to new development in the central and peripheral areas, the average level of constraint is below the numerical half-way point. This reflects both the built-up nature of towns and cities and consequent difficulties with land assembly. Conversely, the average values for the remaining indicators are all significantly higher than 50, indicating generally high levels of importance placed on encouraging and maintaining vitality and vibrancy, promotion and management in town centres and healthy market indicators. These scores are as expected given that the markets in the sample are among the main retail investment and occupier markets across England.

Table 5 shows the correlation matrix for the PFA generated variables and average rental growth. The results reveal correlation coefficients that are generally low but show a highly significant positive correlation between those authorities with a pro-property market policy stance and those with a proactive approach to promotion and town centre management. There is a similar pattern between markets with high levels of constraint to new development in both peripheral and central sites. There is also a significant correlation between the “Built constraints-centre” variable and the pro-property market policy stance.

Table 4. Descriptive statistics

	Pro-property stance	Built constraints—periphery	Local planning policy	Built constraints—centre	Market/economic indicators	Average rental growth
Mean	75.938	44.741	83.667	35.161	73.939	51.429
Standard deviation	15.210	16.601	11.442	21.851	15.750	29.250

Table 5. Correlation matrix

	Pro-property stance	Built constraints— periphery	Local planning policy	Built constraints— centre	Market/economic indicators	Average rental growth
Pro-property stance	—					
Built constraints— periphery	0.095	—				
Local planning policy	0.500***	0.067	—			
Built constraints— centre	0.308*	0.527***	0.240	—		
Market/economic indicators	−0.270	−0.170	−0.209	−0.224	—	
Average rental growth	0.258	0.006	−0.207	0.140	−0.148	—

***indicates significant at the 99 per cent level; *indicates significant at the 90 per cent level.

There are some general difficulties associated with the interpretation of rental growth data. These relate to the complex interactions that determine user rents and shape rental growth over time and can best be illustrated by imposing some simplifying (although admittedly contestable) assumptions. For instance, if we assume that all markets start in equilibrium, then the initial rent will reflect the underlying supply and demand conditions. In these circumstances, rental growth will occur if demand increases at a greater rate than supply. Given the sluggish nature of the supply side of UK property markets, as a result of the protracted development process and the need to gain planning consent, increases in rental value are mainly business-demand led. The magnitude of rental growth, however, will depend on several influences including the strength of flow demand (and the way in which this is reinforced through changes in the property investment sub-market) and the degree of supply responsiveness which will, in part, be shaped by the degree of planning constraint and land market conditions.

As we note above, planning policy will itself also be influenced by the market and the physical constraints on development. Thus, although we can offer several hypotheses

about the likely effects of our measures of planning on rental growth, it is important to recognise that the decisions and behaviour of retail occupiers, property investors and developers are also important determinants of the rate of growth. Importantly, despite our initial assumption of market clearing, it is also possible (and more likely) that the rate of rental growth will reflect the fact that different cities will be at different points on the dynamic path towards an equilibrium state.

Nevertheless, we might reasonably be expected to be able to predict the nature (i.e. whether the sign will be positive or negative) of the relationship between our measures of planning policy and rental growth. For instance, evidence of physical constraint will restrict development activity and be associated with a limited supply response and positive rental growth (all other things being equal). We would also expect the pro-property stance, which will be associated with a vibrant market and, thus, strong user demand, to have a positive relationship with rental change. Conversely, the active use of promotional and discretionary policies will be likely to encourage new development and, ultimately, to dampen down rental growth in a way that would be reflected in a negative relationship.

As Table 5 indicates, the signs on the correlation coefficients are consistent with these expectations. Although there is no evidence of strong interrelationships between the planning measures and rental change, this is a reflection of the fact that rents are shaped by the combined effects of demand, supply and policy conditions. The most important insight from this analysis is that planning policies can often have diverse and, at times, conflicting impact on property values. This is rarely recognised in the property literature.

As Table 6 demonstrates, the composite variables allow us to rank our sample of retail centres by each measure and so examine the relationship with market function and performance. The table shows both the highest and lowest ranking centres on each factor. The measures allow us to differentiate between market and economic conditions, built environment constraints (in both town centres and peripheral areas), formal planning policy approach and discretionary attitudes towards market development.

The size and spatial distribution of the markets displaying high rental growth reveal a striking pattern. Of those ranked within the top 10, the vast majority are the large, generally northern, markets. Those ranked within the bottom 10 are predominantly small southern markets. This finding can be compared with that of Colwell and Jackson (2004), who highlighted the apparent difficulty in recovery experienced by smaller markets following the recessionary period of the early 1990s, compared with larger markets.

Examining these patterns against our composite indicators reveals a complex set of relationships. For instance, several of the markets with the lowest ranking in terms of rental growth have comparatively high rankings in terms of promotional and TCM local planning policies but perform very poorly on market and economic indicators. Ipswich, Lincoln, Macclesfield and Slough—for example, are among the markets with the lowest rental growth, are ranked amongst the highest for both promotion and management in local planning policy and pro-property

market policy, with generally only average market and economic indicators and levels of constraint to development. Here, it seems that pro-active planning authorities are simply unable to overcome average/poor market and economic fundamentals and attract retailers and investors.

In contrast, Hereford and St Albans are ranked at 32 and 33 of the 35 markets in terms of rental growth (scores of 11 and 9, respectively) but, strikingly, there is little evidence of the positive planning response exhibited elsewhere, as they also rank at, or close to, the bottom end of the scale in terms of promotional and co-ordinated management and pro-property market policy stance. They both also have extreme constraints to new development in the centre. Taken together, these indicators will send out strongly negative signals to retailers and investors.

The analysis indicates that the relationship between planning policies and property market performance is highly complex. Several dimensions of policy activity have the ability to make a strong positive impact on supply. They also potentially have an important role to play in generating user and investor demand. It is only when these positive planning policies are understood and analysed alongside economic fundamentals, land market conditions and narrower development control policies, that retailers and investors can develop a clear picture of the future prospects of local markets.

6. Conclusions

There has been considerable recognition that property markets play an important role in determining local economic competitiveness (Gibb *et al.*, 2002; Begg, 2002; Core Cities, 2003). More specifically, it is widely accepted that a well-functioning property market is critical in establishing a vibrant retail sector within towns and cities and, in turn, driving economic and employment growth within the local area. Despite this, however, there has been little research into the relationship between retail planning, and other related

Table 6. Top 10 and bottom 10 ranked markets

Pro-property market policy stance	Built environment constraints on periphery	Local planning policy	Built environment constraints in town centre	Market and economic indicators	Average rental growth, 1996–2000
<i>Top 10 ranked markets</i>					
Leeds	Stoke (Hanley)	Bristol	Stoke (Hanley)	Eastbourne	Liverpool
Northampton	Bedford	Lincoln	Norwich	Bournemouth	Newcastle
Sheffield	Reading	Maidstone	Bedford	Reading	Leeds
Stoke (Hanley)	Nottingham	Northampton	Maidstone	Newcastle	Sheffield
Macclesfield	Leeds	Macclesfield	Sheffield	Nottingham	Birmingham
Maidstone	Lincoln	Ipswich	Birmingham	Cambridge	Middlesbrough
Ipswich	Norwich	Lancaster	Macclesfield	Portsmouth	Portsmouth
Portsmouth	Huddersfield	Sheffield	Slough	Tunbridge	Nottingham
Lincoln	Slough	Slough	Tunbridge	Worcester	Stoke (Hanley)
Birmingham	Birmingham	Stoke-on-Trent	Portsmouth	York	Cambridge
<i>Bottom 10 ranked markets</i>					
Newcastle	Cambridge	Birmingham	Chichester	Liverpool	Bedford
Norwich	Guildford	Southend	Lancaster	Gloucester	Ipswich
Brighton	Bournemouth	Bournemouth	Liverpool	Bedford	Slough
Gloucester	Macclesfield	Middlesbrough	Newcastle	Leeds	Lancaster
Hereford	Lancaster	Newcastle	Southend	Northampton	Macclesfield
Tunbridge	Southend	St Albans	Guildford	Lancaster	Lincoln
Southend	Brighton	Cambridge	Hereford	Southend	Hereford
Chichester	Northampton	Hereford	Northampton	Stoke (Hanley)	St Albans
Bedford	Liverpool	Norwich	Brighton	Middlesbrough	Chichester
Eastbourne	Portsmouth	Guildford	St Albans	Sheffield	Maidstone

policies, and the nature and operation of retail property markets.

Although property market analysts have long recognised the need for a systematic investigation of the role of local planning policies in shaping the supply of retail space and the performance of retail property markets, the dominant quantitative modelling paradigm has only recently started to consider the influence of public policies. This trend relates, in part, to long-standing data problems in property research that have limited the extent to which local markets have been studied. In this context, the problem is exacerbated by the absence of useable measures of policy. This is particularly disappointing given the mounting anecdotal evidence that retail planning policies have significantly influenced the behaviour of property investors, retail developers and the performance of property markets.

This paper seeks to address this problem by undertaking a systematic survey of local planning authorities. It is generally acknowledged that there have been important differences in the interpretation and implementation of town-centre planning policies in recent years (ODPM, 2003). In this context, the survey seeks to explore the relative importance of policy initiatives, strategic documents and environmental and economic contextual factors. The analysis suggests that local planning policies can be separated into several distinct influences. These relate to a supportive property market context, promotional policies (including town-centre management strategies), physical and land constraints (in town centre and peripheral locations), and retail-specific policy measures. The survey data are used to construct indicators of these different dimensions of local planning policies. Significantly, these results imply that real estate analysts should guard against narrower development-control-oriented conceptions of the role of planning. The nature and scope of retail planning need to be understood in terms of the broad range of activities covered by planning policy guidance.

Detailed analysis of the policy measures reveals two clear findings. First, as might be

expected, land market and physical constraints on retail development are fairly pervasive across our sample of authorities. Secondly, and more importantly, the degree of variation in the importance afforded to the more discretionary (and, often, more positive and proactive) dimensions of planning policy are much more variable.

These measures of policy stance are also compared with data on the performance of local retail property markets. The analysis leads to several related observations. First, positive promotional and market-supportive policies were present in those centres that exhibit both high and low levels of retail rental growth. This is not surprising given that strong rental growth will be exhibited in response to policy and that policies will have been adopted in response to poor market performance. Secondly, the results suggest that, for strong rental growth to be achieved, policies also need to be supported by strong market fundamentals. The defining characteristic of the five lowest rental growth markets is that they are constrained by relatively weak local economic and property market contexts. From a property market analyst's perspective, the most important signals can be derived from the combined effect of the indicators. While a positive policy stance is not an essential condition for rental growth, there are a distinct group of markets where both economic fundamentals and policy stance mitigate against improved market performance.

The results point to several challenges for property researchers. In particular, there remains a need to incorporate effective measures of planning policy in the development of a quantitative model of property values. It is clear, however, that real estate modellers should avoid adopting narrower conceptions of the role of planning as a limited development control function. Any attempt to augment quantitative models with planning indicators must be based on an appreciation of the scope of planning activities and on recognition of the potentially varied impacts of different dimensions of planning policy.

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Appendix

Table A1. List of variables

Variable	Description
<i>ESTSHOP</i>	Importance of encouraging different types of shops; ranked on a scale of 0 (not important) to 10; source: local authority survey
<i>ESTSERV</i>	Importance of encouraging different types of service; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>ESINVDEV</i>	Importance of investor/developer requirements in retail planning; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>ESTLEIS</i>	Importance of encouraging different types of leisure use; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>DLPHYS</i>	Difficulty associated with physical constraints at district/local centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>ECPHYS</i>	Difficulty associated with physical constraints at edge of centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>DLLAND</i>	Difficulty associated with land assembly at district/local centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>ECLAND</i>	Difficulty associated with land assembly at edge of centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>TCMSIG</i>	Importance of TCM scheme; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>DOCTCP</i>	Importance, in policy documents, of town-centre promotion; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>TCPHYS</i>	Difficulty associated with physical constraints in town centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>TCLAND</i>	Difficulty associated with land assembly in town centre; ranked on a scale of 0 (not important) to 10; source: LA survey
<i>ESTPVAC</i>	Measure of perceived market conditions based on an—estimated ‘rank’ level of current property vacancy rate; ranked from 1 (market in severe crisis) to 10 (extremely healthy); source: LA survey
<i>ESTPDEM</i>	Measure of perceived rental market conditions based on an—estimated ‘rank’ level of demand for property; ranked from 1 (market in severe crisis) to 10 (extremely healthy); source: LA survey